AWS General Reference

Reference guide

Version 1.0

AWS General Reference: Reference guide

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AWS General Reference

The AWS General Reference provides information that is useful across Amazon Web Services.

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AWS security credentials

When you interact with AWS, you specify your AWS *security credentials* to verify who you are and whether you have permission to access the resources that you are requesting. AWS uses the security credentials to authenticate and authorize your requests.

For example, if you want to download a protected file from an Amazon Simple Storage Service (Amazon S3) bucket, your credentials must allow that access. If your credentials don't show you are authorized to download the file, AWS denies your request. However, your AWS security credentials aren't required for you to download a file in an Amazon S3 bucket that is publicly shared.

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AWS account root user credentials and IAM user credentials

There are two different types of users in AWS. You are either the account owner (root user), or you are an AWS Identity and Access Management (IAM) user. When you create the AWS account, it also creates the root user. The root user or an IAM administrator for the account can create IAM users. All AWS users have security credentials.

Root user credentials

The credentials of the account owner allow full access to all resources in the account. You can't use IAM policies to deny the root user access to resources explicitly. You can only use an AWS Organizations service control policy (SCP) to limit the permissions of the root user. Because of this, we recommend that you create an IAM user with administrator permissions for everyday AWS tasks, and lock away the credentials for the root user.

There are specific tasks that are restricted to the AWS account root user. For example, only the root user can close your account. If you must perform a task that requires the root user, sign in to the AWS Management Console with the email address and password of the root user. For more information, see Tasks that require root user credentials (p. 3).

IAM credentials

With IAM, you can securely control access to AWS services and resources for users in your AWS account. For example, if you require administrator-level permissions, you can create an IAM user, grant that user full access, and then use those credentials to interact with AWS. If you must modify or revoke your permissions, you can delete or modify the policies that are associated with that IAM user.

If you have multiple users who require access to your AWS account, you can create unique credentials for each user and define who has access to which resources. You don't need to share credentials. For example, you can create IAM users with read-only access to resources in your AWS account and distribute those credentials to users.

Tasks that require root user credentials

We recommend that you use an IAM user with appropriate permissions to perform tasks and access AWS resources. However, you can perform the tasks listed below only when you sign in as the root user of an account.

Tasks

- Change your account settings. This includes the account name, email address, root user password, and root user access keys. Other account settings, such as contact information, payment currency preference, and Regions, do not require root user credentials.
- Restore IAM user permissions. If the only IAM user with administrator permissions accidentally revokes their own permissions, you can sign in as the root user to edit policies and restore those permissions.
- Activate IAM access to the Billing and Cost Management console.
- View certain tax invoices. An IAM user with the aws-portal:ViewBilling permission can view and download VAT invoices from AWS Europe, but not AWS Inc or Amazon Internet Services Pvt. Ltd (AISPL).
- Close your AWS account.
- Change your AWS Support plan or Cancel your AWS Support plan. For more information, see IAM for AWS Support.
- Register as a seller in the Reserved Instance Marketplace.
- Configure MFA delete for your S3 bucket.
- Edit or delete an Amazon S3 bucket policy that includes an invalid VPC ID or VPC endpoint ID.
- Sign up for GovCloud.

Troubleshooting

If you can't complete any of these tasks with your root user credentials, your account might be a member of an organization in AWS Organizations. If your organizational administrator used a service control policy (SCP) to limit the permissions of your account, your root user permissions might be affected. For more information, see Service control policies in the *AWS Organizations User Guide*.

Understanding and getting your AWS credentials

AWS requires different types of security credentials, depending on how you access AWS. For example, you need a user name and password to sign in to the AWS Management Console, and you need access keys to make programmatic calls to AWS. You also need access keys to use the AWS Command Line Interface or AWS Tools for PowerShell.

Considerations

- Be sure to save the following in a secure location: the email address associated with your AWS account, the AWS account ID, the root user password, and your account access keys. If you forget or lose your root user password, you must have access to the email address associated with your account in order to reset it. If you lose your access keys, you must sign into your account to create new ones.
- We strongly recommend that you do not use the root user for your everyday tasks. Safeguard your root user credentials and use them to perform the tasks that only the root user can perform. For the complete list of tasks that require you to sign in as the root user, see Tasks that require root user credentials.
- Security credentials are account-specific. If you have access to multiple AWS accounts, you have separate credentials for each account.

- Never share your AWS account root user password or access keys with anyone.

Credentials

- Accessing your AWS account (p. 4)
- Access keys (p. 6)

Accessing your AWS account

The way you access your AWS account depends on what type of AWS user you are. There are a few different types of AWS users. You can be an account root user, an AWS Identity and Access Management (IAM) user, an AWS IAM Identity Center (successor to AWS Single Sign-On) user, or a federated identity.

You can access AWS using the following methods:

- AWS Management Console sign-in page
- AWS access portal sign-in page
- Federated identity
- Programmatic methods like API, AWS Command Line Interface, and SDK (Software Development Kit)

AWS Management Console

Root and IAM users sign in through the AWS Management Console. The AWS Management Console provides a web-based user interface that you can use to create and manage your AWS resources. For example, you can start and stop Amazon Elastic Compute Cloud (EC2) instances, create Amazon DynamoDB tables, and create Amazon Simple Storage Service (S3) buckets.

- Root users sign in with:
  - Email address
  - Password
- IAM users sign in with:
  - Account ID or alias
  - User name or email address
  - Password
    - Your account owner or IAM administrator should provide your account ID or alias and user name to you. They create the account and set your user name. Your user name might be your email address.

For step-by-step directions on how to sign in to the AWS Management Console, see Signing in to the AWS Management Console in the *AWS Sign-In User Guide*.

For more information about signing in with multi-factor authentication (MFA) devices, see Using MFA devices with your IAM sign-in page.

> **Important**
> When you create an AWS account, you begin with one sign-in identity that has complete access to all AWS services and resources in the account. This identity is called the AWS account *root user* and is accessed by signing in with the email address and password that you used to create the account. We strongly recommend that you do not use the root user for your everyday tasks. Safeguard your root user credentials and use them to perform the tasks that only the root user can perform. For the complete list of tasks that require you to sign in as the root user, see Tasks that require root user credentials in the *AWS General Reference*.

AWS access portal

IAM Identity Center users sign in through the AWS access portal rather than the AWS Management Console. After you sign in through the AWS access portal, you can access your AWS account and applications. You can access cloud applications such as Office 365, Concur, and Salesforce through the AWS access portal. Your administrator or help desk employee should have provided you a specific sign-in URL like the following examples:

```
https://d-xxxxxxxxxx.awsapps.com/start
```

or

```
https://your_subdomain.awsapps.com/start
```

Alternatively, if you created an IAM Identity Center user for your AWS account, you would have received an email invitation with the specific sign-in URL.

IAM Identity Center users sign in with:

- Corporate user name
- Corporate password
  - If prompted for a verification code, check your email and then copy and paste the code into the sign-in page.
    - Verification codes are typically sent through email, but the delivery method can vary. Your administrator establishes the security settings that requires users to provide a verification code. Check with your administrator for details.

For step-by-step directions on how to sign in to the AWS access portal, see Signing in to the AWS access portal in the *AWS Sign-In User Guide*.

For more information about IAM Identity Center, see What is IAM Identity Center? in the *AWS IAM Identity Center (successor to AWS Single Sign-On) User Guide*.

Federated identity

Federated identities are users that can access secure AWS account resources with external identities. External identities can come from a corporate identity store (such as LDAP or Windows Active Directory) or from a third party (such as Login in with Amazon, Facebook, or Google). Federated identities do not sign in with the AWS Management Console or AWS access portal. The type of external identity in use determines how federated identities sign in.

For more information about federated identities, see About web identity federation in the *IAM User Guide*.

Administrators must create a custom URL that includes `https://signin.aws.amazon.com/federation`. For more information, see Enabling custom identity broker access to the AWS Management Console.

> **Note**
> Your administrator creates federated identities. Contact your administrator for more details on how to sign in as a federated identity.

AWS Command Line Interface

AWS users can also sign in with the AWS Command Line Interface (AWS CLI). For more information about the AWS CLI, see What is the AWS Command Line Interface.

Multi-factor authentication (MFA)

Multi-factor authentication (MFA) provides an extra level of security for users who can access your AWS account. For additional security, we recommend that you require MFA on the AWS account root user credentials and all IAM users. For more information, see Using Multi-Factor Authentication (MFA) in AWS in the *IAM User Guide*.

When you activate MFA and you sign in to your AWS account, you are prompted for your user name and password, plus a response generated by an MFA device, such as a code, a touch or tap, or a biometric scan. When you add MFA, your AWS account settings and resources are more secure.

By default, MFA isn't activated. You can activate and manage MFA devices for the AWS account root user by going to the Security credentials page or the IAM dashboard in the AWS Management Console. For more information about activating MFA for IAM users, see Enabling MFA Devices in the *IAM User Guide*.

Access keys

When you use AWS programmatically, you provide your AWS access keys so that AWS can verify your identity in programmatic calls. Access keys can be either temporary (short-term) credentials or long-term credentials, such as for an IAM user or the AWS account root user. In many cases, there are alternatives to long-term access keys (p. 6) to consider.

About access keys

When you create a long-term access key, you create the access key ID (for example, `AKIAIOSFODNN7EXAMPLE`) and secret access key (for example, `wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY`) as a set. The secret access key is available for download only when you create it. If you don't download your secret access key or if you lose it, you must create a new one.

In many scenarios, you don't need long-term access keys that never expire (as you have with an IAM user). Instead, you can create IAM roles and generate temporary security credentials. Temporary security credentials include an access key ID and a secret access key, but they also include a security token that indicates when the credentials expire. After they expire, they're no longer valid. For more information, see Temporary access keys (p. 7).

Access key IDs beginning with `AKIA` are long-term access keys for an IAM user or an AWS account root user. Access key IDs beginning with `ASIA` are temporary credentials access keys that you create using AWS STS operations.

Considerations and alternatives for long-term access keys

For many common use cases, there are alternatives to long-term access keys. To improve your account security, consider the following.

- **Don't embed long-term access keys and secret access keys in your application code or in a code repository –** Instead, use AWS Secrets Manager, or other secrets management solution, so you don't have to hardcode keys in plaintext. The application or client can then retrieve secrets when needed. For more information, see What is AWS Secrets Manager? in the *AWS Secrets Manager User Guide*.

- **Use IAM roles to generate temporary security credentials whenever possible –** Always use mechanisms to issue temporary security credentials when possible, rather than long-term access keys. Temporary security credentials are more secure because they are not stored with the user but are generated dynamically and provided to the user when requested. Temporary security credentials have a limited lifetime so you don't have to manage or rotate them. Mechanisms include IAM roles or the authentication of an IAM Identity Center user. For more information, see Use temporary security credentials (IAM roles) (p. 10) and Temporary access keys (p. 7).

- **Use alternatives to long-term access keys for the AWS Command Line Interface (AWS CLI) or the `aws-shell` –** Alternatives include the following.
  - **AWS CloudShell** is a browser-based, pre-authenticated shell that you can launch directly from the AWS Management Console. You can run AWS CLI commands against AWS services through your preferred shell (Bash, Powershell, or Z shell). When you do this, you don't need to download or install command line tools. For more information, see What is AWS CloudShell? in the *AWS CloudShell User Guide*.
  - **AWS CLI Version 2 integration with AWS IAM Identity Center (successor to AWS Single Sign-On) (IAM Identity Center)**. You can authenticate users and provide short-term credentials to run AWS CLI commands. To learn more, see Integrating AWS CLI with IAM Identity Center in the *AWS IAM Identity Center (successor to AWS Single Sign-On) User Guide* and Configuring the AWS CLI to use IAM Identity Center in the *AWS Command Line Interface User Guide*.
- **Don't create long-term access keys for human users who need access to applications or AWS services –** IAM Identity Center can generate temporary access credentials for your external IdP users to access AWS services. This eliminates the need to create and manage long-term credentials in IAM. In IAM Identity Center, create an IAM Identity Center permission set that grants the external IdP users access. Then assign a group from IAM Identity Center to the permission set in the selected AWS accounts. For more information, see What is AWS IAM Identity Center (successor to AWS Single Sign-On), Connect to your external identity provider, and Permission sets in the *AWS IAM Identity Center (successor to AWS Single Sign-On) User Guide*.
- **Don't store long-term access keys within an AWS compute service –** Instead, assign an IAM role to compute resources. This automatically supplies temporary credentials to grant access. For example, when you create an instance profile that is attached to an Amazon EC2 instance, you can assign an AWS role to the instance and make it available to all of its applications. An instance profile contains the role and enables programs that are running on the Amazon EC2 instance to get temporary credentials. To learn more, see Using an IAM role to grant permissions to applications running on Amazon EC2 instances.

For additional security best practices related to access keys, see Best practices for managing AWS access keys (p. 9).

Temporary access keys

You can create and use temporary access keys, known as *temporary security credentials*, for programmatic access requests. We recommend that you use temporary access keys over long term access keys, as mentioned in the previous section. For more information, see Using temporary credentials with AWS resources in the *IAM User Guide*.

You can use temporary access keys in less secure environments, or distribute them, to grant users temporary access to resources in your AWS account.

For example, you can grant entities from other AWS accounts access to resources in your AWS account (cross-account access). You can also grant users who don't have AWS security credentials access to resources in your AWS account (federation). For more information, see `aws sts assume-role`.

Long-term access keys

You can assign up to two long-term access keys per user. It is useful to have two access keys when you want to rotate them. When you disable an access key, you can't use it, but it counts toward your limit of two access keys. After you delete an access key, it's gone forever and can't be restored, but it can be replaced with a new access key.

> **Important**
> Unless there is no other option, we strongly recommend that you don't create long-term access keys for your root user. If a malicious user gains access to your root user access keys, they can completely take over your account.

You provide your AWS access keys to make programmatic calls to AWS or to use the AWS Command Line Interface or AWS Tools for PowerShell.

For more information about creating access keys for the root user, see AWS account root user in the *IAM User Guide*.

For more information about creating access keys for IAM users, see Managing access keys for IAM users in the *IAM User Guide*.

Your AWS account identifiers

AWS assigns the following unique identifiers to each AWS account:

AWS account ID

A 12-digit number, such as 123456789012, that uniquely identifies an AWS account. Many AWS resources include the account ID in their Amazon Resource Names (ARNs). The account ID portion distinguishes resources in one account from the resources in another account. If you are an IAM user, you can sign in to the AWS Management Console with either the account ID or account alias.

Canonical user ID

An alpha-numeric identifier, such as `79a59df900b949e55d96a1e698fbacedfd6e09d98eacf8f8d5218e7cd47ef2be`, that is an obfuscated form of the AWS account ID. You can use this ID to identify an AWS account when granting cross-account access to buckets and objects using Amazon S3. You can retrieve the canonical user ID for your AWS account as either the root user or an IAM user.

For more information, see Finding the canonical user ID for your AWS account in the *Amazon S3 User Guide*.

You must be authenticated with AWS to view these identifiers.

Warning
Do not provide your AWS credentials (p. 3) to a third party who needs your AWS account identifiers to share AWS resources with you. If you do this, they have the same access to the AWS account that you have.

Finding your AWS account ID

You can find the AWS account ID in the AWS Management Console. The location of the account ID in the console depends on whether you are logged in as the root user or as an IAM user. The account ID is the same whether you are logged in as the root user or as an IAM user.

Prerequisite

You must be signed in to the AWS Management Console. For more information, see Signing in to the AWS Management Console in the *IAM User Guide*.

To find your AWS account ID when signed in as the root user

1. In the navigation bar on the upper right, choose your account name or number, and then choose **Security credentials**.
2. Expand the **Account identifiers** section. The account number appears next to the label **AWS account ID**.

To find your AWS account ID when signed in as an IAM user

1. In the navigation bar on the upper right, choose your user name and then choose **Security credentials**.

   Tip
   If you do not see the **Security credentials** page, you might be signed in as a federated user, not an IAM user.
2. At the top of the page, under **Account details**, the account number appears next to the label **AWS account ID**.

To find your AWS account ID using the AWS CLI

Use the get-caller-identity command as follows:

```
aws sts get-caller-identity --query Account --output text
```

Best practices for managing AWS access keys

When you use AWS programmatically, you provide your AWS access keys so that AWS can verify your identity in programmatic calls. Each of your access keys consist of an access key ID (for example, `AKIAIOSFODNN7EXAMPLE`) and a secret access key (for example, `wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY`).

Anyone who has your access keys has the same level of access to your AWS resources that you do. For this reason, AWS protects your access keys according to our shared-responsibility model. You should also protect your access keys.

The steps that follow can help you protect your access keys. For background information, see AWS security credentials (p. 2).

Note
Your organization might have different security requirements and policies than those described in this topic. The suggestions here provide general guidelines.

Don't create access keys for the root user

When you make requests with the AWS Command Line Tools, AWS SDKs, or direct API calls, you sign the requests with your access keys. Anyone who has the access keys for your AWS account root user has unrestricted access to all the resources in your account. This includes access to billing information. You can't restrict the permissions for your AWS account root user.

One of the best ways to protect your account is not to create access keys for your AWS account root user.

If you already have access keys for your account, we recommend the following:

1. Find places in your applications (if any) where you currently use access keys.
2. Replace the root user access keys with IAM user access keys.
3. Deactivate and delete the root user access keys.

For more information about how to substitute one access key for another, see How to Rotate Access Keys for IAM Users on the AWS Security Blog.

By default, AWS doesn't generate access keys for new accounts.

For information about how to create an IAM user with administrative permissions, see Creating Your First IAM Admin User and Group in the *IAM User Guide*.

Use temporary security credentials (IAM roles)

In many scenarios, you don't need long-term access keys that never expire (as you have with an IAM user). Instead, you can create IAM roles and generate temporary security credentials. Temporary security credentials consist of an access key ID and a secret access key, but they also include a security token that indicates when the credentials expire.

Long-term access keys, such as those associated with IAM users and AWS account root users, remain valid until you manually revoke them. However, temporary security credentials that you obtain through IAM roles and other features of the AWS Security Token Service are valid for only a short time. You can configure them to last for anywhere from a few minutes to several hours. Use temporary security credentials to help reduce your risk in case credentials are exposed.

Use an IAM role and temporary security credentials in the following situations:

- **You have an application or AWS CLI scripts that runs on an Amazon EC2 instance.** Don't use access keys directly in your application. Don't pass access keys to the application, embed them in the application, or let the application read access keys from any source. Instead, define an IAM role that has appropriate permissions for your application and launch the Amazon Elastic Compute Cloud (Amazon EC2) instance with roles for EC2. This practice associates an IAM role with the Amazon EC2 instance. When you do this, the application can also get temporary security credentials that it can in turn use to make programmatic calls to AWS. The AWS SDKs and the AWS Command Line Interface (AWS CLI) can get temporary credentials from the role automatically.
- **You need to grant cross-account access.** Use an IAM role to establish trust between accounts, and then grant users in one account limited permissions to access the trusted account. For more information, see Tutorial: Delegate access across AWS accounts using IAM roles in the *IAM User Guide*.
- **You have a mobile app.** Don't embed access keys with the app, even in encrypted storage. Instead, use Amazon Cognito to manage user identities in your app. This service lets you authenticate users using Login with Amazon, Facebook, Google, or any identity provider (IdP) compatible with OpenID Connect (OIDC). You can then use the Amazon Cognito credentials provider to manage credentials that your app uses to make requests to AWS. For more information, see Using the Amazon Cognito Credentials Provider on the AWS Mobile Blog.
- **You want to federate into AWS and your organization supports SAML 2.0.** If you work for an organization that has an identity provider that supports SAML 2.0, configure the provider to use SAML. You can use SAML to exchange authentication information with AWS and get back a set of temporary security credentials. For more information, see About SAML 2.0-based Federation in the *IAM User Guide*.
- **You want to federate into AWS and your organization has an on-premises identity store.** If users can authenticate inside your organization, you can write an application that can issue them temporary security credentials for access to AWS resources. For more information, see Enabling custom identity broker access to the AWS Management Console in the *IAM User Guide*.

Manage IAM user access keys properly

If you must create access keys for programmatic access to AWS, create them for IAM users, and grant the users only the permissions that they require. For more information, see Managing access keys for IAM users in the *IAM User Guide*.

> **Note**
> If you use an Amazon EC2 instance with an application that requires programmatic access to AWS resources, use IAM roles for EC2.

When you use access keys, observe these precautions:

- **Don't embed access keys directly into code.** When you use AWS SDKs and the AWS Command Line Tools, you can insert access keys in known locations so that you don't have to keep them in code.

  Put access keys in one of the following locations:

  - **The AWS credentials file.** The AWS SDKs and AWS CLI automatically use the credentials that you store in the AWS credentials file.

    For information about using the AWS credentials file, see the documentation for your SDK. Examples include Set AWS Credentials and Region in the *AWS SDK for Java Developer Guide* and Configuration and credential files in the *AWS Command Line Interface User Guide*.

    To store credentials for the AWS SDK for .NET and the AWS Tools for Windows PowerShell, we recommend that you use the SDK Store. For more information, see Using the SDK Store in the *AWS SDK for .NET Developer Guide*.
  - **Environment variables.** On a multitenant system, choose user environment variables, not system environment variables.

    For more information about using environment variables to store credentials, see Environment Variables in the *AWS Command Line Interface User Guide*.
- **Use different access keys for different applications.** When you vary access keys across applications, you can isolate the permissions and revoke the access keys for individual applications if they are exposed. When you use separate access keys for different applications it generates distinct entries in AWS CloudTrail log files. This configuration helps you to determine which application performed specific actions.
- **Rotate access keys periodically.** Regularly rotating long-term credentials helps you familiarize yourself with the process. This is useful in case you are ever in a situation where you must rotate credentials, such as when an employee leaves your company. For details, see Rotating access keys (AWS CLI, Tools for Windows PowerShell, and AWS API) in the *IAM User Guide* and How to Rotate Access Keys for IAM Users on the AWS Security Blog.
- **Remove unused access keys.** If a user leaves your organization, remove the corresponding IAM user so that the user can no longer access your resources. To find out when an access key was last used, use the `GetAccessKeyLastUsed` API (AWS CLI command: `aws iam get-access-key-last-used`).
- **Configure multi-factor authentication (MFA).** To improve account security, require MFA on the AWS account root user credentials and all IAM users. For more information, see Using Multi-Factor Authentication (MFA) in AWS in the *IAM User Guide*.

Access the mobile app using AWS access keys

You can access a limited set of AWS services and features using the AWS mobile app. The mobile app helps you support incident response while on the go. For more information and to download the app, see AWS Console Mobile Application.

You can sign in to the mobile app using your console password or your access keys. As a best practice, don't use root user access keys. Instead, we strongly recommend that you use a password or biometric lock on your mobile device, and also create an IAM user to manage AWS resources. If you lose your mobile device, you can remove the IAM user's access. For more information about generating access keys for an IAM user, see Managing access keys for IAM users in the *IAM User Guide*.

To sign in using access keys (mobile app)

1. Open the app on your mobile device.
2. If this is the first time that you're adding an identity to the device, choose **Add an identity** and then choose **Access keys**.

If you have already signed in using another identity, choose the menu icon and choose **Switch identity**. Then choose **Sign in as a different identity** and then **Access keys**.

3. On the **Access keys** page, enter your information:
   - **Access key ID** – Enter your access key ID.
   - **Secret access key** – Enter your secret access key.
   - **Identity name** – Enter the name of the identity that will appear in the mobile app. This does not need to match your IAM user name.
   - **Identity PIN** – Create a personal identification number (PIN) that you will use for future sign-ins.

     Note
     If you enable biometrics for the AWS mobile app, you will be prompted to use your fingerprint or facial recognition for verification instead of the PIN. If the biometrics fail, you might be prompted for the PIN instead.
4. Choose **Verify and add keys**.

   You can now access a select set of your resources using the mobile app.

Learn more

For more information about best practices for AWS account security, see the following resources:

- IAM Best Practices contains suggestions that help you secure your AWS resources with the AWS Identity and Access Management (IAM) service.
- The following topics provide guidance when you set up the AWS SDKs and the AWS CLI to use access keys:
  - Set AWS credentials and Region in the *AWS SDK for Java Developer Guide*
  - Using the SDK Store in the *AWS SDK for .NET Developer Guide*
  - Providing Credentials to the SDK in the *AWS SDK for PHP Developer Guide*
  - Configuration in the Boto 3 (AWS SDK for Python) documentation
  - Using AWS Credentials in the *AWS Tools for Windows PowerShell User Guide*
  - Configuration and credential files in the *AWS Command Line Interface User Guide*
- The following resources discuss how programs that you write with the SDK for Java 2.x or AWS SDK for .NET can automatically get temporary security credentials when they run on an Amazon EC2 instance:
  - Granting access using an IAM role in the *AWS SDK for .NET Developer Guide*
  - Configuring IAM roles for Amazon EC2in the *AWS SDK for Java Developer Guide*

AWS security audit guidelines

You should periodically audit your security configuration to make sure it meets your current business needs. An audit gives you an opportunity to remove unneeded IAM users, roles, groups, and policies, and to make sure that your users and software have only the permissions that are required.

Following are guidelines for systematically reviewing and monitoring your AWS resources for security best practices.

Contents

- When you should perform a security audit (p. 13)

- Guidelines for auditing (p. 13)
- Review your AWS account credentials (p. 13)
- Review your IAM users (p. 14)
- Review your IAM groups (p. 14)
- Review your IAM roles (p. 14)
- Review your IAM providers for SAML and OpenID Connect (OIDC) (p. 14)
- Review Your mobile apps (p. 15)
- Review your Amazon EC2 security configuration (p. 15)
- Review AWS policies in other services (p. 15)
- Monitor activity in your AWS account (p. 16)
- Tips for reviewing IAM policies (p. 16)
- Learn more (p. 17)

When you should perform a security audit

You should audit your security configuration in the following situations:

- On a periodic basis. You should perform the steps described in this document at regular intervals as a best practice for security.
- If there are changes in your organization, such as people leaving.
- If you have stopped using one or more individual AWS services. This is important for removing permissions that users in your account no longer need.
- If you've added or removed software in your accounts, such as applications on Amazon EC2 instances, AWS OpsWorks stacks, AWS CloudFormation templates, etc.
- If you ever suspect that an unauthorized person might have accessed your account.

Guidelines for auditing

As you review your account's security configuration, follow these guidelines:

- **Be thorough**. Look at all aspects of your security configuration, including those you might not use regularly.
- **Don't assume**. If you are unfamiliar with some aspect of your security configuration (for example, the reasoning behind a particular policy or the existence of a role), investigate the business need until you are satisfied.
- **Keep things simple**. To make auditing (and management) easier, use IAM groups, consistent naming schemes, and straightforward policies.

Review your AWS account credentials

Take these steps when you audit your AWS account credentials:

1. If you're not using the root access keys for your account, you can remove them. We strongly recommend that you do not use root access keys for everyday work with AWS, and that instead you create IAM users.
2. If you do need to keep the access keys for your account, rotate them regularly.

Review your IAM users

Take these steps when you audit your existing IAM users:

1. List your users and then delete users that are inactive.
2. Remove users from groups that they don't need to be a part of.
3. Review the policies attached to the groups the user is in. See Tips for reviewing IAM policies (p. 16).
4. Delete security credentials that the user doesn't need or that might have been exposed. For example, an IAM user that is used for an application does not need a password (which is necessary only to sign in to AWS websites). Similarly, if a user does not use access keys, there's no reason for the user to have one. For more information, see Managing Passwords for IAM Users and Managing Access Keys for IAM Users in the *IAM User Guide*.

   You can generate and download a credential report that lists all IAM users in your account and the status of their various credentials, including passwords, access keys, and MFA devices. For passwords and access keys, the credential report shows how recently the password or access key has been used. Credentials that have not been used recently might be good candidates for removal. For more information, see Getting Credential Reports for your AWS Account in the *IAM User Guide*.
5. Rotate (change) user security credentials periodically, or immediately if you ever share them with an unauthorized person. For more information, see Managing Passwords for IAM Users and Managing Access Keys for IAM Users in the *IAM User Guide*.

Review your IAM groups

Take these steps when you audit your IAM groups:

1. List your groups and then delete groups that are unused.
2. Review users in each group and remove users that don't belong.
3. Review the policies attached to the group. See Tips for reviewing IAM policies (p. 16).

Review your IAM roles

Take these steps when you audit your IAM roles:

1. List your roles and then delete roles that are unused.
2. Review the role's trust policy. Make sure that you know who the principal is and that you understand why that account or user needs to be able to assume the role.
3. Review the access policy for the role to be sure that it grants suitable permissions to whoever assumes the role—see Tips for reviewing IAM policies (p. 16).

Review your IAM providers for SAML and OpenID Connect (OIDC)

If you have created an IAM entity for establishing trust with a SAML or OIDC identity provider, take these steps:

1. Delete unused providers.
2. Download and review the AWS metadata documents for each SAML provider and make sure the documents reflect your current business needs. Alternatively, get the latest metadata documents from the SAML IdPs that you want to establish trust with and update the provider in IAM.

Review Your mobile apps

If you have created a mobile app that makes requests to AWS, take these steps:

1. Make sure that the mobile app does not contain embedded access keys, even if they are in encrypted storage.
2. Get temporary credentials for the app by using APIs that are designed for that purpose. We recommend that you use Amazon Cognito to manage user identity in your app. This service lets you authenticate users using Login with Amazon, Facebook, Google, or any OpenID Connect (OIDC)–compatible identity provider. You can then use the Amazon Cognito credentials provider to manage credentials that your app uses to make requests to AWS.

   If your mobile app doesn't support authentication using Login with Amazon, Facebook, Google, or any other OIDC-compatible identity provider, you can create a proxy server that can dispense temporary credentials to your app.

Review your Amazon EC2 security configuration

Take the following steps for each AWS Region:

1. Delete Amazon EC2 key pairs that are unused or that might be known to people outside your organization.
2. Review your Amazon EC2 security groups:
   - Remove security groups that no longer meet your needs.
   - Remove rules from security groups that no longer meet your needs. Make sure you know why the ports, protocols, and IP address ranges they permit have been allowed.
3. Terminate instances that aren't serving a business need or that might have been started by someone outside your organization for unapproved purposes. Remember that if an instance is started with a role, applications that run on that instance can access AWS resources using the permissions that are granted by that role.
4. Cancel Spot Instance requests that aren't serving a business need or that might have been made by someone outside your organization.
5. Review your Auto Scaling groups and configurations. Shut down any that no longer meet your needs or that might have been configured by someone outside your organization.

Review AWS policies in other services

Review the permissions for services that use resource-based policies or that support other security mechanisms. In each case, make sure that only users and roles with a current business need have access to the service's resources, and that the permissions granted on the resources are the fewest necessary to meet your business needs.

- Review your Amazon S3 bucket policies and ACLs.
- Review your Amazon SQS queue policies.
- Review your Amazon SNS topic policies.
- Review your AWS OpsWorks permissions.
- Review your AWS KMS key policies.

Monitor activity in your AWS account

Follow these guidelines for monitoring AWS activity:

- Turn on AWS CloudTrail in each account and use it in each supported Region.
- Periodically examine CloudTrail log files. (CloudTrail has a number of partners who provide tools for reading and analyzing log files.)
- Enable Amazon S3 bucket logging to monitor requests made to each bucket.
- If you believe there has been unauthorized use of your account, pay particular attention to temporary credentials that have been issued. If temporary credentials have been issued that you don't recognize, disable their permissions.
- Enable billing alerts in each account and set a cost threshold that lets you know if your charges exceed your normal usage.

Tips for reviewing IAM policies

Policies are powerful and subtle, so it's important to study and understand the permissions that are granted by each policy. Use the following guidelines when reviewing policies:

- As a best practice, attach policies to groups instead of to individual users. If an individual user has a policy, make sure you understand why that user needs the policy.
- Make sure that IAM users, groups, and roles have only the permissions that they need.
- Use the IAM Policy Simulator to test policies that are attached to users or groups.
- Remember that a user's permissions are the result of all applicable policies—user policies, group policies, and resource-based policies (on Amazon S3 buckets, Amazon SQS queues, Amazon SNS topics, and AWS KMS keys). It's important to examine all the policies that apply to a user and to understand the complete set of permissions granted to an individual user.
- Be aware that allowing a user to create an IAM user, group, role, or policy and attach a policy to the principal entity is effectively granting that user all permissions to all resources in your account. That is, users who are allowed to create policies and attach them to a user, group, or role can grant themselves any permissions. In general, do not grant IAM permissions to users or roles whom you do not trust with full access to the resources in your account. The following list contains IAM permissions that you should review closely:
  - `iam:PutGroupPolicy`
  - `iam:PutRolePolicy`
  - `iam:PutUserPolicy`
  - `iam:CreatePolicy`
  - `iam:CreatePolicyVersion`
  - `iam:AttachGroupPolicy`
  - `iam:AttachRolePolicy`
  - `iam:AttachUserPolicy`
- Make sure policies don't grant permissions for services that you don't use. For example, if you use AWS managed policies, make sure the AWS managed policies that are in use in your account are for services that you actually use. To find out which AWS managed policies are in use in your account, use the IAM `GetAccountAuthorizationDetails` API (AWS CLI command: `aws iam get-account-authorization-details`).
- If the policy grants a user permission to launch an Amazon EC2 instance, it might also allow the `iam:PassRole` action, but if so it should explicitly list the roles that the user is allowed to pass to the Amazon EC2 instance.

- Closely examine any values for the `Action` or `Resource` element that include `*`. It's a best practice to grant `Allow` access to only the individual actions and resources that users need. However, the following are reasons that it might be suitable to use `*` in a policy:
  - The policy is designed to grant administrative-level privileges.
  - The wildcard character is used for a set of similar actions (for example, `Describe*`) as a convenience, and you are comfortable with the complete list of actions that are referenced in this way.
  - The wildcard character is used to indicate a class of resources or a resource path (e.g., `arn:aws:iam::account-id:users/division_abc/*`), and you are comfortable granting access to all of the resources in that class or path.
  - A service action does not support resource-level permissions, and the only choice for a resource is `*`.
- Examine policy names to make sure they reflect the policy's function. For example, although a policy might have a name that includes "read only," the policy might actually grant write or change permissions.

Learn more

For information about managing IAM resources, see the following:

- IAM Users and Groups in the *IAM User Guide*.
- Permissions and Policies in the *IAM User Guide*.
- IAM Roles (Delegation and Federation) in the *IAM User Guide*.
- IAM Policy Simulator in the *Using IAM Policy Simulator* guide.

For more information about Amazon EC2 security, see the following:

- Network and Security in the *Amazon EC2 User Guide for Linux Instances*.
- Demystifying EC2 Resource-Level Permissions on the AWS Security Blog.

For more information about monitoring an AWS account, see the re:Invent 2013 video presentation Intrusion Detection in the Cloud.

Service endpoints and quotas

The following pages describe the service endpoints and service quotas for AWS services. To connect programmatically to an AWS service, you use an endpoint. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Click one of the following links to go to the page for that service. To view the service quotas for all AWS services in the documentation without switching pages, view the information in the Service endpoints and quotas page in the PDF instead.

Services

- Alexa for Business endpoints and quotas (p. 24)
- AWS Amplify endpoints and quotas (p. 25)
- Amazon API Gateway endpoints and quotas (p. 29)
- AWS AppConfig endpoints and quotas (p. 36)
- AWS App Mesh endpoints and quotas (p. 41)
- AWS App Runner endpoints and quotas (p. 46)
- Amazon AppFlow endpoints and quotas (p. 47)
- Application Auto Scaling endpoints and quotas (p. 53)
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Alexa for Business endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	a4b.us-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Address books	Each supported Region: 25	Yes	The maximum number of address books.
Contacts per account	Each supported Region: 10,000	Yes	The maximum number of contacts per account.
Contacts per address book	Each supported Region: 100	Yes	The maximum number of contacts per address book.
Number of conference appliances	Each supported Region: 10,000	Yes	The maximum number of conference appliances.
Number of devices	Each supported Region: 100,000	Yes	The maximum number of devices.
Number of devices per room	Each supported Region: 10	Yes	The maximum number of devices per room.
Number of gateways	Each supported Region: 100	Yes	The maximum number of gateways.
Number of profiles	Each supported Region: 100	Yes	The maximum number of profiles.
Number of rooms	Each supported Region: 10,000	Yes	The maximum number of rooms.
Number of skill groups	Each supported Region: 1,000	Yes	The maximum number of skill groups.
Number of skills	Each supported Region: 100	Yes	The maximum number of skills.
Number of skills per skill group	Each supported Region: 25	Yes	The maximum number of skills per skill group.

Name	Default	Adjust	Description
Number of users	Each supported Region: 10,000	Yes	The maximum number of users.

AWS Amplify endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Amplify endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	amplify.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	amplify.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	amplify.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	amplify.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	amplify.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	amplify.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	amplify.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	amplify.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	amplify.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	amplify.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	amplify.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	amplify.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	amplify.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	amplify.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	amplify.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	amplify.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	amplify.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	amplify.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	amplify.sa-east-1.amazonaws.com	HTTPS	

Amplify Studio (backend) endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	amplifybackend.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	amplifybackend.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	amplifybackend.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	amplifybackend.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	amplifybackend.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	amplifybackend.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	amplifybackend.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	amplifybackend.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	amplifybackend.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	amplifybackend.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	amplifybackend.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	amplifybackend.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	amplifybackend.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	amplifybackend.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	amplifybackend.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	amplifybackend.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	amplifybackend.sa-east-1.amazonaws.com	HTTPS	

Amplify Studio (UI Builder) endpoints

Region Name	Region	Endpoint	Protocol
Europe (Stockholm)	eu-north-1	amplifyuibuilder.eu-north-1.amazonaws.com	HTTPS
Middle East (Bahrain)	me-south-1	amplifyuibuilder.me-south-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Asia Pacific (Mumbai)	ap-south-1	amplifyuibuilder.ap-south-1.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	amplifyuibuilder.eu-west-3.amazonaws.com	HTTPS
US East (Ohio)	us-east-2	amplifyuibuilder.us-east-2.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	amplifyuibuilder.eu-west-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	amplifyuibuilder.eu-central-1.amazonaws.com	HTTPS
South America (Sao Paulo)	sa-east-1	amplifyuibuilder.sa-east-1.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	amplifyuibuilder.us-east-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	amplifyuibuilder.ap-northeast-2.amazonaws.com	HTTPS

Amplify Service quotas

Name	Default	Adjust	Description
Apps	Each supported Region: 25	Yes	The maximum number of apps that you can create in AWS Amplify Console in this account in the current Region.
Branches per app	Each supported Region: 50	Yes	The maximum number of branches per app that you can create in this account in the current Region.
Build artifact size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) of an app build artifact. A build artifact is deployed by AWS Amplify Console after a build.
Cache artifact size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) of a cache artifact.
Concurrent jobs	Each supported Region: 5	Yes	The maximum number of concurrent jobs that you can create in this account in the current Region.
Domains per app	Each supported Region: 5	Yes	The maximum number of domains per app that you

Name	Default	Adjust	Description
			can create in this account in the current Region.
Environment cache artifact size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) of the environment cache artifact.
Manual deploy ZIP file size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) of a manual deploy ZIP file.
Maximum app creations per hour	Each supported Region: 25	No	The maximum number of apps that you can create in AWS Amplify Console per hour in this account in the current Region.
Subdomains per domain	Each supported Region: 50	Yes	The maximum number of subdomains per domain that you can create in this account in the current Region.
Webhooks per app	Each supported Region: 50	Yes	The maximum number of webhooks per app that you can create in this account in the current Region.

Amplify Studio (UI Builder) Service quotas

Name	Default	Adjustable	
Components per app	All supported Regions: 1000	No	
Component size	All supported Regions: 350 Kilobytes	No	
Themes per app	All supported Regions: 1000	No	
Theme size	All supported Regions: 350 Kilobytes	No	

Amazon API Gateway endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon API Gateway includes the API Gateway Control Plane (for creating and managing APIs) and the API Gateway Data Plane (for calling deployed APIs).

The Route 53 Hosted Zone ID column shows the Route 53 Hosted Zone IDs for API Gateway Regional endpoints. Route 53 Hosted Zone IDs are for use with the `execute-api` (API Gateway component service for API execution) domain. For edge-optimized endpoints, the Route 53 Hosted Zone ID is Z2FDTNDATAQYW2 for all Regions.

Amazon API Gateway control plane

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	apigateway.us-east-2.amazonaws.com apigateway-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	apigateway.us-east-1.amazonaws.com apigateway-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	apigateway.us-west-1.amazonaws.com apigateway-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	apigateway.us-west-2.amazonaws.com apigateway-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	apigateway.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	apigateway.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	apigateway.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	apigateway.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	apigateway.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	apigateway.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	apigateway.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	apigateway.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	apigateway.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	apigateway.ca-central-1.amazonaws.com apigateway-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	apigateway.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	apigateway.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	apigateway.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	apigateway.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	apigateway.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	apigateway.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	apigateway.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	apigateway.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	apigateway.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	apigateway.us-gov-east-1.amazonaws.com apigateway-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	apigateway.us-gov-west-1.amazonaws.com apigateway-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Amazon API Gateway data plane

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID
US East (Ohio)	us-east-2	execute-api.us-east-2.amazonaws.com	HTTPS	ZOJJZC49E0EPZ
US East (N. Virginia)	us-east-1	execute-api.us-east-1.amazonaws.com	HTTPS	Z1UJRXOUMOOFQ8
US West (N. California)	us-west-1	execute-api.us-west-1.amazonaws.com	HTTPS	Z2MUQ32089INYE
US West (Oregon)	us-west-2	execute-api.us-west-2.amazonaws.com	HTTPS	Z2OJLYMUO9EFXC
Africa (Cape Town)	af-south-1	execute-api.af-south-1.amazonaws.com	HTTPS	Z2DHW2332DAMTN
Asia Pacific (Hong Kong)	ap-east-1	execute-api.ap-east-1.amazonaws.com	HTTPS	Z3FD1VL90ND7K5
Asia Pacific (Mumbai)	ap-south-1	execute-api.ap-south-1.amazonaws.com	HTTPS	Z3VO1THU9YC4UR
Asia Pacific (Seoul)	ap-northeast-2	execute-api.ap-northeast-2.amazonaws.com	HTTPS	Z20JF4UZKIW1U8
Asia Pacific (Singapore)	ap-southeast-1	execute-api.ap-southeast-1.amazonaws.com	HTTPS	ZL327KTPIQFUL
Asia Pacific (Sydney)	ap-southeast-2	execute-api.ap-southeast-2.amazonaws.com	HTTPS	Z2RPCDW04V8134
Asia Pacific (Tokyo)	ap-northeast-1	execute-api.ap-northeast-1.amazonaws.com	HTTPS	Z1YSHQZHG15GKL
Canada (Central)	ca-central-1	execute-api.ca-central-1.amazonaws.com	HTTPS	Z19DQILCV0OWEC
Europe (Frankfurt)	eu-central-1	execute-api.eu-central-1.amazonaws.com	HTTPS	Z1U9ULNL0V5AJ3
Europe (Ireland)	eu-west-1	execute-api.eu-west-1.amazonaws.com	HTTPS	ZLY8HYME6SFDD

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID	
Europe (London)	eu-west-2	execute-api.eu-west-2.amazonaws.com	HTTPS	ZJ5UAJN8Y3Z2Q	
Europe (Milan)	eu-south-1	execute-api.eu-south-1.amazonaws.com	HTTPS	Z3BT4WSQ9TDYZV	
Europe (Paris)	eu-west-3	execute-api.eu-west-3.amazonaws.com	HTTPS	Z3KY65QIEKYHQQ	
Europe (Stockholm)	eu-north-1	execute-api.eu-north-1.amazonaws.com	HTTPS	Z3UWIKFBOOGXPP	
Middle East (Bahrain)	me-south-1	execute-api.me-south-1.amazonaws.com	HTTPS	Z20ZBPC0SS8806	
South America (São Paulo)	sa-east-1	execute-api.sa-east-1.amazonaws.com	HTTPS	ZCMLWB8V5SYIT	
AWS GovCloud (US-East)	us-gov-east-1	execute-api.us-gov-east-1.amazonaws.com	HTTPS	Z3SE9ATJYCRCZJ	
AWS GovCloud (US-West)	us-gov-west-1	execute-api.us-gov-west-1.amazonaws.com	HTTPS	Z1K6XKP9SAGWDV	

Service quotas

Name	Default	Adjust	Description
API Payload Size	Each supported Region: 10 Megabytes	No	Maximum payload size for non WebSocket API.
API Stage throttles in a usage plan	Each supported Region: 100	No	The maximum number of API-stage throttle settings you can create in a usage plan in this account in the current region
API keys	Each supported Region: 10,000	No	The maximum number of API keys that you can create in this account in the current region
AWS Lambda authorizer result size	Each supported Region: 8 Kilobytes	No	The maximum size of AWS Lambda authorizer result.

Name	Default	Adjust	Description
Client certificates	Each supported Region: 60	Yes	The maximum number of certificates that you can associate with this account in the current region
Connection duration for WebSocket API	Each supported Region: 7,200 Seconds	No	Maximum duration for WebSocket API connection.
Custom Domain Names	Each supported Region: 120	Yes	The maximum number of Custom domain names that you can create in this account in the current region
Edge API URL Length	Each supported Region: 8,192	No	Length, in characters, of the URL for an edge-optimized API.
Edge-optimized APIs	Each supported Region: 120	No	The maximum number of edge-optimized APIs that you can create in this account in the current region
Maximum API caching TTL	Each supported Region: 3,600 Seconds	No	The maximum API caching TTL you can have in this account in the current region.
Maximum Cached Response Size	Each supported Region: 1,048,576 Bytes	No	Maximum size of cached response in bytes
Maximum Combined Header Size	Each supported Region: 10,240 Bytes	No	Maximum combined size of all header values
Maximum Iterations In Mapping Template	Each supported Region: 1,000	No	Maximum number of iterations in a #foreach ... #end loop in mapping templates
Maximum integration timeout in milliseconds	Each supported Region: 29,000 Milliseconds	No	The maximum integration timeout in milliseconds you can have in this account in the current region.
Maximum resource policy size in bytes	Each supported Region: 8,192	Yes	The maximum resource policy size in bytes you can have in this account in the current region.
Method ARN Length	Each supported Region: 1,600 Bytes	No	ARN length of a method with authorization

Name	Default	Adjust	Description
Private APIs	Each supported Region: 600	No	The maximum number of private APIs that you can create in this account in the current region
Regional API URL Length	Each supported Region: 10,240	No	Length, in characters, of the URL for a regional API
Regional APIs	Each supported Region: 600	No	The maximum number of regional APIs that you can create in this account in the current region
Resources/Routes per REST/WebSocket API	Each supported Region: 300	Yes	The maximum number of resources/routes that you can include in a REST or WebSocket API
Routes per HTTP API	Each supported Region: 300	Yes	The maximum number of routes that you can include in an HTTP API
Stage Variable Key Length	Each supported Region: 64	No	Length, in characters, of the key in a stage variable
Stage Variable Value Length	Each supported Region: 512	No	Length, in characters, of the value in a stage variable
Stage variables per stage	Each supported Region: 100	No	Stage variables per stage
Stages per API	Each supported Region: 10	Yes	The maximum number of stages that you can create for an API
Subnets per VPC link(V2)	Each supported Region: 10	Yes	The maximum number of subnets per V2 VPC link in this account in the current Region
Tags Per Stage	Each supported Region: 50	No	Maximum tags per stage.
Throttle burst rate	af-south-1: 1,250 eu-south-1: 1,250 Each of the other supported Regions: 5,000	No	The maximum number of additional requests per second (RPS) that you can send in one burst in this account in the current region
Throttle rate	af-south-1: 2,500 eu-south-1: 2,500 Each of the other supported Regions: 10,000	Yes	The maximum number of requests per second that your APIs can receive in this account in the current region

Name	Default	Adjust	Description
Usage plans	Each supported Region: 300	Yes	The maximum number of usage plans that you can create in this account in the current region
Usage plans per API key	Each supported Region: 10	Yes	The maximum number of usage plans that you can associate with an API key
VPC links	Each supported Region: 20	Yes	The maximum number of VPC links that you can create in this account in the current region
VPC links(V2)	Each supported Region: 10	Yes	The maximum number of V2 VPC links that you can create in this account in the current Region
WebSocket Idle Connection Timeout	Each supported Region: 600 Seconds	No	WebSocket API idle connection timeout.
WebSocket frame size	Each supported Region: 32 Kilobytes	No	Maximum WebSocket frame size.
WebSocket message payload size	Each supported Region: 128 Kilobytes	No	Maximum WebSocket message payload size.
WebSocket new connections burst rate	Each supported Region: 500	No	New connections in burst capacity per account (across all WebSocket APIs) per region
WebSocket new connections rate	Each supported Region: 500	Yes	New connections per second per account (across all WebSocket APIs) per region

For more information, see Quotas in Amazon API Gateway in the *API Gateway Developer Guide*.

AWS AppConfig endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

AWS AppConfig is a capability of AWS Systems Manager. To view endpoints and quotas of other Systems Manager capabilities, see AWS Systems Manager endpoints and quotas (p. 922).

Service endpoints

The following sections describe the service endpoints for AWS AppConfig. AWS AppConfig uses *control plane* APIs for setting up and configuring AWS AppConfig applications, environments, configuration profiles, and deployment strategies. AWS AppConfig uses the AWS AppConfig Data service to call *data plane* APIs for retrieving stored configurations.

Topics

- Control plane endpoints (p. 37)
- Data plane endpoints (p. 39)

Control plane endpoints

The following table contains AWS Region-specific endpoints that AWS AppConfig supports for control plane operations. Control plane operations are used for creating, updating, and managing configuration data. For more information, see AWS AppConfig operations in the *AWS AppConfig API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appconfig.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	appconfig.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	appconfig.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appconfig.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	appconfig.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appconfig.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	appconfig.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appconfig.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appconfig.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	appconfig.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appconfig.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appconfig.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appconfig.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appconfig.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	appconfig.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appconfig.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appconfig.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	appconfig.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	appconfig.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	appconfig.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	appconfig.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	appconfig.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	appconfig.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	appconfig.us-gov-east-1.amazonaws.com appconfig.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	appconfig.us-gov-west-1.amazonaws.com appconfig.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Data plane endpoints

The following table contains AWS Region-specific endpoints that AWS AppConfig Data supports for data plane operations. Data plane operations are used for retrieving configuration data. For more information, see AWS AppConfig Data operations in the *AWS AppConfig API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appconfigdata.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	appconfigdata.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	appconfigdata.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appconfigdata.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	appconfigdata.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appconfigdata.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appconfigdata.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appconfigdata.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appconfigdata.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appconfigdata.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appconfigdata.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appconfigdata.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appconfigdata.ca-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	appconfigdata.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appconfigdata.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appconfigdata.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	appconfigdata.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	appconfigdata.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	appconfigdata.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	appconfigdata.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	appconfigdata.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	appconfigdata.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	appconfigdata.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Configuration size limit in AWS AppConfig hosted configuration store	Each supported Region: 1,024 Kilobytes	Yes	AWS AppConfig hosted configuations have a limit for each version of configuration data. Hosted configurations do not have additional costs to use in AWS AppConfig.
Deployment size limit	Each supported Region: 1,024 Kilobytes	Yes	AWS AppConfig limits configuration data stored in Amazon S3 to 1 MB. Please see S3s pricing information to understand costs of storage in S3.

Name	Default	Adjust	Description
Maximum number of applications	Each supported Region: 100	Yes	An application in AWS AppConfig is a logical unit of code (a namespace) that provides capabilities for your customers. An application can be a microservice that runs on EC2 instances, a mobile application installed by your users, a serverless application using Amazon API Gateway and AWS Lambda, or any system you run on behalf of others.
Maximum number of configuration profiles per application	Each supported Region: 100	Yes	Configuration profiles contain metadata about a particular set of configuration data used by your application.
Maximum number of deployment strategies	Each supported Region: 20	Yes	A deployment strategy defines how configuration deploys, or rolls out, across the collection of instances within a specific application environment.
Maximum number of environments per application	Each supported Region: 20	Yes	An environment corresponds to a grouping of instances associated with an application. Examples of environments include stages such as beta and prod, or application subcomponents such as web, mobile, and service.

AWS App Mesh endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appmesh.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		appmesh.us-east-2.api.aws appmesh-envoy-management.us-east-2.amazonaws.com appmesh-envoy-management.us-east-2.api.aws	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	appmesh.us-east-1.amazonaws.com appmesh-envoy-management.us-east-1.api.aws appmesh-envoy-management.us-east-1.amazonaws.com appmesh.us-east-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	appmesh.us-west-1.amazonaws.com appmesh-envoy-management.us-west-1.amazonaws.com appmesh.us-west-1.api.aws appmesh-envoy-management.us-west-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	appmesh.us-west-2.amazonaws.com appmesh-envoy-management.us-west-2.amazonaws.com appmesh.us-west-2.api.aws appmesh-envoy-management.us-west-2.api.aws	HTTPS HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	appmesh.af-south-1.amazonaws.com appmesh-envoy-management.af-south-1.amazonaws.com appmesh.af-south-1.api.aws appmesh-envoy-management.af-south-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appmesh.ap-east-1.amazonaws.com appmesh.ap-east-1.api.aws appmesh-envoy-management.ap-east-1.api.aws appmesh-envoy-management.ap-east-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	appmesh.ap-southeast-3.amazonaws.com appmesh-envoy-management.ap-southeast-3.amazonaws.com appmesh.ap-southeast-3.api.aws appmesh-envoy-management.ap-southeast-3.api.aws	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appmesh.ap-south-1.amazonaws.com appmesh.ap-south-1.api.aws appmesh-envoy-management.ap-south-1.amazonaws.com appmesh-envoy-management.ap-south-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appmesh.ap-northeast-3.amazonaws.com appmesh-envoy-management.ap-northeast-3.amazonaws.com appmesh-envoy-management.ap-northeast-3.api.aws appmesh.ap-northeast-3.api.aws	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appmesh.ap-northeast-2.amazonaws.com appmesh-envoy-management.ap-northeast-2.api.aws appmesh-envoy-management.ap-northeast-2.amazonaws.com appmesh.ap-northeast-2.api.aws	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appmesh.ap-southeast-1.amazonaws.com appmesh-envoy-management.ap-southeast-1.api.aws appmesh.ap-southeast-1.api.aws appmesh-envoy-management.ap-southeast-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appmesh.ap-southeast-2.amazonaws.com appmesh-envoy-management.ap-southeast-2.api.aws appmesh-envoy-management.ap-southeast-2.amazonaws.com appmesh.ap-southeast-2.api.aws	HTTPS HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	appmesh.ap-northeast-1.amazonaws.com appmesh-envoy-management.ap-northeast-1.api.aws appmesh-envoy-management.ap-northeast-1.amazonaws.com appmesh.ap-northeast-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
Canada (Central)	ca-central-1	appmesh.ca-central-1.amazonaws.com appmesh.ca-central-1.api.aws appmesh-envoy-management.ca-central-1.api.aws appmesh-envoy-management.ca-central-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	appmesh.eu-central-1.amazonaws.com appmesh.eu-central-1.api.aws appmesh-envoy-management.eu-central-1.amazonaws.com appmesh-envoy-management.eu-central-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
Europe (Ireland)	eu-west-1	appmesh.eu-west-1.amazonaws.com appmesh-envoy-management.eu-west-1.api.aws appmesh-envoy-management.eu-west-1.amazonaws.com appmesh.eu-west-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
Europe (London)	eu-west-2	appmesh.eu-west-2.amazonaws.com appmesh.eu-west-2.api.aws appmesh-envoy-management.eu-west-2.amazonaws.com appmesh-envoy-management.eu-west-2.api.aws	HTTPS HTTPS HTTPS HTTPS	
Europe (Milan)	eu-south-1	appmesh.eu-south-1.amazonaws.com appmesh-envoy-management.eu-south-1.api.aws appmesh-envoy-management.eu-south-1.amazonaws.com appmesh.eu-south-1.api.aws	HTTPS HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	appmesh.eu-west-3.amazonaws.com appmesh-envoy-management.eu-west-3.amazonaws.com appmesh-envoy-management.eu-west-3.api.aws appmesh.eu-west-3.api.aws	HTTPS HTTPS HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	appmesh.eu-north-1.amazonaws.com appmesh.eu-north-1.api.aws appmesh-envoy-management.eu-north-1.api.aws appmesh-envoy-management.eu-north-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	appmesh.me-south-1.amazonaws.com appmesh-envoy-management.me-south-1.api.aws appmesh-envoy-management.me-south-1.amazonaws.com appmesh.me-south-1.api.aws	HTTPS HTTPS HTTPS HTTPS	
South America (São Paulo)	sa-east-1	appmesh.sa-east-1.amazonaws.com appmesh.sa-east-1.api.aws appmesh-envoy-management.sa-east-1.api.aws appmesh-envoy-management.sa-east-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Backends per virtual node	Each supported Region: 50	Yes	Number of backends per virtual node
Connected Envoy processes per virtual gateway	Each supported Region: 50	Yes	Number of concurrently connected Envoy processes per virtual gateway
Connected Envoy processes per virtual node	Each supported Region: 50	Yes	Number of concurrently connected Envoy processes per virtual node
Gateway routes per virtual gateway	Each supported Region: 10	Yes	Number of gateway routes per virtual gateway

Name	Default	Adjust	Description
Meshes per account	Each supported Region: 15	Yes	Number of meshes per account
Routes per virtual router	Each supported Region: 50	Yes	Number of routes per virtual router
Virtual gateways per mesh	Each supported Region: 3	Yes	Number of virtual gateways per mesh
Virtual nodes per mesh	Each supported Region: 200	Yes	Number of virtual nodes per mesh
Virtual routers per mesh	Each supported Region: 200	Yes	Number of virtual routers per mesh
Virtual services per mesh	Each supported Region: 200	Yes	Number of virtual services per mesh
Weighted targets per route	Each supported Region: 10	No	Number of weighted targets per route

AWS App Runner endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID	
US East (Ohio)	us-east-2	apprunner.us-east-2.amazonaws.com apprunner-fips.us-east-2.amazonaws.com	HTTPS HTTPS	Z0224347AD7KVHMLOX31	
US East (N. Virginia)	us-east-1	apprunner.us-east-1.amazonaws.com apprunner-fips.us-east-1.amazonaws.com	HTTPS HTTPS	Z01915732ZBZKC8D32TPT	
US West (Oregon)	us-west-2	apprunner.us-west-2.amazonaws.com apprunner-fips.us-west-2.amazonaws.com	HTTPS HTTPS	Z02243383FTQ64HJ5772Q	
Asia Pacific (Tokyo)	ap-northeast-1	apprunner.ap-northeast-1.amazonaws.com	HTTPS	Z08491812XW6IPYLR6CCA	
Europe (Ireland)	eu-west-1	apprunner.eu-west-1.amazonaws.com	HTTPS	Z0875519 14Z2PCAU0QHMW	

Service quotas

Name	Default	Adjust	Description
Auto scaling configurations	Each supported Region: 10	Yes	The maximum number of auto scaling configurations that you can create in this account in the current Region. You can use a single auto scaling configuration in multiple services.
Connections	Each supported Region: 10	Yes	The maximum number of connections that you can create in this account in the current Region. You can use a single connection in multiple services.
Observability configurations	Each supported Region: 10	Yes	The maximum number of observability configurations that you can create in this account in the current Region. You can use a single observability configuration in multiple services.
Services	Each supported Region: 30	Yes	The maximum number of services that you can create in this account in the current Region.
VPC connectors	Each supported Region: 10	Yes	The maximum number of VPC connectors that you can create in this account in the current Region. You can use a single VPC connector in multiple services.

Amazon AppFlow endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

You can't use IP allow listing in your Amazon S3 bucket policy to deny access to any other IP addresses besides Amazon AppFlow IP addresses. This is because Amazon AppFlow uses a VPC endpoint when placing data in your Amazon S3 buckets.

For more information about the IP addresses used by Amazon AppFlow, see AWS IP address ranges in the *Amazon Web Services General Reference*.

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appflow.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	appflow.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	appflow.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appflow.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	appflow.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appflow.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appflow.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appflow.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appflow.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appflow.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appflow.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	appflow.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appflow.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appflow.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	appflow.eu-west-3.amazonaws.com	HTTPS	
South America	sa-east-1	appflow.sa-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
(São Paulo)				

Service quotas

Name	Default	Adjust	Description
Amazon AppFlow flow run size	Each supported Region: 100 Gigabytes	No	The maximum size (in GB) of data that Amazon AppFlow can process per flow run in this account in the current Region.
Amazon EventBridge event size	Each supported Region: 256 Kilobytes	No	The maximum size (in KB) of events that Amazon EventBridge can process per flow run in this account in the current Region. If your event exceeds this size, Amazon AppFlow publishes a summary event with a pointer to the Amazon S3 bucket where you can get the full event.
Amplitude flow run size	Each supported Region: 25 Megabytes	No	The maximum size (in MB) of data that can be processed per flow run when when using Amplitude as a source, in this account in the current Region.
Concurrent flow runs	Each supported Region: 1,000	Yes	The maximum number of concurrent flow runs that you can perform at any time, in this account in the current Region.
Connector profiles	Each supported Region: 100	Yes	The maximum number of connector profiles in this account in the current Region.
Google Analytics dimensions	Each supported Region: 9	No	The maximum number of Google Analytics dimensions that can be processed per flow run in this account in the current Region.
Google Analytics metrics	Each supported Region: 10	No	The maximum number of Google Analytics metrics

Name	Default	Adjust	Description
			that can be processed per flow run in this account in the current Region.
Marketo flow run size	Each supported Region: 20 Megabytes	No	The maximum size (in MB) of data that can be processed per flow run when using Marketo as a source, in this account in the current Region.
Monthly flow runs	Each supported Region: 10,000,000	Yes	The maximum number of flow runs you can perform per month in this account in the current Region.
Rate of Amazon AppFlow flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that Amazon AppFlow can run per minute in this account in the current Region.
Rate of Amazon S3 flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Amazon S3 as a source, in this account in the current Region.
Rate of Amplitude flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per day when using Amplitude as a source, in this account in the current Region.
Rate of Datadog flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Datadog as a source, in this account in the current Region.
Rate of Dynatrace flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Dynatrace as a source, in this account in the current Region.

Name	Default	Adjust	Description
Rate of Google Analytics flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per day when using Google Analytics as a source, in this account in the current Region.
Rate of Infor Nexus flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Infor Nexus as a source, in this account in the current Region.
Rate of Marketo flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per hour when using Marketo as a source, in this account in the current Region.
Rate of Salesforce Pardot flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Salesforce Pardot as a source, in this account in the current Region.
Rate of Salesforce flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Salesforce as a source, in this account in the current Region.
Rate of ServiceNow flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using ServiceNow as a source, in this account in the current Region.
Rate of Singular flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per hour when using Singular as a source, in this account in the current Region.

Name	Default	Adjust	Description
Rate of Slack flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Slack as a source, in this account in the current Region.
Rate of TrendMicro flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per hour when using TrendMicro as a source, in this account in the current Region.
Rate of Veeva flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Veeva as a source, in this account in the current Region.
Rate of Zendesk flow runs	Each supported Region: 1	No	The maximum number of schedule-triggered flows that you can run per minute when using Zendesk as a source, in this account in the current Region.
Salesforce event size	Each supported Region: 1 Megabytes	No	The maximum size (in MB) of events from Salesforce that can be processed per flow run in this account in the current Region.
Salesforce flow run data export size	Each supported Region: 500 Megabytes	No	The maximum size (in MB) of records that you can insert, update, or upsert into Salesforce per flow run. If your source is Amazon S3, each CSV file cannot exceed 25 MB in size. However, you can drop multiple CSV files into the source bucket or folder, and Amazon AppFlow will transfer all the data to Salesforce in a single flow run.
Salesforce flow run data import size	Each supported Region: 15 Gigabytes	No	The maximum size (in GB) of data that Salesforce can import per flow run in this account in the current Region.

Name	Default	Adjust	Description
ServiceNow records	Each supported Region: 100,000	No	The maximum number of ServiceNow records that can be processed per flow run in this account in the current Region.
Total flows	Each supported Region: 1,000	Yes	The maximum number of flows that you can have in this account in the current Region.

For more information, see Quotas for Amazon AppFlow in the *Amazon AppFlow User Guide*.

Application Auto Scaling endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	application-autoscaling.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	application-autoscaling.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	application-autoscaling.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	application-autoscaling.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	application-autoscaling.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	application-autoscaling.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	application-autoscaling.ap-southeast-3.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	application-autoscaling.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	application-autoscaling.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	application-autoscaling.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	application-autoscaling.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	application-autoscaling.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	application-autoscaling.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	application-autoscaling.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	application-autoscaling.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	application-autoscaling.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	application-autoscaling.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	application-autoscaling.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	application-autoscaling.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	application-autoscaling.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	application-autoscaling.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	application-autoscaling.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	application-autoscaling.sa-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	application-autoscaling.us-gov-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	application-autoscaling.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjust	Description
Scalable targets for Amazon Keyspaces	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the Cassandra namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for Amazon MSK	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the Kafka namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for AppStream	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the AppStream namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for Comprehend	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the Comprehend namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.

Name	Default	Adjust	Description
Scalable targets for DynamoDB	Each supported Region: 5,000	Yes	The maximum number of scalable targets that you can register for the DynamoDB namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for EC2	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the EC2 namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for ECS	Each supported Region: 3,000	Yes	The maximum number of scalable targets that you can register for the ECS namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for EMR	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the Elastic MapReduce (EMR) namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for Lambda	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the Lambda namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.

Name	Default	Adjust	Description
Scalable targets for RDS	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the RDS namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for SageMaker	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the SageMaker namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scalable targets for custom resources	Each supported Region: 500	Yes	The maximum number of scalable targets that you can register for the custom resource namespace in this account in the current Region. A scalable target identifies the resource that Application Auto Scaling can scale.
Scaling policies per scalable target	Each supported Region: 50	No	The maximum number of scaling policies per scalable target.
Scheduled actions per scalable target	Each supported Region: 200	No	The maximum number of scheduled actions per scalable target.
Step adjustments per step scaling policy	Each supported Region: 20	No	The maximum number of step adjustments per step scaling policy.

For more information, see Quotas for Application Auto Scaling in the *Application Auto Scaling User Guide*.

AWS Application Discovery Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	discovery.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	discovery.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	discovery.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	discovery.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	discovery.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	discovery.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	discovery.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Active agents sending data to the service	Each supported Region: 1,000	No	The maximum number of active agents sending data to the service.
Applications per account	Each supported Region: 1,000	No	The maximum number of applications per account. If you reach this quota, and want to import new applications, you can delete existing applications in the Migration Hub console or by using the DeleteApplications API action.
Deletions of import records per day	Each supported Region: 25,000	No	The maximum number of deletions of import records per day. Each day starts at 00:00 UTC.
Imported server records per account	Each supported Region: 25,000	No	The maximum number of imported server records per account.

Name	Default	Adjust	Description
Imported servers per account	Each supported Region: 10,000	Yes	The maximum number of imported servers per account.
Inactive agents heartbeating but not collecting data	Each supported Region: 10,000	No	The maximum number of inactive agents heartbeating but not collecting data.
Servers per application	Each supported Region: 400	No	The maximum number of servers that can be associated with a single application.
Tags per server	Each supported Region: 30	No	The maximum number of tags for a single server.

AWS Application Migration Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mgn.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	mgn.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	mgn.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mgn.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	mgn.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	mgn.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	mgn.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mgn.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	mgn.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mgn.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mgn.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mgn.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mgn.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	mgn.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mgn.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mgn.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mgn.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	mgn.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mgn.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mgn.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	mgn.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	mgn.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent jobs in progress	Each supported Region: 20	No	Concurrent jobs in progress
Max Active Source Servers	Each supported Region: 20	Yes	Max Active Source Servers
Max Non-Archived Source Servers	Each supported Region: 4,000	No	Max Non-Archived Source Servers
Max Source Servers in a single Job	Each supported Region: 200	No	Max Source Servers in a single Job
Max Source Servers in all Jobs	Each supported Region: 200	No	Max Source Servers in all Jobs
Max Total Source Servers Per AWS Account	Each supported Region: 50,000	No	Max Total Source Servers Per AWS Account
Max concurrent Jobs per Source Server	Each supported Region: 1	No	Max concurrent Jobs per Source Server

The following table lists additional information.

Resource	Retention
Launch history	Saved for 10 years
Individual Job log	Saved for 185 days

Amazon AppStream 2.0 endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appstream2.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	appstream2.us-east-1.amazonaws.com appstream2-fips.us-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
		appstream2-fips.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appstream2.us-west-2.amazonaws.com appstream2-fips.us-west-2.amazonaws.com appstream2-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appstream2.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appstream2.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appstream2.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appstream2.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appstream2.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appstream2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	appstream2.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appstream2.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appstream2.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	appstream2.us-gov-west-1.amazonaws.com appstream2-fips.us-gov-west-1.amazonaws.com appstream2-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Active fleets	Each supported Region: 10	Yes	The maximum number of active fleets that you can create in this account in the current Region.

Name	Default	Adjust	Description
Compute-optimized 2xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of compute-optimized 2xlarge streaming instances (stream.compute.2xlarge) that you can use for fleets in this account in the current Region.
Compute-optimized 2xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of compute-optimized 2xlarge streaming instances (stream.compute.2xlarge) that you can use for image builders in this account in the current Region.
Compute-optimized 4xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of compute 4xlarge streaming instances (stream.compute.4xlarge) that you can use for fleets in this account in the current Region.
Compute-optimized 4xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of compute-optimized 4xlarge streaming instances (stream.compute.4xlarge) that you can use for image builders in this account in the current Region.
Compute-optimized 8xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of compute-optimized 8xlarge streaming instances (stream.compute.8xlarge) that you can use for fleets in this account in the current Region.
Compute-optimized 8xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of compute-optimized 8xlarge streaming instances (stream.compute.8xlarge) that you can use for image builders in this account in the current Region.
Compute-optimized large streaming instances for fleets	Each supported Region: 10	Yes	The maximum number of compute-optimized large streaming instances (stream.compute.large) that you can use for fleets in this account in the current Region.

Name	Default	Adjust	Description
Compute-optimized large streaming instances for image builders	Each supported Region: 3	Yes	The maximum number of compute-optimized large streaming instances (stream.compute.large) that you can use for image builders in this account in the current Region.
Compute-optimized xlarge streaming instances for fleets	Each supported Region: 10	Yes	The maximum number of compute-optimized xlarge streaming instances (stream.compute.xlarge) that you can use for fleets in this account in the current Region.
Compute-optimized xlarge streaming instances for image builders	Each supported Region: 3	Yes	The maximum number of compute-optimized xlarge streaming instances (stream.compute.xlarge) that you can use for image builders in this account in the current Region.
Concurrent image copies per destination Region	Each supported Region: 2	Yes	The maximum number of concurrent image copies that you can have in this account in the current Region.
Concurrent image updates	Each supported Region: 5	Yes	The maximum number of concurrent image updates that you can have in this account in the current Region.
Fleets	Each supported Region: 10	Yes	The maximum number of fleets that you can create in this account in the current Region.
Graphics G4DN 12xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics G4DN 12xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Graphics G4DN 16xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics G4DN 16xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available

Name	Default	Adjust	Description
Graphics G4DN 2xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of graphics G4DN 2xlarge instances (stream.graphics.g4dn.2xlarge) that you can use for fleets in this account in the current Region.
Graphics G4DN 2xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of graphics G4DN 2xlarge instances (stream.graphics.g4dn.2xlarge) that you can use for image builders in this account in the current Region.
Graphics G4DN 4xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of graphics G4DN 4xlarge instances (stream.graphics.g4dn.4xlarge) that you can use for fleets in this account in the current Region.
Graphics G4DN 4xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of graphics G4DN 4xlarge instances (stream.graphics.g4dn.4xlarge) that you can use for image builders in this account in the current Region.
Graphics G4DN 8xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of graphics G4DN 8xlarge instances (stream.graphics.g4dn.8xlarge) that you can use for fleets in this account in the current Region.
Graphics G4DN 8xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of graphics G4DN 8xlarge instances (stream.graphics.g4dn.8xlarge) that you can use for image builders in this account in the current Region.
Graphics G4DN xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of graphics G4DN xlarge instances (stream.graphics.g4dn.xlarge) that you can use for fleets in this account in the current Region.

Name	Default	Adjust	Description
Graphics G4DN xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of graphics G4DN xlarge instances (stream.graphics.g4dn.xlarge) that you can use for image builders in this account in the current Region.
Graphics design 2xlarge streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Graphics design 2xlarge streaming instances for image builders	Each supported Region: 3	Yes	No Description Available
Graphics design 4xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics design 4xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Graphics design large streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Graphics design large streaming instances for image builders	Each supported Region: 3	Yes	No Description Available
Graphics design xlarge streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Graphics design xlarge streaming instances for image builders	Each supported Region: 3	Yes	No Description Available
Graphics desktop 2xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics desktop 2xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Graphics pro 16xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics pro 16xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Graphics pro 4xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics pro 4xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Graphics pro 8xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Graphics pro 8xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available

Name	Default	Adjust	Description
Image builders	Each supported Region: 10	Yes	The maximum number of image builders that you can create in this account in the current Region.
Image sharing limit	Each supported Region: 100	Yes	The maximum number of AWS accounts one image can be shared with in this account in the current Region.
Max concurrent sessions for Elastic fleets with Amazon Linux 2 platform and stream.standard.2xlarge instance type	Each supported Region: 2	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Amazon Linux 2 platform and stream.standard.large instance type	Each supported Region: 5	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Amazon Linux 2 platform and stream.standard.medium instance type	Each supported Region: 10	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Amazon Linux 2 platform and stream.standard.small instance type	Each supported Region: 10	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Amazon Linux 2 platform and stream.standard.xlarge instance type	Each supported Region: 2	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Windows Server 2019 platform and stream.standard.2xlarge instance type	Each supported Region: 2	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Windows Server 2019 platform and stream.standard.large instance type	Each supported Region: 5	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Windows Server 2019 platform and stream.standard.medium instance type	Each supported Region: 10	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Windows Server 2019 platform and stream.standard.small instance type	Each supported Region: 10	Yes	No Description Available
Max concurrent sessions for Elastic fleets with Windows Server 2019 platform and stream.standard.xlarge instance type	Each supported Region: 2	Yes	No Description Available

Name	Default	Adjust	Description
Memory-optimized 2xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of memory-optimized 2xlarge streaming instances (stream.memory.2xlarge) that you can use for fleets in this account in the current Region.
Memory-optimized 2xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of memory-optimized 2xlarge streaming instances (stream.memory.2xlarge) that you can use for image builders in this account in the current Region.
Memory-optimized 4xlarge streaming instances for fleets	Each supported Region: 0	Yes	The maximum number of memory-optimized 4xlarge streaming instances (stream.memory.4xlarge) that you can use for fleets in this account in the current Region.
Memory-optimized 4xlarge streaming instances for image builders	Each supported Region: 0	Yes	The maximum number of memory-optimized 4xlarge streaming instances (stream.memory.4xlarge) that you can use for image builders in this account in the current Region.
Memory-optimized 8xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Memory-optimized 8xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Memory-optimized large streaming instances for fleets	Each supported Region: 10	Yes	The maximum number of memory-optimized large streaming instances (stream.memory.large) that you can use for fleets in this account in the current Region.
Memory-optimized large streaming instances for image builders	Each supported Region: 3	Yes	The maximum number of memory-optimized large streaming instances (stream.memory.large) that you can use for image builders in this account in the current Region.

Name	Default	Adjust	Description
Memory-optimized xlarge streaming instances for fleets	Each supported Region: 10	Yes	The maximum number of memory-optimized xlarge streaming instances (stream.memory.xlarge) that you can use for fleets in this account in the current Region.
Memory-optimized xlarge streaming instances for image builders	Each supported Region: 3	Yes	The maximum number of memory-optimized xlarge streaming instances (stream.memory.xlarge) that you can use for image builders in this account in the current Region
Memory-optimized z1d 12xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 12xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 2xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 2xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 3xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 3xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 6xlarge streaming instances for fleets	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d 6xlarge streaming instances for image builders	Each supported Region: 0	Yes	No Description Available
Memory-optimized z1d large streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Memory-optimized z1d large streaming instances for image builders	Each supported Region: 3	Yes	No Description Available
Memory-optimized z1d xlarge streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Memory-optimized z1d xlarge streaming instances for image builders	Each supported Region: 3	Yes	No Description Available
Private images	Each supported Region: 10	Yes	The maximum number of private images that you can create in this account in the current Region.

Name	Default	Adjust	Description
Stacks	Each supported Region: 10	Yes	The maximum number of stacks that you can create in this account in the current Region.
Standard 2xlarge streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Standard large streaming instances for fleets	Each supported Region: 50	Yes	The maximum number of standard large streaming instances (stream.standard.large) that you can use for fleets in this account in the current Region.
Standard large streaming instances for image builders	Each supported Region: 5	Yes	The maximum number of standard large streaming instances (stream.standard.large) that you can use for image builders in this account in the current Region.
Standard medium streaming instances for fleets	Each supported Region: 50	Yes	The maximum number of standard medium streaming instances (stream.standard.medium) that you can use for fleets in this account in the current Region.
Standard medium streaming instances for image builders	Each supported Region: 5	Yes	The maximum number of standard medium streaming instances (stream.standard.medium) that you can use for image builders in this account in the current Region.
Standard small streaming instances for fleets	Each supported Region: 50	Yes	The maximum number of standard small streaming instances (stream.standard.small) that you can use for fleets in this account in the current Region.
Standard small streaming instances for image builders	Each supported Region: 5	Yes	The maximum number of standard small streaming instances (stream.standard.small) that you can use for image builders in this account in the current Region.

Name	Default	Adjust	Description
Standard xlarge streaming instances for fleets	Each supported Region: 10	Yes	No Description Available
Users in the user pool	Each supported Region: 50	Yes	The maximum number of users that you can create in the user pool in this account in the current Region.

*For fleets that have **Default Internet Access** enabled, the quota is 100 fleet instances. If your deployment must support more than 100 concurrent users, use a NAT gateway configuration instead.

AWS AppSync endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

AWS AppSync control plane

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appsync.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	appsync.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	appsync.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appsync.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appsync.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appsync.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appsync.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	appsync.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appsync.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appsync.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appsync.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appsync.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	appsync.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appsync.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appsync.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	appsync.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	appsync.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	appsync.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	appsync.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	appsync.sa-east-1.amazonaws.com	HTTPS	

AWS AppSync data plane

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appsync.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	appsync.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	appsync.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	appsync.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appsync.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	appsync.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appsync.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appsync.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appsync.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appsync.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appsync.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	appsync.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	appsync.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	appsync.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	appsync.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	appsync.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	appsync.eu-west-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	appsync.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	appsync.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	appsync.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
API keys per API	Each supported Region: 50	No	Maximum number of API keys per GraphQL API
APIs per region	Each supported Region: 25	Yes	Maximum number of APIs per region
Authentication providers per API	Each supported Region: 50	No	The maximum number of authentication providers per API
Evaluated resolver template size	Each supported Region: 5 Megabytes	No	Maximum size of the evaluated resolver template
Functions per pipeline resolver	Each supported Region: 10	No	Maximum number of functions per pipeline resolver
Iterations in a foreach loop in mapping templates	Each supported Region: 1,000	No	Maximum number of iterations in #foreach...#end loop in mapping templates
Max Batch Size	Each supported Region: 2,000	No	The maximum length of the resolver request list that will be sent to a single Lambda function for a BatchInvoke operation.
Number of caching keys	Each supported Region: 25	No	The maximum number of caching keys
Number of custom domain names	Each supported Region: 25	Yes	The maximum number of custom domain names per region

Name	Default	Adjust	Description
Rate of request tokens	Each supported Region: 2,000 per second	Yes	The maximum number of request tokens per second in this account in the current Region. AWS AppSync allocates tokens to mutation and query requests based on the amount of resources (processing time and memory) that they consume. For more details on tokens, see the Monitoring section in the AWS AppSync documentation.
Rate of subscription invalidation requests	Each supported Region: 100 per second	No	The maximum number of invalidation requests per second per account per region
Request execution time for mutations, queries, and subscriptions	Each supported Region: 30 Seconds	No	Maximum GraphQL request (queries, mutations, subscriptions) execution time
Request mapping template size	Each supported Region: 64 Kilobytes	No	Maximum size of the request mapping template
Resolvers executed in a single request	Each supported Region: 10,000	No	The maximum number of resolvers that can be executed in a single request
Response mapping template size	Each supported Region: 64 Kilobytes	No	Maximum size of the response mapping template
Schema document size	Each supported Region: 1 Megabytes	No	Maximum size of the schema document
Subscription payload size	Each supported Region: 240 Kilobytes	No	Maximum size of the message received via subscriptions
Subscriptions per connection	Each supported Region: 100	Yes	Subscriptions code statements per client in a single WebSocket connection. Each statement allows the client to receive multiple messages related to the specific subscription.

Rate of request tokens is the maximum number of request tokens per second in this account in the current Region. AWS AppSync allocates tokens to mutation and query requests based on the amount of

resources (processing time and memory) that they consume. For more details on tokens, see Using token counts to optimize your requests in the *AWS AppSync developer guide*.

Amazon Athena endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	athena.us-east-2.amazonaws.com athena-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	athena.us-east-1.amazonaws.com athena-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	athena.us-west-1.amazonaws.com athena-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	athena.us-west-2.amazonaws.com athena-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	athena.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	athena.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	athena.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	athena.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	athena.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	athena.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	athena.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	athena.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	athena.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	athena.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	athena.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	athena.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	athena.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	athena.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	athena.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	athena.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	athena.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	athena.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	athena.us-gov-east-1.amazonaws.com athena-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	athena.us-gov-west-1.amazonaws.com athena-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

To download the latest version of the JDBC driver and its documentation, see Using Athena with the JDBC Driver.

For more information about the previous versions of the JDBC driver and their documentation, see Using the Previous Version of the JDBC Driver.

To download the latest and previous versions of the ODBC driver and their documentation, see Connecting to Athena with ODBC.

Service quotas

Name	Default	Adjust	Description
Active DDL queries	Each supported Region: 20	Yes	The number of active DDL queries. DDL queries include CREATE TABLE and ALTER TABLE ADD PARTITION queries.
Active DML queries	us-east-1: 200 us-east-2: 150 us-west-2: 150 ap-northeast-1: 150 ap-northeast-2: 100 ap-south-1: 100 ap-southeast-1: 100 ap-southeast-2: 100 eu-central-1: 150 eu-west-1: 150 eu-west-2: 100 Each of the other supported Regions: 20	Yes	The number of active DML queries. DML queries include SELECT, CREATE TABLE AS (CTAS), and INSERT INTO queries. The specific quotas vary by AWS Region.
DDL query timeout	Each supported Region: 600	No	The maximum amount of time in minutes a DDL query can run before it gets cancelled. DDL queries include CREATE TABLE and CREATE TABLE ADD PARTITION queries.
DML query timeout	Each supported Region: 30	Yes	The maximum amount of time in minutes a DML query can run before it gets cancelled. DML queries include SELECT, CTAS and INSERT queries.

For more information, see Service quotas in the *Amazon Athena User Guide*.

AWS Audit Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	auditmanager.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	auditmanager.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	auditmanager.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	auditmanager.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	auditmanager.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	auditmanager.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	auditmanager.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	auditmanager.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	auditmanager.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	auditmanager.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	auditmanager.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	auditmanager.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Custom controls	Each supported Region: 500	Yes	The maximum number of custom controls per account per region
Custom frameworks	Each supported Region: 100	Yes	The maximum number of custom frameworks per account per region
Running assessments	Each supported Region: 100	Yes	The maximum number of running assessments per account per region

Amazon Augmented AI endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	a2i.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	a2i.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	a2i.us-west-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	a2i.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	a2i.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	a2i.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	a2i.ap-southeast-2.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	a2i.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	a2i.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	a2i.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	a2i.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	a2i.eu-west-2.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjustable
Flow definitions	100	Yes
Worker task templates (human task UIs)	100	Yes
In-flight human loops per flow definition (private or vendor work team) †	5,000	No
In-flight human loops per flow definition (Amazon Mechanical Turk work team) †	1,000	No

† Human loops are considered *in-flight* when their status is `InProgress` or `Stopping`.

Amazon Aurora endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Aurora MySQL-Compatible Edition

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rds.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	rds.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	rds.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	rds.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	rds.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	rds.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	rds.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	rds.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	rds.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rds.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rds.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rds.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rds.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	rds.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	rds.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	rds.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	rds.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	rds.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	rds.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	rds.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	rds.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	rds.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	rds.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	rds.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rds.us-gov-west-1.amazonaws.com	HTTPS	

Amazon Aurora PostgreSQL-Compatible Edition

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rds.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	rds.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	rds.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	rds.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	rds.af-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Hong Kong)	ap-east-1	rds.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	rds.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	rds.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	rds.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rds.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rds.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rds.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rds.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	rds.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	rds.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	rds.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	rds.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	rds.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	rds.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	rds.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	rds.me-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (UAE)	me-central-1	rds.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	rds.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	rds.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rds.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Authorizations per DB security group	Each supported Region: 20	No	Number of security group authorizations per DB security group
Custom engine versions	Each supported Region: 40	Yes	The maximum number of custom engine versions allowed in this account in the current Region
DB cluster parameter groups	Each supported Region: 50	No	The maximum number of DB cluster parameter groups
DB clusters	Each supported Region: 40	Yes	The maximum number of Aurora clusters allowed in this account in the current Region
DB instances	Each supported Region: 40	Yes	The maximum number of DB instances allowed in this account in the current Region
DB subnet groups	Each supported Region: 50	Yes	The maximum number of DB subnet groups
Data API HTTP request body size	Each supported Region: 4 Megabytes	No	The maximum size allowed for the HTTP request body.
Data API maximum concurrent cluster-secret pairs	Each supported Region: 30	No	The maximum number of unique pairs of Aurora Serverless DB clusters and secrets in concurrent Data

Name	Default	Adjust	Description
			API requests for the current account and AWS Region.
Data API maximum concurrent requests	Each supported Region: 500	No	The maximum number of Data API requests to an Aurora Serverless DB cluster that use the same secret and can be processed at the same time. Additional requests are queued and processed as in-process requests complete.
Data API maximum result set size	Each supported Region: 1 Megabytes	No	The maximum size of the database result set that can be returned by the Data API.
Data API maximum size of JSON response string	Each supported Region: 10 Megabytes	No	The maximum size of the simplified JSON response string returned by the RDS Data API.
Data API requests per second	Each supported Region: 1,000 per second	No	The maximum number of requests to the Data API per second allowed in this account in the current AWS Region.
Event subscriptions	Each supported Region: 20	Yes	The maximum number of event subscriptions
IAM roles per DB cluster	Each supported Region: 5	Yes	The maximum number of IAM roles associated with a DB cluster
IAM roles per DB instance	Each supported Region: 5	Yes	The maximum number of IAM roles associated with a DB instance
Manual DB cluster snapshots	Each supported Region: 100	Yes	The maximum number of manual DB cluster snapshots
Manual DB instance snapshots	Each supported Region: 100	Yes	The maximum number of manual DB instance snapshots
Option groups	Each supported Region: 20	Yes	The maximum number of option groups
Parameter groups	Each supported Region: 50	Yes	The maximum number of parameter groups

Name	Default	Adjust	Description
Proxies	Each supported Region: 20	Yes	The maximum number of proxies allowed in this account in the current AWS Region
Read replicas per master	Each supported Region: 5	Yes	The maximum number of read replicas per master
Reserved DB instances	Each supported Region: 40	Yes	The maximum number of reserved DB instances allowed in this account in the current AWS Region
Rules per security group	Each supported Region: 20	No	The maximum number of rules per DB security group
Security groups	Each supported Region: 25	Yes	The maximum number of DB security groups
Security groups (VPC)	Each supported Region: 5	No	The maximum number of DB security groups per Amazon VPC
Subnets per DB subnet group	Each supported Region: 20	No	The maximum number of subnets per DB subnet group
Tags per resource	Each supported Region: 50	No	The maximum number of tags per Amazon RDS resource
Total storage for all DB instances	Each supported Region: 100,000 Gigabytes	Yes	The maximum total storage (in GB) for all DB instances added together

AWS Auto Scaling endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Note
This page provides service endpoints and service quotas related to scaling plans, an AWS Auto Scaling resource. If you are trying to find endpoints and quotas for Amazon EC2 Auto Scaling or Application Auto Scaling, see the following:

- Amazon EC2 Auto Scaling (p. 308)
- Application Auto Scaling (p. 53)

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	autoscaling-plans.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	autoscaling-plans.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	autoscaling-plans.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	autoscaling-plans.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	autoscaling-plans.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	autoscaling-plans.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	autoscaling-plans.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	autoscaling-plans.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	autoscaling-plans.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	autoscaling-plans.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	autoscaling-plans.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	autoscaling-plans.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	autoscaling-plans.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	autoscaling-plans.ca-central-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	autoscaling-plans.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	autoscaling-plans.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	autoscaling-plans.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	autoscaling-plans.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	autoscaling-plans.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	autoscaling-plans.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	autoscaling-plans.me-south-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	autoscaling-plans.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	autoscaling-plans.us-gov-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	autoscaling-plans.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjust	Description
Scaling instructions per scaling plan	Each supported Region: 500	No	The maximum number of scaling instructions per scaling plan.
Scaling plans	Each supported Region: 100	Yes	The maximum number of scaling plans that you can create in this account in the current Region. A scaling plan tells AWS Auto Scaling how to scale a collection of resources.
Target tracking configurations per scaling instruction	Each supported Region: 10	No	The maximum number of target tracking

Name	Default	Adjust	Description
			configurations per scaling instruction.

For more information, see Quotas for your scaling plans in the *AWS Auto Scaling User Guide*.

AWS Backup endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	backup.us-east-2.amazonaws.com backup-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	backup.us-east-1.amazonaws.com backup-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	backup.us-west-1.amazonaws.com backup-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	backup.us-west-2.amazonaws.com backup-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	backup.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	backup.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	backup.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	backup.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	backup.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	backup.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	backup.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	backup.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	backup.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	backup.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	backup.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	backup.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	backup.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	backup.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	backup.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	backup.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	backup.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	backup.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	backup.us-gov-east-1.amazonaws.com backup-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	backup.us-gov-west-1.amazonaws.com backup-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Backup plans per Region per account	Each supported Region: 100	Yes	Number of backup plans in this account in the current Region
Backup vaults per Region per account	Each supported Region: 100	Yes	Number of backup vaults in this account in the current Region
Concurrent backup copies per supported service per account	Each supported Region: 5	No	Number of concurrent backup copies per supported service per account
Concurrent backup jobs per resource	Each supported Region: 1	No	Number of concurrent backup jobs per resource
Framework controls per Region per account	Each supported Region: 50	Yes	Number of framework controls in this account in the current Region
Frameworks per Region per account	Each supported Region: 10	Yes	Number of frameworks in this account in the current Region
Frameworks per report plan	Each supported Region: 1,000	No	Number of frameworks per report plan
Metadata tags per backup	Each supported Region: 50	No	Number of metadata tags per backup
Recovery points per backup vault	Each supported Region: 1,000,000	Yes	Number of recovery points per backup vault
Report plans per Region per account	Each supported Region: 20	Yes	Number of report plans in this account in the current Region
Versions per backup plan	Each supported Region: 2,000	Yes	Number of versions per backup plan

If you regularly receive throttling exceptions, consider using a rate limiter.

API name	Default calls/sec
CreateBackupPlan | CreateBackupSelection | DeleteBackupPlan | DeleteBackupSelection | DeleteBackupVault | DeleteBackupVaultAccessPolicy | DeleteBackupVaultNotifications | DescribeBackupVault | ExportBackupPlanTemplate | GetBackupPlanFromJSON | GetBackupPlanFromTemplate | PutBackupVaultNotifications | StartBackupJob | StartRestoreJob | StopBackupJob | TagResource | UntagResource | UpdateBackupPlan | UpdateRecoveryPointLifecycle	5

API name	Default calls/sec
DeleteRecoveryPoint | DescribeProtectedResource	10
DescribeBackupJob | DescribeRecoveryPoint | DescribeRestoreJob | GetBackupPlan | GetBackupSelection | GetBackupVaultAccessPolicy | GetBackupVaultNotifications | GetRecoveryPointRestoreMetadata | GetSupportedResourceTypes	15
ListBackupJobs | ListBackupPlans | ListBackupPlanTemplates | ListBackupPlanVersions | ListBackupSelections | ListBackupVaults | ListProtectedResources | ListRecoveryPointByResource | ListRecoveryPointsByBackupVault | ListRecoveryPointsByResource | ListRestoreJobs | ListTags	20
Sum of All API Calls	50

For additional information, see Quotas in the *AWS Backup Developer Guide*.

AWS Batch endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	batch.us-east-2.amazonaws.com fips.batch.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	batch.us-east-1.amazonaws.com fips.batch.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	batch.us-west-1.amazonaws.com fips.batch.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	batch.us-west-2.amazonaws.com fips.batch.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	batch.af-south-1.amazonaws.com	HTTPS	
Asia Pacific	ap-east-1	batch.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
(Hong Kong)				
Asia Pacific (Jakarta)	ap-southeast-3	batch.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	batch.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	batch.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	batch.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	batch.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	batch.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	batch.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	batch.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	batch.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	batch.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	batch.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	batch.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	batch.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	batch.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	batch.me-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	batch.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	batch.us-gov-east-1.amazonaws.com batch.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	batch.us-gov-west-1.amazonaws.com batch.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Compute environment limit	Each supported Region: 50	No	Maximum number of compute environments per account, per region.
Compute environments per job queue limit.	Each supported Region: 3	No	Maximum number of compute environments per job queue.
Job dependencies limit	Each supported Region: 20	No	Maximum number of job dependencies per job.
Job payload size limit	Each supported Region: 30	No	Maximum job payload size (for SubmitJob API operations), measured in KiB.
Job queue limit	Each supported Region: 50	No	Maximum number of job queues per account, per region.
Maximum array size limit	Each supported Region: 10,000	No	Maximum array size for array jobs.
Share identifiers per job queue limit.	Each supported Region: 500	No	Maximum number of share identifiers per job queue.
Submitted state jobs limit	Each supported Region: 1,000,000	No	Maximum number of jobs in SUBMITTED state.

For more information, see Service Quotas in the *AWS Batch User Guide*.

AWS Billing and Cost Management endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

AWS Billing and Cost Management includes the AWS Cost Explorer API, the AWS Cost and Usage Reports API, the AWS Budgets API, and the AWS Price List API.

Service endpoints

AWS Cost Explorer

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	ce.us-east-1.amazonaws.com	HTTPS	

AWS Cost and Usage Reports

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	cur.us-east-1.amazonaws.com	HTTPS	

AWS Budgets

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	budgets.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	budgets.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	budgets.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	budgets.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	budgets.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	budgets.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	budgets.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	budgets.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	budgets.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	budgets.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	budgets.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	budgets.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	budgets.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	budgets.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	budgets.amazonaws.com	HTTPS	

AWS Price List Service

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	api.pricing.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	api.pricing.ap-south-1.amazonaws.com	HTTPS	

Savings Plans

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	savingsplans.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	savingsplans.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	savingsplans.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	savingsplans.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	savingsplans.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	savingsplans.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	savingsplans.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	savingsplans.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	savingsplans.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	savingsplans.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	savingsplans.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	savingsplans.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	savingsplans.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	savingsplans.amazonaws.com	HTTPS	

Service quotas

Billing and Cost Management has no increasable quotas. For more information, see Quotas in AWS Billing and Cost Management.

Amazon Braket endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	braket.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	braket.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	braket.us-west-2.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	braket.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Burst rate of API requests	Each supported Region: 600	No	The maximum number of additional requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of CancelJob requests	Each supported Region: 5	No	The maximum number of additional CancelJob requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of CancelQuantumTask requests	Each supported Region: 20	No	The maximum number of additional CancelQuantumTask requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of CreateJob requests	Each supported Region: 5	No	The maximum number of additional CreateJob requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of CreateQuantumTask requests	Each supported Region: 40	No	The maximum number of additional CreateQuantumTask requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of GetDevice requests	Each supported Region: 50	No	The maximum number of additional GetDevice requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of GetJob requests	Each supported Region: 25	No	The maximum number of additional GetJob requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of GetQuantumTask requests	Each supported Region: 500	No	The maximum number of additional

Name	Default	Adjust	Description
			GetQuantumTask requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of SearchDevices requests	Each supported Region: 50	No	The maximum number of additional SearchDevices requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of SearchJobs requests	Each supported Region: 50	No	The maximum number of additional SearchJobs requests per second (RPS) that you can send in one burst in this account in the current Region.
Burst rate of SearchQuantumTasks requests	Each supported Region: 50	No	The maximum number of additional SearchQuantumTasks requests per second (RPS) that you can send in one burst in this account in the current Region.
Maximum allowed compute instances for a job	Each supported Region: 5	Yes	The maximum allowed number of compute instances for a job.
Maximum number of instances of ml.c4.2xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c4.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c4.4xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c4.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c4.8xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c4.8xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.c4.xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c4.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5.18xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5.18xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5.2xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c5.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5.4xlarge for jobs	Each supported Region: 1	Yes	The maximum number of instances of type ml.c5.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5.9xlarge for jobs	Each supported Region: 1	Yes	The maximum number of instances of type ml.c5.9xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5.xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.c5.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5n.18xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5n.18xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5n.2xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5n.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.c5n.4xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5n.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5n.9xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5n.9xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.c5n.xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.c5n.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g4dn.12xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.12xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g4dn.16xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.16xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g4dn.2xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g4dn.4xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g4dn.8xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.8xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.g4dn.xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.g4dn.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.12xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.12xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.16xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.16xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.24xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.24xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.2xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.48xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.48xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.4xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.g5.8xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.8xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.g5.xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.g5.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m4.10xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.m4.10xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m4.16xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.m4.16xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m4.2xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m4.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m4.4xlarge for jobs	Each supported Region: 2	Yes	The maximum number of instances of type ml.m4.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m4.xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m4.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m5.12xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.m5.12xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m5.24xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.m5.24xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.m5.2xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m5.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m5.4xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m5.4xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m5.large for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m5.large allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.m5.xlarge for jobs	Each supported Region: 5	Yes	The maximum number of instances of type ml.m5.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p2.16xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p2.16xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p2.8xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p2.8xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p2.xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p2.xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p3.16xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p3.16xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.

Name	Default	Adjust	Description
Maximum number of instances of ml.p3.2xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p3.2xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p3.8xlarge for jobs	Each supported Region: 0	Yes	The maximum number of instances of type ml.p3.8xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p3dn.24xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.p3dn.24xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Maximum number of instances of ml.p4d.24xlarge for jobs	Each supported Region: 0	No	The maximum number of instances of type ml.p4d.24xlarge allowed for all Amazon Braket Hybrid Jobs in this account and region.
Number of concurrent DM1 tasks	us-east-1: 100 us-west-2: 100 Each of the other supported Regions: 50	No	The maximum number of concurrent tasks running on the Density Matrix Simulator (DM1) in the current Region.
Number of concurrent SV1 tasks	us-east-1: 100 us-west-2: 100 Each of the other supported Regions: 50	No	The maximum number of concurrent tasks running on the State Vector Simulator (SV1) in the current Region.
Number of concurrent TN1 tasks	eu-west-2: 5 Each of the other supported Regions: 10	Yes	The maximum number of concurrent tasks running on the Tensor Network Simulator (TN1) in the current Region.
Number of concurrent jobs	Each supported Region: 5	Yes	The maximum number of concurrent jobs running in the current Region.

Name	Default	Adjust	Description
Rate of API requests	Each supported Region: 140	Yes	The maximum number of requests per second that you can send in this account in the current Region.
Rate of CancelJob requests	Each supported Region: 2 per second	Yes	The maximum number of CancelJob requests you can send per second in this account per Region.
Rate of CancelQuantumTask requests	Each supported Region: 2 per second	Yes	The maximum number of CancelQuantumTask requests you can send per second in this account per Region.
Rate of CreateJob requests	Each supported Region: 1 per second	Yes	The maximum number of CreateJob requests you can send per second in this account per Region.
Rate of CreateQuantumTask requests	Each supported Region: 20 per second	Yes	The maximum number of CreateQuantumTask requests you can send per second in this account per Region.
Rate of GetDevice requests	Each supported Region: 5 per second	Yes	The maximum number of GetDevice requests you can send per second in this account per Region.
Rate of GetJob requests	Each supported Region: 5 per second	Yes	The maximum number of GetJob requests you can send per second in this account per Region.
Rate of GetQuantumTask requests	Each supported Region: 100 per second	Yes	The maximum number of GetQuantumTask requests you can send per second in this account per Region.
Rate of SearchDevices requests	Each supported Region: 5 per second	Yes	The maximum number of SearchDevices requests you can send per second in this account per Region.
Rate of SearchJobs requests	Each supported Region: 5 per second	Yes	The maximum number of SearchJobs requests you can send per second in this account per Region.

Name	Default	Adjust	Description
Rate of SearchQuantumTasks requests	Each supported Region: 5 per second	Yes	The maximum number of SearchQuantumTasks requests you can send per second in this account per Region.

AWS BugBust endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	bugbust.us-east-1.amazonaws.com	HTTPS

Service quotas

Resource	Default
Associated repositories	5 per BugBust event
Profiling groups	25 per BugBust event
Participants	50 per BugBust event
Regions	50 BugBust events per Region

AWS Certificate Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	acm.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		acm-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	acm.us-east-1.amazonaws.com acm-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	acm.us-west-1.amazonaws.com acm-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	acm.us-west-2.amazonaws.com acm-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	acm.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	acm.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	acm.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	acm.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	acm.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	acm.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	acm.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	acm.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	acm.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	acm.ca-central-1.amazonaws.com acm-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	acm.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	acm.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	acm.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	acm.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	acm.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	acm.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	acm.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	acm.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	acm.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	acm.us-gov-east-1.amazonaws.com acm.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	acm.us-gov-west-1.amazonaws.com acm.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
ACM certificates	Each supported Region: 2,500	Yes	The maximum number of ACM Certificates you can have in this account in the current Region. Only certificates in the PENDING or ISSUED state count towards this limit.
ACM certificates created in last 365 days	Each supported Region: 5,000	Yes	The maximum number of ACM Certificates you can request per year.
Domain names per ACM certificate	Each supported Region: 10	Yes	The maximum number of domain names per ACM Certificate. The first

Name	Default	Adjust	Description
			domain name that you submit is included as the subject common name (CN) of the certificate. All names are included in the Subject Alternative Name extension.
Imported certificates	Each supported Region: 2,500	Yes	The maximum number of imported certificates you can have in this account in the current Region.
Imported certificates in last 365 days	Each supported Region: 5,000	Yes	The maximum number of certificates you can import per year in this account in the current Region.

For more information, see Quotas in the *AWS Certificate Manager User Guide*.

AWS Certificate Manager Private Certificate Authority endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	acm-pca.us-east-2.amazonaws.com acm-pca-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	acm-pca.us-east-1.amazonaws.com acm-pca-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	acm-pca.us-west-1.amazonaws.com acm-pca-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	acm-pca.us-west-2.amazonaws.com acm-pca-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	acm-pca.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	acm-pca.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	acm-pca.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	acm-pca.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	acm-pca.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	acm-pca.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	acm-pca.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	acm-pca.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	acm-pca.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	acm-pca.ca-central-1.amazonaws.com acm-pca-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	acm-pca.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	acm-pca.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	acm-pca.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	acm-pca.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	acm-pca.eu-west-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	acm-pca.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	acm-pca.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	acm-pca.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	acm-pca.us-gov-east-1.amazonaws.com acm-pca.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	acm-pca.us-gov-west-1.amazonaws.com acm-pca.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of private certificate authorities (CAs)	Each supported Region: 200	Yes	The maximum number of private certificate authorities (CAs) that you can create in this account in the current Region.
Number of private certificates per CA	Each supported Region: 1,000,000	Yes	The maximum number of private certificates per certificate authority (CA) that you can create in this account in the current Region.
Number of revoked private certificates per CA	Each supported Region: 1,000,000	No	The maximum number of private certificates per certificate authority (CA) that you can revoke in this account in the current Region.
Rate of CreateCertificateAuthority requests	Each supported Region: 1	No	The maximum number of CreateCertificateAuthority requests that you can perform in this account in the current region per second.

Name	Default	Adjust	Description
Rate of CreateCertificateAuthorityAuditReport requests	Each supported Region: 1	No	The maximum number of CreateCertificateAuthorityAuditReport requests that you can perform in this account in the current region per second.
Rate of CreatePermission requests	Each supported Region: 1	No	The maximum number of CreatePermission requests that you can perform in this account in the current region per second.
Rate of DeleteCertificateAuthority requests	Each supported Region: 10	No	The maximum number of DeleteCertificateAuthority requests that you can perform in this account in the current region per second.
Rate of DeletePermission requests	Each supported Region: 1	No	The maximum number of DeletePermission requests that you can perform in this account in the current region per second.
Rate of DeletePolicy requests	Each supported Region: 5	No	The maximum number of DeletePolicy requests that you can perform in this account in the current region per second.
Rate of DescribeCertificateAuthority requests	Each supported Region: 20	No	The maximum number of DescribeCertificateAuthority requests that you can perform in this account in the current region per second.
Rate of DescribeCertificateAuthorityAuditReport requests	Each supported Region: 20	No	The maximum number of DescribeCertificateAuthorityAuditReport requests that you can perform in this account in the current region per second.
Rate of GetCertificate requests	Each supported Region: 75	Yes	The maximum number of GetCertificate requests that you can perform in this account in the current region per second.

Name	Default	Adjust	Description
Rate of GetCertificateAuthorityCertificate requests	Each supported Region: 20	No	The maximum number of GetCertificateAuthorityCertificate requests that you can perform in this account in the current region per second.
Rate of GetCertificateAuthorityCsr requests	Each supported Region: 10	No	The maximum number of GetCertificateAuthorityCsr requests that you can perform in this account in the current region per second.
Rate of GetPolicy requests	Each supported Region: 5	No	The maximum number of GetPolicy requests that you can perform in this account in the current region per second.
Rate of ImportCertificateAuthorityCertificate requests	Each supported Region: 10	No	The maximum number of ImportCertificateAuthorityCertificate requests that you can perform in this account in the current region per second.
Rate of IssueCertificate requests	Each supported Region: 25	Yes	The maximum number of IssueCertificate requests that you can perform in this account in the current region per second.
Rate of ListCertificateAuthorities requests	Each supported Region: 20	No	The maximum number of ListCertificateAuthorities requests that you can perform in this account in the current region per second.
Rate of ListPermissions requests	Each supported Region: 5	No	The maximum number of ListPermissions requests that you can perform in this account in the current region per second.
Rate of ListTags requests	Each supported Region: 20	No	The maximum number of ListTags requests that you can perform in this account in the current region per second.

Name	Default	Adjust	Description
Rate of PutPolicy requests	Each supported Region: 5	No	The maximum number of PutPolicy requests that you can perform in this account in the current region per second.
Rate of RestoreCertificateAuthority requests	Each supported Region: 20	No	The maximum number of RestoreCertificateAuthority requests that you can perform in this account in the current region per second.
Rate of RevokeCertificate requests	Each supported Region: 20	No	The maximum number of RevokeCertificate requests that you can perform in this account in the current region per second.
Rate of TagCertificateAuthority requests	Each supported Region: 10	No	The maximum number of TagCertificateAuthority requests that you can perform in this account in the current region per second.
Rate of UntagCertificateAuthority requests	Each supported Region: 10	No	The maximum number of UntagCertificateAuthority requests that you can perform in this account in the current region per second.
Rate of UpdateCertificateAuthority requests	Each supported Region: 10	No	The maximum number of UpdateCertificateAuthority requests that you can perform in this account in the current region per second.

AWS Chatbot endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2		HTTPS	
US East (N. Virginia)	us-east-1		HTTPS	
US West (N. California)	us-west-1		HTTPS	
US West (Oregon)	us-west-2		HTTPS	
Africa (Cape Town)	af-south-1		HTTPS	
Asia Pacific (Hong Kong)	ap-east-1		HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3		HTTPS	
Asia Pacific (Mumbai)	ap-south-1		HTTPS	
Asia Pacific (Osaka)	ap-northeast-3		HTTPS	
Asia Pacific (Seoul)	ap-northeast-2		HTTPS	
Asia Pacific (Singapore)	ap-southeast-1		HTTPS	
Asia Pacific (Sydney)	ap-southeast-2		HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1		HTTPS	
Canada (Central)	ca-central-1		HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1		HTTPS	
Europe (Ireland)	eu-west-1		HTTPS	
Europe (London)	eu-west-2		HTTPS	
Europe (Milan)	eu-south-1		HTTPS	
Europe (Paris)	eu-west-3		HTTPS	
Europe (Stockholm)	eu-north-1		HTTPS	
Middle East (Bahrain)	me-south-1		HTTPS	
South America (São Paulo)	sa-east-1		HTTPS	

Service quotas

Name	Default	Adjust	Description
Maximum number of Chime webhook configurations per AWS account	Each supported Region: 500	No	The maximum number of Chime webhook configurations that can be created per AWS account.
Maximum number of Slack channel configurations per AWS account	Each supported Region: 500	No	The maximum number of Slack channel configurations that can be created per AWS account.

Amazon Chime endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Chime has a single endpoint that supports HTTPS: service.chime.aws.amazon.com

Service quotas

The following table lists additional quotas for Amazon Chime rooms and memberships.

Resource	Default
Rooms per account	1,500
Rooms per profile	1,500
Memberships per room	1,000
Memberships per profile	1,000

Amazon Chime SDK endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

WebRTC media sessions

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	meetings-chime.us-east-1.amazonaws.com meetings-chime-fips.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	meetings-chime.us-west-2.amazonaws.com meetings-chime-fips.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	meetings-chime.ap-southeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	meetings-chime.eu-central-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	meetings-chime.us-gov-east-1.amazonaws.com	HTTPS

Region name	Region	Endpoint	Protocol
AWS GovCloud (US-West)	us-gov-west-1	meetings-chime.us-gov-west-1.amazonaws.com	HTTPS

Media pipeline regional endpoints

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	media-pipelines-chime.us-east-1.amazonaws.com media-pipelines-chime-fips.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	media-pipelines-chime.us-west-2.amazonaws.com media-pipelines-chime-fips.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	media-pipelines-chime.ap-southeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	media-pipelines-chime.eu-central-1.amazonaws.com	HTTPS

PSTN audio

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	service.chime.aws.amazon.com service-fips.chime.aws.amazon.com	HTTPS

Messaging

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	messaging-chime.us-east-1.amazonaws.com messaging-chime-fips.us-east-1.amazonaws.com	HTTPS

Identity

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	identity-chime.us-east-1.amazonaws.com	HTTPS

Region name	Region	Endpoint	Protocol
		identity-chime-fips.us-east-1.amazonaws.com	

Legacy

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	service.chime.aws.amazon.com service-fips.chime.aws.amazon.com	HTTPS

Service quotas

Note
Service quotas are per AWS Region. If adjustable, they are changed for the requested Region only.

Amazon Chime SDK Meetings WebRTC media sessions have the following quotas.

Name	Default	Adjustable
Concurrent meeting limit	250	Yes
Chime SDK Meetings - attendees per meeting	250	No
Chime SDK Meetings - replica meetings per primary meeting	4	Yes
Chime SDK Meetings - maximum concurrent video streams published per meeting	25	Yes
Chime SDK Meetings - maximum concurrent video streams subscribed per attendee	25	No
Chime SDK Meetings - concurrent meeting limit	250	Yes
Chime SDK Meetings - all meeting management API requests burst limit	20	Yes*
Chime SDK Meetings - all meeting management API requests rate limit in transactions per second	10	Yes*
Chime SDK Meetings - BatchCreateAttendees burst limit	20	Yes*
Chime SDK Meetings - BatchCreateAttendees rate limit in transactions per second	10	Yes*
Chime SDK Meetings - CreateAttendee burst limit	20	Yes*
Chime SDK Meetings - CreateAttendee rate limit in transactions per second	10	Yes*
Chime SDK Meetings - CreateMeeting burst limit	20	Yes*
Chime SDK Meetings - CreateMeeting rate limit in transactions per second	10	Yes*

Name	Default	Adjustable
Chime SDK Meetings - CreateMeetingWithAttendees burst limit	20	Yes*
Chime SDK Meetings - CreateMeetingWithAttendees rate limit in transactions per second	10	Yes*
Chime SDK Meetings - DeleteAttendee burst limit	20	Yes*
Chime SDK Meetings - DeleteAttendee rate limit in transactions per second	10	Yes*
Chime SDK Meetings - DeleteMeeting burst limit	20	Yes*
Chime SDK Meetings - DeleteMeeting rate limit in transactions per second	10	Yes*
Chime SDK Meetings - GetMeeting burst limit	20	Yes*
Chime SDK Meetings - GetMeeting rate limit in transactions per second	10	Yes*
Chime SDK Meetings - ListAttendees burst limit	20	Yes*
Chime SDK Meetings - ListAttendees rate limit in transactions per second	10	Yes*
Chime SDK Meetings - ListMeetings burst limit	20	Yes*
Chime SDK Meetings - ListMeetings rate limit in transactions per second	10	Yes*

***** Adjustable by the service team based on concurrent meeting limits.

Amazon Chime SDK Messaging has the following quotas.

Name	Default	Adjustable
App Instances per AWS Account	100	Yes
Users per App Instance	100,000	Yes
Admins per App Instance	100	Yes
Channels per App Instance	10,000,000	Yes
Memberships per Channel	10,000	Yes
Moderators per Channel	1,000	Yes
Max concurrent connections per user (Amazon Chime SDK messaging only, does not apply to meetings)	10	Yes
ChannelFlows per App Instance	100	Yes
Channel processors in a channel flow	1	Yes

Name	Default	Adjustable
Endpoints per App Instance User	10	Yes
Number of CHANNEL_DETAILS events	50	Yes
Number of ChannelMessages in CHANNEL_DETAILS	20	Yes
Number of ChannelMemberships in CHANNEL_DETAILS	30	Yes
Elastic channels per AWS account*	1	Yes
SubChannels per channel*	100	Yes
Memberships per SubChannel*	1000	Yes **Note** The product of SubChannels per channel and Memberships per SubChannel cannot exceed 1-million after a limit increase.

* Only available in the IAD Region.

Note
Customers with large chat channels often qualify for volume discounts on pricing. Contact your account manager for more details.

Amazon Chime SDK SIP trunking and PSTN audio have the following quotas.

Name	Default	Adjustable
Amazon Chime Voice Connector provisioned phone numbers per account	25	Yes
Amazon Chime Voice Connectors per account	3	Yes
Amazon Chime Voice Connector groups per account	3	Yes
Amazon Chime Voice Connectors per Amazon Chime Voice Connector group	3	Yes
Calls per second for each Amazon Chime Voice Connector	1	Yes
Amazon Chime CreateSipMediaApplicationCall transactions per second	1	Yes
Amazon Chime SIP media applications per account	30	Yes
Amazon Chime SIP rules per Amazon Chime SIP media application	25	Yes
Amazon Chime UpdateSipMediaApplicationCall	1	Yes

Cloud Control API endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloudcontrolapi.us-east-2.amazonaws.com cloudcontrolapi-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cloudcontrolapi.us-east-1.amazonaws.com cloudcontrolapi-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	cloudcontrolapi.us-west-1.amazonaws.com cloudcontrolapi-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	cloudcontrolapi.us-west-2.amazonaws.com cloudcontrolapi-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	cloudcontrolapi.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	cloudcontrolapi.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	cloudcontrolapi.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cloudcontrolapi.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	cloudcontrolapi.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloudcontrolapi.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloudcontrolapi.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	cloudcontrolapi.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudcontrolapi.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	cloudcontrolapi.ca-central-1.amazonaws.com cloudcontrolapi-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	cloudcontrolapi.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudcontrolapi.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cloudcontrolapi.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	cloudcontrolapi.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cloudcontrolapi.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cloudcontrolapi.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cloudcontrolapi.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloudcontrolapi.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	cloudcontrolapi.us-gov-east-1.amazonaws.com cloudcontrolapi-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudcontrolapi.us-gov-west-1.amazonaws.com cloudcontrolapi-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS Cloud9 endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloud9.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	cloud9.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	cloud9.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cloud9.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	cloud9.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	cloud9.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cloud9.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	cloud9.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloud9.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloud9.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloud9.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloud9.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	cloud9.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloud9.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	cloud9.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cloud9.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	cloud9.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cloud9.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cloud9.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cloud9.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloud9.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
EC2 development environments	Each supported Region: 200	Yes	The maximum number of AWS Cloud9 EC2 development environments that you can create in this account in the current Region.
EC2 development environments	Each supported Region: 100	Yes	The maximum number of AWS Cloud9 EC2 development environments that you can create for this user in the current Region.
Members per development environment	Each supported Region: 8	No	The maximum number of users that can participate in a single AWS Cloud9 development environment in this account in the current Region.
SSH development environments	Each supported Region: 200	Yes	The maximum number of AWS Cloud9 SSH development environments that you can create in this

Name	Default	Adjust	Description
			account in the current Region.
SSH development environments	Each supported Region: 100	Yes	The maximum number of AWS Cloud9 SSH development environments that you can create for this user in the current Region.

For more information, see Quotas in the *AWS Cloud9 User Guide*.

Amazon Cloud Directory endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	clouddirectory.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	clouddirectory.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	clouddirectory.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	clouddirectory.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	clouddirectory.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	clouddirectory.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	clouddirectory.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	clouddirectory.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	clouddirectory.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	clouddirectory.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

For more information, see Amazon Cloud Directory quotas.

AWS CloudFormation endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloudformation.us-east-2.amazonaws.com cloudformation-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cloudformation.us-east-1.amazonaws.com cloudformation-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	cloudformation.us-west-1.amazonaws.com cloudformation-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	cloudformation.us-west-2.amazonaws.com cloudformation-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	cloudformation.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	cloudformation.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	cloudformation.ap-southeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	cloudformation.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	cloudformation.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloudformation.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloudformation.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloudformation.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudformation.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	cloudformation.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloudformation.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudformation.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cloudformation.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	cloudformation.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cloudformation.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cloudformation.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cloudformation.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	cloudformation.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloudformation.sa-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	cloudformation.us-gov-east-1.amazonaws.com cloudformation.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudformation.us-gov-west-1.amazonaws.com cloudformation.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

StackSets regional support

StackSets is supported in the following Regions:

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	stacksets.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	stacksets.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	stacksets.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	stacksets.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	stacksets.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	stacksets.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	stacksets.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	stacksets.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	stacksets.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	stacksets.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	stacksets.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	stacksets.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	stacksets.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	stacksets.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	stacksets.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	stacksets.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	stacksets.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	stacksets.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	stacksets.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	stacksets.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	stacksets.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	stacksets.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	stacksets.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	stacksets.us-gov-west-1.amazonaws.com	HTTPS	

For more information, see AWS CloudFormation StackSets in the *AWS CloudFormation User Guide*.

Service quotas

Name	Default	Adjust	Description
Attributes per mapping in CloudFormation template	Each supported Region: 200	No	Maximum number of mapping attributes for each mapping that you can declare in your AWS CloudFormation template.
Data in custom resource provider	Each supported Region: 4,096 Bytes	No	Maximum amount of data that a custom resource provider can pass.
Declared mappings in CloudFormation template.	Each supported Region: 200	No	Maximum number of mappings that you can declare in your AWS CloudFormation template.
Maximum size of a template description in a cloud formation template	Each supported Region: 1,024 Bytes	No	Maximum size of a template description
Module limit per account	Each supported Region: 100	Yes	Maximum number of module types you are allowed to register.
Nested modules	Each supported Region: 3	No	Number of levels of nesting per module.
Output count in CloudFormation template	Each supported Region: 200	No	Maximum number of outputs that you can declare in your AWS CloudFormation template.
Parameters declared in CloudFormation template.	Each supported Region: 200	No	Maximum number of parameters that you can declare in your AWS CloudFormation template.
Resource limit per account	Each supported Region: 50	Yes	Maximum number of resource types you are allowed to register.
Resources declared in a CloudFormation template	Each supported Region: 500	No	Maximum number of resources that you can declare in your AWS CloudFormation template.
Size of Mapping attribute name	Each supported Region: 255	No	Maximum size of each mapping name.
Size of a parameter value in cloud formation template	Each supported Region: 4,096	No	Maximum size of a parameter value
Size of a resource name in cloud formation template	Each supported Region: 255	No	Maximum size of a resource name

Name	Default	Adjust	Description
Size of a template body in S3 object for a ValidateStack request	Each supported Region: 1 Megabytes	No	Maximum size of a template body that you can pass in an Amazon S3 object for a CreateStack, UpdateStack, ValidateTemplate request with an Amazon S3 template URL.
Size of output name in CloudFormation template	Each supported Region: 255	No	Maximum size of an output name.
Size of parameter name in CloudFormation template	Each supported Region: 255	No	Maximum size of a parameter name
Size of template body in CreateStack request	Each supported Region: 51,200 Bytes	No	Maximum size of a template body that you can pass in a CreateStack, UpdateStack, or ValidateTemplate request.
Stack count	Each supported Region: 2,000	Yes	Maximum number of AWS CloudFormation stacks that you can create.
Stack instance operations per administrator account	Each supported Region: 3,500	Yes	Maximum number of stack instances, across all stack sets, that you can run operations on in each Region at the same time, per administrator account.
Stack instances per stack set	Each supported Region: 2,000	Yes	Maximum number of stack instances you can create per stack set.
Stack sets per administrator account	Each supported Region: 100	Yes	Maximum number of AWS CloudFormation stack sets you can create in your administrator account.
Version limit per module	Each supported Region: 100	Yes	Maximum number of versions per module type you are allowed to register.
Version limit per resource	Each supported Region: 50	Yes	Maximum number of versions per resource type you are allowed to register.
cfn-signal wait condition data	Each supported Region: 4,096 Bytes	No	Maximum amount of data that cfn-signal can pass.

For more information, see AWS CloudFormation Quotas in the *AWS CloudFormation User Guide*.

Amazon CloudFront endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	Amazon Route 53 Hosted Zone ID*
US East (N. Virginia) Region	us-east-1	cloudfront.amazonaws.com cloudfront-fips.amazonaws.com	HTTPS HTTPS	`Z2FDTNDATAQYW2`

Service quotas

Name	Default	Adjust	Description
Alternate domain names (CNAMEs) per distribution	Each supported Region: 100	Yes	The maximum number of alternate domain names (CNAMEs) per distribution.
Cache behaviors per distribution	Each supported Region: 25	Yes	The maximum number of cache behaviors per distribution.
Cache policies per AWS account	Each supported Region: 20	No	The maximum number of cache policies per AWS account.
CloudFront Functions: Maximum number of distributions associated with a single function	Each supported Region: 100	Yes	The maximum number of CloudFront distributions associated with a single CloudFront function.
Concurrent executions	Each supported Region: 1,000	Yes	The maximum number of concurrent executions in each region.
Connection attempts per origin	Each supported Region: 3	No	The number of connection attempts per origin (1-3).
Connection timeout per origin	Each supported Region: 10 Seconds	No	The connection timeout per origin (1-10 seconds).
Cookies per cache policy	Each supported Region: 10	Yes	The maximum number of cookies per cache policy.

Name	Default	Adjust	Description
Cookies per origin request policy	Each supported Region: 10	Yes	The maximum number of cookies per origin request policy.
Custom headers: maximum length of a header name	Each supported Region: 256	No	The maximum length of a header name in characters.
Custom headers: maximum length of a header value	Each supported Region: 1,783	No	The maximum length of a header value in characters.
Custom headers: maximum length of all header values and names combined	Each supported Region: 10,240	No	The maximum length of all header values and names combined.
Custom headers: maximum number of custom headers that you can configure CloudFront to add to origin requests	Each supported Region: 10	Yes	The maximum number of custom headers that you can configure CloudFront to add to origin requests.
Data transfer rate per distribution	Each supported Region: 150	Yes	The maximum data transfer rate (in Gbps) per distribution.
Distributions associated with a single key group	Each supported Region: 100	Yes	The maximum number of distributions associated with a single key group.
Distributions associated with the same cache policy	Each supported Region: 100	No	The maximum number of distributions associated with the same cache policy.
Distributions associated with the same origin request policy	Each supported Region: 100	No	The maximum number of distributions associated with the same origin request policy.
Distributions per AWS account that you can create triggers for	Each supported Region: 25	Yes	The maximum number of distributions per AWS account that you can create triggers for.
File invalidation: maximum number of active wildcard invalidations allowed	Each supported Region: 15	No	The maximum number of active wildcard invalidations allowed.
File invalidation: maximum number of files allowed in active invalidation requests, excluding wildcard invalidations	Each supported Region: 3,000	No	The maximum number of files allowed in active invalidation requests, excluding wildcard invalidations.
Function memory size (Viewer request and response event)	Each supported Region: 128 Megabytes	No	The maximum function memory size (in MB). (Viewer request and response event)

Name	Default	Adjust	Description
Function timeout (Origin request and response event)	Each supported Region: 30 Seconds	No	The maximum function timeout (in seconds). (Origin request and response event)
Function timeout for a viewer request and response event	Each supported Region: 5 Seconds	No	The maximum function timeout (in seconds). (Viewer request and response event)
Headers per cache policy	Each supported Region: 10	Yes	The maximum number of headers per cache policy.
Headers per origin request policy	Each supported Region: 10	Yes	The maximum number of headers per origin request policy.
Key groups associated with a single distribution	Each supported Region: 4	Yes	The maximum number of key groups associated with a single distribution.
Key groups per AWS account	Each supported Region: 10	Yes	The maximum number of key groups per AWS account.
Maximum compressed size of a Lambda function and any included libraries. (Origin request and response event)	Each supported Region: 50 Megabytes	No	The maximum compressed size (in MB) of a Lambda function and any included libraries. (Origin request and response event)
Maximum compressed size of a Lambda function and any included libraries. (Viewer request and response event)	Each supported Region: 1 Megabytes	No	The maximum compressed size (in MB) of a Lambda function and any included libraries. (Viewer request and response event)
Maximum file size for HTTP GET, POST, and PUT requests	Each supported Region: 20 Gigabytes	No	The maximum file size (in GB) for HTTP GET, POST, and PUT requests.
Maximum length of a URL	Each supported Region: 8,192 Bytes	No	The maximum length of a URL (in bytes).
Maximum length of a field to encrypt	Each supported Region: 16 Kilobytes	No	The maximum length (in KB) of a field to encrypt.
Maximum length of a request body when field-level encryption is configured	Each supported Region: 1 Megabytes	No	The maximum length (in MB) of a request body when field-level encryption is configured.
Maximum length of a request, including headers and query strings, but not including the body content	Each supported Region: 20,480 Bytes	No	The maximum length of a request (in bytes), including headers and query strings, but not including the body content.

Name	Default	Adjust	Description
Maximum number of CloudFront distributions that can be associated with a field-level encryption configuration	Each supported Region: 20	No	The maximum number of CloudFront distributions that can be associated with a field-level encryption configuration.
Maximum number of characters in a whitelisted query string	Each supported Region: 128	No	The maximum number of characters in a whitelisted query string.
Maximum number of characters total for all whitelisted query strings in the same parameter	Each supported Region: 512	No	The maximum number of characters total for all whitelisted query strings in the same parameter.
Maximum number of field-level encryption configurations that can be associated with one AWS account	Each supported Region: 10	No	The maximum number of field-level encryption configurations that can be associated with one AWS account.
Maximum number of field-level encryption profiles that can be associated with one AWS account	Each supported Region: 10	No	The maximum number of field-level encryption profiles that can be associated with one AWS account.
Maximum number of fields in a request body when field-level encryption is configured	Each supported Region: 10	No	The maximum number of fields in a request body when field-level encryption is configured.
Maximum number of fields to encrypt that can be specified in one profile	Each supported Region: 10	No	The maximum number of fields to encrypt that can be specified in one profile.
Maximum number of public keys that can be added to one AWS account	Each supported Region: 10	No	The maximum number of public keys that can be added to one AWS account.
Maximum number of query argument profile mappings that can be included in a field-level encryption configuration	Each supported Region: 5	No	The maximum number of query argument profile mappings that can be included in a field-level encryption configuration.
Origin access identities per account	Each supported Region: 100	Yes	The maximum number of origin access identities per account.
Origin groups per distribution	Each supported Region: 10	Yes	The maximum number of origin groups per distribution.
Origin request policies per AWS account	Each supported Region: 20	No	The maximum number of origin request policies per AWS account.

Name	Default	Adjust	Description
Origin response timeout (idle timeout)	Each supported Region: 10	No	The maximum origin response timeout (idle timeout) in minutes. If CloudFront hasn't detected any bytes sent from the origin to the client within the past 10 minutes, the connection is assumed to be idle and is closed.
Origins per distribution	Each supported Region: 25	Yes	The maximum number of origins per distribution.
Public keys in a single key group	Each supported Region: 5	Yes	The maximum number of public keys in a single key group.
Query strings per cache policy	Each supported Region: 10	Yes	The maximum number of query strings per cache policy.
Query strings per origin request policy	Each supported Region: 10	Yes	The maximum number of query strings per origin request policy.
RTMP distributions per AWS account	Each supported Region: 100	Yes	The maximum number of RTMP distributions per AWS account.
Range of file sizes that CloudFront compresses	Each supported Region: 10,000,000 Bytes	No	The range of file sizes (in bytes) that CloudFront compresses (1,000 to 10,000,000).
Request body size for origin requests exposed to a Lambda@Edge function.	Each supported Region: 1 Megabytes	No	The maximum request body size (in MB) for origin requests exposed to a Lambda@Edge function.
Request body size for origin requests when returning from a Lambda function (base64 encoding)	Each supported Region: 1.33 Megabytes	No	The maximum request body size (in KB) for origin requests when returning from a Lambda function. (base64 encoding)
Request body size for origin requests when returning from a Lambda function (text encoding)	Each supported Region: 1 Megabytes	No	The maximum request body size (in KB) for origin requests when returning from a Lambda function. (text encoding)
Request body size for viewer requests exposed to a Lambda@Edge function.	Each supported Region: 40 Kilobytes	No	The maximum request body size (in KB) for viewer requests exposed to a Lambda@Edge function.

Name	Default	Adjust	Description
Request body size for viewer requests when returning from a Lambda function (base64 encoding)	Each supported Region: 53.2 Kilobytes	No	The maximum request body size (in KB) for viewer requests when returning from a Lambda function. (base64 encoding)
Request body size for viewer requests when returning from a Lambda function (text encoding)	Each supported Region: 40 Kilobytes	No	The maximum request body size (in KB) for viewer requests when returning from a Lambda function. (text encoding)
Request timeout	Each supported Region: 30 Seconds	Yes	The maximum request timeout in seconds.
Requests per second	Each supported Region: 10,000	Yes	The maximum number of requests per second in each region.
Requests per second per distribution	Each supported Region: 250,000	Yes	The maximum number of requests per second per distribution.
Response timeout per origin	Each supported Region: 60 Seconds	Yes	The response timeout per origin (1-60 seconds).
SSL certificates per AWS account when serving HTTPS requests using dedicated IP addresses	Each supported Region: 2	Yes	The maximum number of SSL certificates per AWS account when serving HTTPS requests using dedicated IP addresses (no quota when serving HTTPS requests using SNI).
SSL certificates that can be associated with a CloudFront web distribution	Each supported Region: 1	No	The maximum number of SSL certificates that can be associated with a CloudFront web distribution.
Size of a response that is generated by a Lambda function, including headers and body (Origin request and response event)	Each supported Region: 1 Megabytes	No	The maximum size (in MB) of a response that is generated by a Lambda function, including headers and body. (Origin request and response event)
Size of a response that is generated by a Lambda function, including headers and body (Viewer request and response event)	Each supported Region: 40 Kilobytes	No	The maximum size (in KB) of a response that is generated by a Lambda function, including headers and body. (Viewer request and response event)
Tags that can be added to a distribution	Each supported Region: 50	No	The maximum number of tags that can be added to a distribution.

Name	Default	Adjust	Description
Total length of the URI including query string in a Lambda@Edge function	Each supported Region: 8,192	No	The maximum total length in characters of the URI including the query string in a Lambda@Edge function.
Total number of bytes in whitelisted cookie names (doesn't apply if you configure CloudFront to forward all cookies to the origin)	Each supported Region: 512 Bytes	No	The total number of bytes in whitelisted cookie names (doesn't apply if you configure CloudFront to forward all cookies to the origin). 512 minus the number of whitelisted cookies.
Triggers per distribution	Each supported Region: 100	Yes	The maximum number of triggers per distribution.
Web distributions per AWS account	Each supported Region: 200	Yes	The maximum number of web distributions per AWS account.
Whitelisted cookies per cache behavior	Each supported Region: 10	Yes	The maximum number of whitelisted cookies per cache behavior.
Whitelisted headers per cache behavior	Each supported Region: 10	Yes	The maximum number of whitelisted headers per cache behavior.
Whitelisted query strings per cache behavior	Each supported Region: 10	Yes	The maximum number of whitelisted query strings per cache behavior.

For more information, see Quotas in the *Amazon CloudFront Developer Guide*.

AWS CloudHSM endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

AWS CloudHSM

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloudhsmv2.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	cloudhsmv2.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	cloudhsmv2.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cloudhsmv2.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	cloudhsmv2.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	cloudhsmv2.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	cloudhsmv2.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cloudhsmv2.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	cloudhsmv2.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloudhsmv2.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloudhsmv2.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloudhsmv2.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudhsmv2.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	cloudhsmv2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloudhsmv2.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudhsmv2.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cloudhsmv2.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	cloudhsmv2.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cloudhsmv2.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cloudhsmv2.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cloudhsmv2.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloudhsmv2.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	cloudhsmv2.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudhsmv2.us-gov-west-1.amazonaws.com	HTTPS	

AWS CloudHSM Classic

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	cloudhsm.us-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudhsm.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

AWS CloudHSM

Name	Default	Adjust	Description
Clusters per AWS Region and AWS account	Each supported Region: 4	Yes	The maximum number of clusters that you can create in this account in the current Region.
HSMs per AWS Region and AWS account	Each supported Region: 6	Yes	The maximum number of HSMs that you can create in this account in the current Region.
HSMs per CloudHSM cluster	Each supported Region: 28	No	The maximum number of HSMs that you can create in a CloudHSM cluster.
Keys per CloudHSM cluster	Each supported Region: 3,300	No	The maximum number of keys that you can create in a CloudHSM cluster.
Length of a Username	Each supported Region: 31	No	The maximum number of characters for a username.
Length of a password	Each supported Region: 32	No	The maximum number of characters for a password.
Minimum length of a password	Each supported Region: 7	No	The minimum number of characters for a password.
Number of concurrent clients	Each supported Region: 900	No	The maximum number of concurrent clients that can exist in a Region.
Users per CloudHSM cluster	Each supported Region: 1,024	No	The maximum number of users who can be created on a cluster in an account.

For more information, see Quotas in the *AWS CloudHSM User Guide*.

AWS CloudHSM Classic

Resource	Default
HSM appliances	3
High-availability partition groups	20

For more information, see Quotas in the *AWS CloudHSM Classic User Guide*.

AWS Cloud Map endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	servicediscovery.us-east-2.amazonaws.com	HTTPS	
		servicediscovery-fips.us-east-2.amazonaws.com	HTTPS	
		servicediscovery-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	servicediscovery.us-east-1.amazonaws.com	HTTPS	
		servicediscovery-fips.us-east-1.amazonaws.com	HTTPS	
		servicediscovery-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	servicediscovery.us-west-1.amazonaws.com	HTTPS	
		servicediscovery-fips.us-west-1.amazonaws.com	HTTPS	
		servicediscovery-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	servicediscovery.us-west-2.amazonaws.com	HTTPS	
		servicediscovery-fips.us-west-2.amazonaws.com	HTTPS	
		servicediscovery-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	servicediscovery.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	servicediscovery.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	servicediscovery.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	servicediscovery.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	servicediscovery.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	servicediscovery.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	servicediscovery.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	servicediscovery.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	servicediscovery.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	servicediscovery.ca-central-1.amazonaws.com servicediscovery-fips.ca-central-1.amazonaws.com servicediscovery-fips.ca-central-1.amazonaws.com	HTTPS HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	servicediscovery.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	servicediscovery.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	servicediscovery.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	servicediscovery.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	servicediscovery.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	servicediscovery.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	servicediscovery.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	servicediscovery.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	servicediscovery.us-gov-east-1.amazonaws.com servicediscovery-fips.us-gov-east-1.amazonaws.com servicediscovery-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	servicediscovery.us-gov-west-1.amazonaws.com servicediscovery-fips.us-gov-west-1.amazonaws.com servicediscovery-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Custom attributes per instance	Each supported Region: 30	No	The maximum number of custom attributes that you can specify when you register an instance.
DiscoverInstances operation per account burst rate	Each supported Region: 2,000	Yes	The maximum burst rate to call DiscoverInstances operation from a single account.
DiscoverInstances operation per account steady rate	Each supported Region: 1,000	Yes	The maximum steady rate to call DiscoverInstances operation from a single account.
Instances per namespace	Each supported Region: 2,000	Yes	The maximum number of service instances that you can register using the same namespace.
Instances per service	Each supported Region: 1,000	No	The maximum number of instances that you can register in a Region using the same service.
Namespaces per Region	Each supported Region: 50	Yes	The maximum number of namespaces that you can create per Region.

For more information, see AWS Cloud Map Quotas in the *AWS Cloud Map Developer Guide*.

Amazon CloudSearch endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	cloudsearch.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	cloudsearch.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cloudsearch.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloudsearch.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloudsearch.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloudsearch.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudsearch.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloudsearch.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudsearch.eu-west-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloudsearch.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Document batch size	Each supported Region: 5 Megabytes	No	The size of document batch uploads.
Document size	Each supported Region: 1 Megabytes	No	The size of individual documents.

Name	Default	Adjust	Description
Domains per account	Each supported Region: 100	No	Number of search domains you can create per AWS account.
Index fields	Each supported Region: 200	Yes	The number of index fields per domain. A dynamic field counts as one index field, but typically matches multiple document fields. Dynamic fields can cause the total number of fields in your index to exceed this limit. If you use dynamic fields, keep the number of index fields below 1,000 to avoid performance issues.
Partition count	Each supported Region: 10	Yes	The minimum number of partitions your search index is distributed across per Amazon CloudSearch domain.
Replication count	Each supported Region: 5	Yes	The minimum number of replicas each partition of your Amazon CloudSearch domain would contain.
Search document fields	Each supported Region: 200	No	Number of fields per document.

For more information, see Understanding Amazon CloudSearch Quotas in the *Amazon CloudSearch Developer Guide*.

AWS CloudShell endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloudshell.us-east-2.amazonaws.com cloudshell.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cloudshell.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		cloudshell.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cloudshell.us-west-2.amazonaws.com cloudshell.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cloudshell.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloudshell.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudshell.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloudshell.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudshell.eu-west-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	cloudshell.us-gov-east-1.amazonaws.com cloudshell.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudshell.us-gov-west-1.amazonaws.com cloudshell.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Data retention	Each supported Region: 120	No	The number of days that the data in the home directory will be retained after a shell was last accessed.
Home directory size	Each supported Region: 1 Gigabytes	No	The maximum size of your shells home directory.

AWS CloudTrail endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cloudtrail.us-east-2.amazonaws.com cloudtrail-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cloudtrail.us-east-1.amazonaws.com cloudtrail-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	cloudtrail.us-west-1.amazonaws.com cloudtrail-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	cloudtrail.us-west-2.amazonaws.com cloudtrail-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	cloudtrail.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	cloudtrail.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	cloudtrail.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cloudtrail.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	cloudtrail.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cloudtrail.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cloudtrail.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cloudtrail.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cloudtrail.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	cloudtrail.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cloudtrail.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cloudtrail.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cloudtrail.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	cloudtrail.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cloudtrail.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cloudtrail.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cloudtrail.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	cloudtrail.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cloudtrail.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	cloudtrail.us-gov-east-1.amazonaws.com cloudtrail.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cloudtrail.us-gov-west-1.amazonaws.com cloudtrail.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Conditions across all advanced event selectors	Each supported Region: 500	No	If a trail uses advanced event selectors, a maximum of 500 total values for all conditions in all advanced event selectors is allowed. Unless a trail logs data events on all resources, such as all S3 buckets, a trail is limited to 250 data

Name	Default	Adjust	Description
			resources. Data resources can be distributed across event selectors, but the total cannot exceed 250.
Data resources across all event selectors in a trail	Each supported Region: 250	No	If you choose to limit data events by using event selectors or advanced event selectors, the total number of data resources cannot exceed 250 across all event selectors in a trail.
Event data stores per region	Each supported Region: 5	No	The maximum number of event data stores per region.
Event selectors	Each supported Region: 5	No	The maximum number of event selectors per trail.
Event size	Each supported Region: 256 Kilobytes	No	The maximum event size (in KB). All event versions: events over 256 KB cannot be sent to CloudWatch Logs. Event version 1.05 and newer: maximum event size of 256 KB.
Trails per region	Each supported Region: 5	No	The maximum number of trails per region.
Transactions per second (TPS) for all other APIs	Each supported Region: 1	No	The maximum number of operation requests you can make per second without being throttled.
Transactions per second (TPS) for the LookupEvents API	Each supported Region: 2	No	The maximum number of operation requests you can make per second without being throttled.
Transactions per second (TPS) for the get, describe, and list APIs	Each supported Region: 10	No	The maximum number of operation requests you can make per second without being throttled. The LookupEvents API is not included in this category.

For more information, see Quotas in AWS CloudTrail.

Amazon CloudWatch endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	monitoring.us-east-2.amazonaws.com monitoring-fips.us-east-2.amazonaws.com	HTTP and HTTPS HTTPS	
US East (N. Virginia)	us-east-1	monitoring.us-east-1.amazonaws.com monitoring-fips.us-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (N. California)	us-west-1	monitoring.us-west-1.amazonaws.com monitoring-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	monitoring.us-west-2.amazonaws.com monitoring-fips.us-west-2.amazonaws.com	HTTP and HTTPS HTTPS	
Africa (Cape Town)	af-south-1	monitoring.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	monitoring.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	monitoring.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	monitoring.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	monitoring.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	monitoring.ap-northeast-2.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	monitoring.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	monitoring.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	monitoring.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	monitoring.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	monitoring.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	monitoring.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	monitoring.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	monitoring.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	monitoring.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	monitoring.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	monitoring.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	monitoring.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	monitoring.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	monitoring.us-gov-east-1.amazonaws.com monitoring.us-gov-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	monitoring.us-gov-west-1.amazonaws.com monitoring.us-gov-west-1.amazonaws.com	HTTP and HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Actions per CloudWatch alarm, per state	Each supported Region: 5	No	The maximum number of actions that you can associate with a CloudWatch alarm, per state, in this account in the current region. Given that, an alarm can have up to 15 actions (5 on ALARM, 5 on OK and 5 on INSUFFICIENT_DATA)
Canary limit	us-east-1: 300 us-east-2: 300 us-west-2: 300 ap-northeast-1: 300 eu-west-1: 300 Each of the other supported Regions: 200	Yes	The maximum number of canaries per account per region.
Data retention	Each supported Region: 15	No	The amount of time, in months, that metric data is retained by CloudWatch.
Dimensions per metric	Each supported Region: 10	No	The maximum number of dimensions per metric in this account in the current region.
Groups limit	Each supported Region: 20	Yes	The maximum number of groups per account across all regions.
Metric data queries per GetMetricData request	Each supported Region: 500	No	The maximum number of MetricDataQuery structures per GetMetricData request in this account in the current region.
MetricDatum items per PutMetricData request	Each supported Region: 20	No	The maximum number of MetricDatum items per PutMetricData request in this account in the current region.
Metrics per dashboard	Each supported Region: 2,500	No	The maximum number of metrics per dashboard in this account in the current region.

Name	Default	Adjust	Description
Metrics per dashboard widget	Each supported Region: 500	No	The maximum number of metrics per dashboard widget in this account in the current region.
Minimum frequency	Each supported Region: 60,000 Milliseconds	No	The minimum time, in milliseconds, between runs of the same canary.
Number of Contributor Insights rules	Each supported Region: 100 per 5 minutes	Yes	The maximum number of Contributor Insights rules you can have in this account.
Payload size for PutMetricData requests	Each supported Region: 40	No	The maximum size of the payload for PutMetricData requests, in Kilobytes, in this account in the current region.
Rate of DeleteAlarms requests	Each supported Region: 3 per second	No	The maximum number of DeleteAlarms requests that you can make, per second, in this account in the current region.
Rate of DeleteDashboards requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteDashboards requests that you can make, per second, in this account in the current region.
Rate of DeleteInsightRules requests	Each supported Region: 5 per second	No	The maximum number of DeleteInsightRules requests you can make per second in this account.
Rate of DeleteMetricStream requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteMetricStream requests that you can make, per second, in this account in the current region.
Rate of DescribeAlarmHistory requests	Each supported Region: 3 per second	No	The maximum number of DescribeAlarmHistory requests that you can make, per second, in this account in the current region.
Rate of DescribeAlarms requests	Each supported Region: 9 per second	Yes	The maximum number of DescribeAlarms requests that you can make, per second, in this account in the current region.

Name	Default	Adjust	Description
Rate of DescribeAlarmsForMetric requests	Each supported Region: 3 per second	No	The maximum number of DescribeAlarmsForMetric requests that you can make, per second, in this account in the current region.
Rate of DescribeInsightRules requests	Each supported Region: 20 per second	No	The maximum number of DescribeInsightRules requests you can make per second in this account.
Rate of DisableAlarmActions requests	Each supported Region: 3 per second	No	The maximum number of DisableAlarmActions requests that you can make, per second, in this account in the current region.
Rate of DisableInsightRules requests	Each supported Region: 1 per second	No	The maximum number of DisableInsightRules requests you can make per second in this account.
Rate of EnableAlarmActions requests	Each supported Region: 3 per second	No	The maximum number of EnableAlarmActions requests that you can make, per second, in this account in the current region.
Rate of EnableInsightRules requests	Each supported Region: 1 per second	No	The maximum number of EnableInsightRules requests you can make per second in this account.
Rate of GetDashboard requests	Each supported Region: 10 per second	Yes	The maximum number of GetDashboard requests that you can make, per second, in this account in the current region.
Rate of GetInsightRuleReport requests	Each supported Region: 20 per second	Yes	The maximum number of GetInsightRuleReport requests you can make, per second in this account.
Rate of GetMetricData datapoints for metrics older than three hours	Each supported Region: 396,000	No	The maximum number of GetMetricData datapoints that you can fetch, per second, for a request with a StartTime of more than three hours in this account in the current region.

Name	Default	Adjust	Description
Rate of GetMetricData datapoints for the last three hours of metrics	Each supported Region: 180,000	No	The maximum number of GetMetricData datapoints that you can fetch, per second, for a request with a StartTime of less than or equal to three hours in this account in the current region.
Rate of GetMetricData requests	Each supported Region: 50 per second	Yes	The maximum number of GetMetricData requests that you can make, per second, in this account in the current region.
Rate of GetMetricStatistics requests	Each supported Region: 400 per second	Yes	The maximum number of GetMetricStatistics requests that you can make, per second, in this account in the current region.
Rate of GetMetricStream requests	Each supported Region: 10 per second	Yes	The maximum number of GetMetricStream requests that you can make, per second, in this account in the current region.
Rate of GetMetricWidgetImage requests	Each supported Region: 20 per second	Yes	The maximum number of GetMetricWidgetImage requests that you can make, per second, in this account in the current region.
Rate of ListDashboards requests	Each supported Region: 10 per second	Yes	The maximum number of ListDashboards requests that you can make, per second, in this account in the current region.
Rate of ListMetricStreams requests	Each supported Region: 10 per second	Yes	The maximum number of ListMetricStreams requests that you can make, per second, in this account in the current region.
Rate of ListMetrics requests	Each supported Region: 50 per second	Yes	The maximum number of ListMetrics requests that you can make, per second, in this account in the current region.

Name	Default	Adjust	Description
Rate of ListTagsForResource requests	Each supported Region: 10 per second	No	The maximum number of ListTagsForResource requests that you can make, per second, in this account in the current region.
Rate of PutDashboard requests	Each supported Region: 10 per second	Yes	The maximum number of PutDashboard requests that you can make, per second, in this account in the current region.
Rate of PutInsightRule requests	Each supported Region: 5 per second	No	The maximum number of PutInsightRule requests you can make, per second in this account.
Rate of PutMetricAlarm requests	Each supported Region: 3 per second	Yes	The maximum number of PutMetricAlarm requests that you can make, per second, in this account in the current region.
Rate of PutMetricData requests	Each supported Region: 500 per second	Yes	The maximum number of PutMetricData requests that you can make, per second, in this account in the current region.
Rate of PutMetricStream requests	Each supported Region: 10 per second	Yes	The maximum number of PutMetricStream requests that you can make, per second, in this account in the current region.
Rate of SetAlarmState requests	Each supported Region: 3 per second	No	The maximum number of SetAlarmState requests that you can make, per second, in this account in the current region.
Rate of StartMetricStreams requests	Each supported Region: 10 per second	Yes	The maximum number of StartMetricStreams requests that you can make, per second, in this account in the current region.
Rate of StopMetricStreams requests	Each supported Region: 10 per second	Yes	The maximum number of StopMetricStreams requests that you can make, per second, in this account in the current region.

Name	Default	Adjust	Description
Rate of TagResource requests	Each supported Region: 1 per second	No	The maximum number of TagResource requests that you can make, per second, in this account in the current region.
Rate of UntagResource requests	Each supported Region: 1 per second	No	The maximum number of UntagResource requests that you can make, per second, in this account in the current region.

For more information, see CloudWatch Quotas in the *Amazon CloudWatch User Guide*.

Amazon CloudWatch Application Insights endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	applicationinsights.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	applicationinsights.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	applicationinsights.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	applicationinsights.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	applicationinsights.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	applicationinsights.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	applicationinsights.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	applicationinsights.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	applicationinsights.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	applicationinsights.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	applicationinsights.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	applicationinsights.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	applicationinsights.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	applicationinsights.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	applicationinsights.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	applicationinsights.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	applicationinsights.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	applicationinsights.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	applicationinsights.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	applicationinsights.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	applicationinsights.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	applicationinsights.us-gov-east-1.amazonaws.com applicationinsights.us-gov-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	applicationinsights.us-gov-west-1.amazonaws.com applicationinsights.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Resource	Default quota
API requests	All API actions are throttled to 5 TPS
Applications	100 per account
Log Streams	5 per resource
Observations per problem	20 per dashboard 40 per DescribeProblemObservations action
Metrics	60 per resource
Resources	30 per application

Amazon CloudWatch Events endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	events.us-east-2.amazonaws.com events-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	events.us-east-1.amazonaws.com events-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	events.us-west-1.amazonaws.com events-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	events.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		events-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	events.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	events.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	events.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	events.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	events.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	events.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	events.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	events.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	events.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	events.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	events.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	events.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	events.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	events.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	events.eu-west-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	events.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	events.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	events.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	events.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	events.us-gov-east-1.amazonaws.com events.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	events.us-gov-west-1.amazonaws.com events.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Api destinations	Each supported Region: 3,000	Yes	The maximum number of API destinations per account per Region.
Connections	Each supported Region: 3,000	Yes	The maximum number of connections per account per Region.
CreateEndpoint throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of requests per second for CreateEndpoint API. Additional requests are throttled.
DeleteEndpoint throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of requests per second for DeleteEndpoint API. Additional requests are throttled.
Endpoints	Each supported Region: 100	Yes	The maximum number of endpoints per account per Region.
Invocations throttle limit in transactions per second	us-east-1: 18,750 us-east-2: 4,500	Yes	An invocation is an event matching a rule and being sent on to the rules

Name	Default	Adjust	Description
	us-west-1: 2,250 us-west-2: 18,750 af-south-1: 750 ap-northeast-1: 2,250 ap-northeast-3: 750 ap-southeast-1: 2,250 ap-southeast-2: 2,250 eu-central-1: 4,500 eu-south-1: 750 eu-west-1: 18,750 eu-west-2: 2,250 Each of the other supported Regions: 1,100		targets. After the limit is reached, the invocations are throttled; that is, they still happen but they are delayed.
Number of rules	af-south-1: 100 eu-south-1: 100 Each of the other supported Regions: 300	Yes	Maximum number of rules an account can have per event bus

Name	Default	Adjust	Description
PutEvents throttle limit in transactions per second	us-east-1: 10,000 us-east-2: 2,400 us-west-1: 1,200 us-west-2: 10,000 af-south-1: 400 ap-northeast-1: 1,200 ap-northeast-3: 400 ap-southeast-1: 1,200 ap-southeast-2: 1,200 eu-central-1: 2,400 eu-south-1: 400 eu-west-1: 10,000 eu-west-2: 1,200 Each of the other supported Regions: 600	Yes	Maximum number of requests per second for PutEvents API. Additional requests are throttled.
Rate of invocations per API destination	Each supported Region: 300	Yes	The maximum number of invocations per second to send to each API destination endpoint per account per Region. Once the quota is met, future invocations to that API endpoint are throttled. The invocations will still occur, but are delayed.
Targets per rule	Each supported Region: 5	No	Maximum number of targets that can be associated with a rule
Throttle limit in transactions per second	Each supported Region: 50	Yes	Maximum number of requests per second for all EventBridge API operations except PutEvents. Additional requests are throttled

Name	Default	Adjust	Description
UpdateEndpoint throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of requests per second for UpdateEndpoint API. Additional requests are throttled.

For more information, see CloudWatch Events quotas in the *Amazon CloudWatch Events User Guide*.

Amazon CloudWatch Logs endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	logs.us-east-2.amazonaws.com logs-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	logs.us-east-1.amazonaws.com logs-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	logs.us-west-1.amazonaws.com logs-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	logs.us-west-2.amazonaws.com logs-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	logs.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	logs.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	logs.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	logs.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Osaka)	ap-northeast-3	logs.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	logs.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	logs.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	logs.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	logs.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	logs.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	logs.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	logs.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	logs.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	logs.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	logs.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	logs.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	logs.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	logs.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	logs.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	logs.us-gov-east-1.amazonaws.com logs.us-gov-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	logs.us-gov-west-1.amazonaws.com logs.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Active export task	Each supported Region: 1	No	The number of active (running or pending) export tasks per account
AssociateKmsKey throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of associate-kms-key calls per second per account/per region
Batch size	Each supported Region: 1 Megabytes	No	The maximum batch size in MB of a put-log-events request
CancelExportTask throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of cancel-export-task calls per second per account/per region
CreateExportTask throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of create-export-task calls per second per account/per region
CreateLogGroup throttle limit in transactions per second	Each supported Region: 5 per second	Yes	The maximum number of create-log-group calls per second per account/per region
CreateLogStream throttle limit in transactions per second	Each supported Region: 50 per second	Yes	The maximum number of create-log-stream calls per second per account/per region
Data archiving	Each supported Region: 5 Gigabytes	No	The maximum size in GB of free data archiving
DeleteDestination throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of delete-destination calls per second per account/per region
DeleteLogGroup throttle limit in transactions per second	Each supported Region: 5 per second	Yes	The maximum number of delete-log-group calls per second per account/per region

Name	Default	Adjust	Description
DeleteLogStream throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of delete-log-stream calls per second per account/per region
DeleteMetricFilter throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of delete-metric-filter calls per second per account/per region
DeleteRetentionPolicy throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of delete-retention-policy calls per second per account/per region
DeleteSubscriptionFilter throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of delete-subscription-filter calls per second per account/per region
DescribeDestinations throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of describe-destinations calls per second per account/per region
DescribeExportTasks throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of describe-export-tasks calls per second per account/per region
DescribeLogGroups throttle limit in transactions per second	Each supported Region: 5 per second	Yes	The maximum number of describe-log-groups calls per second per account/per region
DescribeLogStreams throttle limit in transactions per second	Each supported Region: 5 per second	Yes	The maximum number of describe-log-streams calls per second per account/per region
DescribeMetricFilters throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of describe-metric-filters calls per second per account/per region
DescribeSubscriptionFilters throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of describe-subscription-filters calls per second per account/per region
Event size	Each supported Region: 256 Kilobytes	No	The maximum log event size in KB

Name	Default	Adjust	Description
FilterLogEvents throttle limit in transactions per second	us-east-1: 25 per second ap-northeast-3: 5 per second eu-central-1: 5 per second Each of the other supported Regions: 10 per second	No	The maximum number of filter-log-events calls per second per account/per region
GetLogEvents throttle limit in transactions per second	us-west-2: 10 per second ap-northeast-3: 10 per second eu-central-1: 10 per second eu-west-1: 10 per second eu-west-3: 30 per second Each of the other supported Regions: 25 per second	No	The maximum number of get-log-events calls per second per account/per region
GetQueryResults throttle limit in transactions per second	Each supported Region: 5	No	The maximum number of get-query-results calls per second per account/per region
ListTagsLogGroup throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of list-tags-log-group calls per second per account/per region
Log groups	Each supported Region: 1,000,000	Yes	The maximum number of log groups an account can have
Metrics filters per log group	Each supported Region: 100	No	The number of metric filters per log group
PutDestination throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of put-destination calls per second per account/per region

Name	Default	Adjust	Description
PutDestinationPolicy throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of put-destination-policy calls per second per account/per region
PutLogEvents throttle limit in transactions per second	us-east-1: 1,500 per second us-west-2: 1,500 per second eu-north-1: 1,500 per second eu-south-1: 1,500 per second eu-west-1: 1,500 per second eu-west-3: 1,500 per second Each of the other supported Regions: 800 per second	Yes	The maximum number of put-log-events calls per second per account/per region
PutMetricFilter throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of put-metric-filter calls per second per account/per region
PutRetentionPolicy throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of put-retention-policy calls per second per account/per region
PutSubscriptionFilter throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of put-subscription-filter calls per second per account/per region
StartQuery throttle limit in transactions per second	Each supported Region: 5	No	The maximum number of start-query calls per second per account/per region
Subscription filters per log group	Each supported Region: 2	No	The number of subscription filters per log group
TagLogGroup throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of tag-log-group calls per second per account/per region

Name	Default	Adjust	Description
TestMetricFilter throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of test-metric-filter calls per second per account/per region
UntagLogGroup throttle limit in transactions per second	Each supported Region: 5 per second	No	The maximum number of untag-log-group calls per second per account/per region

For more information, see CloudWatch Logs quotas in the *Amazon CloudWatch Logs User Guide*.

Amazon CloudWatch Synthetics endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	synthetics.us-east-2.amazonaws.com synthetics-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	synthetics.us-east-1.amazonaws.com synthetics-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	synthetics.us-west-1.amazonaws.com synthetics-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	synthetics.us-west-2.amazonaws.com synthetics-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	synthetics.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	synthetics.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	synthetics.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	synthetics.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	synthetics.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	synthetics.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	synthetics.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	synthetics.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	synthetics.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	synthetics.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	synthetics.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	synthetics.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	synthetics.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	synthetics.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	synthetics.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	synthetics.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	synthetics.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	synthetics.me-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	synthetics.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	synthetics.us-gov-east-1.amazonaws.com synthetics-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	synthetics.us-gov-west-1.amazonaws.com synthetics-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjustable
Number of canaries	100 per Region per account in the following Regions: US East (N. Virginia), US East (Ohio), US West (Oregon), Europe (Ireland), and Asia Pacific (Tokyo) 20 per Region per account in all other Regions	Yes

For more information, see CloudWatch service quotas in the *Amazon CloudWatch User Guide*.

AWS CodeArtifact endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codeartifact.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	codeartifact.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codeartifact.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codeartifact.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codeartifact.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codeartifact.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codeartifact.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codeartifact.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codeartifact.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codeartifact.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	codeartifact.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codeartifact.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codeartifact.eu-north-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Asset file size maximum	Each supported Region: 5 Gigabytes	Yes	The maximum file size per asset.
Assets per package version maximum	Each supported Region: 100	No	The maximum number of assets per package version.
CopyPackageVersions maximum requests per second	Each supported Region: 5	Yes	The maximum number of calls that can be made to CopyPackageVersions per second.

Name	Default	Adjust	Description
Direct upstream repository maximum	Each supported Region: 10	No	The maximum number of direct upstream repositories per repository.
Domains per AWS account maximum	Each supported Region: 10	Yes	The maximum number of domains that can be created per AWS account.
GetAuthorizationToken maximum requests per second	Each supported Region: 40	Yes	The maximum number of authorization tokens retrieved per second.
GetPackageVersionAsset maximum requests per second	Each supported Region: 50	Yes	The maximum number of calls that can be made to GetPackageVersionAsset per second.
ListPackageVersionAssets maximum requests per second	Each supported Region: 20	Yes	The maximum number of calls that can be made to ListPackageVersionAssets per second.
ListPackageVersions maximum requests per second	Each supported Region: 200	Yes	The maximum number of calls that can be made to ListPackageVersions per second.
ListPackages maximum requests per second	Each supported Region: 200	Yes	The maximum number of calls that can be made to ListPackages per second.
Maximum read requests per second from a single AWS account	Each supported Region: 800	Yes	The maximum number of read requests from one AWS account per second.
Maximum requests per second using a single authentication token.	Each supported Region: 800	No	The maximum number of requests per second using a single authentication token.
Maximum write requests per second from a single AWS account	Each supported Region: 100	Yes	The maximum number of write requests from one AWS account per second.
Repositories per domain maximum	Each supported Region: 1,000	Yes	The maximum number of repositories that can be created per domain.
Requests without authentication token per IP address maximum	Each supported Region: 600	No	The maximum number of requests per second without an authentication token from a single IP address.
Upstream repository search maximum	Each supported Region: 25	No	The maximum number of upstream repositories searched when resolving a package.

AWS CodeBuild endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codebuild.us-east-2.amazonaws.com codebuild-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	codebuild.us-east-1.amazonaws.com codebuild-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	codebuild.us-west-1.amazonaws.com codebuild-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	codebuild.us-west-2.amazonaws.com codebuild-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	codebuild.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	codebuild.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	codebuild.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codebuild.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	codebuild.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	codebuild.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codebuild.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	codebuild.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codebuild.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codebuild.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codebuild.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codebuild.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codebuild.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	codebuild.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codebuild.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codebuild.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	codebuild.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	codebuild.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	codebuild.us-gov-east-1.amazonaws.com codebuild-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	codebuild.us-gov-west-1.amazonaws.com codebuild-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Associated tags per project	Each supported Region: 50	No	Maximum number of tags you can associate with a build project

Name	Default	Adjust	Description
Build projects	Each supported Region: 5,000	Yes	Maximum number of build projects
Build timeout in minutes	Each supported Region: 480	No	Maximum build timeout in minutes
Concurrent request for information about builds	Each supported Region: 100	No	Maximum number of builds you can request information about at any one time using the AWS CLI or an AWS SDK.
Concurrent requests for information on build projects	Each supported Region: 100	No	Maximum number of build projects you can request information about at any one time using the AWS CLI or an AWS SDK.
Concurrently running builds	Each supported Region: 60	Yes	Maximum number of concurrently running builds
Minimum period for build timeout in minutes	Each supported Region: 5	No	Minimum build timeout in minutes
Security groups under VPC configuration	Each supported Region: 5	No	Security groups available for VPC configuration
Subnets under VPC configuration	Each supported Region: 16	No	Subnets available for VPC configuration

For more information, see Quotas for CodeBuild in the *AWS CodeBuild User Guide*.

AWS CodeCommit endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codecommit.us-east-2.amazonaws.com codecommit-fips.us-east-2.amazonaws.com codecommit-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	codecommit.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		codecommit-fips.us-east-1.amazonaws.com	HTTPS	
		codecommit-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	codecommit.us-west-1.amazonaws.com	HTTPS	
		codecommit-fips.us-west-1.amazonaws.com	HTTPS	
		codecommit-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codecommit.us-west-2.amazonaws.com	HTTPS	
		codecommit-fips.us-west-2.amazonaws.com	HTTPS	
		codecommit-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	codecommit.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	codecommit.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codecommit.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	codecommit.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	codecommit.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codecommit.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codecommit.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codecommit.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codecommit.ca-central-1.amazonaws.com	HTTPS	
		codecommit-fips.ca-central-1.amazonaws.com	HTTPS	
		codecommit-fips.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codecommit.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	codecommit.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codecommit.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	codecommit.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codecommit.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codecommit.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	codecommit.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	codecommit.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	codecommit.us-gov-east-1.amazonaws.com codecommit-fips.us-gov-east-1.amazonaws.com codecommit-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	codecommit.us-gov-west-1.amazonaws.com codecommit-fips.us-gov-west-1.amazonaws.com codecommit-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

For information about Git connection endpoints, including SSH and HTTPS information, see Regions and Git Connection Endpoints for CodeCommit.

Service quotas

Name	Default	Adjust	Description
Allowed repositories	Each supported Region: 1,000	Yes	The maximum number of repositories that you can create in this account.

For more information, see Quotas in CodeCommit in the *AWS CodeCommit User Guide*.

AWS CodeDeploy endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codedeploy.us-east-2.amazonaws.com codedeploy-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	codedeploy.us-east-1.amazonaws.com codedeploy-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	codedeploy.us-west-1.amazonaws.com codedeploy-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	codedeploy.us-west-2.amazonaws.com codedeploy-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	codedeploy.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	codedeploy.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	codedeploy.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codedeploy.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	codedeploy.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	codedeploy.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codedeploy.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	codedeploy.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codedeploy.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codedeploy.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codedeploy.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codedeploy.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codedeploy.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	codedeploy.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codedeploy.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codedeploy.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	codedeploy.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	codedeploy.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	codedeploy.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	codedeploy.us-gov-east-1.amazonaws.com codedeploy-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	codedeploy.us-gov-west-1.amazonaws.com codedeploy-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS Lambda deployment run in hours	Each supported Region: 50	No	Maximum number of hours an AWS Lambda deployment can run (48 hours for the maximum time between the first and last traffic shift plus one hour for each of two possible lifecycle hooks)
Applications associated per account per region	Each supported Region: 1,000	Yes	The maximum number of applications associated with an AWS account in a single region
Auto Scaling groups in a deployment group	Each supported Region: 10	No	Maximum number of Amazon EC2 Auto Scaling groups in a deployment group
Concurrent deployments per account	Each supported Region: 1,000	Yes	Maximum number of concurrent deployments associated with an AWS account. Each deployment to a scaled-up Amazon EC2 instance in an Amazon EC2 Auto Scaling group counts as a single concurrent deployment for each application that the EC2 instance is associated with.
Concurrent deployments per deployment group	Each supported Region: 1	No	Maximum number of concurrent deployments to a deployment group. This limit prevents concurrent deployments of the same application to the same deployment group.
Custom deployment configurations per account	Each supported Region: 50	No	Maximum number of custom deployment configurations associated with an AWS account
Deployment groups associated with a single application	Each supported Region: 1,000	Yes	Maximum number of deployment groups associated with a single application
EC2/On-Premises blue/green deployment run in hours	Each supported Region: 109	No	Maximum number of hours an EC2/On-Premises blue/green deployment can run (48 hours for each of the

Name	Default	Adjust	Description
			above two limits plus one hour for each of 13 possible lifecycle events)
EC2/On-Premises in-place deployment run in hours	Each supported Region: 8	No	Maximum number of hours an EC2/On-Premises in-place deployment can run
Event notification triggers in a deployment group	Each supported Region: 10	Yes	Maximum number of event notification triggers in a deployment group
GitHub connection tokens per account	Each supported Region: 25	No	Maximum number of GitHub connection tokens for a single AWS account
Hours between the completion of a deployment and the termination of the original instances during an EC2/On-Premises blue/green deployment	Each supported Region: 48	No	Maximum number of hours between the completion of a deployment and the termination of the original instances during an EC2/On-Premises blue/green deployment
Hours between the deployment of a revision and when traffic shifts to the replacement instances during an EC2/On-Premises blue/green deployment	Each supported Region: 48	No	Maximum number of hours between the deployment of a revision and when traffic shifts to the replacement instances during an EC2/On-Premises blue/green deployment
Instances count per deployment	us-east-1: 2,000 Each of the other supported Regions: 1,000	Yes	Maximum number of instances in a single deployment
Minutes a blue/green deployment can wait after a successful deployment before terminating instances from the original deployment	Each supported Region: 2,800	No	Maximum number of minutes a blue/green deployment can wait after a successful deployment before terminating instances from the original deployment
Minutes between the first and last traffic shift during an AWS Lambda canary or linear deployment	Each supported Region: 2,880	No	Maximum number of minutes between the first and last traffic shift during an AWS Lambda canary or linear deployment

Name	Default	Adjust	Description
Minutes until a deployment fails if a lifecycle event doesnt start	Each supported Region: 5	No	Maximum number of minutes until a deployment fails if a lifecycle event doesnt start after (1) a deployment is triggered by using the console or the AWS CLI create-deployment command, or (2) the previous lifecycle event is completed.
Number of deployment groups that can be associated with an Amazon ECS service	Each supported Region: 1	No	Maximum number of deployment groups that can be associated with an Amazon ECS service
Number of instances that can be passed to the BatchGetOnPremisesInstances API action	Each supported Region: 100	No	Maximum number of instances that can be passed to the BatchGetOnPremisesInstances API action
Number of instances used by concurrent deployments that are in progress per account	us-east-1: 3,000 Each of the other supported Regions: 1,000	Yes	Maximum number of instances that can be used by concurrent deployments that are in progress and associated with one account
Number of listeners for a traffic route during an Amazon ECS deployment	Each supported Region: 1	No	Maximum number of listeners for a traffic route during an Amazon ECS deployment
Seconds until a deployment lifecycle event fails if not completed	Each supported Region: 3,600 Seconds	No	Maximum number of seconds until a deployment lifecycle event fails if not completed
Size of deployment group name	Each supported Region: 100	No	Maximum number of characters in a deployment group name
Size of tag key	Each supported Region: 128	No	Maximum number of characters in a tag key
Size of tag value	Each supported Region: 256	No	Maximum number of characters in a tag value
Tags in a deployment group	Each supported Region: 10	No	Maximum number of tags in a deployment group
Traffic that can be shifted in one increment during an AWS Lambda deployment	Each supported Region: 99	No	Maximum percentage of traffic that can be shifted in one increment during an AWS Lambda deployment

For more information, see Quotas in CodeDeploy in the *AWS CodeDeploy User Guide*.

Amazon CodeGuru Profiler endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codeguru-profiler.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	codeguru-profiler.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codeguru-profiler.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codeguru-profiler.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codeguru-profiler.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codeguru-profiler.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codeguru-profiler.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codeguru-profiler.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codeguru-profiler.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codeguru-profiler.eu-north-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of profiling groups per account and region.	Each supported Region: 50	Yes	The maximum number of profiling groups per account, per region.

Amazon CodeGuru Reviewer endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codeguru-reviewer.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	codeguru-reviewer.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codeguru-reviewer.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codeguru-reviewer.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codeguru-reviewer.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codeguru-reviewer.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codeguru-reviewer.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codeguru-reviewer.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codeguru-reviewer.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codeguru-reviewer.eu-north-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Allowed Code Reviews	Each supported Region: 5,000	Yes	The maximum number of code reviews per account per month in the current region.

AWS CodePipeline endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codepipeline.us-east-2.amazonaws.com codepipeline-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	codepipeline.us-east-1.amazonaws.com codepipeline-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	codepipeline.us-west-1.amazonaws.com codepipeline-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	codepipeline.us-west-2.amazonaws.com codepipeline-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	codepipeline.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codepipeline.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	codepipeline.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codepipeline.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	codepipeline.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codepipeline.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codepipeline.ca-central-1.amazonaws.com codepipeline-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	codepipeline.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codepipeline.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codepipeline.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	codepipeline.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codepipeline.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codepipeline.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	codepipeline.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	codepipeline.us-gov-west-1.amazonaws.com codepipeline-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS CloudFormation action timeout	Each supported Region: 3	Yes	The length of time, in days, before an AWS CloudFormation deployment action times out
AWS CodeBuild action timeout	Each supported Region: 8	No	The length of time, in hours, before an AWS CodeBuild build action or test action times out

Name	Default	Adjust	Description
AWS CodeDeploy ECS (Blue/Green) action timeout	Each supported Region: 5	Yes	The length of time, in days, before an AWS CodeDeploy ECS (Blue/Green) action times out
AWS CodeDeploy action timeout	Each supported Region: 5	Yes	The length of time, in days, before an AWS CodeDeploy deployment action times out
AWS Lambda action timeout	Each supported Region: 1	Yes	The length of time in hours before an AWS Lambda invoke action times out
Action configuration key length	Each supported Region: 50	No	The maximum number of characters allowed in an action configuration key
Action configuration value length	Each supported Region: 1,000	No	The maximum number of characters allowed in an action configuration value
Action timeout	Each supported Region: 1	Yes	The length of time in hours before any other action times out
Amazon S3 deployment action timeout	Each supported Region: 20	Yes	The length of time, in minutes, before an Amazon S3 deployment action times out
Approval action timeout	Each supported Region: 7	No	The length of time, in days, before an approval action times out
Minimum actions	Each supported Region: 1	No	The minimum number of actions allowed in a stage
Minimum stages per pipeline	Each supported Region: 2	No	The minimum number of stages allowed in a pipeline.
Total AWS CodeCommit or GitHub source artifact size	Each supported Region: 1 Gigabytes	No	The maximum size (in GB) of artifacts in a source stage that uses AWS CodeCommit or GitHub repositories
Total Amazon S3 source artifact size	Each supported Region: 3 Gigabytes	No	The maximum size (in GB) of artifacts in a source stage that uses Amazon S3 artifact buckets

Name	Default	Adjust	Description
Total JSON object size for Parameter Overrides	Each supported Region: 1 Kilobytes	No	The maximum size (in KB) of the JSON object that can be stored in the ParameterOverrides property
Total actions per pipeline	Each supported Region: 500	No	The maximum number of actions allowed in a pipeline
Total actions per stage	Each supported Region: 50	No	The maximum number of actions allowed in a stage
Total custom actions	Each supported Region: 50	Yes	The maximum number of custom actions per region in an AWS account
Total image definitions JSON file size	Each supported Region: 100 Kilobytes	No	The maximum size (in KB) of the image definitions file JSON file used in pipelines that deploy Amazon ECS containers and images
Total input artifact size for AWS CloudFormation deployments	Each supported Region: 256 Megabytes	No	The maximum size (in MB) of input artifacts for AWS CloudFormation actions when deploying Lambda functions
Total parallel actions per stage	Each supported Region: 50	No	The maximum number of parallel actions in a stage
Total period for execution history	Each supported Region: 12	No	The maximum number of previous months for which pipeline execution history information can be viewed
Total pipelines	Each supported Region: 1,000	Yes	The maximum number of pipelines per AWS Region in an AWS account.
Total pipelines with change detection set to periodically checking for source changes	Each supported Region: 300	No	The maximum number of pipelines per region with change detection set to periodically checking for source changes
Total sequential actions per stage	Each supported Region: 50	No	The maximum number of sequential actions in a stage
Total source artifact size for Amazon EBS deployments	Each supported Region: 512 Megabytes	No	The maximum size (in MB) of artifacts in a source stage for a pipeline that uses Amazon EBS to deploy applications

Name	Default	Adjust	Description
Total stages per pipeline	Each supported Region: 50	No	The maximum number of stages allowed in a pipeline
Total webhooks	Each supported Region: 300	Yes	The maximum number of webhooks per region in an AWS account

For more information, see Quotas in CodePipeline in the *AWS CodePipeline User Guide*.

AWS CodeStar endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codestar.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	codestar.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	codestar.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codestar.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	codestar.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codestar.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codestar.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codestar.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codestar.ca-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	codestar.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codestar.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codestar.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codestar.eu-north-1.amazonaws.com	HTTPS	

Service quotas

For a list of quotas, see Limits in AWS CodeStar in the *AWS CodeStar User Guide*.

AWS CodeStar Notifications endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	codestar-notifications.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	codestar-notifications.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	codestar-notifications.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	codestar-notifications.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	codestar-notifications.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	codestar-notifications.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	codestar-notifications.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	codestar-notifications.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	codestar-notifications.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	codestar-notifications.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	codestar-notifications.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	codestar-notifications.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	codestar-notifications.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	codestar-notifications.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	codestar-notifications.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	codestar-notifications.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	codestar-notifications.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	codestar-notifications.sa-east-1.amazonaws.com	HTTPS	

Service quotas

For a list of quotas, see Quotas for notifications in the *Developer Tools console User Guide*.

Amazon Cognito Identity endpoints and quotas

Amazon Cognito Identity includes Amazon Cognito user pools and Amazon Cognito identity pools (federated identities).

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Cognito User Pools

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cognito-idp.us-east-2.amazonaws.com cognito-idp-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cognito-idp.us-east-1.amazonaws.com cognito-idp-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	cognito-idp.us-west-1.amazonaws.com cognito-idp-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	cognito-idp.us-west-2.amazonaws.com cognito-idp-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cognito-idp.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cognito-idp.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cognito-idp.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cognito-idp.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cognito-idp.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	cognito-idp.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cognito-idp.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cognito-idp.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	cognito-idp.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cognito-idp.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cognito-idp.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cognito-idp.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cognito-idp.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cognito-idp.us-gov-west-1.amazonaws.com cognito-idp-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Amazon Cognito Identity Pools

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cognito-identity.us-east-2.amazonaws.com cognito-identity-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	cognito-identity.us-east-1.amazonaws.com cognito-identity-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	cognito-identity.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cognito-identity.us-west-2.amazonaws.com cognito-identity-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cognito-identity.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cognito-identity.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cognito-identity.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	cognito-identity.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	cognito-identity.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	cognito-identity.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cognito-identity.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cognito-identity.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cognito-identity.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	cognito-identity.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	cognito-identity.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	cognito-identity.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	cognito-identity.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	cognito-identity.us-gov-west-1.amazonaws.com cognito-identity-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Amazon Cognito User Pools

Name	Default	Adjust	Description
Apps per user pool	Each supported Region: 1,000	Yes	The maximum number of app clients per user pool.
Custom domains per account	Each supported Region: 4	No	The maximum number of custom domains that you can create in this account.

Name	Default	Adjust	Description
Groups per user	Each supported Region: 100	No	The maximum number of groups per user that any individual user can be added to.
Groups per user pool	Each supported Region: 10,000	No	The maximum number of groups per user pool. A group is a collection of users in a user pool.
Identity providers per user pool	Each supported Region: 300	Yes	The maximum number of identity providers per user pool.
Rate of ClientAuthentication requests per account	Each supported Region: 150 per second	No	The maximum total combined call rate (requests per second) for all API operations in the ClientAuthentication category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserAccountRecovery requests	Each supported Region: 30 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserAccountRecovery category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserAuthentication requests	Each supported Region: 120 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserAuthentication category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserCreation requests	Each supported Region: 50 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserCreation category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserFederation requests	Each supported Region: 25 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserFederation category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserList requests	Each supported Region: 30 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserList category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolClientRead requests per account	Each supported Region: 15 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolClientRead category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolClientRead requests per user pool	Each supported Region: 5 per second	No	The maximum call rate (requests per second) for an operation in the UserPoolClientRead category per user pool. Any operation within this category could be called at this rate per user pool. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserPoolClientUpdate requests per account	Each supported Region: 15 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolClientUpdate category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolClientUpdate requests per user pool	Each supported Region: 5 per second	No	The maximum call rate (requests per second) for an operation in the UserPoolClientUpdate category per user pool. Any operation within this category could be called at this rate per user pool. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolRead requests	Each supported Region: 15 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolRead category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserPoolResourceRead requests per account	Each supported Region: 20 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolResourceRead category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolResourceRead requests per user pool	Each supported Region: 5 per second	No	The maximum call rate (requests per second) for an operation in the UserPoolResourceRead category per user pool. Any operation within this category could be called at this rate per user pool. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolResourceUpdate requests per account	Each supported Region: 15 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolResourceUpdate category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserPoolResourceUpdate requests per user pool	Each supported Region: 5 per second	No	The maximum call rate (requests per second) for an operation in the UserPoolResourceUpdate category per user pool. Any operation within this category could be called at this rate per user pool. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserPoolUpdate requests	Each supported Region: 15 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserPoolUpdate category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserRead requests	Each supported Region: 120 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserRead category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserResourceRead requests	Each supported Region: 50 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserResourceRead category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserResourceUpdate requests	Each supported Region: 25 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserResourceUpdate category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Rate of UserToken requests	Each supported Region: 120 per second	Yes	The maximum total combined call rate (requests per second) for all API operations in the UserToken category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.

Name	Default	Adjust	Description
Rate of UserUpdate requests	Each supported Region: 25 per second	No	The maximum total combined call rate (requests per second) for all API operations in the UserUpdate category. All operations within a category share the quota. You can find the list of included operations at https://docs.aws.amazon.com/cognito/latest/developerguide/limits.html#category_operations.
Resource servers per user pool	Each supported Region: 25	Yes	The maximum number of resource servers per user pool. A resource server is a server for access-protected resources.
Scopes per resource server	Each supported Region: 100	No	The maximum number of scopes per resource server. A scope is a level of access (such as read or write access) that an app can request to a resource.
User import jobs per user pool	Each supported Region: 1,000	Yes	The maximum number of user import jobs per user pool.
User pools per account	Each supported Region: 1,000	Yes	The maximum number of user pools that you can create in this account per region.

For more information, see Quotas in Amazon Cognito in the *Amazon Cognito Developer Guide*.

Amazon Cognito Federated Identities

Name	Default	Adjust	Description
Identity pool name size	Each supported Region: 128 Bytes	No	The maximum size of an identity pool name in bytes.
Identity pools per account	Each supported Region: 1,000	Yes	The maximum number of identity pools per account.
List API call results	Each supported Region: 60	No	The maximum number of results from a list or lookup API call.

Name	Default	Adjust	Description
Login provider name size	Each supported Region: 2,048 Bytes	No	The maximum size of a login provider name in bytes.
Role-based access control rules	Each supported Region: 25	No	The maximum number of rules for role-based access control (RBAC)
User pool providers per identity pool	Each supported Region: 50	Yes	The maximum number of Amazon Cognito user pool providers per identity pool.

For more information, see Quotas in Amazon Cognito in the *Amazon Cognito Developer Guide*.

Amazon Cognito Sync endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cognito-sync.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	cognito-sync.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	cognito-sync.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	cognito-sync.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	cognito-sync.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	cognito-sync.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	cognito-sync.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	cognito-sync.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	cognito-sync.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	cognito-sync.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	cognito-sync.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Bulk publish wait time	Each supported Region: 24	No	The maximum wait time for a bulk publish after a successful request in hours.
Dataset name size	Each supported Region: 128 Bytes	No	The maximum size of a dataset name in bytes.
Dataset size	Each supported Region: 1 Megabytes	Yes	The maximum size of a dataset in megabytes.
Datasets per identity	Each supported Region: 20	Yes	The maximum number of datasets per identity.
Records per dataset	Each supported Region: 1,024	Yes	The maximum number of records per dataset.

For more information, see Quotas in Amazon Cognito in the *Amazon Cognito Developer Guide*.

Amazon Comprehend endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	comprehend.us-east-2.amazonaws.com comprehend-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	comprehend.us-east-1.amazonaws.com comprehend-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	comprehend.us-west-2.amazonaws.com comprehend-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	comprehend.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	comprehend.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	comprehend.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	comprehend.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	comprehend.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	comprehend.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	comprehend.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	comprehend.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	comprehend.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	comprehend.us-gov-west-1.amazonaws.com comprehend-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
BatchDetectDominantLanguage throttle limit in transactions per second	Each supported Region: 10	Yes	The maximum number of BatchDetectDominantLanguage requests allowed per account per second, in the current Region
BatchDetectEntities throttle limit in transactions per second	Each supported Region: 10	Yes	The maximum number of BatchDetectEntities requests allowed per account per second, in the current Region
BatchDetectKeyPhrases throttle limit in transactions per second	Each supported Region: 10	Yes	The maximum number of BatchDetectKeyPhrases requests allowed per account per second, in the current Region
BatchDetectSentiment throttle limit in transactions per second	Each supported Region: 10	Yes	The maximum number of BatchDetectSentiment requests allowed per account per second, in the current Region
BatchDetectSyntax throttle limit in transactions per second	Each supported Region: 10	Yes	The maximum number of BatchDetectSyntax requests allowed per account per second, in the current Region
CreateDocumentClassifier throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of CreateDocumentClassifier requests allowed per account per second, in the current Region
CreateEntityRecognizer throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of CreateEntityRecognizer requests allowed per account per second, in the current Region
DeleteDocumentClassifier throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of DeleteDocumentClassifier requests allowed per account per second, in the current Region
DeleteEntityRecognizer throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of DeleteEntityRecognizer requests allowed per account per second, in the current Region

Name	Default	Adjust	Description
DescribeDocumentClassificationJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeDocumentClassificationJob requests allowed per account per second, in the current Region
DescribeDocumentClassifier throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeDocumentClassifier requests allowed per account per second, in the current Region
DescribeDominantLanguageDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeDominantLanguageDetectionJob requests allowed per account per second, in the current Region
DescribeEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeEntitiesDetectionJob requests allowed per account per second, in the current Region
DescribeEntityRecognizer throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeEntityRecognizer requests allowed per account per second, in the current Region
DescribeEventsDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeEventsDetectionJob requests allowed per account per second, in the current Region
DescribeKeyPhrasesDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeKeyPhrasesDetectionJob requests allowed per account per second, in the current Region
DescribePiiEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribePiiEntitiesDetectionJob requests allowed per account per second, in the current Region
DescribeSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeSentimentDetectionJob requests allowed per account per second, in the current Region

Name	Default	Adjust	Description
DescribeTargetedSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeTargetedSentimentDetectionJob requests allowed per account per second, in the current Region
DescribeTopicsDetectionJob throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of DescribeTopicsDetectionJob requests allowed per account per second, in the current Region
DetectDominantLanguage max active jobs	Each supported Region: 10	No	The maximum number of active DetectDominantLanguage jobs allowed per account, in the current Region
DetectDominantLanguage throttle limit in transactions per second	Each supported Region: 40	Yes	The maximum number of DetectDominantLanguage requests allowed per account per second, in the current Region
DetectEntities max active jobs	Each supported Region: 10	No	The maximum number of active DetectEntities jobs allowed per account, in the current Region
DetectEntities throttle limit in transactions per second	Each supported Region: 20	Yes	The maximum number of DetectEntities requests allowed per account per second, in the current Region
DetectEvents max active jobs	Each supported Region: 10	No	The maximum number of active DetectEvents jobs allowed per account, in the current Region
DetectKeyPhrases max active jobs	Each supported Region: 10	No	The maximum number of active DetectKeyPhrases jobs allowed per account, in the current Region
DetectKeyPhrases throttle limit in transactions per second	Each supported Region: 20	Yes	The maximum number of DetectKeyPhrases requests allowed per account per second, in the current Region
DetectPiiEntities max active jobs	Each supported Region: 10	No	The maximum number of active DetectPiiEntities jobs allowed per account, in the current Region

Name	Default	Adjust	Description
DetectPiiEntities throttle limit in transactions per second	Each supported Region: 20	Yes	The maximum number of DetectPiiEntities requests allowed per account per second, in the current Region
DetectSentiment max active jobs	Each supported Region: 10	No	The maximum number of active DetectSentiment jobs allowed per account, in the current Region
DetectSentiment throttle limit in transactions per second	Each supported Region: 20	Yes	The maximum number of DetectSentiment requests allowed per account per second, in the current Region
DetectSyntax throttle limit in transactions per second	Each supported Region: 20	Yes	The maximum number of DetectSyntax requests allowed per account per second, in the current Region
DetectTargetedSentiment max active jobs	Each supported Region: 10	No	The maximum number of active DetectTargetedSentiment jobs allowed per account, in the current Region
DocumentClassification max active jobs	Each supported Region: 10	No	The maximum number of active DocumentClassification jobs allowed per account, in the current Region
DocumentClassifier max active jobs	Each supported Region: 10	No	The maximum number of active DocumentClassifier jobs allowed per account, in the current Region
Endpoints max active endpoints	Each supported Region: 10	Yes	The maximum number of active endpoints allowed per account in the current Region
Endpoints max inference units per account	Each supported Region: 100	Yes	The maximum number of inference units allowed per account in the current Region
Endpoints max inference units per endpoint	Each supported Region: 10	Yes	The maximum number of inference units allowed per endpoint in the current Region

Name	Default	Adjust	Description
EntityRecognizer max active jobs	Each supported Region: 10	No	The maximum number of active EntityRecognizer jobs allowed per account, in the current Region
ListDocumentClassificationJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListDocumentClassificationJobs requests allowed per account per second, in the current Region
ListDocumentClassifiers throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListDocumentClassifiers requests allowed per account per second, in the current Region
ListDominantLanguageDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListDominantLanguageDetectionJobs requests allowed per account per second, in the current Region
ListEntitiesDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListEntitiesDetectionJobs requests allowed per account per second, in the current Region
ListEntityRecognizers throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListEntityRecognizers requests allowed per account per second, in the current Region
ListEventsDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListEventsDetectionJobs requests allowed per account per second, in the current Region
ListKeyPhrasesDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListKeyPhrasesDetectionJobs requests allowed per account per second, in the current Region
ListPiiEntitiesDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListPiiEntitiesDetectionJobs requests allowed per account per second, in the current Region

Name	Default	Adjust	Description
ListSentimentDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListSentimentDetectionJobs requests allowed per account per second, in the current Region
ListTagsForResource throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListTagsForResource requests allowed per account per second, in the current Region
ListTargetedSentimentDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListTargetedSentimentDetectionJobs requests allowed per account per second, in the current Region
ListTopicsDetectionJobs throttle limit in transactions per second	Each supported Region: 10	No	The maximum number of ListTopicsDetectionJobs requests allowed per account per second, in the current Region
StartDocumentClassificationJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartDocumentClassificationJob requests allowed per account per second, in the current Region
StartDominantLanguageDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartDominantLanguageDetectionJob requests allowed per account per second, in the current Region
StartEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartEntitiesDetectionJob requests allowed per account per second, in the current Region
StartEventsDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartEventsDetectionJob requests allowed per account per second, in the current Region
StartKeyPhrasesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartKeyPhrasesDetectionJob requests allowed per account per second, in the current Region

Name	Default	Adjust	Description
StartPiiEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartPiiEntitiesDetectionJob requests allowed per account per second, in the current Region
StartSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartSentimentDetectionJob requests allowed per account per second, in the current Region
StartTargetedSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartTargetedSentimentDetectionJob requests allowed per account per second, in the current Region
StartTopicsDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StartTopicsDetectionJob requests allowed per account per second, in the current Region
StopDominantLanguageDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopDominantLanguageDetectionJob requests allowed per account per second, in the current Region
StopEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopEntitiesDetectionJob requests allowed per account per second, in the current Region
StopEventsDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopEventsDetectionJob requests allowed per account per second, in the current Region
StopKeyPhrasesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopKeyPhrasesDetectionJob requests allowed per account per second, in the current Region
StopPiiEntitiesDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopPiiEntitiesDetectionJob requests allowed per account per second, in the current Region

Name	Default	Adjust	Description
StopSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopSentimentDetectionJob requests allowed per account per second, in the current Region
StopTargetedSentimentDetectionJob throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopTargetedSentimentDetectionJob requests allowed per account per second, in the current Region
StopTrainingDocumentClassifier throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopTrainingDocumentClassifier requests allowed per account per second, in the current Region
StopTrainingEntityRecognizer throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of StopTrainingEntityRecognizer requests allowed per account per second, in the current Region
TagResource throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of TagResource requests allowed per account per second, in the current Region
TopicsDetection max active jobs	Each supported Region: 10	No	The maximum number of active TopicsDetection jobs allowed per account, in the current Region
UntagResource throttle limit in transactions per second	Each supported Region: 1	No	The maximum number of UntagResource requests allowed per account per second, in the current Region

For more information, see Guidelines and Quotas in the *Amazon Comprehend Developer Guide*.

Amazon Comprehend Medical endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	comprehendmedical.us-east-2.amazonaws.com comprehendmedical-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	comprehendmedical.us-east-1.amazonaws.com comprehendmedical-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	comprehendmedical.us-west-2.amazonaws.com comprehendmedical-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	comprehendmedical.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	comprehendmedical.ca-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	comprehendmedical.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	comprehendmedical.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	comprehendmedical.us-gov-west-1.amazonaws.com comprehendmedical-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Characters per second (CPS) for the DetectEntities operation	Each supported Region: 40,000	Yes	The maximum characters per second (CPS) for the DetectEntities operation.
Characters per second (CPS) for the DetectEntities-v2 operation	Each supported Region: 40,000	Yes	The maximum characters per second (CPS) for the DetectEntities-v2 operation.
Characters per second (CPS) for the DetectPHI operation	Each supported Region: 40,000	Yes	The maximum characters per second (CPS) for the DetectPHI operation.

Name	Default	Adjust	Description
Characters per second (CPS) for the InferICD10CM operation	Each supported Region: 40,000	Yes	The maximum characters per second (CPS) for the InferICD10CM operation.
Characters per second (CPS) for the InferRxNorm operation	Each supported Region: 40,000	Yes	The maximum characters per second (CPS) for the InferRxNorm operation.
Maximum document size (UTF-8 characters) for the DetectEntities operation	Each supported Region: 20,000 Bytes	No	The maximum document size (UTF-8 characters) for the DetectEntities operation.
Maximum document size (UTF-8 characters) for the DetectEntities-v2 operation	Each supported Region: 20,000 Bytes	No	The maximum document size (UTF-8 characters) for the DetectEntities-v2 operation.
Maximum document size (UTF-8 characters) for the DetectPHI operation	Each supported Region: 20,000 Bytes	No	The maximum document size (UTF-8 characters) for the DetectPHI operation.
Maximum document size (UTF-8 characters) for the InferICD10CM operation	Each supported Region: 10,000 Bytes	No	The maximum document size (UTF-8 characters) for the InferICD10CM operation.
Maximum document size (UTF-8 characters) for the InferRxNorm operation	Each supported Region: 10,000 Bytes	No	The maximum document size (UTF-8 characters) for the InferRxNorm operation.
Maximum individual file size for batch jobs	Each supported Region: 40 Kilobytes	No	The Maximum individual file size for batch jobs.
Maximum number of files for batch jobs	Each supported Region: 5,000,000	No	The maximum number of files for batch jobs.
Maximum size (in GB) of text analysis batch jobs (all files)	Each supported Region: 10 Gigabytes	No	The maximum size (in GB) of text analysis batch jobs (all files).
Maximum size of ontology linking batch analysis jobs (all files)	Each supported Region: 5 Gigabytes	No	The maximum size of ontology linking batch analysis jobs (all files).
Minimum size of batch jobs (all files)	Each supported Region: 1 Bytes	No	The minimum size of batch jobs (all files).
Transactions per second (TPS) for the DescribeEntitiesDetectionV2Job operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the DescribeEntitiesDetectionV2Job operation.
Transactions per second (TPS) for the DescribeICD10CMInferenceJob operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the DescribeICD10CMInferenceJob operation.

Name	Default	Adjust	Description
Transactions per second (TPS) for the DescribePHIDetectionJob operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the DescribePHIDetectionJob operation.
Transactions per second (TPS) for the DescribeRxNormInferenceJob operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the DescribeRxNormInferenceJob operation.
Transactions per second (TPS) for the DetectEntities operation	Each supported Region: 100	No	The maximum transactions per second (TPS) for the DetectEntities operation.
Transactions per second (TPS) for the DetectEntities-v2 operation	Each supported Region: 100	No	The maximum transactions per second (TPS) for the DetectEntities-v2 operation.
Transactions per second (TPS) for the DetectPHI operation	Each supported Region: 100	No	The maximum transactions per second (TPS) for the DetectPHI operation.
Transactions per second (TPS) for the InferICD10CM operation	Each supported Region: 100	No	The maximum transactions per second (TPS) for the InferICD10CM operation.
Transactions per second (TPS) for the InferRxNorm operation	Each supported Region: 100	No	The maximum transactions per second (TPS) for the InferRxNorm operation.
Transactions per second (TPS) for the ListEntitiesDetectionV2Jobs operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the ListEntitiesDetectionV2Jobs operation.
Transactions per second (TPS) for the ListICD10CMInferenceJobs operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the ListICD10CMInferenceJobs operation.
Transactions per second (TPS) for the ListPHIDetectionJobs operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the ListPHIDetectionJobs operation.
Transactions per second (TPS) for the ListRxNormInferenceJobs operation	Each supported Region: 10	Yes	The maximum transactions per second (TPS) for the ListRxNormInferenceJobs operation.
Transactions per second (TPS) for the StartEntitiesDetectionV2Job operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StartEntitiesDetectionV2Job operation.

Name	Default	Adjust	Description
Transactions per second (TPS) for the StartICD10CMInferenceJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StartICD10CMInferenceJob operation.
Transactions per second (TPS) for the StartPHIDetectionJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StartPHIDetectionJob operation.
Transactions per second (TPS) for the StartRxNormInferenceJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StartRxNormInferenceJob operation.
Transactions per second (TPS) for the StopEntitiesDetectionV2Job operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StopEntitiesDetectionV2Job operation.
Transactions per second (TPS) for the StopICD10CMInferenceJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StopICD10CMInferenceJob operation.
Transactions per second (TPS) for the StopPHIDetectionJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StopPHIDetectionJob operation.
Transactions per second (TPS) for the StopRxNormInferenceJob operation	Each supported Region: 5	Yes	The maximum transactions per second (TPS) for the StopRxNormInferenceJob operation.

AWS Compute Optimizer endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	compute-optimizer.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	compute-optimizer.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (N. California)	us-west-1	compute-optimizer.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	compute-optimizer.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	compute-optimizer.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	compute-optimizer.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	compute-optimizer.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	compute-optimizer.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	compute-optimizer.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	compute-optimizer.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	compute-optimizer.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	compute-optimizer.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	compute-optimizer.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	compute-optimizer.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	compute-optimizer.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	compute-optimizer.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	compute-optimizer.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	compute-optimizer.eu-west-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	compute-optimizer.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	compute-optimizer.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	compute-optimizer.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
The number of API calls per second per account	Each supported Region: 5	No	The number of API calls per second per account.

AWS Config endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	config.us-east-2.amazonaws.com config-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	config.us-east-1.amazonaws.com config-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	config.us-west-1.amazonaws.com config-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	config.us-west-2.amazonaws.com config-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	config.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	config.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	config.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	config.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	config.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	config.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	config.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	config.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	config.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	config.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	config.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	config.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	config.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	config.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	config.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	config.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	config.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	config.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	config.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	config.us-gov-east-1.amazonaws.com config.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	config.us-gov-west-1.amazonaws.com config.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

AWS Config Service quotas

Name	Default	Adjustable
Maximum number of AWS Config Rules per Region per account	400	Yes
Maximum number of configuration aggregators	50	Yes
Maximum number of accounts in an aggregator	10000	No
Maximum number of accounts added or deleted per week for all aggregators	1000	Yes
Maximum number of Tags	50	No
Maximum number of saved queries in a single account and a Region	300	Yes

Single Account Conformance Packs

Name	Default	Adjustable
Maximum number of conformance packs per account	50	No
Maximum number of AWS Config Rules per conformance pack	130	No

Name	Default	Adjustable
Maximum number of AWS Config Rules per account across all conformance packs	150	No

Organization Conformance Packs

Name	Default	Adjustable
Maximum number of conformance packs per organization	50	No
Maximum number of AWS Config Rules per organization conformance pack	130	No
Maximum number of AWS Config Rules per account across all organization conformance packs	180	No

Note
Deploying at the organization level automatically uses up the quota for child accounts.

Organization Config Rules

Name	Default	Adjustable
Maximum number of organization AWS Config rules per organization	150	No

Note
Deploying at the organization level automatically uses up the quota for child accounts.

Amazon Connect endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	connect.us-east-1.amazonaws.com connect-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	connect.us-west-2.amazonaws.com connect-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	connect.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	connect.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	connect.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	connect.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	connect.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	connect.eu-central-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	connect.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	connect.us-gov-west-1.amazonaws.com connect.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Amazon Connect Contact Lens endpoints

The Amazon Connect Contact Lens Service has the following endpoints.

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	contact-lens.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	contact-lens.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	contact-lens.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	contact-lens.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	contact-lens.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	contact-lens.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	contact-lens.eu-central-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	contact-lens.eu-west-2.amazonaws.com	HTTPS	

Amazon Connect Participant Service endpoints

The Amazon Connect Participant Service has the following endpoints.

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	participant.connect.us-east-1.amazonaws.com participant.connect-fips.us-east-1.amazonaws.com	HTTPS HTTPS
US West (Oregon)	us-west-2	participant.connect.us-west-2.amazonaws.com participant.connect-fips.us-west-2.amazonaws.com	HTTPS HTTPS
Africa (Cape Town)	af-south-1	participant.connect.af-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	participant.connect.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	participant.connect.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	participant.connect.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	participant.connect.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	participant.connect.ca-central-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	participant.connect.eu-central-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	participant.connect.eu-west-2.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	participant.connect.us-gov-west-1.amazonaws.com participant.connect.us-gov-west-1.amazonaws.com	HTTPS HTTPS

Amazon Connect Customer Profiles endpoints

The Amazon Connect Customer Profiles Service has the following endpoints.

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	profile.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	profile.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	profile.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	profile.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	profile.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	profile.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	profile.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	profile.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	profile.eu-central-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	profile.eu-west-2.amazonaws.com	HTTPS	

AppIntegrations Service endpoints

The AppIntegrations Service has the following endpoints.

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	app-integrations.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	app-integrations.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	app-integrations.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	app-integrations.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	app-integrations.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	app-integrations.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	app-integrations.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	app-integrations.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	app-integrations.eu-central-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	app-integrations.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS Lambda functions per instance	Each supported Region: 50	Yes	The maximum number of AWS Lambda functions you can create in this instance in the current Region.
Agent status per instance	Each supported Region: 50	No	The maximum number of agent statuses you can create in this instance in the current Region. This limit cannot be increased.
Amazon Connect instance count	Each supported Region: 2	Yes	The maximum number of Amazon Connect instances you can create in this account in the current Region.
Amazon Lex V2 bot aliases per instance	Each supported Region: 100	Yes	The maximum number of Amazon Lex V2 bot aliases you can use in this instance

Name	Default	Adjust	Description
Amazon Lex bots per instance	Each supported Region: 70	Yes	The maximum number of Amazon Lex bots you can use in this instance in the current Region.
Concurrent active calls per instance	Each supported Region: 10	Yes	The maximum number of concurrent active calls you can have in this instance in the current Region. If this is exceeded, contacts will get a fast busy tone, which indicates the transmission path to the called number is not available.
Concurrent active chats per instance	Each supported Region: 100	Yes	The maximum number of concurrent active chats you can have in this instance in the current Region. If this is exceeded, additional chat sessions cannot be initiated.
Concurrent active tasks per instance	Each supported Region: 2,500	Yes	The maximum number of concurrent active tasks you can have in this instance in the current Region. If this is exceeded, additional tasks cannot be created.
Contact flows per instance	Each supported Region: 100	Yes	The maximum number of contact flows you can create in this instance in the current Region.
Hours of operation per instance	Each supported Region: 100	Yes	The maximum number of hours of operation you can create in this instance in the current Region.
Phone numbers per instance	Each supported Region: 5	Yes	The maximum number of phone numbers you can claim for this instance in the current Region.
Prompts per instance	Each supported Region: 500	Yes	The maximum number of prompts you can create in this instance in the current Region.
Queues per instance	Each supported Region: 50	Yes	The maximum number of queues you can create in this instance in the current Region.

Name	Default	Adjust	Description
Queues per routing profile per instance	Each supported Region: 50	Yes	The maximum number of queues you can create per routing profile in this instance in the current Region.
Quick connects per instance	Each supported Region: 100	Yes	The maximum number of quick connects/transfer destinations you can create in this instance in the current Region.
Rate of AssociateQueueQuickConnects API requests	Each supported Region: 2 per second	Yes	The maximum number of AssociateQueueQuickConnects API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of AssociateRoutingProfileQueues API requests	Each supported Region: 2 per second	Yes	The maximum number of AssociateRoutingProfileQueues API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of CreateQueue API requests	Each supported Region: 2 per second	Yes	The maximum number of CreateQueue API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of CreateQuickConnect API requests	Each supported Region: 2 per second	Yes	The maximum number of CreateQuickConnect API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of CreateRoutingProfile API requests	Each supported Region: 2 per second	Yes	The maximum number of CreateRoutingProfile API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of CreateUser API requests	Each supported Region: 2 per second	Yes	The maximum number of CreateUser API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of CreateUserHierarchyGroup API requests	Each supported Region: 2 per second	Yes	The maximum number of CreateUserHierarchyGroup API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DeleteQuickConnect API requests	Each supported Region: 2 per second	Yes	The maximum number of DeleteQuickConnect API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DeleteUser API requests	Each supported Region: 2 per second	Yes	The maximum number of DeleteUser API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DeleteUserHierarchyGroup API requests	Each supported Region: 2 per second	Yes	The maximum number of DeleteUserHierarchyGroup API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeHoursOfOperation API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeHoursOfOperation API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of DescribeQueue API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeQueue API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeQuickConnect API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeQuickConnect API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeRoutingProfile API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeRoutingProfile API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeUser API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeUser API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeUserHierarchyGroup API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeUserHierarchyGroup API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DescribeUserHierarchyStructure API requests	Each supported Region: 2 per second	Yes	The maximum number of DescribeUserHierarchyStructure API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of DisassociateQueueQuickConnects API requests	Each supported Region: 2 per second	Yes	The maximum number of DisassociateQueueQuickConnects API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of DisassociateRoutingProfileQueues API requests	Each supported Region: 2 per second	Yes	The maximum number of DisassociateRoutingProfileQueues API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of GetContactAttributes API requests	Each supported Region: 2 per second	Yes	The maximum number of GetContactAttributes API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of GetCurrentMetricData API requests	Each supported Region: 5 per second	Yes	The maximum number of GetCurrentMetricData API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of GetFederationToken API requests	Each supported Region: 2 per second	Yes	The maximum number of GetFederationToken API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of GetMetricData API requests	Each supported Region: 5 per second	Yes	The maximum number of GetMetricData API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of ListContactFlows API requests	Each supported Region: 2 per second	Yes	The maximum number of ListContactFlows API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListHoursOfOperations API requests	Each supported Region: 2 per second	Yes	The maximum number of ListHoursOfOperations API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListPhoneNumbers API requests	Each supported Region: 2 per second	Yes	The maximum number of ListPhoneNumbers API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListQueueQuickConnects API requests	Each supported Region: 2 per second	Yes	The maximum number of ListQueueQuickConnects API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListQueues API requests	Each supported Region: 2 per second	Yes	The maximum number of ListQueues API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListQuickConnects API requests	Each supported Region: 2 per second	Yes	The maximum number of ListQuickConnects API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of ListRoutingProfileQueues API requests	Each supported Region: 2 per second	Yes	The maximum number of ListRoutingProfileQueues API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListRoutingProfiles API requests	Each supported Region: 2 per second	Yes	The maximum number of ListRoutingProfiles API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListSecurityProfiles API requests	Each supported Region: 2 per second	Yes	The maximum number of ListSecurityProfiles API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListTagsForResource API requests	Each supported Region: 2 per second	Yes	The maximum number of ListTagsForResource API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListUserHierarchyGroups API requests	Each supported Region: 2 per second	Yes	The maximum number of ListUserHierarchyGroups API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of ListUsers API requests	Each supported Region: 2 per second	Yes	The maximum number of ListUsers API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of StartOutboundVoiceContact API requests	Each supported Region: 2 per second	Yes	The maximum number of StartOutboundVoiceContact API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of StopContact API requests	Each supported Region: 2 per second	Yes	The maximum number of StopContact API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of TagResource API requests	Each supported Region: 2 per second	Yes	The maximum number of TagResource API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UntagResource API requests	Each supported Region: 2 per second	Yes	The maximum number of UntagResource API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateContactAttributes API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateContactAttributes API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQueueHoursOfOperation API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQueueHoursOfOperation API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of UpdateQueueMaxContacts API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQueueMaxContacts API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQueueName API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQueueName API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQueueOutboundCallerConfig API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQueueOutboundCallerConfig API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQueueStatus API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQueueStatus API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQuickConnectConfig API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQuickConnectConfig API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateQuickConnectName API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateQuickConnectName API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of UpdateRoutingProfileConcurrency API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateRoutingProfileConcurrency API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateRoutingProfileDefaultOutboundQueue API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateRoutingProfileDefaultOutboundQu API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateRoutingProfileName API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateRoutingProfileName API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateRoutingProfileQueues API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateRoutingProfileQueues API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateUserHierarchy API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserHierarchy API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateUserHierarchyGroupName API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserHierarchyGroupName API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Rate of UpdateUserIdentityInfo API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserIdentityInfo API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateUserPhoneConfig API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserPhoneConfig API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateUserRoutingProfile API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserRoutingProfile API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Rate of UpdateUserSecurityProfiles API requests	Each supported Region: 2 per second	Yes	The maximum number of UpdateUserSecurityProfiles API requests allowed per second. When you reach this quota, Amazon Connect rejects requests for this operation for the remainder of the interval.
Reports per instance	Each supported Region: 500	Yes	The maximum number of reports that you can create in this instance in the current Region. Personal saved reports count towards the limit. As a best practice, we recommend you implement appropriate retention policies so reports dont pile up.
Routing profiles per instance	Each supported Region: 100	Yes	The maximum number of routing profiles you can create in this instance in the current Region.

Name	Default	Adjust	Description
Scheduled reports per instance	Each supported Region: 50	Yes	The maximum number of scheduled reports you can create in this instance in the current Region.
Security profiles per instance	Each supported Region: 100	Yes	The maximum number of security profiles you can create in this instance in the current Region.
User hierarchy groups per instance	Each supported Region: 500	Yes	The maximum number of user hierarchy groups you can create in this instance in the current Region.
Users per instance	Each supported Region: 500	Yes	The maximum number of users you can create in this instance in the current Region.

Amazon Connect Customer Profiles service quotas

The Amazon Connect Customer Profiles Service has the following quotas.

Name	Default	Adjust	Description
Amazon Connect Customer Profiles domain count	Each supported Region: 100	Yes	The maximum number of Amazon Connect Customer Profiles domains you can create in this account in the current AWS Region.
Keys per object type	Each supported Region: 10	Yes	The maximum number of keys that can be defined per object type in the current AWS Region.
Maximum expiration in days	Each supported Region: 1,098	Yes	The maximum expiration, in days, that can be defined for an object or profile in the current AWS Region.
Maximum number of integrations	Each supported Region: 50	Yes	The maximum number of integrations per domain in the current AWS Region.
Maximum size of all objects for a profile	Each supported Region: 51,200 Kilobytes	Yes	The total size of a profile, including all of its related objects, in the current AWS Region.
Object and profile maximum size	Each supported Region: 250 Kilobytes	No	The maximum size of a single profile or profile object in the current AWS Region.

Name	Default	Adjust	Description
Object types per domain	Each supported Region: 100	Yes	The maximum number of object types you can define per domain in the current AWS Region.
Objects per profile	Each supported Region: 1,000	Yes	The maximum number of objects that can be attached to a single profile in the current AWS Region.

For more information, see Amazon Connect Service Quotas in the *Amazon Connect Administrator Guide*.

AWS Data Exchange endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	dataexchange.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	dataexchange.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	dataexchange.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	dataexchange.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	dataexchange.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	dataexchange.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	dataexchange.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	dataexchange.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	dataexchange.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	dataexchange.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	dataexchange.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Amazon API Gateway API assets per revision	Each supported Region: 20	Yes	The maximum number of Amazon API Gateway API assets that a single revision can contain.
Amazon Redshift datashare assets per import job from Redshift	Each supported Region: 10	No	The maximum number of Amazon Redshift datashare assets you can import from Redshift in a single job.
Amazon Redshift datashare assets per revision	Each supported Region: 20	Yes	The maximum number of Amazon Redshift datashare assets that a single revision can contain.
Asset per export job from Amazon S3	Each supported Region: 100	No	The maximum number of assets you can export to Amazon S3 in a single job.
Asset size in GB	Each supported Region: 100 Gigabytes	No	The maximum size in GB of a single asset.
Assets per import job from Amazon S3	Each supported Region: 100	No	The maximum number of assets you can import from Amazon S3 in a single job.
Assets per revision	Each supported Region: 10,000	Yes	The maximum number of assets that a single revision can contain.
Auto export event actions per data set	Each supported Region: 5	Yes	The maximum number of auto export event actions per data set.
Bring-Your-Own-Subscription offers per account	Each supported Region: 10	Yes	The maximum number of BYOS (Bring-Your-Own-Subscription) offers that a single account can create.

Name	Default	Adjust	Description
Concurrent in progress jobs to export assets to Amazon S3	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to export assets to Amazon S3.
Concurrent in progress jobs to export assets to a signed URL	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to export assets to a signed URL.
Concurrent in progress jobs to export revisions to Amazon S3	Each supported Region: 5	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to export revisions to Amazon S3.
Concurrent in progress jobs to import assets from Amazon API Gateway	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to import assets from Amazon API Gateway.
Concurrent in progress jobs to import assets from Amazon Redshift datashares	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to import Amazon Redshift datashares.
Concurrent in progress jobs to import assets from Amazon S3	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to import assets from Amazon S3.
Concurrent in progress jobs to import assets from a signed URL	Each supported Region: 10	No	The maximum number of concurrently running jobs (i.e. jobs with IN_PROGRESS state) to import assets from a signed URL.
Data dictionaries per product	Each supported Region: 50	Yes	The maximum number of data dictionaries per product.
Data dictionary file size in MB	Each supported Region: 1 Megabytes	Yes	The maximum size (in MB) of a data dictionary.

Name	Default	Adjust	Description
Data sets per account	Each supported Region: 3,000	Yes	The maximum number of data sets per account.
Data sets per product	Each supported Region: 25	Yes	The maximum number of data sets that a single product can contain.
Event actions per account	Each supported Region: 50	Yes	The maximum number of event actions per account.
Private offers per account	Each supported Region: 25	Yes	The maximum number of custom offers that a single account can create.
Products per account	Each supported Region: 50	Yes	The maximum number of published products per account.
Products per data set	Each supported Region: 100	Yes	The maximum number of products that can contain a given data set.
Revisions per Amazon API Gateway API data set	Each supported Region: 20	Yes	The maximum number of revisions that a single Amazon API Gateway API data set can contain.
Revisions per Amazon Redshift datashare data set	Each supported Region: 20	Yes	The maximum number of revisions that a single Amazon Redshift datashare data set can contain.
Revisions per addRevisions change set	Each supported Region: 5	No	The maximum number of revisions that can be published to a product in a single AWS Marketplace Catalog API ChangeSet of type addRevisions.
Revisions per data set	Each supported Region: 10,000	Yes	The maximum number of revisions that a single data set can contain.
Sample file size in MB	Each supported Region: 50 Megabytes	Yes	The maximum size (in MB) of a sample.
Samples per product	Each supported Region: 50	Yes	The maximum number of samples per product.

For more information, see AWS Data Exchange quotas in the *AWS Data Exchange User Guide*.

Amazon Data Lifecycle Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	dlm.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	dlm.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	dlm.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	dlm.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	dlm.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	dlm.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	dlm.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	dlm.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	dlm.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	dlm.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	dlm.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	dlm.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	dlm.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	dlm.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	dlm.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	dlm.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	dlm.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	dlm.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	dlm.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	dlm.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	dlm.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	dlm.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	dlm.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	dlm.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Policies per Region	Each supported Region: 100	Yes	The maximum number of policies per Region.

Name	Default	Adjust	Description
Target accounts per sharing rule	Each supported Region: 50	Yes	The maximum number of target accounts per sharing rule.

AWS Data Pipeline endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	datapipeline.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	datapipeline.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	datapipeline.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	datapipeline.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	datapipeline.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Minimum delay between retry attempts in minutes	Each supported Region: 2	No	The minimum delay between retry attempts in minutes.
Minimum scheduling interval in minutes	Each supported Region: 15	No	The minimum scheduling interval in minutes.
Number of EC2 instances per Ec2Resource object	Each supported Region: 1	No	The maximum number of EC2 instances per Ec2Resource object.
Number of UTF8 bytes per field	Each supported Region: 10,240	No	The maximum number of UTF8 bytes per field.

Name	Default	Adjust	Description
Number of UTF8 bytes per field name or identifier	Each supported Region: 256	No	The maximum number of UTF8 bytes per field name or identifier.
Number of UTF8 bytes per object	Each supported Region: 15,360	No	The maximum number of UTF8 bytes per object (including field names).
Number of active instances per object	Each supported Region: 5	Yes	The maximum number of active instances per object.
Number of fields per object	Each supported Region: 50	No	The maximum number of fields per object.
Number of objects per pipeline	Each supported Region: 100	Yes	The maximum number of objects that you can define per pipeline.
Number of pipelines you can create	Each supported Region: 100	Yes	The maximum number of pipelines that you can create.
Number of roll-ups into a single object	Each supported Region: 32	No	The maximum number of roll-ups into a single object.
Rate of creation of an instance from an object	Each supported Region: 1 per 5 minutes	No	The rate of creation of an instance from an object per 5 minutes.
Retries of a pipeline activity per task	Each supported Region: 5	No	The maximum number of retries of a pipeline activity per task.

For more information, see AWS Data Pipeline Quotas in the *AWS Data Pipeline Developer Guide*.

AWS DataSync endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	datasync.us-east-2.amazonaws.com datasync-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	datasync.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		datasync-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	datasync.us-west-1.amazonaws.com datasync-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	datasync.us-west-2.amazonaws.com datasync-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	datasync.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	datasync.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	datasync.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	datasync.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	datasync.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	datasync.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	datasync.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	datasync.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	datasync.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	datasync.ca-central-1.amazonaws.com datasync-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	datasync.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	datasync.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	datasync.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	datasync.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	datasync.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	datasync.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	datasync.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	datasync.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	datasync.us-gov-east-1.amazonaws.com datasync-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	datasync.us-gov-west-1.amazonaws.com datasync-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Files per task	Each supported Region: 25,000,000	Yes	The maximum number of files per task.
Tasks	Each supported Region: 100	Yes	The maximum number of tasks that you can create in this account in the current Region.
Throughput per task	Each supported Region: 10 Gigabits per second	Yes	The maximum throughput per task.

AWS Database Migration Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services

offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	dms.us-east-2.amazonaws.com dms-fips.us-east-2.amazonaws.com dms-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	dms.us-east-1.amazonaws.com dms-fips.us-east-1.amazonaws.com dms-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	dms.us-west-1.amazonaws.com dms-fips.us-west-1.amazonaws.com dms-fips.us-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	dms.us-west-2.amazonaws.com dms-fips.us-west-2.amazonaws.com dms-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	dms.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	dms.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	dms.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	dms.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	dms.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	dms.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	dms.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	dms.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	dms.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	dms.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	dms.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	dms.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	dms.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	dms.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	dms.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	dms.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	dms.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	dms.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	dms.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	dms.us-gov-east-1.amazonaws.com dms.us-gov-east-1.amazonaws.com dms.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	dms.us-gov-west-1.amazonaws.com dms.us-gov-west-1.amazonaws.com dms.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Certificate count	Each supported Region: 100	Yes	The maximum number of certificates allowed in this account in the current Region.
Endpoint count	Each supported Region: 1,000	Yes	The maximum number of endpoints allowed in this account in the current Region.
Endpoints per instance	Each supported Region: 100	Yes	The maximum number of endpoints allowed per replication instance.
Event subscriptions	Each supported Region: 60	Yes	The maximum number of AWS DMS events that you can subscribe to.
Number of DMS Fleet Advisor collector instances	Each supported Region: 10	No	Maximum number of created instances of DMS Fleet Advisor collector
Number of data files DMS Fleet Advisor can send per hour	Each supported Region: 500 per hour	No	Maximum number of files that DMS Fleet Advisor collector can send per hour
Number of database objects DMS Fleet Advisor can process	Each supported Region: 50,000,000	No	The total number of database objects that AWS DMS Fleet Advisor can process. A database object is any data structure used to store or reference data, including tables, views, stored procedures, functions, and triggers
Number of monitored objects in DMS Fleet Advisor collector	Each supported Region: 2,000	No	Maximum number of monitored objects that a customer can add in a single DMS Fleet Advisor collector
Replication instances	Each supported Region: 60	Yes	The maximum number of replication instances allowed in this account in the current Region.
Subnet groups	Each supported Region: 60	Yes	The maximum number of subnet groups allowed in this account in the current Region.

Name	Default	Adjust	Description
Subnets per subnet group	Each supported Region: 60	Yes	The maximum number of subnets allowed per subnet group.
Task count	Each supported Region: 600	Yes	The maximum number of tasks allowed in this account in the current Region.
The amount of collected data in DMS Fleet Advisor	Each supported Region: 10 Gigabytes	No	The amount of data that can be collected by all DMS Fleet Advisor collectors
Total storage	Each supported Region: 30,000 Gigabytes	Yes	The maximum total storage (in GB) for all replication instances added together.

AWS DeepLens endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	deeplens.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	deeplens.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	deeplens.eu-central-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Devices per account	Each supported Region: 200	Yes	The maximum number of devices in the same account.
Models per account	Each supported Region: 200	Yes	The maximum number of models in the same account.

Name	Default	Adjust	Description
Projects per account	Each supported Region: 200	Yes	The maximum number of projects in the same account.
Versions per project	Each supported Region: 100	No	The maximum number of versions any project can have at the same time.

AWS DeepRacer endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	deepracer.us-east-1.amazonaws.com		

Service quotas

Name	Default	Adjust	Description
Cars	Each supported Region: 20	Yes	The maximum number of cars any account can have at same time.
Evaluation jobs	Each supported Region: 3	Yes	The maximum number of concurrent evaluation jobs in same account in the same region.
Training jobs	Each supported Region: 4	Yes	The maximum number of concurrent training jobs in same account in the same region.

Amazon Detective endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services

offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	api.detective.us-east-2.amazonaws.com api.detective-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	api.detective.us-east-1.amazonaws.com api.detective-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	api.detective.us-west-1.amazonaws.com api.detective-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	api.detective.us-west-2.amazonaws.com api.detective-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	api.detective.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	api.detective.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	api.detective.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	api.detective.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	api.detective.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	api.detective.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.detective.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	api.detective.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	api.detective.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	api.detective.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	api.detective.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	api.detective.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	api.detective.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	api.detective.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	api.detective.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	api.detective.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	api.detective.us-gov-east-1.amazonaws.com api.detective-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	api.detective.us-gov-west-1.amazonaws.com api.detective-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

For more information, see Amazon Detective quotas.

Amazon DevOps Guru endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	devops-guru.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		devops-guru-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	devops-guru.us-east-1.amazonaws.com devops-guru-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	devops-guru.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	devops-guru.us-west-2.amazonaws.com devops-guru-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	devops-guru.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	devops-guru.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	devops-guru.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	devops-guru.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	devops-guru.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	devops-guru.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	devops-guru.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	devops-guru.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	devops-guru.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	devops-guru.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	devops-guru.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	devops-guru.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Resource	Quota
Maximum number of Amazon Simple Notification Service topics you can specify at once	2
Maximum number of AWS CloudFormation stacks you can specify	1000

For more information, see Quotas in the *Amazon DevOps Guru User Guide*.

AWS Device Farm endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	devicefarm.us-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrency for automation tests on metered devices	Each supported Region: 5	Yes	The maximum number of concurrent metered devices running automation tests.
Concurrency for remote access on metered devices	Each supported Region: 2	Yes	The maximum number of concurrent metered devices running remote access sessions.
Remote access session length in minutes	Each supported Region: 150	No	The maximum length of a remote access session per device in minutes.
Test run timeout per device in minutes	Each supported Region: 150	No	The maximum length of an automation test run per device in minutes.
Uploaded file size	Each supported Region: 4 Gigabytes	No	The maximum size of a file to be uploaded.

AWS Direct Connect endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	directconnect.us-east-2.amazonaws.com directconnect-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	directconnect.us-east-1.amazonaws.com directconnect-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	directconnect.us-west-1.amazonaws.com directconnect-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	directconnect.us-west-2.amazonaws.com directconnect-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	directconnect.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	directconnect.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	directconnect.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	directconnect.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	directconnect.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	directconnect.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	directconnect.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	directconnect.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	directconnect.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	directconnect.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	directconnect.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	directconnect.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	directconnect.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	directconnect.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	directconnect.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	directconnect.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	directconnect.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	directconnect.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	directconnect.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	directconnect.us-gov-east-1.amazonaws.com directconnect.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	directconnect.us-gov-west-1.amazonaws.com directconnect.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Active AWS Direct Connect dedicated connections per location	Each supported Region: 10	No	The maximum number of active AWS Direct Connect dedicated connections per location.
Dedicated connections, or interconnects per link aggregation group (LAG)	Each supported Region: 4	No	The maximum number of dedicated connections, or interconnects per link aggregation group (LAG).
Global maximum number of AWS Direct Connect gateways	Each supported Region: 200	Yes	The maximum number of AWS Direct Connect gateways per account.
Link aggregation groups (LAGs) per AWS Region	Each supported Region: 10	No	The maximum number of link aggregation groups (LAGs) per AWS Region.
Number of prefixes per AWS transit Gateway from AWS to on-premises on a transit virtual interface	Each supported Region: 20	No	The maximum number of prefixes per AWS transit Gateway from AWS to on-premises on a transit virtual interface.
Private or public virtual interfaces per AWS Direct Connect dedicated connection	Each supported Region: 50	No	The maximum number of private, or public interfaces per AWS Direct Connect dedicated connection.
Transit gateways per AWS Direct Connect gateway	Each supported Region: 3	No	The maximum number of transit gateways per AWS Direct Connect gateway.
Virtual interfaces per AWS Direct Connect gateway	Each supported Region: 30	Yes	The maximum number of virtual interfaces per AWS Direct Connect gateway.
Virtual private gateways per AWS Direct Connect gateway	Each supported Region: 10	No	The maximum number of virtual private gateways per AWS Direct Connect gateway.

For more information, see AWS Direct Connect Quotas in the *AWS Direct Connect User Guide*.

AWS Directory Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ds.us-east-2.amazonaws.com ds-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ds.us-east-1.amazonaws.com ds-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	ds.us-west-1.amazonaws.com ds-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ds.us-west-2.amazonaws.com ds-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ds.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ds.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ds.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ds.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ds.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ds.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ds.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ds.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ds.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	ds.ca-central-1.amazonaws.com ds-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ds.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ds.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ds.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	ds.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ds.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ds.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	ds.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ds.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ds.us-gov-east-1.amazonaws.com ds-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ds.us-gov-west-1.amazonaws.com ds-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

For a list of supported endpoints by directory type, see Region availability for AWS Directory Service.

Service quotas

Name	Default	Adjust	Description
AD Connector directories	Each supported Region: 10	Yes	The maximum number of AD Connector directories that you can create in the current Region.
AWS Managed Microsoft AD directories	Each supported Region: 20	Yes	The maximum number of AWS Managed Microsoft AD directories that you can create in the current region.

Name	Default	Adjust	Description
AWS Managed Microsoft AD domain controllers	Each supported Region: 20	Yes	The maximum number of domain controllers that you can add to your AWS Managed Microsoft AD directory.
AWS Managed Microsoft AD manual snapshots	Each supported Region: 5	No	The maximum number of manual snapshots that you can take for your AWS Managed Microsoft AD directory.
Simple AD directories	Each supported Region: 10	Yes	The maximum number of Simple AD directories that you can create in the current Region.
Simple AD manual snapshots	Each supported Region: 5	No	The maximum number of manual snapshots that you can take for your Simple AD directory.

For more information, see the following:

- AD Connector quotas
- AWS Managed Microsoft AD quotas
- Simple AD quotas

Amazon DocumentDB endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rds.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	rds.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	rds.us-west-2.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	rds.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rds.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rds.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rds.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rds.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	rds.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	rds.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	rds.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	rds.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	rds.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	rds.eu-west-3.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	rds.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rds.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

For information on finding and connecting to your cluster or instance endpoints, see Working with Amazon DocumentDB Endpoints in the *Amazon DocumentDB Developer Guide*.

Service quotas

Name	Default	Adjust	Description
Cluster parameter groups	Each supported Region: 50	No	The maximum number of DB cluster parameter groups
Clusters	Each supported Region: 40	Yes	The maximum number of clusters allowed in this account in the current Region
Event subscriptions	Each supported Region: 20	Yes	The maximum number of event subscriptions
Instances	Each supported Region: 40	Yes	The maximum number of DB instances allowed in this account in the current Region
Manual cluster snapshots	Each supported Region: 100	Yes	The maximum number of manual snapshots
Read replicas per cluster	Each supported Region: 15	Yes	The maximum number of read replicas per cluster
Subnet groups	Each supported Region: 50	Yes	The maximum number of DB subnet groups
Subnets per subnet group	Each supported Region: 20	No	The maximum number of subnets per DB subnet group
Tags per resource	Each supported Region: 50	No	The maximum number of tags per Amazon RDS resource
VPC security groups per instance	Each supported Region: 5	No	The maximum number of DB security groups per Amazon VPC

For more information, see Amazon DocumentDB Service Quotas in the *Amazon DocumentDB Developer Guide*.

Amazon DynamoDB endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

For more information about this topic specific to DynamoDB, see Quotas in Amazon DynamoDB.

Service endpoints

DynamoDB

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	dynamodb.us-east-2.amazonaws.com dynamodb-fips.us-east-2.amazonaws.com	HTTP and HTTPS HTTPS	
US East (N. Virginia)	us-east-1	dynamodb.us-east-1.amazonaws.com dynamodb-fips.us-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (N. California)	us-west-1	dynamodb.us-west-1.amazonaws.com dynamodb-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	dynamodb.us-west-2.amazonaws.com dynamodb-fips.us-west-2.amazonaws.com	HTTP and HTTPS HTTPS	
Africa (Cape Town)	af-south-1	dynamodb.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	dynamodb.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	dynamodb.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	dynamodb.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	dynamodb.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	dynamodb.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	dynamodb.ap-southeast-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	dynamodb.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	dynamodb.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	dynamodb.ca-central-1.amazonaws.com dynamodb-fips.ca-central-1.amazonaws.com	HTTP and HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	dynamodb.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	dynamodb.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	dynamodb.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	dynamodb.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	dynamodb.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	dynamodb.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	dynamodb.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	dynamodb.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	dynamodb.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	dynamodb.us-gov-east-1.amazonaws.com dynamodb.us-gov-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	dynamodb.us-gov-west-1.amazonaws.com dynamodb.us-gov-west-1.amazonaws.com	HTTP and HTTPS HTTPS	

DynamoDB Accelerator (DAX)

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	dax.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	dax.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	dax.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	dax.us-west-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	dax.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	dax.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	dax.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	dax.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	dax.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	dax.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	dax.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	dax.eu-west-3.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	dax.sa-east-1.amazonaws.com	HTTP and HTTPS	

Amazon DynamoDB Streams

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	streams.dynamodb.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	streams.dynamodb.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	streams.dynamodb.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	streams.dynamodb.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	streams.dynamodb.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	streams.dynamodb.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	streams.dynamodb.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	streams.dynamodb.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	streams.dynamodb.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	streams.dynamodb.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	streams.dynamodb.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	streams.dynamodb.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	streams.dynamodb.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	streams.dynamodb.ca-central-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	streams.dynamodb.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	streams.dynamodb.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	streams.dynamodb.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	streams.dynamodb.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	streams.dynamodb.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	streams.dynamodb.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	streams.dynamodb.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	streams.dynamodb.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	streams.dynamodb.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	streams.dynamodb.us-gov-east-1.amazonaws.com streams.dynamodb.us-gov-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	streams.dynamodb.us-gov-west-1.amazonaws.com streams.dynamodb.us-gov-west-1.amazonaws.com	HTTP and HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Account-level read throughput limit (Provisioned mode)	Each supported Region: 80,000	Yes	The maximum number of read capacity units allocated for the account; applicable only for tables (including all associated global secondary indexes) in provisioned read/write capacity mode. For more

Name	Default	Adjust	Description
			information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Limits.html#default-limits-throughput-capacity-modes
Account-level write throughput limit (Provisioned mode)	Each supported Region: 80,000	Yes	The maximum number of write capacity units allocated for the account; applicable only for tables (including all associated global secondary indexes) in provisioned read/write capacity mode. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Limits.html#default-limits-throughput-capacity-modes
Concurrent control plane operations	Each supported Region: 500	Yes	The maximum number of allowed concurrent control plane operations. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Limits.html#limits-api
Global Secondary Indexes per table	Each supported Region: 20	Yes	The maximum number of global secondary indexes that can be created for a table. For more information, see, https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ServiceQuotas.html#limits-secondary-indexes
Maximum number of tables	Each supported Region: 2,500	Yes	The maximum number of tables that can be created per region. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ServiceQuotas.html#limits-tables

Name	Default	Adjust	Description
Provisioned capacity decreases per day	Each supported Region: 27	Yes	A decrease is allowed up to four times any time per day (GMT time zone). Also, if there was no decrease in the past hour, an additional decrease is allowed, effectively bringing the maximum number of decreases in a day to 27 times. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ServiceQuotas.html
Table-level read throughput limit	Each supported Region: 40,000	Yes	The maximum number of read throughput allocated for a table or global secondary index. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Limits.html#default-limits-throughput-capacity-modes
Table-level write throughput limit	Each supported Region: 40,000	Yes	The maximum number of write throughput allocated for a table or global secondary index. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Limits.html#default-limits-throughput-capacity-modes

Name	Default	Adjust	Description
Write throughput limit for DynamoDB Streams (Provisioned mode)	af-south-1: 10,000 ap-east-1: 10,000 ap-northeast-3: 10,000 ap-south-1: 10,000 ca-central-1: 10,000 eu-north-1: 10,000 eu-south-1: 10,000 eu-west-2: 10,000 eu-west-3: 10,000 me-south-1: 10,000 Each of the other supported Regions: 40,000	Yes	The maximum number of write capacity units allowed for a table with streams enabled; applicable only for tables in provisioned read/write capacity mode. Other quotas might also apply. For more information, see https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/ServiceQuotas.html#limits-dynamodb-streams

DAX has the following quotas.

Name	Default	Adjust	Description
Nodes per cluster	Each supported Region: 11	No	The maximum number of nodes per cluster, including the primary node as well as any read replica nodes.
Parameter groups	Each supported Region: 20	No	The maximum number of parameter groups in a single AWS region.
Subnet groups	Each supported Region: 50	No	The maximum number of subnet groups in a single AWS region.
Subnets per subnet group	Each supported Region: 20	No	The maximum number of subnets per subnet group in a single AWS region.
Total number of nodes	Each supported Region: 50	Yes	The maximum total number of nodes per AWS account in a single AWS region.

AWS Elastic Beanstalk endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Elastic Beanstalk

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID	
US East (Ohio)	us-east-2	elasticbeanstalk.us-east-2.amazonaws.com elasticbeanstalk-fips.us-east-2.amazonaws.com	HTTPS HTTPS	Z14LCN19Q5QHIC	
US East (N. Virginia)	us-east-1	elasticbeanstalk.us-east-1.amazonaws.com elasticbeanstalk-fips.us-east-1.amazonaws.com	HTTPS HTTPS	Z117KPS5GTRQ2G	
US West (N. California)	us-west-1	elasticbeanstalk.us-west-1.amazonaws.com elasticbeanstalk-fips.us-west-1.amazonaws.com	HTTPS HTTPS	Z1LQECGX5PH1X	
US West (Oregon)	us-west-2	elasticbeanstalk.us-west-2.amazonaws.com elasticbeanstalk-fips.us-west-2.amazonaws.com	HTTPS HTTPS	Z38NKT9BP95V3O	
Africa (Cape Town)	af-south-1	elasticbeanstalk.af-south-1.amazonaws.com	HTTPS	Z1EI3BVKMKK4AM	
Asia Pacific (Hong Kong)	ap-east-1	elasticbeanstalk.ap-east-1.amazonaws.com	HTTPS	ZPWYUBWRU171A	
Asia Pacific (Jakarta)	ap-southeast-3	elasticbeanstalk.ap-southeast-3.amazonaws.com	HTTPS		
Asia Pacific (Mumbai)	ap-south-1	elasticbeanstalk.ap-south-1.amazonaws.com	HTTPS	Z18NTBI3Y7N9TZ	
Asia Pacific (Osaka)	ap-northeast-3	elasticbeanstalk.ap-northeast-3.amazonaws.com	HTTPS	ZNE5GEY1TIAGY	

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID	
Asia Pacific (Seoul)	ap-northeast-2	elasticbeanstalk.ap-northeast-2.amazonaws.com	HTTPS	Z3JE5OI70	TWKCP
Asia Pacific (Singapore)	ap-southeast-1	elasticbeanstalk.ap-southeast-1.amazonaws.com	HTTPS	Z16FZ9L249	IFLT
Asia Pacific (Sydney)	ap-southeast-2	elasticbeanstalk.ap-southeast-2.amazonaws.com	HTTPS	Z2PCDNR3	VC2G1N
Asia Pacific (Tokyo)	ap-northeast-1	elasticbeanstalk.ap-northeast-1.amazonaws.com	HTTPS	Z1R25G3K	IG2GBW
Canada (Central)	ca-central-1	elasticbeanstalk.ca-central-1.amazonaws.com	HTTPS	ZJFCZL7S	SZB5I
Europe (Frankfurt)	eu-central-1	elasticbeanstalk.eu-central-1.amazonaws.com	HTTPS	Z1FRNW7U	H4DEZJ
Europe (Ireland)	eu-west-1	elasticbeanstalk.eu-west-1.amazonaws.com	HTTPS	Z2NYPWQ7	DFZAZH
Europe (London)	eu-west-2	elasticbeanstalk.eu-west-2.amazonaws.com	HTTPS	Z1GKAAAU	GATPF1
Europe (Milan)	eu-south-1	elasticbeanstalk.eu-south-1.amazonaws.com	HTTPS	Z10VDYYO	A2JFKM
Europe (Paris)	eu-west-3	elasticbeanstalk.eu-west-3.amazonaws.com	HTTPS	Z5WN6GAY	WG5OB
Europe (Stockholm)	eu-north-1	elasticbeanstalk.eu-north-1.amazonaws.com	HTTPS	Z23GO28B	Z5AETM
Middle East (Bahrain)	me-south-1	elasticbeanstalk.me-south-1.amazonaws.com	HTTPS	Z2BBTEKR	2I36N2
South America (São Paulo)	sa-east-1	elasticbeanstalk.sa-east-1.amazonaws.com	HTTPS	Z10X7K2B	4QSOFV
AWS GovCloud (US-East)	us-gov-east-1	elasticbeanstalk.us-gov-east-1.amazonaws.com elasticbeanstalk.us-gov-east-1.amazonaws.com	HTTPS HTTPS	Z35TSARG	0EJ4VU

Region Name	Region	Endpoint	Protocol	Route 53 Hosted Zone ID	
AWS GovCloud (US-West)	us-gov-west-1	elasticbeanstalk.us-gov-west-1.amazonaws.com elasticbeanstalk.us-gov-west-1.amazonaws.com	HTTPS HTTPS	Z4KAURWC4UUUG	

Elastic Beanstalk Health Service

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	elasticbeanstalk-health.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	elasticbeanstalk-health.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	elasticbeanstalk-health.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	elasticbeanstalk-health.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	elasticbeanstalk-health.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	elasticbeanstalk-health.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	elasticbeanstalk-health.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	elasticbeanstalk-health.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	elasticbeanstalk-health.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	elasticbeanstalk-health.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	elasticbeanstalk-health.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	elasticbeanstalk-health.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	elasticbeanstalk-health.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	elasticbeanstalk-health.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	elasticbeanstalk-health.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	elasticbeanstalk-health.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	elasticbeanstalk-health.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	elasticbeanstalk-health.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	elasticbeanstalk-health.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	elasticbeanstalk-health.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	elasticbeanstalk-health.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Application versions	Each supported Region: 1,000	Yes	The maximum number of application versions that you can create in this account in the current Region. The limit applies across applications, not per application.
Applications	Each supported Region: 75	Yes	The maximum number of applications that you can create in this account in the current Region.
Configuration templates	Each supported Region: 2,000	Yes	The maximum number of configuration templates

Name	Default	Adjust	Description
			that you can create in this account in the current Region.
Custom platform versions	Each supported Region: 50	Yes	The maximum number of custom platform versions that you can create in this account in the current Region. The limit applies across custom platforms, not per custom platform.
Environments	Each supported Region: 200	Yes	The maximum number of environments that you can create in this account in the current Region. The limit applies across applications, not per application.

Amazon Elastic Block Store endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Topics

- Endpoints for Amazon EBS in Amazon EC2 (p. 285)
- Endpoints for the EBS direct APIs (p. 287)

Endpoints for Amazon EBS in Amazon EC2

Use the Amazon EBS endpoints in Amazon Elastic Compute Cloud (Amazon EC2) to manage EBS volumes, snapshots, and encryption. For more information, see Amazon EBS actions in the *Amazon EC2 API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ec2.us-east-2.amazonaws.com ec2-fips.us-east-2.amazonaws.com ec2.us-east-2.api.aws	HTTP and HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ec2.us-east-1.amazonaws.com ec2-fips.us-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
		ec2.us-east-1.api.aws	HTTPS HTTPS	
US West (N. California)	us-west-1	ec2.us-west-1.amazonaws.com ec2-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	ec2.us-west-2.amazonaws.com ec2-fips.us-west-2.amazonaws.com ec2.us-west-2.api.aws	HTTP and HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ec2.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ec2.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ec2.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ec2.ap-south-1.amazonaws.com ec2.ap-south-1.api.aws	HTTP and HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ec2.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ec2.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ec2.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ec2.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ec2.ap-northeast-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	ec2.ca-central-1.amazonaws.com ec2-fips.ca-central-1.amazonaws.com	HTTP and HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ec2.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	ec2.eu-west-1.amazonaws.com ec2.eu-west-1.api.aws	HTTP and HTTPS HTTPS	
Europe (London)	eu-west-2	ec2.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	ec2.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	ec2.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	ec2.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	ec2.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	ec2.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	ec2.sa-east-1.amazonaws.com ec2.sa-east-1.api.aws	HTTP and HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ec2.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ec2.us-gov-west-1.amazonaws.com	HTTPS	

Endpoints for the EBS direct APIs

Use the EBS direct APIs endpoints to directly read the data on your Amazon EBS snapshots, and identify the difference between two snapshots. For more information, see Use EBS direct APIs to access the contents of an Amazon EBS snapshot in the *Amazon Elastic Compute Cloud User Guide*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ebs.us-east-2.amazonaws.com ebs-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ebs.us-east-1.amazonaws.com ebs-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	ebs.us-west-1.amazonaws.com ebs-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ebs.us-west-2.amazonaws.com ebs-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ebs.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ebs.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ebs.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ebs.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ebs.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ebs.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ebs.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ebs.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ebs.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ebs.ca-central-1.amazonaws.com ebs-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	ebs.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ebs.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ebs.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	ebs.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ebs.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ebs.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	ebs.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ebs.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ebs.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ebs.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Archived snapshots per volume	Each supported Region: 25	Yes	The maximum number of archived snapshots per volume.
CompleteSnapshot requests per account	Each supported Region: 10 per second	No	The maximum number of CompleteSnapshot requests allowed per account.
Concurrent snapshot copies per destination Region	Each supported Region: 20	No	The maximum number of concurrent snapshot copies to a single destination Region.

Name	Default	Adjust	Description
Concurrent snapshots per Cold HDD (sc1) volume	Each supported Region: 1	No	The maximum number of concurrent snapshots per Cold HDD (sc1) volume in this Region.
Concurrent snapshots per General Purpose SSD (gp2) volume	Each supported Region: 5	No	The maximum number of concurrent snapshots per General Purpose SSD (gp2) volume in this Region.
Concurrent snapshots per General Purpose SSD (gp3) volume	Each supported Region: 5	No	The maximum number of concurrent snapshots per General Purpose SSD (gp3) volume in this Region.
Concurrent snapshots per Magnetic (standard) volume	Each supported Region: 5	No	The maximum number of concurrent snapshots per Magnetic (standard) volume in this Region.
Concurrent snapshots per Provisioned IOPS SSD (io1) volume	Each supported Region: 5	No	The maximum number of concurrent snapshots per Provisioned IOPS SSD (io1) volume in this Region.
Concurrent snapshots per Provisioned IOPS SSD (io2) volume	Each supported Region: 5	No	The maximum number of concurrent snapshots per Provisioned IOPS SSD (io2) volume in this Region.
Concurrent snapshots per Throughput Optimized HDD (st1) volume	Each supported Region: 1	No	The maximum number of concurrent snapshots per Throughput Optimized HDD (st1) volume in this Region.
Fast snapshot restore	Each supported Region: 5	Yes	The maximum number of snapshots that can be enabled for fast snapshot restore in this Region.
GetSnapshotBlock requests per account	Each supported Region: 1,000 per second	Yes	The maximum number of GetSnapshotBlock requests allowed per account.
GetSnapshotBlock requests per snapshot	Each supported Region: 1,000 per second	No	The maximum number of GetSnapshotBlock requests allowed per snapshot.
IOPS for Provisioned IOPS SSD (io1) volumes	Each supported Region: 300,000	Yes	The maximum aggregated number of IOPS that can be provisioned across Provisioned IOPS SDD (io1) volumes in this Region.

Name	Default	Adjust	Description
IOPS for Provisioned IOPS SSD (io2) volumes	Each supported Region: 100,000	Yes	The maximum aggregated number of IOPS that can be provisioned across Provisioned IOPS SDD (io2) volumes in this Region.
IOPS modifications for Provisioned IOPS SSD (io1) volumes	Each supported Region: 500,000	Yes	The maximum aggregated number of IOPS that can be requested in volume modifications across Provisioned IOPS SSD (io1) volumes in this Region.
IOPS modifications for Provisioned IOPS SSD (io2) volumes	Each supported Region: 100,000	Yes	The maximum aggregated number of IOPS that can be requested in volume modifications across Provisioned IOPS SSD (io2) volumes in this Region.
In-progress snapshot archives per account	Each supported Region: 5	Yes	The maximum number of in-progress snapshot archives per account.
In-progress snapshot restores from archive per account	Each supported Region: 5	Yes	The maximum number of in-progress snapshot restores from archive per account.
ListChangedBlocks requests per account	Each supported Region: 50 per second	No	The maximum number of ListChangedBlocks requests allowed per account.
ListSnapshotBlocks requests per account	Each supported Region: 50 per second	No	The maximum number of ListSnapshotBlocks requests allowed per account.
Pending snapshots per account	Each supported Region: 100	No	The maximum number of snapshots in a pending state per account.
PutSnapshotBlock requests per account	Each supported Region: 1,000 per second	Yes	The maximum number of PutSnapshotBlock requests allowed per account.
PutSnapshotBlock requests per snapshot	Each supported Region: 1,000 per second	No	The maximum number of PutSnapshotBlock requests allowed per snapshot.
Snapshots per Region	Each supported Region: 100,000	Yes	The maximum number of snapshots per Region
StartSnapshot requests per account	Each supported Region: 10 per second	No	The maximum number of StartSnapshot requests allowed per account.

Name	Default	Adjust	Description
Storage for Cold HDD (sc1) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across Cold HDD (sc1) volumes in this Region.
Storage for General Purpose SSD (gp2) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across General Purpose SSD (gp2) volumes in this Region.
Storage for General Purpose SSD (gp3) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across General Purpose SSD (gp3) volumes in this Region.
Storage for Magnetic (standard) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across Magnetic (standard) volumes in this Region.
Storage for Provisioned IOPS SSD (io1) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across Provisioned IOPS SSD (io1) volumes in this Region.

Name	Default	Adjust	Description
Storage for Provisioned IOPS SSD (io2) volumes, in TiB	Each supported Region: 20	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across Provisioned IOPS SSD (io2) volumes in this Region.
Storage for Throughput Optimized HDD (st1) volumes, in TiB	af-south-1: 300 ap-east-1: 300 eu-south-1: 300 me-south-1: 300 Each of the other supported Regions: 50	Yes	The maximum aggregated amount of storage, in TiB, that can be provisioned across Throughput Optimized HDD (st1) volumes in this Region.
Storage modifications for Cold HDD (sc1) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across Cold HDD (sc1) volumes in this Region.
Storage modifications for General Purpose SSD (gp2) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across General Purpose SSD (gp2) volumes in this Region.
Storage modifications for General Purpose SSD (gp3) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across General Purpose SSD (gp3) volumes in this Region.
Storage modifications for Magnetic (standard) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across Magnetic (standard) volumes in this Region.
Storage modifications for Provisioned IOPS SSD (io1) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across Provisioned IOPS SSD (io1) volumes in this Region.

Name	Default	Adjust	Description
Storage modifications for Provisioned IOPS SSD (io2) volumes, in TiB	Each supported Region: 20	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across Provisioned IOPS SSD (io2) volumes in this Region.
Storage modifications for Throughput Optimized HDD (st1) volumes, in TiB	Each supported Region: 500	Yes	The maximum aggregated amount of storage, in TiB, that can be requested in volume modifications across Throughput Optimized HDD (st1) volumes in this Region.

The quota for **Concurrent snapshot copies per destination Region** is not adjustable using Service Quotas. However, you can request an increase for this quota by contacting AWS Support.

The following considerations apply to both **IOPS modifications for Provisioned IOPS SSD volumes** quotas:

- The quotas apply to both the current (*from*) IOPS value and the requested (*to*) IOPS value in the request. This means that you can modify volume IOPS either **up to**, or **from** this quota. For example, if your quota is `200,000` IOPS, you can request IOPS increases **up to** `200,000` IOPS. Or you can request IOPS decreases **from** `200,000` IOPS.
- The quotas should not be greater than the respective *maximum* quotas. For example, the *IOPS modifications for Provisioned IOPS SSD (io1) volumes* quota should not be greater than the *IOPS for Provisioned IOPS SSD (io1) volumes* quota.

Recycle Bin endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Topics

- Service endpoints (p. 294)
- Service quotas (p. 296)

Service endpoints

Region name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	rbin.us-east-2.amazonaws.com	HTTPS

Region name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	rbin.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	rbin.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	rbin.us-west-2.amazonaws.com	HTTPS
Africa (Cape Town)	af-south-1	rbin.af-south-1.amazonaws.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	rbin.ap-east-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	rbin.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Osaka)	ap-northeast-3	rbin.ap-northeast-3.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	rbin.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	rbin.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	rbin.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	rbin.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	rbin.ca-central-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	rbin.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	rbin.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	rbin.eu-west-2.amazonaws.com	HTTPS
Europe (Milan)	eu-south-1	rbin.eu-south-1.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	rbin.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	rbin.eu-north-1.amazonaws.com	HTTPS
Middle East (Bahrain)	me-south-1	rbin.me-south-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	rbin.sa-east-1.amazonaws.com	HTTPS

Service quotas

Quota	Default quota	Adjustable
Retention rules per Region	250	No
Tag key and value pairs per retention rule	50	No

Amazon EC2 endpoints and quotas

Important
AWS Regions launched after **October 30, 2021** will no longer support Amazon EC2 API requests over connections that are established using TLSv1, TLSv1.1, or unencrypted HTTP.

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ec2.us-east-2.amazonaws.com ec2-fips.us-east-2.amazonaws.com ec2.us-east-2.api.aws	HTTP and HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ec2.us-east-1.amazonaws.com ec2-fips.us-east-1.amazonaws.com ec2.us-east-1.api.aws	HTTP and HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	ec2.us-west-1.amazonaws.com ec2-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	ec2.us-west-2.amazonaws.com ec2-fips.us-west-2.amazonaws.com ec2.us-west-2.api.aws	HTTP and HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ec2.af-south-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Hong Kong)	ap-east-1	ec2.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ec2.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ec2.ap-south-1.amazonaws.com ec2.ap-south-1.api.aws	HTTP and HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ec2.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ec2.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ec2.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ec2.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ec2.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	ec2.ca-central-1.amazonaws.com ec2-fips.ca-central-1.amazonaws.com	HTTP and HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ec2.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	ec2.eu-west-1.amazonaws.com ec2.eu-west-1.api.aws	HTTP and HTTPS HTTPS	
Europe (London)	eu-west-2	ec2.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	ec2.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	ec2.eu-west-3.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	ec2.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	ec2.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	ec2.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	ec2.sa-east-1.amazonaws.com ec2.sa-east-1.api.aws	HTTP and HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ec2.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ec2.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
AMI sharing	Each supported Region: 1,000	Yes	The maximum number of entities (organizations, organizational units, and accounts) that an AMI can be shared with in this Region. Note that if you share an AMI with an organization, the number of accounts in the organization does not count towards the quota.
AMIs	Each supported Region: 50,000	Yes	The maximum number of public and private AMIs allowed in this Region. These include available and pending AMIs, and AMIs in the Recycle Bin.
All DL Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested DL Spot Instances per Region
All F Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or

Name	Default	Adjust	Description
			requested F Spot Instances per Region
All G and VT Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested G and VT Spot Instances per Region
All Inf Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested Inf Spot Instances per Region
All P Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested P Spot Instances per Region
All Standard (A, C, D, H, I, M, R, T, Z) Spot Instance Requests	Each supported Region: 5	Yes	The maximum number of vCPUs for all running or requested Standard (A, C, D, H, I, M, R, T, Z) Spot Instances per Region
All Trn Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested Trn Spot Instances per Region
All X Spot Instance Requests	Each supported Region: 0	Yes	The maximum number of vCPUs for all running or requested X Spot Instances per Region
Amazon FPGA images (AFIs)	Each supported Region: 100	Yes	The maximum number of available Amazon FPGA images (AFIs) that you can own in this Region.
Attachments per VPC	Each supported Region: 5	No	Number of transit gateway attachments per VPC.
Attachments per transit gateway	Each supported Region: 5,000	Yes	Total number of transit gateway attachments per transit gateway.
Authorization rules per Client VPN endpoint	Each supported Region: 50	Yes	The maximum number of authorization rules per Client VPN endpoint.
Client VPN endpoints per Region	Each supported Region: 5	Yes	The maximum number of Client VPN endpoints per Region.

Name	Default	Adjust	Description
Concurrent client connections per Client VPN endpoint	Each supported Region: 20,000	Yes	The maximum number of concurrent client connections per Client VPN endpoint.
Concurrent operations per Client VPN endpoint	Each supported Region: 10	No	The maximum number of concurrent operations per Client VPN endpoint.
Customer gateways per region	Each supported Region: 50	Yes	The maximum number of customer gateways that you can create per region.
Direct Connect gateways per transit gateway	Each supported Region: 20	No	Number of AWS Direct Connect gateways per transit gateway.
Dynamic routes advertised from CGW to VPN connection	Each supported Region: 100	No	The maximum number of dynamic routes advertised from a customer gateway device to a Site-to-Site VPN connection.
EC2-Classic Elastic IPs	Each supported Region: 5	Yes	The maximum number of Elastic IP addresses that you can allocate for EC2-Classic in this Region.
EC2-VPC Elastic IPs	Each supported Region: 5	Yes	The maximum number of Elastic IP addresses that you can allocate for EC2-VPC in this Region.
Entries in a client certificate revocation list for Client VPN endpoints	Each supported Region: 20,000	No	The maximum number of entries in a client certificate revocation list for Client VPN endpoints.
Members per transit gateway multicast group	Each supported Region: 100	Yes	Number of members per transit gateway multicast group.
Multicast Network Interfaces per transit gateway	Each supported Region: 1,000	Yes	Number of multicast group members and sources per transit gateway.
Multicast domain associations per VPC	Each supported Region: 20	Yes	Number of multicast domain associations per VPC.
Multicast domains per transit gateway	Each supported Region: 20	Yes	Number of multicast domains per transit gateway.

Name	Default	Adjust	Description
New Reserved Instances per month	Each supported Region: 20	Yes	The maximum number of Reserved Instances (RIs) that you can purchase per month in the current account. For regional RIs, this is the maximum number of RIs that you can purchase for the current Region. For zonal RIs, this is the maximum number of RIs that you can purchase for each Availability Zone in the current Region.
Number of Elastic Graphics accelerators	Each supported Region: 20	Yes	The maximum number of Elastic Graphics accelerators that you can request in this Region.
Peering attachments per transit gateway	Each supported Region: 50	Yes	Number of transit gateway peering attachments per transit gateway.
Pending peering attachments per transit gateway	Each supported Region: 10	Yes	Number of pending transit gateway peering attachments per transit gateway.
Public AMIs	Each supported Region: 5	Yes	The maximum number of public AMIs, including public AMIs in the Recycle Bin, allowed in this Region.
Route Tables per transit gateway	Each supported Region: 20	Yes	Number of transit gateway route tables per transit gateway.
Routes advertised from VPN connection to CGW	Each supported Region: 1,000	No	The maximum number of routes advertised from a Site-to-Site VPN connection to a customer gateway device.
Routes per Client VPN endpoint	Each supported Region: 10	Yes	The maximum number of routes per Client VPN endpoint.
Routes per transit gateway	Each supported Region: 10,000	Yes	Number of static routes per transit gateway.
Running Dedicated a1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated a1 hosts.
Running Dedicated c3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c3 hosts.

Name	Default	Adjust	Description
Running Dedicated c4 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c4 hosts.
Running Dedicated c5 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c5 hosts.
Running Dedicated c5a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c5a hosts.
Running Dedicated c5d Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c5d hosts.
Running Dedicated c5n Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c5n hosts.
Running Dedicated c6a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6a hosts.
Running Dedicated c6g Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6g hosts.
Running Dedicated c6gd Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6gd hosts.
Running Dedicated c6gn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6gn hosts.
Running Dedicated c6i Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6i hosts.
Running Dedicated c6id Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c6id hosts.
Running Dedicated c7g Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated c7g hosts.
Running Dedicated d2 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated d2 hosts.
Running Dedicated dl1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated dl1 hosts.
Running Dedicated f1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated f1 hosts.
Running Dedicated g2 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g2 hosts.

Name	Default	Adjust	Description
Running Dedicated g3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g3 hosts.
Running Dedicated g3s Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g3s hosts.
Running Dedicated g4ad Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g4ad hosts.
Running Dedicated g4dn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g4dn hosts.
Running Dedicated g5 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g5 hosts.
Running Dedicated g5g Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated g5g hosts.
Running Dedicated h1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated h1 hosts.
Running Dedicated i2 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated i2 hosts.
Running Dedicated i3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated i3 hosts.
Running Dedicated i3en Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated i3en hosts.
Running Dedicated i4i Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated i4i hosts.
Running Dedicated im4gn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated im4gn hosts.
Running Dedicated inf Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated inf hosts.
Running Dedicated is4gen Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated is4gen hosts.
Running Dedicated m3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m3 hosts.
Running Dedicated m4 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m4 hosts.

Name	Default	Adjust	Description
Running Dedicated m5 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5 hosts.
Running Dedicated m5a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5a hosts.
Running Dedicated m5ad Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5ad hosts.
Running Dedicated m5d Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5d hosts.
Running Dedicated m5dn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5dn hosts.
Running Dedicated m5n Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5n hosts.
Running Dedicated m5zn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m5zn hosts.
Running Dedicated m6a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m6a hosts.
Running Dedicated m6g Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m6g hosts.
Running Dedicated m6gd Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m6gd hosts.
Running Dedicated m6i Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m6i hosts.
Running Dedicated m6id Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated m6id hosts.
Running Dedicated mac1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated mac1 hosts.
Running Dedicated mac2 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated mac2 hosts.
Running Dedicated p2 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated p2 hosts.

Name	Default	Adjust	Description
Running Dedicated p3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated p3 hosts.
Running Dedicated p3dn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated p3dn hosts.
Running Dedicated p4d Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated p4d hosts.
Running Dedicated r3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r3 hosts.
Running Dedicated r4 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r4 hosts.
Running Dedicated r5 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5 hosts.
Running Dedicated r5a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5a hosts.
Running Dedicated r5ad Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5ad hosts.
Running Dedicated r5b Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5b hosts.
Running Dedicated r5d Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5d hosts.
Running Dedicated r5dn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5dn hosts.
Running Dedicated r5n Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r5n hosts.
Running Dedicated r6a Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r6a hosts.
Running Dedicated r6g Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r6g hosts.
Running Dedicated r6gd Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r6gd hosts.
Running Dedicated r6i Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r6i hosts.

Name	Default	Adjust	Description
Running Dedicated r6id Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated r6id hosts.
Running Dedicated t3 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated t3 hosts.
Running Dedicated u-12tb1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated u-12tb1 hosts.
Running Dedicated u-3tb1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated u-3tb1 hosts.
Running Dedicated u-6tb1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated u-6tb1 hosts.
Running Dedicated u-9tb1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated u-9tb1 hosts.
Running Dedicated vt1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated vt1 hosts.
Running Dedicated x1 Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x1 hosts.
Running Dedicated x1e Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x1e hosts.
Running Dedicated x2gd Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x2gd hosts.
Running Dedicated x2idn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x2idn hosts.
Running Dedicated x2iedn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x2iedn hosts.
Running Dedicated x2iezn Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated x2iezn hosts.
Running Dedicated z1d Hosts	Each supported Region: 0	Yes	Maximum number of running dedicated z1d hosts.
Running On-Demand DL instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand DL instances.

Name	Default	Adjust	Description
Running On-Demand F instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand F instances.
Running On-Demand G and VT instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand G and VT instances.
Running On-Demand HPC instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand HPC instances.
Running On-Demand High Memory instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand High Memory instances.
Running On-Demand Inf instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand Inf instances.
Running On-Demand P instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand P instances.
Running On-Demand Standard (A, C, D, H, I, M, R, T, Z) instances	Each supported Region: 5	Yes	Maximum number of vCPUs assigned to the Running On-Demand Standard (A, C, D, H, I, M, R, T, Z) instances.
Running On-Demand Trn instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand Trn instances.
Running On-Demand X instances	Each supported Region: 0	Yes	Maximum number of vCPUs assigned to the Running On-Demand X instances.
Sources per transit gateway multicast group	Each supported Region: 1	Yes	Number of sources per transit gateway multicast group.
Transit gateways per Direct Connect Gateway	Each supported Region: 3	No	Transit gateways per AWS Direct Connect gateway.
Transit gateways per account	Each supported Region: 5	Yes	Number of transit gateways per Region per account.
VPC Attachment Bandwidth	Each supported Region: 50 Gigabits per second	No	Maximum bandwidth (burst) per VPC connection.
VPN connections per VGW	Each supported Region: 10	Yes	The maximum number of Site-to-Site VPN connections you can create per virtual private gateway.

Name	Default	Adjust	Description
VPN connections per region	Each supported Region: 50	Yes	The maximum number of Site-to-Site VPN connections that you can create per region.
Virtual private gateways per region	Each supported Region: 5	Yes	The maximum number of virtual private gateways that you can create per region.

The following quotas are for VM Import/Export.

Name	Default	Adjust	Description
Concurrent task limit for ImportImage, ImportSnapshot, and ExportImage	Each supported Region: 20	Yes	The maximum number of concurrent tasks for a given account initiated by the following VM Import/Export APIs: ImportImage, ImportSnapshot, and ExportImage.
Concurrent task limit for ImportInstance, ImportVolume, and CreateInstanceExportTask	Each supported Region: 5	Yes	The maximum number of concurrent tasks for a given account initiated by the following VM Import/Export APIs: ImportInstance, ImportVolume, and CreateInstanceExportTask.

For more information, see the following:

- On-Demand Instance quotas
- Spot Instance quotas
- Reserved Instance quotas
- Launch template quotas

Amazon EC2 Auto Scaling endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	autoscaling.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	autoscaling.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	autoscaling.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	autoscaling.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	autoscaling.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	autoscaling.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	autoscaling.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	autoscaling.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	autoscaling.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	autoscaling.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	autoscaling.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	autoscaling.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	autoscaling.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	autoscaling.ca-central-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	autoscaling.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	autoscaling.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	autoscaling.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	autoscaling.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	autoscaling.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	autoscaling.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	autoscaling.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	autoscaling.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	autoscaling.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	autoscaling.us-gov-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	autoscaling.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

If you specify the general endpoint (autoscaling.amazonaws.com), Amazon EC2 Auto Scaling directs your request to the endpoint for `us-east-1`.

Service quotas

Name	Default	Adjust	Description
Auto Scaling groups per region	Each supported Region: 500	Yes	The maximum number of Auto Scaling groups allowed for your AWS account
Classic Load Balancers per Auto Scaling group	Each supported Region: 50	No	The maximum number of Classic Load Balancers per Auto Scaling group

Name	Default	Adjust	Description
Launch configurations per region	Each supported Region: 200	Yes	The maximum number of launch configurations allowed for your AWS account
Lifecycle hooks per Auto Scaling group	Each supported Region: 50	No	The maximum number of lifecycle hooks per Auto Scaling group
SNS topics per Auto Scaling group	Each supported Region: 10	No	The maximum number of SNS topics per Auto Scaling group
Scaling policies per Auto Scaling group	Each supported Region: 50	No	The maximum number of scaling policies per Auto Scaling group
Scheduled actions per Auto Scaling group	Each supported Region: 125	No	The maximum number of scheduled actions per Auto Scaling group
Step adjustments per step scaling policy	Each supported Region: 20	No	The maximum number of step adjustments per step scaling policy
Target groups per Auto Scaling group	Each supported Region: 50	No	The maximum number of target groups per Auto Scaling group

For more information, see Quotas for Amazon EC2 Auto Scaling in the *Amazon EC2 Auto Scaling User Guide*.

EC2 Image Builder endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	imagebuilder.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	imagebuilder.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (N. California)	us-west-1	imagebuilder.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	imagebuilder.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	imagebuilder.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	imagebuilder.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	imagebuilder.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	imagebuilder.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	imagebuilder.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	imagebuilder.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	imagebuilder.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	imagebuilder.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	imagebuilder.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	imagebuilder.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	imagebuilder.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	imagebuilder.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	imagebuilder.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Milan)	eu-south-1	imagebuilder.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	imagebuilder.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	imagebuilder.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	imagebuilder.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	imagebuilder.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	imagebuilder.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	imagebuilder.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Component parameter length	Each supported Region: 1,024	Yes	The maximum number of characters that a Component Parameter value can contain.
Component size	Each supported Region: 64 Kilobytes	Yes	The maximum size of the data field of an EC2 Image Builder component.
Components	Each supported Region: 1,000	Yes	The maximum number of EC2 Image Builder components that you can create in an account in the current Region.
Components per image recipe	Each supported Region: 20	No	The maximum number of EC2 Image Builder components that can be associated with a single EC2 Image Builder image recipe.
Concurrent AMI copies per distribution configuration	Each supported Region: 50	Yes	The maximum number of target accounts that can

Name	Default	Adjust	Description
			be defined for a single EC2 Image Builder distribution configuration.
Concurrent builds	Each supported Region: 100	Yes	The maximum number of concurrent builds that can be in progress in this account in the current Region.
Container recipes	Each supported Region: 1,000	Yes	The maximum number of EC2 Image Builder container recipes that you can create in an account in the current Region.
Distribution configurations	Each supported Region: 1,000	Yes	The maximum number of EC2 Image Builder distribution configurations that you can create in an account in the current Region.
Docker template size	Each supported Region: 64 Kilobytes	Yes	The maximum size of an EC2 Image Builder Docker template data field.
Image pipelines	Each supported Region: 75	Yes	The maximum number of EC2 Image Builder image pipelines that you can create in an account in the current Region.
Image recipes	Each supported Region: 1,000	Yes	The maximum number of EC2 Image Builder image recipes that you can create in an account in the current Region.
Infrastructure configurations	Each supported Region: 1,000	Yes	The maximum number of EC2 Image Builder infrastructure configurations that you can create in an account in the current Region.
Launch templates modified per distribution configuration	Each supported Region: 5	Yes	The maximum number of launch templates that a single EC2 Image Builder distribution configuration can modify.
Parameters per component	Each supported Region: 25	Yes	The maximum number of parameters that a single Component can contain.

Amazon EC2 Instance Connect endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ec2-instance-connect.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	ec2-instance-connect.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	ec2-instance-connect.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	ec2-instance-connect.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ec2-instance-connect.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ec2-instance-connect.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ec2-instance-connect.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ec2-instance-connect.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ec2-instance-connect.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ec2-instance-connect.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	ec2-instance-connect.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ec2-instance-connect.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	ec2-instance-connect.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ec2-instance-connect.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ec2-instance-connect.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ec2-instance-connect.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ec2-instance-connect.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ec2-instance-connect.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

This service has no quotas.

Amazon ECR endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The `ecr` and `api.ecr` endpoints are used for calls to the Amazon ECR API. API actions such as `DescribeImages` and `CreateRepository` go to this endpoint. While the two endpoints function the same, the `api.ecr` endpoint is recommended and the default when using the AWS CLI or AWS SDKs. When connecting to Amazon ECR through an AWS PrivateLink VPC endpoint, you must use the `api.ecr` endpoint to make API calls. For more information, see Amazon ECR Interface VPC Endpoints (AWS PrivateLink) in the *Amazon Elastic Container Registry User Guide*.

For more information about FIPS endpoints, see FIPS endpoints (p. 984).

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ecr.us-east-2.amazonaws.com ecr-fips.us-east-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
		api.ecr.us-east-2.amazonaws.com	HTTPS	
		dkr.ecr-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	ecr.us-east-1.amazonaws.com	HTTPS	
		dkr.ecr-fips.us-east-1.amazonaws.com	HTTPS	
		api.ecr.us-east-1.amazonaws.com	HTTPS	
		ecr-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	ecr.us-west-1.amazonaws.com	HTTPS	
		dkr.ecr-fips.us-west-1.amazonaws.com	HTTPS	
		api.ecr.us-west-1.amazonaws.com	HTTPS	
		ecr-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	ecr.us-west-2.amazonaws.com	HTTPS	
		ecr-fips.us-west-2.amazonaws.com	HTTPS	
		api.ecr.us-west-2.amazonaws.com	HTTPS	
		dkr.ecr-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	ecr.af-south-1.amazonaws.com	HTTPS	
		api.ecr.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ecr.ap-east-1.amazonaws.com	HTTPS	
		api.ecr.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ecr.ap-southeast-3.amazonaws.com	HTTPS	
		api.ecr.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ecr.ap-south-1.amazonaws.com	HTTPS	
		api.ecr.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ecr.ap-northeast-3.amazonaws.com	HTTPS	
		api.ecr.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ecr.ap-northeast-2.amazonaws.com	HTTPS	
		api.ecr.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ecr.ap-southeast-1.amazonaws.com	HTTPS	
		api.ecr.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	ecr.ap-southeast-2.amazonaws.com api.ecr.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ecr.ap-northeast-1.amazonaws.com api.ecr.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	ecr.ca-central-1.amazonaws.com api.ecr.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ecr.eu-central-1.amazonaws.com api.ecr.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	ecr.eu-west-1.amazonaws.com api.ecr.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	ecr.eu-west-2.amazonaws.com api.ecr.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	ecr.eu-south-1.amazonaws.com api.ecr.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	ecr.eu-west-3.amazonaws.com api.ecr.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	ecr.eu-north-1.amazonaws.com api.ecr.eu-north-1.amazonaws.com	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	ecr.me-south-1.amazonaws.com api.ecr.me-south-1.amazonaws.com	HTTPS HTTPS	
Middle East (UAE)	me-central-1	ecr.me-central-1.amazonaws.com api.ecr.me-central-1.amazonaws.com	HTTPS HTTPS	
South America (São Paulo)	sa-east-1	ecr.sa-east-1.amazonaws.com api.ecr.sa-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ecr.us-gov-east-1.amazonaws.com ecr-fips.us-gov-east-1.amazonaws.com api.ecr.us-gov-east-1.amazonaws.com dkr.ecr-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	ecr.us-gov-west-1.amazonaws.com dkr.ecr-fips.us-gov-west-1.amazonaws.com ecr-fips.us-gov-west-1.amazonaws.com api.ecr.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	

Docker and OCI client endpoints

The Docker and OCI client endpoints are used for the Docker Registry APIs. Docker client commands such as `push` and `pull` use this endpoint.

For more information about FIPS endpoints, see FIPS endpoints (p. 984).

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	*<registry-id>*.dkr.ecr.us-east-2.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	*<registry-id>*.dkr.ecr.us-east-1.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	*<registry-id>*.dkr.ecr.us-west-1.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	*<registry-id>*.dkr.ecr.us-west-2.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	*<registry-id>*.dkr.ecr.ap-east-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	*<registry-id>*.dkr.ecr.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	*<registry-id>*.dkr.ecr.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	*<registry-id>*.dkr.ecr.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	*<registry-id>*.dkr.ecr.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	*<registry-id>*.dkr.ecr.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	*<registry-id>*.dkr.ecr.ca-central-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
China (Beijing)	cn-north-1	*<registry-id>*.dkr.ecr.cn-north-1.amazonaws.com.cn	HTTPS
China (Ningxia)	cn-northwest-1	*<registry-id>*.dkr.ecr.cn-northwest-1.amazonaws.com.cn	HTTPS
Europe (Frankfurt)	eu-central-1	*<registry-id>*.dkr.ecr.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	*<registry-id>*.dkr.ecr.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	*<registry-id>*.dkr.ecr.eu-west-2.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	*<registry-id>*.dkr.ecr.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	*<registry-id>*.dkr.ecr.eu-north-1.amazonaws.com	HTTPS
Middle East (Bahrain)	me-south-1	*<registry-id>*.dkr.ecr.me-south-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	*<registry-id>*.dkr.ecr.sa-east-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	*<registry-id>*.dkr.ecr.us-gov-east-1.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-gov-east-1.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	*<registry-id>*.dkr.ecr.us-gov-west-1.amazonaws.com *<registry-id>*.dkr.ecr-fips.us-gov-west-1.amazonaws.com	HTTPS

Service quotas

The following table provides the default limits for Amazon Elastic Container Registry (Amazon ECR).

Name	Default	Adjust	Description
Filters per rule in a replication configuration	Each supported Region: 100	No	The maximum number of filters per rule in a replication configuration.
Images per repository	Each supported Region: 10,000	Yes	The maximum number of images per repository.
Layer parts	Each supported Region: 4,200	No	The maximum number of layer parts. This is only applicable if you are using Amazon ECR API actions

Name	Default	Adjust	Description
			directly to initiate multipart uploads for image push operations.
Lifecycle policy length	Each supported Region: 30,720	No	The maximum number of characters in a lifecycle policy.
Maximum layer part size	Each supported Region: 10	No	The maximum size (MiB) of a layer part. This is only applicable if you are using Amazon ECR API actions directly to initiate multipart uploads for image push operations.
Maximum layer size	Each supported Region: 42,000	No	The maximum size (MiB) of a layer.
Minimum layer part size	Each supported Region: 5	No	The minimum size (MiB) of a layer part. This is only applicable if you are using Amazon ECR API actions directly to initiate multipart uploads for image push operations.
Rate of BatchCheckLayerAvailability requests	Each supported Region: 1,000 per second	Yes	The maximum number of BatchCheckLayerAvailability requests that you can make per second in the current Region. When an image is pushed to a repository, each image layer is checked to verify if it has been uploaded before. If it has been uploaded, then the image layer is skipped.
Rate of BatchGetImage requests	Each supported Region: 2,000 per second	Yes	The maximum number of BatchGetImage requests that you can make per second in the current Region. When an image is pulled, the BatchGetImage API is called once to retrieve the image manifest. If you request a quota increase for this API, review your GetDownloadUrlForLayer usage as well.

Name	Default	Adjust	Description
Rate of CompleteLayerUpload requests	Each supported Region: 100 per second	Yes	The maximum number of CompleteLayerUpload requests that you can make per second in the current Region. When an image is pushed, the CompleteLayerUpload API is called once per each new image layer to verify that the upload has completed.
Rate of GetAuthorizationToken requests	Each supported Region: 500 per second	Yes	The maximum number of GetAuthorizationToken requests that you can make per second in the current Region.
Rate of GetDownloadUrlForLayer requests	Each supported Region: 3,000 per second	Yes	The maximum number of GetDownloadUrlForLayer requests that you can make per second in the current Region. When an image is pulled, the GetDownloadUrlForLayer API is called once per image layer that is not already cached. If you request a quota increase for this API, review your BatchGetImage usage as well.
Rate of InitiateLayerUpload requests	Each supported Region: 100 per second	Yes	The maximum number of InitiateLayerUpload requests that you can make per second in the current Region. When an image is pushed, the InitiateLayerUpload API is called once per image layer that has not already been uploaded. Whether or not an image layer has been uploaded is determined by the BatchCheckLayerAvailability API action.

Name	Default	Adjust	Description
Rate of PutImage requests	Each supported Region: 10 per second	Yes	The maximum number of PutImage requests that you can make per second in the current Region. When an image is pushed and all new image layers have been uploaded, the PutImage API is called once to create or update the image manifest and the tags associated with the image.
Rate of UploadLayerPart requests	Each supported Region: 500 per second	Yes	The maximum number of UploadLayerPart requests that you can make per second in the current Region. When an image is pushed, each new image layer is uploaded in parts and the UploadLayerPart API is called once per each new image layer part.
Rate of image scans	Each supported Region: 1	No	The maximum number of image scans per image, per 24 hours.
Registered repositories	Each supported Region: 10,000	Yes	The maximum number of repositories that you can create in this account in the current Region.
Rules per lifecycle policy	Each supported Region: 50	No	The maximum number of rules in a lifecycle policy
Rules per replication configuration	Each supported Region: 10	No	The maximum number of rules in a replication configuration.
Tags per image	Each supported Region: 1,000	No	The maximum number of tags per image.
Unique destinations across all rules in a replication configuration	Each supported Region: 25	No	The maximum number of unique destinations across all rules in a replication configuration.

For more information, see Amazon ECR Service Quotas in the *Amazon Elastic Container Registry User Guide*.

Amazon ECR Public endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The `ecr-public` and `api.ecr-public` endpoints are used for calls to the Amazon ECR Public API. API actions such as `DescribeImages` and `CreateRepository` go to this endpoint. While the two endpoints function the same, the `api.ecr-public` endpoint is recommended and the default when using the AWS CLI or AWS SDKs.

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	ecr-public.us-east-1.amazonaws.com api.ecr-public.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ecr-public.us-west-2.amazonaws.com api.ecr-public.us-west-2.amazonaws.com	HTTPS HTTPS	

Service quotas

The following are the service quotas for Amazon ECR Public.

Name	Default	Adjust	Description
Images per repository	Each supported Region: 10,000	Yes	The maximum number of images per repository.
Layer parts	Each supported Region: 1,000	No	The maximum number of layer parts. This is only applicable if you are using Amazon ECR API actions directly to initiate multipart uploads for image push operations.
Maximum layer part size	Each supported Region: 10	No	The maximum size (MiB) of a layer part. This is only applicable if you are using Amazon ECR API actions directly to initiate multipart uploads for image push operations.
Maximum layer size	Each supported Region: 10,000	No	The maximum size per layer.

Name	Default	Adjust	Description
Minimum layer part size	Each supported Region: 5	No	The minimum size (MiB) of a layer part. This is only applicable if you are using Amazon ECR API actions directly to initiate multipart uploads for image push operations.
Rate of BatchCheckLayerAvailability requests	Each supported Region: 200 per second	Yes	The maximum number of BatchCheckLayerAvailability requests that you can make per second in the current Region. When an image is pushed to a repository, each image layer is checked to verify if it has been uploaded before. If it has been uploaded, then the image layer is skipped.
Rate of CompleteLayerUpload requests	Each supported Region: 10 per second	Yes	The maximum number of CompleteLayerUpload requests that you can make per second in the current Region. When an image is pushed, the CompleteLayerUpload API is called once per each new image layer to verify that the upload has completed.
Rate of GetAuthorizationToken requests	Each supported Region: 200 per second	Yes	The maximum number of GetAuthorizationToken requests that you can make per second in the current Region.
Rate of InitiateLayerUpload requests	Each supported Region: 200 per second	Yes	The maximum number of InitiateLayerUpload requests that you can make per second in the current Region. When an image is pushed, the InitiateLayerUpload API is called once per image layer that has not already been uploaded. Whether or not an image layer has been uploaded is determined by the BatchCheckLayerAvailability API action.

Name	Default	Adjust	Description
Rate of PutImage requests	Each supported Region: 10 per second	Yes	The maximum number of PutImage requests that you can make per second in the current Region. When an image is pushed and all new image layers have been uploaded, the PutImage API is called once to create or update the image manifest and the tags associated with the image.
Rate of UploadLayerPart requests	Each supported Region: 260 per second	Yes	The maximum number of UploadLayerPart requests that you can make per second in the current Region. When an image is pushed, each new image layer is uploaded in parts and the UploadLayerPart API is called once per each new image layer part.
Rate of authenticated image pulls	Each supported Region: 10 per second	Yes	The maximum number of authenticated image pulls per second.
Rate of image pulls to AWS resources	Each supported Region: 10 per second	No	The maximum number of image pulls per second to resources running on Amazon ECS, Fargate, or Amazon EC2.
Rate of unauthenticated image pulls	Each supported Region: 1	No	The maximum number of unauthenticated image pulls.
Registered repositories	Each supported Region: 10,000	Yes	The maximum number of repositories that you can create in this account in the current Region.
Tags per image	Each supported Region: 1,000	No	The maximum number of tags per image.

For more information, see Amazon ECR Public service quotas in the *Amazon ECR Public user guide*.

Amazon ECS endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ecs.us-east-2.amazonaws.com ecs-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ecs.us-east-1.amazonaws.com ecs-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	ecs.us-west-1.amazonaws.com ecs-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ecs.us-west-2.amazonaws.com ecs-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ecs.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ecs.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ecs.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ecs.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ecs.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ecs.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ecs.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ecs.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	ecs.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ecs.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	ecs.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ecs.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ecs.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	ecs.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ecs.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ecs.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	ecs.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	ecs.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ecs.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ecs.us-gov-east-1.amazonaws.com ecs-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ecs.us-gov-west-1.amazonaws.com ecs-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

The following are Amazon ECS service quotas.

Most of these service quotas, but not all, are listed under the Amazon Elastic Container Service (Amazon ECS) namespace in the Service Quotas console. To request a quota increase, see Requesting a quota increase in the *Service Quotas User Guide*.

Name	Default	Adjust	Description
Capacity providers per cluster	Each supported Region: 10	No	The maximum number of capacity providers that can be associated with a cluster.
Classic Load Balancers per service	Each supported Region: 1	No	The maximum number of Classic Load Balancers per service.
Clusters per account	Each supported Region: 10,000	Yes	Number of clusters per account
Container instances per cluster	Each supported Region: 5,000	No	Number of container instances per cluster
Container instances per start-task	Each supported Region: 10	No	The maximum number of container instances specified in a StartTask API action.
Containers per task definition	Each supported Region: 10	No	The maximum number of containers definitions within a task definition.
ECS Exec sessions	Each supported Region: 20	Yes	The maximum number of ECS Exec sessions per container.
Rate of tasks launched by a service on AWS Fargate	Each supported Region: 500	Yes	The maximum number of tasks that can be provisioned per service per minute on Fargate by the Amazon ECS service scheduler.
Rate of tasks launched by a service on an Amazon EC2 or External instance	Each supported Region: 500	Yes	The maximum number of tasks that can be provisioned per service per minute on an Amazon EC2 or External instance by the Amazon ECS service scheduler.
Revisions per task definition family	Each supported Region: 1,000,000	No	The maximum number of revisions per task definition family. Deregistering a task definition revision does not exclude it from being included in this limit.
Security groups per awsvpcConfiguration	Each supported Region: 5	No	The maximum number of security groups specified within an awsvpcConfiguration.
Services per cluster	Each supported Region: 5,000	Yes	The maximum number of services per cluster

Name	Default	Adjust	Description
Subnets per awsvpcConfiguration	Each supported Region: 16	No	The maximum number of subnets specified within an awsvpcConfiguration.
Tags per resource	Each supported Region: 50	No	The maximum number of tags per resource. This applies to task definitions, clusters, tasks, and services.
Target groups per service	Each supported Region: 5	No	The maximum number of target groups per service, if using an Application Load Balancer or a Network Load Balancer.
Task definition size	Each supported Region: 64 Kilobytes	No	The maximum size, in KiB, of a task definition.
Tasks in PROVISIONING state per cluster	Each supported Region: 300	No	The maximum number of tasks waiting in the PROVISIONING state per cluster. This quota only applies to tasks launched using an EC2 Auto Scaling group capacity provider.
Tasks launched per run-task	Each supported Region: 10	No	The maximum number of tasks that can be launched per RunTask API action.
Tasks per service	Each supported Region: 5,000	Yes	The maximum number of tasks per service (the desired count).

Note
Services configured to use Amazon ECS service discovery have a limit of 1,000 tasks per service. This is due to the AWS Cloud Map service quota for the number of instances per service. For more information, see AWS Cloud Map service quotas in the *Amazon Web Services General Reference*.

Note
In practice, task launch rates are also dependent on other considerations such as container images to be downloaded and unpacked, health checks and other integrations enabled, such as registering tasks with a load balancer. You will see variations in task launch rates compared with the quotas represented above based on the features that you have enabled for your Amazon ECS services. For more information, see speeding up Amazon ECS deployments in the Amazon ECS Best Practices Guide.

AWS Fargate quotas

The following are Amazon ECS on AWS Fargate service quotas and are listed under the **AWS Fargate** service in the Service Quotas console.

New AWS accounts might have initial lower quotas that can increase over time. Fargate constantly monitors the account usage within each Region, and then automatically increases the quotas based

on your usage. You can also request a quota increase for values that are shown as adjustable, see Requesting a quota increase in the *Service Quotas User Guide*.

AWS Fargate is transitioning from task-based quotas to vCPU-based quotas. The following table lists the new vCPU-based quotas followed by the existing task-based quotas.

Currently, you must opt in to use the vCPU-based quotas. For more information, see AWS Fargate vCPU-based quotas in the *Amazon ECS Developer Guide*.

Service quota	Description	Default quota value	Adjustable
Fargate On-Demand vCPU resource count	The number of Fargate vCPUs that run concurrently as Fargate On-Demand in this account in the current Region.	6	Yes
Fargate Spot vCPU resource count	The number of Fargate vCPUs running concurrently as Fargate Spot in this account in the current Region.	6	Yes
Fargate On-Demand resource count	The number of Amazon ECS tasks and Amazon EKS pods that run concurrently on Fargate in this account in the current Region.	2	Yes
Fargate Spot resource count	The number of Amazon ECS tasks that run concurrently on Fargate Spot in this account in the current Region.	2	Yes

Note
The default values are the initial quotas set by AWS, which are separate from the actual applied quota value and maximum possible service quota. For more information, see Terminology in Service Quotas in the *Service Quotas User Guide*.

Note
Fargate additionally enforces Amazon ECS tasks and Amazon EKS pods launch rate limits. For more information, see AWS Fargate throttling linits in the *Amazon ECS Developer Guide*.

Amazon Elastic Kubernetes Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	eks.us-east-2.amazonaws.com fips.eks.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	eks.us-east-1.amazonaws.com fips.eks.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	eks.us-west-1.amazonaws.com fips.eks.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	eks.us-west-2.amazonaws.com fips.eks.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	eks.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	eks.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	eks.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	eks.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	eks.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	eks.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	eks.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	eks.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	eks.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	eks.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	eks.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	eks.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	eks.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	eks.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	eks.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	eks.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	eks.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	eks.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	eks.us-gov-east-1.amazonaws.com eks.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	eks.us-gov-west-1.amazonaws.com eks.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Clusters	Each supported Region: 100	Yes	The maximum number of EKS clusters in this account in the current Region.
Control plane security groups per cluster	Each supported Region: 4	No	The maximum number of control plane security groups per cluster (these are specified when you create the cluster).
Fargate profiles per cluster	Each supported Region: 10	Yes	The maximum number of Fargate profiles per cluster.

Name	Default	Adjust	Description
Label pairs per Fargate profile selector	Each supported Region: 5	Yes	The maximum number of label pairs per Fargate profile selector.
Managed node groups per cluster	Each supported Region: 30	Yes	The maximum number of managed node groups per cluster.
Nodes per managed node group	Each supported Region: 450	Yes	The maximum number of nodes per managed node group.
Public endpoint access CIDR ranges per cluster	Each supported Region: 40	No	The maximum number of public endpoint access CIDR ranges per cluster (these are specified when you create or update the cluster).
Registered clusters	Each supported Region: 10	Yes	The maximum number of registered clusters in this account in the current Region.
Selectors per Fargate profile	Each supported Region: 5	Yes	The maximum number of selectors per Fargate profile.

Note
The default values are the initial quotas set by AWS. These default values are separate from the actual applied quota values and maximum possible service quotas. For more information, see Terminology in Service Quotas in the *Service Quotas User Guide*.

These service quotas are listed under **Amazon Elastic Kubernetes Service (Amazon EKS)** in the Service Quotas console. To request a quota increase for values that are shown as adjustable, see Requesting a quota increase in the *Service Quotas User Guide*.

AWS Fargate service quotas

This section describes AWS Fargate service quotas for Amazon EKS. AWS Fargate is transitioning from pod based quotas to vCPU based quotas. The following are the important dates related to the new vCPU based quotas.

- September 8, 2022 – You can now opt in to using the new vCPU based quotas ahead of automatic migration. By opting in, your account is controlled by vCPU based quotas rather than the previous pod based quotas. Pod based quotas remain the default for accounts that don't opt in.

  Note
  To use the vCPU based quotas with Amazon EKS before October 3, 2022, you must opt in. To opt in, use the AWS Support Center Console to create a **Service limit increase** case. Choose **Fargate** for **Limit type** and **Fargate account vCPU limit opt-in** for **Limit**. For more information, see Creating a support case in the *AWS Support User Guide*.
- October 3, 2022 through October 21, 2022 – All new and existing accounts are switched to the vCPU based quotas in a phased manner.

Note
To continue using the pod based quotas, you must opt out.
To opt out, use the AWS Support Center Console to create a **Service limit increase** case. Choose **Fargate** for **Limit type** and **Fargate account opt-out of vCPU limit** for **Limit**. For more information, see Creating a support case in the *AWS Support User Guide*.

- October 31, 2022 – The last day that you can remain opted out of the vCPU based quotas.
- November 1, 2022 through November 15, 2022 – The opt-out option ends and all accounts are migrated to the vCPU based quotas. The pod based quotas are no longer available.

The following table lists the new vCPU based quota followed by the existing pod based quota. These service quotas are among those listed under the **AWS Fargate** service in the Service Quotas console. The following table only describes the quotas that also applicable to Amazon EKS.

You can confirm which quota type is active by looking at the Service Quotas console. If the vCPU quota is in effect, the Fargate On-Demand Pod count based quotas show `0` for the **Applied quota value**. Any other value indicates that the pod count quota is in effect.

New AWS accounts might have lower initial quotas that can increase over time. Fargate constantly monitors the account usage within each AWS Region, and then automatically increases the quotas based on the usage. You can also request a quota increase for values that are shown as adjustable. For more information, see Requesting a quota increase in the *Service Quotas User Guide*.

Name	Default	Adjustable	Description
Fargate On-Demand vCPU resource count	6	Yes	The number of Fargate vCPUs that can run concurrently as Fargate On-Demand in this account in the current Region.
Fargate On-Demand resource count	2	Yes	The number of Amazon ECS tasks and Amazon EKS pods that can run concurrently on Fargate in this account in the current Region.

Note
The default values are the initial quotas set by AWS. These default values are separate from the actual applied quota values and maximum possible service quotas. For more information, see Terminology in Service Quotas in the *Service Quotas User Guide*.

Note
Fargate additionally enforces Amazon ECS tasks and Amazon EKS pods launch rate quotas. For more information, see Fargate throttling limits in the *Amazon Elastic Container Service User Guide for AWS Fargate*.

Amazon Elastic File System endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	elasticfilesystem.us-east-2.amazonaws.com elasticfilesystem-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	elasticfilesystem.us-east-1.amazonaws.com elasticfilesystem-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	elasticfilesystem.us-west-1.amazonaws.com elasticfilesystem-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	elasticfilesystem.us-west-2.amazonaws.com elasticfilesystem-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	elasticfilesystem.af-south-1.amazonaws.com elasticfilesystem-fips.af-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	elasticfilesystem.ap-east-1.amazonaws.com elasticfilesystem-fips.ap-east-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	elasticfilesystem.ap-southeast-3.amazonaws.com elasticfilesystem-fips.ap-southeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	elasticfilesystem.ap-south-1.amazonaws.com elasticfilesystem-fips.ap-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	elasticfilesystem.ap-northeast-3.amazonaws.com elasticfilesystem-fips.ap-northeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	elasticfilesystem.ap-northeast-2.amazonaws.com elasticfilesystem-fips.ap-northeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	elasticfilesystem.ap-southeast-1.amazonaws.com elasticfilesystem-fips.ap-southeast-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	elasticfilesystem.ap-southeast-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
		elasticfilesystem-fips.ap-southeast-2.amazonaws.com		
Asia Pacific (Tokyo)	ap-northeast-1	elasticfilesystem.ap-northeast-1.amazonaws.com elasticfilesystem-fips.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	elasticfilesystem.ca-central-1.amazonaws.com elasticfilesystem-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	elasticfilesystem.eu-central-1.amazonaws.com elasticfilesystem-fips.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	elasticfilesystem.eu-west-1.amazonaws.com elasticfilesystem-fips.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	elasticfilesystem.eu-west-2.amazonaws.com elasticfilesystem-fips.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	elasticfilesystem.eu-south-1.amazonaws.com elasticfilesystem-fips.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	elasticfilesystem.eu-west-3.amazonaws.com elasticfilesystem-fips.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	elasticfilesystem.eu-north-1.amazonaws.com elasticfilesystem-fips.eu-north-1.amazonaws.com	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	elasticfilesystem.me-south-1.amazonaws.com elasticfilesystem-fips.me-south-1.amazonaws.com	HTTPS HTTPS	
South America (São Paulo)	sa-east-1	elasticfilesystem.sa-east-1.amazonaws.com elasticfilesystem-fips.sa-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	elasticfilesystem.us-gov-east-1.amazonaws.com elasticfilesystem-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	elasticfilesystem.us-gov-west-1.amazonaws.com elasticfilesystem-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Active users per NFS client	Each supported Region: 128	No	The maximum number of active user accounts that can have files open at the same time for each NFS client
Bursting throughput	us-east-1: 3,072 Megabytes per second us-east-2: 3,072 Megabytes per second us-west-2: 3,072 Megabytes per second ap-southeast-2: 3,072 Megabytes per second eu-west-1: 3,072 Megabytes per second Each of the other supported Regions: 1,024 Megabytes per second	No	The maximum total bursting throughput for all connected clients on an EFS file system
Directory depth	Each supported Region: 1,000	No	The maximum number of levels, or depth, that you can have within a single directory
EFS file locks	Each supported Region: 512	No	The maximum number of locks per file across all instances connected and users accessing the file
File hard links	Each supported Region: 177	No	The maximum number of hard links that you can have for each file
File size	Each supported Region: 52,673,613,135,872 Bytes	No	The maximum size of a single file on an EFS file system
File system name length	Each supported Region: 255 Bytes	No	The maximum length of a file system name

Name	Default	Adjust	Description
File system symbolic link (symlink) length	Each supported Region: 4,080 Bytes	No	The maximum length that a file system symbolic link, or symlink, can be
File systems per account	Each supported Region: 1,000	Yes	The maximum number of file systems that a customer account can have in an AWS Region
Locks across unique file/process pairs	Each supported Region: 65,536	No	The maximum number of locks that can occur at the same time for each unique mount on an NFS client, across all unique file/process pairs
Minimum wait time between Provisioned Throughput decreases	Each supported Region: 86,400 Seconds	No	The minimum amount of time that you have to wait after decreasing the amount of Provisioned Throughput before you can decrease it again
Minimum wait time between Throughput mode changes	Each supported Region: 86,400 Seconds	No	The minimum amount of time that you have to wait after changing the Throughput mode before you can change it again
Mount targets per Availability Zone	Each supported Region: 1	No	The maximum number of EFS mount targets that you can have in an Availability Zone
Mount targets per VPC	Each supported Region: 400	No	The maximum number of EFS mount targets allowed for each VPC
Open files per NFS client	Each supported Region: 32,768	No	The maximum number of files that can be open at the same time for each NFS client
Provisioned throughput	Each supported Region: 1,024 Megabytes per second	No	The maximum total provisioned throughput for all connected clients on an EFS file system

Name	Default	Adjust	Description
Rate of file system operations	Each supported Region: 35,000	No	The maximum number of file system operations per second, for all connected clients, on an EFS file system that is configured in General Purpose mode. Data or metadata read operations consume one file operation, and data or metadata write operations consume five file operations.
Security groups per mount target	Each supported Region: 5	No	The maximum number of security groups that you can apply to a single EFS mount target
Tags	Each supported Region: 50	No	The maximum number of tags that you can apply to an EFS file system
Throughput per NFS client	Each supported Region: 524.288 Megabytes per second	No	The maximum throughput that you can drive for each NFS client connected to an EFS file system
VPCs per file system	Each supported Region: 1	No	The maximum number of VPCs that you can apply to an EFS file system

For more information, see Amazon EFS quotas in the *Amazon Elastic File System User Guide*.

Amazon Elastic Inference endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	api.elastic-inference.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	api.elastic-inference.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	api.elastic-inference.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	api.elastic-inference.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.elastic-inference.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	api.elastic-inference.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of Elastic Inference accelerators	Each supported Region: 5	Yes	The maximum number of Elastic Inference accelerators that you can request in this Region.

Elastic Load Balancing endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Route 53 Hosted Zone ID (Application Load Balancers, Classic Load Balancers)	Route 53 Hosted Zone ID (Network Load Balancers)
US East (Ohio)	us-east-2	elasticloadbalancing.us-east-2.amazonaws.com elasticloadbalancing-fips.us-east-2.amazonaws.com	Z3AADJGX6KTTL2	ZLMOA37VPKANP
US East (N. Virginia)	us-east-1	elasticloadbalancing.us-east-1.amazonaws.com	Z35SXDOTRQ7X7K	Z26RNL4JYFTOTI

Region Name	Region	Endpoint	Route 53 Hosted Zone ID (Application Load Balancers, Classic Load Balancers)	Route 53 Hosted Zone ID (Network Load Balancers)
		elasticloadbalancing-fips.us-east-1.amazonaws.com		
US West (N. California)	us-west-1	elasticloadbalancing.us-west-1.amazonaws.com elasticloadbalancing-fips.us-west-1.amazonaws.com	Z368ELLRRE2KJ0	Z24FKFUX50B4VW
US West (Oregon)	us-west-2	elasticloadbalancing.us-west-2.amazonaws.com elasticloadbalancing-fips.us-west-2.amazonaws.com	Z1H1FL5HABSF5	Z18D5FSROUN65G
Africa (Cape Town)	af-south-1	elasticloadbalancing.af-south-1.amazonaws.com	Z268VQBMOI5EKX	Z203XCE67M25HM
Asia Pacific (Hong Kong)	ap-east-1	elasticloadbalancing.ap-east-1.amazonaws.com	Z3DQVH9N71FHZ0	Z12Y7K3UBGUAD1
Asia Pacific (Jakarta)	ap-southeast-3	elasticloadbalancing.ap-southeast-3.amazonaws.com	Z08888821HLRG5A9ZRTER	Z07171771FYVNCOVWJU1G
Asia Pacific (Mumbai)	ap-south-1	elasticloadbalancing.ap-south-1.amazonaws.com	ZP97RAFLXTNZK	ZVDDRBQ08TROA
Asia Pacific (Osaka)	ap-northeast-3	elasticloadbalancing.ap-northeast-3.amazonaws.com	Z5LXEXXYW11ES	Z1GWIQ4HH19I5X
Asia Pacific (Seoul)	ap-northeast-2	elasticloadbalancing.ap-northeast-2.amazonaws.com	ZWKZPGTI48KDX	ZIBE1TIR4HY56
Asia Pacific (Singapore)	ap-southeast-1	elasticloadbalancing.ap-southeast-1.amazonaws.com	Z1LMS91P8CMLE5	ZKVM4W9LS7TM
Asia Pacific (Sydney)	ap-southeast-2	elasticloadbalancing.ap-southeast-2.amazonaws.com	Z1GM3OXH4ZPM65	ZCT6FZBF4DROD
Asia Pacific (Tokyo)	ap-northeast-1	elasticloadbalancing.ap-northeast-1.amazonaws.com	Z14GRHDCWA56QT	Z31USIVHYNEOWT
Canada (Central)	ca-central-1	elasticloadbalancing.ca-central-1.amazonaws.com	ZQSVJUPU6J1EY	Z2EPGBW3API2WT
China (Beijing)	cn-north-1	elasticloadbalancing.cn-north-1.amazonaws.com.cn	Z1GDH35T77C1KE	Z3QFB96KMJ7ED6
China (Ningxia)	cn-northwest-1	elasticloadbalancing.cn-northwest-1.amazonaws.com.cn	ZM7IZAIOVVDZF	ZQEIKTCZ8352D

Region Name	Region	Endpoint	Route 53 Hosted Zone ID (Application Load Balancers, Classic Load Balancers)	Route 53 Hosted Zone ID (Network Load Balancers)
Europe (Frankfurt)	eu-central-1	elasticloadbalancing.eu-central-1.amazonaws.com	Z215JYRZR1TBD5	Z3F0SRJ5LGBH90
Europe (Ireland)	eu-west-1	elasticloadbalancing.eu-west-1.amazonaws.com	Z32O12XQLNTSW2	Z2IFOLAFXWLO4F
Europe (London)	eu-west-2	elasticloadbalancing.eu-west-2.amazonaws.com	ZHURV8PSTC4K8	ZD4D7Y8KGAS4G
Europe (Milan)	eu-south-1	elasticloadbalancing.eu-south-1.amazonaws.com	Z3ULH7SSC9OV64	Z23146JA1KNAFP
Europe (Paris)	eu-west-3	elasticloadbalancing.eu-west-3.amazonaws.com	Z3Q77PNBQS71R4	Z1CMS0P5QUZ6D5
Europe (Stockholm)	eu-north-1	elasticloadbalancing.eu-north-1.amazonaws.com	Z23TAZ6LKFMNIO	Z1UDT6IFJ4EJM
Middle East (Bahrain)	me-south-1	elasticloadbalancing.me-south-1.amazonaws.com	ZS929ML54UICD	Z3QSRYVP46NYYV
Middle East (UAE)	me-central-1	elasticloadbalancing.me-central-1.amazonaws.com	Z08230872XQRWHG2XF6	ZM282643NTTLPANJJG2P
South America (São Paulo)	sa-east-1	elasticloadbalancing.sa-east-1.amazonaws.com	Z2P70J7HTTTPLU	ZTK26PT1VY4CU
AWS GovCloud (US-East)	us-gov-east-1	elasticloadbalancing.us-gov-east-1.amazonaws.com	Z166TLBEWOO7G0	Z1ZSMQQ6Q24QQ8
AWS GovCloud (US-West)	us-gov-west-1	elasticloadbalancing.us-gov-west-1.amazonaws.com	Z33AYJ8TM3BH4J	ZMG1MZ2THAWF1

Service quotas

The following quotas are for Application Load Balancers.

Name	Default	Adjustable
Application Load Balancers per Region	50	Yes
Certificates per Application Load Balancer	25	Yes
Condition Values per Rule	5	No
Condition Wildcards per Rule	5	No
Listeners per Application Load Balancer	50	Yes

Name	Default	Adjustable
Number of times a target can be registered per Application Load Balancer	1,000	Yes
Rules per Application Load Balancer	100	Yes
Target Groups per Action per Application Load Balancer	5	No
Target Groups per Application Load Balancer	100	No
Targets per Application Load Balancer	1,000	Yes

The following quotas are for Network Load Balancers.

Name	Default	Adjustable
Certificates per Network Load Balancer	25	Yes
Listeners per Network Load Balancer	50	No
Network Load Balancer ENIs per VPC	1,200	Yes
Network Load Balancers per Region	50	Yes
Target Groups per Action per Network Load Balancer	1	No
Targets per Availability Zone per Network Load Balancer	500	Yes
Targets per Network Load Balancer	3,000	Yes

The following quotas are for target groups.

Name	Default	Adjustable
Target Groups per Region	3,000	Yes
Targets per Target Group per Region	1,000	Yes

The following quotas are for Classic Load Balancers.

Name	Default	Adjustable
Classic Load Balancers per Region	20	Yes
Listeners per Classic Load Balancer	100	Yes
Registered Instances per Classic Load Balancer	1,000	Yes

For more information, see the following:

- Quotas for your Application Load Balancers
- Quotas for your Network Load Balancers
- Quotas for your Classic Load Balancers

- Quotas for your Gateway Load Balancers

Amazon Elastic Transcoder endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	elastictranscoder.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	elastictranscoder.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	elastictranscoder.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	elastictranscoder.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	elastictranscoder.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	elastictranscoder.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	elastictranscoder.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	elastictranscoder.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Burst size of Create Job requests	Each supported Region: 100	Yes	The maximum number of Create Job requests that you can send in one burst in this account in the current region.

Name	Default	Adjust	Description
Burst size of Read Job requests	Each supported Region: 50	Yes	The maximum number of Read Job requests that you can send in one burst in this account in the current region.
Concurrent jobs per pipeline	us-east-1: 20 us-west-2: 20 eu-west-1: 20 Each of the other supported Regions: 12	Yes	The maximum number of jobs processed simultaneously by each pipeline in the current region.
Pipelines	Each supported Region: 4	Yes	The maximum number of pipelines that you can create in this account in the current region.
Queued jobs per pipeline	Each supported Region: 1,000,000	No	The maximum number of queued jobs per pipeline in the current region.
Rate of Create Job requests	Each supported Region: 2	Yes	The maximum number of Create Job requests per second that you can send in this account in the current region
Rate of Read Job requests	Each supported Region: 4	Yes	The maximum number of Read Job requests per second that you can send in this account in the current region.
User-defined presets	Each supported Region: 50	Yes	The maximum number of custom output presets that you can create in this account in the current region.

For more information, see Amazon Elastic Transcoder quotas in the *Amazon Elastic Transcoder Developer Guide*.

AWS Elastic Disaster Recovery endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	drs.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	drs.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	drs.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	drs.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	drs.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	drs.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	drs.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	drs.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	drs.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	drs.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	drs.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	drs.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	drs.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	drs.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	drs.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	drs.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	drs.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	drs.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	drs.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	drs.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	drs.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent jobs in progress	Each supported Region: 20	No	Concurrent jobs in progress
Max Total replicating source servers Per AWS Account	Each supported Region: 300	Yes	Max Total replicating source servers Per AWS Account
Max Total source servers Per AWS Account	Each supported Region: 3,000	Yes	Max Total source servers Per AWS Account
Max concurrent Jobs per source server	Each supported Region: 1	No	Max concurrent Jobs per source server
Max source servers in a single Job	Each supported Region: 200	No	Max source servers in a single Job
Max source servers in all Jobs	Each supported Region: 200	No	Max source servers in all Jobs

Amazon ElastiCache endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	elasticache.us-east-2.amazonaws.com elasticache-fips.us-east-2.amazonaws.com elasticache-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	elasticache.us-east-1.amazonaws.com elasticache-fips.us-east-1.amazonaws.com elasticache-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	elasticache.us-west-1.amazonaws.com elasticache-fips.us-west-1.amazonaws.com elasticache-fips.us-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	elasticache.us-west-2.amazonaws.com elasticache-fips.us-west-2.amazonaws.com elasticache-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	elasticache.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	elasticache.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	elasticache.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	elasticache.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	elasticache.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	elasticache.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	elasticache.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	elasticache.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	elasticache.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	elasticache.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	elasticache.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	elasticache.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	elasticache.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	elasticache.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	elasticache.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	elasticache.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	elasticache.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	elasticache.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	elasticache.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	elasticache.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	elasticache.us-gov-west-1.amazonaws.com elasticache.us-gov-west-1.amazonaws.com elasticache.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Nodes per Region	Each supported Region: 300	Yes	The maximum number of nodes across all clusters in a Region. This quota applies to both your reserved and non-reserved nodes within the given Region. You can have up to 300 reserved nodes and 300 non-reserved nodes in the same Region.
Nodes per cluster (Memcached)	Each supported Region: 40	Yes	The maximum number of nodes in an individual Memcached cluster.
Nodes per cluster per instance type (Redis cluster mode enabled)	Each supported Region: 90	Yes	The maximum number of nodes in an individual Redis cluster. You must also specify the instance type with your request.
Nodes per shard (Redis)	Each supported Region: 6	No	The maximum number of nodes in an individual Redis shard (node group). One node is the read/write Primary. All other nodes are read-only Replicas.
Parameter groups per Region	Each supported Region: 150	Yes	The maximum number of parameters groups you can create in a Region.
Security groups per Region	Each supported Region: 50	Yes	The maximum number of security groups you can create in a Region.
Shards per cluster (Redis cluster mode disabled)	Each supported Region: 1	No	The maximum number of shards (node groups) in a Redis (cluster mode disabled) cluster.
Subnet groups per Region	Each supported Region: 150	Yes	The maximum number of subnet groups you can create in a Region.
Subnets per subnet group	Each supported Region: 20	Yes	The maximum number of subnets you can define for a subnet group.

Amazon MemoryDB for Redis endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	memory-db.us-east-2.amazonaws.com memory-db-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	memory-db.us-east-1.amazonaws.com memory-db-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	memory-db.us-west-1.amazonaws.com memory-db-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	memory-db.us-west-2.amazonaws.com memory-db-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	memory-db.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	memory-db.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	memory-db.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	memory-db.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	memory-db.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	memory-db.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	memory-db.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	memory-db.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	memory-db.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	memory-db.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	memory-db.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	memory-db.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Resource	Default
Nodes per Region	300
Nodes per cluster per instance type	90
Nodes per shard	6
Parameter groups per Region	150
Subnet groups per Region	150
Subnets per subnet group	20

Amazon EMR endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	elasticmapreduce.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		elasticmapreduce-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	elasticmapreduce.us-east-1.amazonaws.com elasticmapreduce-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	elasticmapreduce.us-west-1.amazonaws.com elasticmapreduce-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	elasticmapreduce.us-west-2.amazonaws.com elasticmapreduce-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	elasticmapreduce.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	elasticmapreduce.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	elasticmapreduce.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	elasticmapreduce.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	elasticmapreduce.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	elasticmapreduce.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	elasticmapreduce.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	elasticmapreduce.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	elasticmapreduce.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	elasticmapreduce.ca-central-1.amazonaws.com elasticmapreduce-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	elasticmapreduce.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	elasticmapreduce.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	elasticmapreduce.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	elasticmapreduce.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	elasticmapreduce.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	elasticmapreduce.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	elasticmapreduce.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	elasticmapreduce.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	elasticmapreduce.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	elasticmapreduce.us-gov-east-1.amazonaws.com elasticmapreduce.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	elasticmapreduce.us-gov-west-1.amazonaws.com elasticmapreduce.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

If you specify the general endpoint (elasticmapreduce.amazonaws.com), Amazon EMR directs your request to an endpoint in the default Region. For accounts created on or after March 8, 2013, the default Region is us-west-2; for older accounts, the default Region is us-east-1.

Service quotas

Name	Default	Adjust	Description
Replenishment rate of AddInstanceFleet calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the AddInstanceFleet bucket
Replenishment rate of AddInstanceGroups calls	Each supported Region: 0.2	Yes	The Rate at which tokens are added to the AddInstanceGroups bucket

Name	Default	Adjust	Description
Replenishment rate of AddJobFlowSteps calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the AddJobFlowSteps bucket
Replenishment rate of AddTags calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the AddTags bucket
Replenishment rate of CancelSteps calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the CancelSteps bucket
Replenishment rate of CreateSecurityConfiguration calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the CreateSecurityConfiguration bucket
Replenishment rate of DeleteSecurityConfiguration calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the DeleteSecurityConfiguration bucket
Replenishment rate of DescribeCluster calls	Each supported Region: 1	Yes	The Rate at which tokens are added to the DescribeCluster bucket
Replenishment rate of DescribeJobFlows calls	Each supported Region: 0.2	Yes	The Rate at which tokens are added to the DescribeJobFlows bucket
Replenishment rate of DescribeSecurityConfiguration calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the DescribeSecurityConfiguration bucket
Replenishment rate of DescribeStep calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the DescribeStep bucket
Replenishment rate of ListBootstrapActions calls	Each supported Region: 1	Yes	The Rate at which tokens are added to the ListBootstrapActions bucket
Replenishment rate of ListClusters calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ListClusters bucket
Replenishment rate of ListInstanceFleets calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ListInstanceFleets bucket
Replenishment rate of ListInstanceGroups calls	Each supported Region: 1	Yes	The Rate at which tokens are added to the ListInstanceGroups bucket

Name	Default	Adjust	Description
Replenishment rate of ListInstances calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ListInstances bucket
Replenishment rate of ListSecurityConfigurations calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ListSecurityConfigurations bucket
Replenishment rate of ListSteps calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ListSteps bucket
Replenishment rate of ModifyCluster calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ModifyCluster bucket
Replenishment rate of ModifyInstanceFleet calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ModifyInstanceFleet bucket
Replenishment rate of ModifyInstanceGroups calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the ModifyInstanceGroups bucket
Replenishment rate of PutAutoScalingPolicy calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the PutAutoScalingPolicy bucket
Replenishment rate of RemoveAutoScalingPolicy calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the RemoveAutoScalingPolicy bucket
Replenishment rate of RemoveTags calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the RemoveTags bucket
Replenishment rate of RunJobFlow calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the RunJobFlow bucket
Replenishment rate of SetTerminationProtection calls	Each supported Region: 0.2	Yes	The Rate at which tokens are added to the SetTerminationProtection bucket
Replenishment rate of SetVisibleToAllUsers calls	Each supported Region: 0.2	Yes	The Rate at which tokens are added to the SetVisibleToAllUsers bucket
Replenishment rate of TerminateJobFlows calls	Each supported Region: 0.5	Yes	The Rate at which tokens are added to the TerminateJobFlows bucket

Name	Default	Adjust	Description
The maximum number of API requests that you can make per second.	Each supported Region: 25 per second	Yes	The maximum number of requests per second that you can perform in this account in the current Region for all EMR operations.
The maximum number of AWS SSO Groups assigned to each Amazon EMR Studio	Each supported Region: 5	No	The maximum number of AWS SSO Groups assigned to each Amazon EMR Studio
The maximum number of AWS SSO Users assigned to each Amazon EMR Studio	Each supported Region: 100	No	The maximum number of AWS SSO Users assigned to each Amazon EMR Studio
The maximum number of AddInstanceFleet API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of AddInstanceFleet requests per second that you can perform in this account in the current Region. AddInstanceFleet adds an instance fleet to a running cluster.
The maximum number of AddInstanceGroups API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of AddInstanceGroups requests per second that you can perform in this account in the current Region. Adds one or more instance groups to a running cluster.
The maximum number of AddJobFlowSteps API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of AddJobFlowSteps requests per second that you can perform in this account in the current Region. AddJobFlowSteps adds new steps to a running cluster.
The maximum number of AddTags API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of AddTags requests per second that you can perform in this account in the current Region. Adds tags to an Amazon EMR resource.
The maximum number of Amazon EMR Studios per account	Each supported Region: 10	No	The maximum number of Amazon EMR Studios per account

Name	Default	Adjust	Description
The maximum number of CancelSteps API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of CancelSteps requests per second that you can perform in this account in the current Region.
The maximum number of CreateSecurityConfiguration API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of CreateSecurityConfiguration requests per second that you can perform in this account in the current Region. CreateSecurityConfiguration creates a security configuration, which is stored in the service and can be specified when a cluster is created.
The maximum number of DeleteSecurityConfiguration API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of DeleteSecurityConfiguration requests per second that you can perform in this account in the current Region. DeleteSecurityConfiguration deletes a security configuration.
The maximum number of DescribeCluster API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of DescribeCluster requests per second that you can perform in this account in the current Region. DescribeCluster provides cluster-level details including status, hardware and software configuration, VPC settings, and so on.
The maximum number of DescribeJobFlows API requests that you can make per second.	Each supported Region: 20 per second	Yes	The maximum number of DescribeJobFlows requests per second that you can perform in this account in the current Region. This API is deprecated and will eventually be removed. We recommend you use ListClusters, DescribeCluster, ListSteps, ListInstanceGroups and ListBootstrapActions instead.

Name	Default	Adjust	Description
The maximum number of DescribeSecurityConfiguration API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of DescribeSecurityConfiguration requests per second that you can perform in this account in the current Region. DescribeSecurityConfiguration provides the details of a security configuration by returning the configuration JSON.
The maximum number of DescribeStep API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of DescribeStep requests per second that you can perform in this account in the current Region. DescribeStep provides more detail about the cluster step.
The maximum number of ListBootstrapActions API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of ListBootstrapActions requests per second that you can perform in this account in the current Region. ListBootstrapActions provides information about the bootstrap actions associated with a cluster.
The maximum number of ListClusters API requests that you can make per second.	Each supported Region: 20 per second	Yes	The maximum number of ListClusters requests per second that you can perform in this account in the current Region. ListClusters provides the status of all clusters visible to this AWS account.
The maximum number of ListInstanceFleets API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of ListInstanceFleets requests per second that you can perform in this account in the current Region. ListInstanceFleets lists all available details about the instance fleets in a cluster.

Name	Default	Adjust	Description
The maximum number of ListInstanceGroups API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of ListInstanceGroups requests per second that you can perform in this account in the current Region. ListInstanceGroups provides all available details about the instance groups in a cluster.
The maximum number of ListInstances API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of ListInstances requests per second that you can perform in this account in the current Region. ListInstances provides information for all active EC2 instances and EC2 instances terminated in the last 30 days, up to a maximum of 2,000.
The maximum number of ListSecurityConfigurations API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of ListSecurityConfigurations requests per second that you can perform in this account in the current Region. ListSecurityConfigurations lists all the security configurations visible to this account, providing their creation dates and times, and their names.
The maximum number of ListSteps API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of ListSteps requests per second that you can perform in this account in the current Region. ListSteps provides a list of steps for the cluster in reverse order.
The maximum number of ModifyCluster API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of ModifyCluster requests per second that you can perform in this account in the current Region. ModifyCluster modifies the number of steps that can be executed concurrently for the cluster specified using ClusterID.

Name	Default	Adjust	Description
The maximum number of ModifyInstanceFleet API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of ModifyInstanceFleet requests per second that you can perform in this account in the current Region. ModifyInstanceFleet modifies the target On-Demand and target Spot capacities for the instance fleet.
The maximum number of ModifyInstanceGroups API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of ModifyInstanceGroups requests per second that you can perform in this account in the current Region. ModifyInstanceGroups modifies the number of nodes and configuration settings of an instance group.
The maximum number of PutAutoScalingPolicy API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of PutAutoScalingPolicy requests per second that you can perform in this account in the current Region. PutAutoScalingPolicy creates or updates an automatic scaling policy for a core instance group or task instance group in an Amazon EMR cluster.
The maximum number of RemoveAutoScalingPolicy API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of RemoveAutoScalingPolicy requests per second that you can perform in this account in the current Region. RemoveAutoScalingPolicy removes an automatic scaling policy from a specified instance group within an EMR cluster.

Name	Default	Adjust	Description
The maximum number of RemoveTags API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of RemoveTags requests per second that you can perform in this account in the current Region. Removes tags from an Amazon EMR resource.
The maximum number of RunJobFlow API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of RunJobFlow requests per second that you can perform in this account in the current Region. RunJobFlow creates and starts running a new cluster (job flow).
The maximum number of SetTerminationProtection API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of SetTerminationProtection requests per second that you can perform in this account in the current Region. SetTerminationProtection locks a cluster (job flow) so the EC2 instances in the cluster cannot be terminated.
The maximum number of SetVisibileToAllUsers API requests that you can make per second.	Each supported Region: 5 per second	Yes	The maximum number of SetVisibleToAllUsers requests per second that you can perform in this account in the current Region. Sets the VisibleToAllUsers value, which determines whether the cluster is visible to all IAM users of the AWS account associated with the cluster.
The maximum number of TerminateJobFlows API requests that you can make per second.	Each supported Region: 10 per second	Yes	The maximum number of TerminateJobFlows requests per second that you can perform in this account in the current Region. TerminateJobFlows shuts a list of clusters (job flows) down.
The maximum number of active clusters can be run at the same time	Each supported Region: 500	Yes	The maximum number of active clusters can be run at the same time.

Name	Default	Adjust	Description
The maximum number of active instances per instance group	Each supported Region: 2,000	Yes	The maximum number of active instances per instance group.
The maximum number of subnets associated with each Amazon EMR Studio	Each supported Region: 5	No	The maximum number of subnets associated with each Amazon EMR Studio
The maximum rate at which your bucket replenishes for all EMR operations.	Each supported Region: 5	Yes	The maximum rate at which your bucket replenishes for all EMR operations.

Amazon EMR throttles the following API requests for each AWS account on a per-Region basis. For more information about how throttling is applied, see API Request Throttling in the *Amazon EC2 API Reference*.

Amazon EventBridge endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	events.us-east-2.amazonaws.com events-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	events.us-east-1.amazonaws.com events-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	events.us-west-1.amazonaws.com events-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	events.us-west-2.amazonaws.com events-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	events.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	events.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	events.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	events.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	events.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	events.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	events.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	events.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	events.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	events.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	events.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	events.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	events.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	events.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	events.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	events.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	events.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	events.me-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	events.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	events.us-gov-east-1.amazonaws.com events.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	events.us-gov-west-1.amazonaws.com events.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

For more information, see EventBridge Quotas in the *Amazon EventBridge User Guide*.

Amazon EventBridge Schemas endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	schemas.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	schemas.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	schemas.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	schemas.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	schemas.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	schemas.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	schemas.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	schemas.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	schemas.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	schemas.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	schemas.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	schemas.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	schemas.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	schemas.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	schemas.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	schemas.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	schemas.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
DiscoveredSchemas	Each supported Region: 200	Yes	The maximum number of schemas for a discovered schema registry that you can create in the current region

Name	Default	Adjust	Description
Discoverers	Each supported Region: 10	Yes	The maximum number of discoverers that you can create in the current region.
Registries	Each supported Region: 10	Yes	The maximum number of registries that you can create in the current region.
SchemaVersions	Each supported Region: 100	Yes	The maximum number of versions per schema that you can create in the current region.
Schemas	Each supported Region: 100	Yes	The maximum number of schemas per registry that you can create in the current region. (Except Discovered Schema Registry)

Amazon FinSpace quotas

The following are the service quotas for this service. Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service quotas

Name	Default	Adjust	Description
Attribute Sets	Each supported Region: 100	Yes	The maximum number of attribute sets that can exist in a FinSpace environment.
Clusters per user	Each supported Region: 1	No	The maximum number of FinSpace Spark clusters that can be active for each user.
Concurrent Changesets processing	Each supported Region: 10	Yes	The maximum number of concurrent changesets that can be processing per FinSpace environment
Concurrent data views processing	Each supported Region: 10	Yes	The maximum number of concurrently running data views processing per FinSpace environment.
Controlled Vocabularies and Categories	Each supported Region: 100	Yes	The maximum combined number of Controlled Vocabularies and

Name	Default	Adjust	Description
			Categories per FinSpace environment.
Data views per dataset	Each supported Region: 3	Yes	The maximum number of data views that can be created per dataset.
Datasets	Each supported Region: 1,500	Yes	The maximum number of datasets that can exist in a FinSpace environment.
Datasets per User Group	Each supported Region: 1,500	Yes	The maximum number of Datasets assigned per User Group.
Environments	Each supported Region: 2	Yes	The maximum number of FinSpace environments you can create per AWS account.
Files per Changeset	Each supported Region: 100,000	No	The maximum number of files in a single changeset.
Maximum file size per Changeset	Each supported Region: 50 Gigabytes	No	The maximum file size of any single file in a changeset.
Notebook storage	Each supported Region: 10 Gigabytes	No	The maximum amount of EFS storage per user notebook environment.
User Groups	Each supported Region: 20	Yes	The maximum number of User Groups per FinSpace environment.
Users	Each supported Region: 5	Yes	The maximum number of users that can exist in a FinSpace environment.

AWS Fault Injection Simulator endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	fis.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	fis.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	fis.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	fis.us-west-2.amazonaws.com	HTTPS
Africa (Cape Town)	af-south-1	fis.af-south-1.amazonaws.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	fis.ap-east-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	fis.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	fis.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	fis.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	fis.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	fis.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	fis.ca-central-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	fis.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	fis.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	fis.eu-west-2.amazonaws.com	HTTPS
Europe (Milan)	eu-south-1	fis.eu-south-1.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	fis.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	fis.eu-north-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Middle East (Bahrain)	me-south-1	fis.me-south-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	fis.sa-east-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	fis.us-gov-east-1.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	fis.us-gov-west-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
Action duration in hours	Each supported Region: 12	No	The maximum number of hours allowed to run one action in this account in the current Region.
Actions per experiment template	Each supported Region: 20	No	The maximum number of actions that you can create in an experiment template in this account in the current Region.
Active experiments	Each supported Region: 5	No	The maximum number of active experiments that you can run simultaneously in this account in the current Region.
Completed experiment data retention in days	Each supported Region: 120	No	The maximum number of days allowed for AWS FIS to retain data about completed experiments in this account in the current Region.
Experiment duration in hours	Each supported Region: 12	No	The maximum number of hours allowed to run one experiment in this account in the current Region.
Experiment templates	Each supported Region: 500	No	The maximum number of experiment templates that you can create in this account in the current Region.

Name	Default	Adjust	Description
Parallel actions per experiment	Each supported Region: 10	No	The maximum number of actions that you can run in parallel in an experiment in this account in the current Region.
Resources per experiment target	Each supported Region: 5	No	The maximum number of resources per experiment target in this account in the current Region, calculated after target resolution.
Stop conditions per experiment template	Each supported Region: 5	No	The maximum number of stop conditions that you can add to an experiment template in this account in the current Region.

AWS Firewall Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	fms.us-east-2.amazonaws.com fms-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	fms.us-east-1.amazonaws.com fms-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	fms.us-west-1.amazonaws.com fms-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	fms.us-west-2.amazonaws.com fms-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	fms.af-south-1.amazonaws.com fms-fips.af-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific	ap-east-1	fms.ap-east-1.amazonaws.com fms-fips.ap-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
(Hong Kong)				
Asia Pacific (Mumbai)	ap-south-1	fms.ap-south-1.amazonaws.com fms-fips.ap-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	fms.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	fms.ap-northeast-2.amazonaws.com fms-fips.ap-northeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	fms.ap-southeast-1.amazonaws.com fms-fips.ap-southeast-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	fms.ap-southeast-2.amazonaws.com fms-fips.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	fms.ap-northeast-1.amazonaws.com fms-fips.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	fms.ca-central-1.amazonaws.com fms-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	fms.eu-central-1.amazonaws.com fms-fips.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	fms.eu-west-1.amazonaws.com fms-fips.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	fms.eu-west-2.amazonaws.com fms-fips.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	fms.eu-south-1.amazonaws.com fms-fips.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	fms.eu-west-3.amazonaws.com fms-fips.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	fms.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	fms.me-south-1.amazonaws.com fms-fips.me-south-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	fms.sa-east-1.amazonaws.com fms-fips.sa-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	fms.us-gov-east-1.amazonaws.com fms-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	fms.us-gov-west-1.amazonaws.com fms-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS WAF Classic rule groups per AWS WAF Classic policy	Each supported Region: 2	No	The maximum number of AWS WAF Classic rule groups that you can use in a Firewall Manager AWS WAF Classic policy.
Amazon VPC instances in scope of a common security group policy	Each supported Region: 100	Yes	The maximum number of Amazon VPC instances that you can have in scope per Firewall Manager common security group policy per account. This number represents the combined count of VPCs that you own and VPCs that are shared with you.
Applications per application list	Each supported Region: 50	Yes	The maximum number of applications that you can define in an application list.
Audit security groups per security group content audit policy	Each supported Region: 1	Yes	The maximum number of audit security groups that you can use in a Firewall Manager content audit security group policy.
Custom managed application lists in any content audit security group policy setting	Each supported Region: 1	Yes	The maximum number of custom managed application lists that you can use in any setting in a Firewall Manager content audit security group policy.
Custom managed application lists per account	Each supported Region: 10	Yes	The maximum number of custom managed

Name	Default	Adjust	Description
			application lists that you can define for an account.
Custom managed protocol lists in any content audit security group policy setting	Each supported Region: 1	Yes	The maximum number of custom managed protocol lists that you can use in any setting in a Firewall Manager content audit security group policy.
Custom managed protocol lists per account	Each supported Region: 10	Yes	The maximum number of custom managed protocol lists that you can define for an account.
Explicitly included or excluded accounts per policy per Region	Each supported Region: 200	Yes	The maximum number of accounts per Region that you can explicitly include in scope or explicitly exclude from scope for a Firewall Manager policy.
Firewall Manager policies per organization per Region	Each supported Region: 20	Yes	The maximum number of Firewall Manager policies for any pair of Region and organization in AWS Organizations.
IPV4 CIDRs for a Network Firewall policy	Each supported Region: 50	No	The maximum number of IPV4 CIDR ranges that you can provide in a single Firewall Manager Network Firewall policy, for use in firewall endpoint management.
Organizational units in scope per policy per Region	Each supported Region: 20	Yes	The maximum number of organizational units that can be in scope of a Firewall Manager policy for any Region.
Primary security groups per common security group policy	Each supported Region: 1	Yes	The maximum number of primary security groups that you can use in a Firewall Manager common security group policy.
Protocols per protocol list	Each supported Region: 5	Yes	The maximum number of protocols that you can define in a protocol list.

Name	Default	Adjust	Description
Route 53 Resolver DNS Firewall rule groups per DNS Firewall policy	Each supported Region: 2	Yes	The maximum number of Route 53 Resolver DNS Firewall rule groups that you can use in a Firewall Manager DNS Firewall policy.
Rule groups per AWS WAF policy	Each supported Region: 50	Yes	The maximum number of rule groups that you can use in a Firewall Manager AWS WAF policy.
Tags to include or exclude resources per policy	Each supported Region: 8	Yes	The maximum number of tags that you can use to include or exclude resources for a Firewall Manager policy.
VPCs that a single Network Firewall policy can automatically remediate	Each supported Region: 1,000	No	The maximum number of VPCs that a single Firewall Manager Network Firewall policy can automatically remediate.
Web ACL capacity units (WCU) used in an AWS WAF policy	Each supported Region: 1,500	Yes	The maximum combined number of web ACL capacity units (WCU) for all of the rule groups used in a Firewall Manager AWS WAF policy. The WCU usage for a rule group is fixed by the rule group owner at creation time.

For more information, see AWS Firewall Manager quotas in the *AWS Firewall Manager Developer Guide*.

Amazon Forecast endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Forecast

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	forecast.us-east-2.amazonaws.com forecast-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	forecast.us-east-1.amazonaws.com forecast-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	forecast.us-west-2.amazonaws.com forecast-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	forecast.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	forecast.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	forecast.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	forecast.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	forecast.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	forecast.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	forecast.eu-west-1.amazonaws.com	HTTPS	

Amazon Forecast Query

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	forecastquery.us-east-2.amazonaws.com forecastquery-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	forecastquery.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		forecastquery-fips.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	forecastquery.us-west-2.amazonaws.com forecastquery-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	forecastquery.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	forecastquery.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	forecastquery.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	forecastquery.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	forecastquery.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	forecastquery.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	forecastquery.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Maximum cumulative size of all files in your Amazon S3 bucket	Each supported Region: 30 Gigabytes	Yes	The maximum cumulative size of all your files in your Amazon S3 bucket in GB
Maximum forecast horizon	Each supported Region: 500	No	The maximum prediction length (lesser of 500 data points or 1/3 of the target time series dataset length)
Maximum number of Explainabilities	Each supported Region: 1,000	No	Maximum number of Explainabilities that you can have in your Amazon Forecast account
Maximum number of Explainability exports	Each supported Region: 1,000	No	Maximum number of Explainability exports that you can have in your Amazon Forecast account

Name	Default	Adjust	Description
Maximum number of backtest windows	Each supported Region: 5	No	The maximum Back-Test Window Count (RecipeParameters)
Maximum number of columns in a related time series dataset	Each supported Region: 25	No	The maximum number of columns that can be in the RELATED_TIME_SERIES dataset
Maximum number of columns in a target time series dataset	Each supported Region: 13	No	The maximum number of columns that can be in the TARGET_TIME_SERIES dataset
Maximum number of columns in an item metadata dataset	Each supported Region: 10	No	The maximum number of columns that can be in the ITEM_METADATA dataset
Maximum number of dataset groups	Each supported Region: 500	Yes	The maximum number of dataset groups that you can have in your Amazon Forecast account
Maximum number of dataset import jobs	Each supported Region: 1,000	Yes	The maximum number of dataset imports that you can have in your Amazon Forecast account
Maximum number of datasets	Each supported Region: 1,500	Yes	The maximum number of datasets that you can have in your Amazon Forecast account
Maximum number of datasets in a dataset group	Each supported Region: 3	No	The maximum number of datasets that can be in a dataset group
Maximum number of files in your Amazon S3 bucket	Each supported Region: 10,000	No	The maximum number of files that you can have in your Amazon S3 bucket
Maximum number of forecast export jobs	Each supported Region: 1,000	Yes	The maximum number of forecast exports that you can have in your Amazon Forecast account
Maximum number of forecasts	Each supported Region: 100	Yes	The maximum number of forecasts that you can have in your Amazon Forecast account
Maximum number of predictor backtest export jobs	Each supported Region: 1,000	Yes	The maximum number of predictor backtest exports that you can have in your Amazon Forecast account

Name	Default	Adjust	Description
Maximum number of predictors	Each supported Region: 500	Yes	The maximum number of predictors that you can have in your Amazon Forecast account
Maximum number of rows in a dataset	ap-south-1: 1,000,000,000 Each of the other supported Regions: 3,000,000,000	Yes	The maximum number of rows that can be in a dataset
Maximum number of tags you can add to a resource	Each supported Region: 50	No	Maximum number of tags you can add to a resource
Maximum number of time series per predictor	ap-south-1: 1,000,000 Each of the other supported Regions: 5,000,000	Yes	The maximum number of time series allowed for training a predictor (number of items * number of unique values across forecast dimensions in the target time series dataset)
Maximum parallel running CreateAutoPredictor tasks	Each supported Region: 3	No	The maximum number of parallel running CreateAutoPredictor tasks
Maximum parallel running CreateDatasetImportJob tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateDatasetImportJob tasks
Maximum parallel running CreateExplainability tasks	Each supported Region: 3	No	Maximum number of parallel running CreateExplainability tasks
Maximum parallel running CreateExplainabilityExport tasks	Each supported Region: 3	No	Maximum number of parallel running CreateExplainabilityExport tasks
Maximum parallel running CreateForecast tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateForecast tasks
Maximum parallel running CreateForecastExportJob tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateForecastExportJob tasks
Maximum parallel running CreatePredictor tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreatePredictor tasks

Name	Default	Adjust	Description
Maximum parallel running CreatePredictor tasks using AutoML	Each supported Region: 3	Yes	The maximum number of parallel running CreatePredictor tasks using AutoML
Maximum parallel running CreatePredictorBacktestExportJob tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreatePredictorBacktestExportJob tasks
Maximum parallel running CreateWhatIfAnalysis tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateWhatIfAnalysis tasks
Maximum parallel running CreateWhatIfForecast tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateWhatIfForecast tasks
Maximum parallel running CreateWhatIfForecastExport tasks	Each supported Region: 3	Yes	The maximum number of parallel running CreateWhatIfForecastExport tasks
Maximum parallel running QueryForecast API tasks	Each supported Region: 10	No	10 concurrent forecasts, including 5 created with large datasets (anything over 20GB or 100,000 items).
Maximum parallel running Stop jobs per resource type	Each supported Region: 3	No	Maximum number of parallel Stop jobs in progress
Maximum time for which a forecast can be queried on console or QueryForecast API	Each supported Region: 30	No	Maximum time (in days) for which a forecast can be queried on console or QueryForecast API
The maximum number of AutoPredictors	Each supported Region: 500	No	The maximum number of AutoPredictors that you can have in your Amazon Forecast account
The maximum number of What-if Analyses	Each supported Region: 500	Yes	The maximum number of What-if Analyses that you can have in your Amazon Forecast account
The maximum number of What-if Forecast Exports	Each supported Region: 1,000	Yes	The maximum number of What-if Forecast Exports that you can have in your Amazon Forecast account
The maximum number of What-if Forecasts	Each supported Region: 100	Yes	The maximum number of What-if Forecasts that you can have in your Amazon Forecast account

Name	Default	Adjust	Description
The maximum number of What-if Forecasts in a CreateWhatIfForecastExport task	Each supported Region: 3	No	The maximum number of What-if Forecasts in a CreateWhatIfForecastExport task

Amazon Fraud Detector endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	frauddetector.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	frauddetector.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	frauddetector.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	frauddetector.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	frauddetector.ap-southeast-2.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	frauddetector.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent training jobs per model	Each supported Region: 1	No	Maximum number of concurrent training jobs per model.
Deployed model versions	Each supported Region: 5	No	Maximum number of deployed model versions per account.

Name	Default	Adjust	Description
Detectors per account	Each supported Region: 100	No	Maximum number of detectors per account.
EntityType per account	Each supported Region: 100	No	Maximum number of EntityType per account
EventType per account	Each supported Region: 100	No	Maximum number of EventType per account
Labels per account	Each supported Region: 100	No	Maximum number of labels per account
Models including external models per detector version	Each supported Region: 10	No	Maximum number of models including external models per detector version.
Models per account	Each supported Region: 50	No	Maximum number of models per account.
Outcomes per account	Each supported Region: 5,000	No	Maximum number of outcomes per account.
Rate of GetPrediction requests	Each supported Region: 200	Yes	Maximum number of GetPrediction API calls that you can make per second.
Rules per account	Each supported Region: 5,000	No	Maximum number of rules per account.
Size of GetPrediction requests	Each supported Region: 256 Kilobytes	No	Maximum size of payload per GetPrediction API call.
Total concurrent Event Type statistics update operations	Each supported Region: 1	Yes	Maximum total number of concurrent Event Type statistics update operations per account.
Total concurrent training jobs	Each supported Region: 3	No	Maximum total number of concurrent training jobs per account.
Training data size	Each supported Region: 5 Gigabytes	No	Maximum size of Fraud Detector model training data.
Variables per account	Each supported Region: 5,000	No	Maximum number of variables per account.
Versions per detector	Each supported Region: 100	No	Maximum number of draft versions per detector.
Versions per model	Each supported Region: 200	No	Maximum number of versions per model.

For more information, see Quotas in the *Amazon Fraud Detector User Guide*.

FreeRTOS endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The following tables provide a list of Region-specific endpoints that FreeRTOS supports for Over-the-Air functionality. The FreeRTOS console is also supported in these Regions.

FreeRTOS OTA Control Plane

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iot.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	iot.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	iot.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	iot.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iot.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	iot.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	iot.sa-east-1.amazonaws.com	HTTPS	

FreeRTOS OTA Data Plane

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	*prefix*.iot.us-east-2.amazonaws.com	MQTT
US East (N. Virginia)	us-east-1	*prefix*.iot.us-east-1.amazonaws.com	MQTT
US West (N. California)	us-west-1	*prefix*.iot.us-west-1.amazonaws.com	MQTT
US West (Oregon)	us-west-2	*prefix*.iot.us-west-2.amazonaws.com	MQTT
Asia Pacific (Hong Kong)	ap-east-1	*prefix*.iot.ap-east-1.amazonaws.com	MQTT
Asia Pacific (Mumbai)	ap-south-1	*prefix*.iot.ap-south-1.amazonaws.com	MQTT
Asia Pacific (Seoul)	ap-northeast-2	*prefix*.iot.ap-northeast-2.amazonaws.com	MQTT
Asia Pacific (Singapore)	ap-southeast-1	*prefix*.iot.ap-southeast-1.amazonaws.com	MQTT

Region Name	Region	Endpoint	Protocol
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.iot.ap-southeast-2.amazonaws.com	MQTT
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.iot.ap-northeast-1.amazonaws.com	MQTT
Canada (Central)	ca-central-1	*prefix*.iot.ca-central-1.amazonaws.com	MQTT
Europe (Frankfurt)	eu-central-1	*prefix*.iot.eu-central-1.amazonaws.com	MQTT
Europe (Ireland)	eu-west-1	*prefix*.iot.eu-west-1.amazonaws.com	MQTT
Europe (London)	eu-west-2	*prefix*.iot.eu-west-2.amazonaws.com	MQTT
Europe (Paris)	eu-west-3	*prefix*.iot.eu-west-3.amazonaws.com	MQTT
Europe (Stockholm)	eu-north-1	*prefix*.iot.eu-north-1.amazonaws.com	MQTT
Middle East (Bahrain)	me-south-1	*prefix*.iot.me-south-1.amazonaws.com	MQTT
South America (São Paulo)	sa-east-1	*prefix*.iot.sa-east-1.amazonaws.com	MQTT

Service quotas

FreeRTOS OTA Resource Quotas

Resource	Default
File size	16MB

FreeRTOS OTA Throttling

API	Transactions Per Second
CreateOTAUpdate	10 TPS
DeleteOTAUpdate	5 TPS
GetOTAUpdate	15 TPS
ListOTAUpdates	15 TPS

Amazon FSx endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services

offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	fsx.us-east-2.amazonaws.com fsx-fips.us-east-2.amazonaws.com fsx-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	fsx.us-east-1.amazonaws.com fsx-fips.us-east-1.amazonaws.com fsx-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	fsx.us-west-1.amazonaws.com fsx-fips.us-west-1.amazonaws.com fsx-fips.us-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	fsx.us-west-2.amazonaws.com fsx-fips.us-west-2.amazonaws.com fsx-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	fsx.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	fsx.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	fsx.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	fsx.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	fsx.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	fsx.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	fsx.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	fsx.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	fsx.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	fsx.ca-central-1.amazonaws.com fsx-fips.ca-central-1.amazonaws.com fsx-fips.ca-central-1.amazonaws.com	HTTPS HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	fsx.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	fsx.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	fsx.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	fsx.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	fsx.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	fsx.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	fsx.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	fsx.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	fsx.us-gov-east-1.amazonaws.com fsx-fips.us-gov-east-1.amazonaws.com fsx-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	fsx.us-gov-west-1.amazonaws.com fsx-fips.us-gov-west-1.amazonaws.com fsx-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Lustre Persistent HDD storage capacity (per file system)	Each supported Region: 102,000	Yes	The maximum amount of HDD storage capacity (in GiB) that you can configure for an Amazon FSx for Lustre persistent file system.
Lustre Persistent_1 file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for Lustre persistent_1 file systems that you can create in this account
Lustre Persistent_1 storage capacity	Each supported Region: 100,800	Yes	The maximum amount of storage capacity (in GiB) that you can configure for all Amazon FSx for Lustre persistent_1 file systems in this account.
Lustre Persistent_2 file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for Lustre persistent_2 file systems that you can create in this account
Lustre Persistent_2 storage capacity	Each supported Region: 100,800	Yes	The maximum amount of storage capacity (in GiB) that you can configure for all Amazon FSx for Lustre persistent_2 file systems in this account.
Lustre Scratch file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for Lustre scratch file systems that you can create in this account.
Lustre Scratch storage capacity	Each supported Region: 100,800	Yes	The maximum amount of storage capacity (in GiB) that you can configure for all Amazon FSx for Lustre scratch file systems in this account.
Lustre backups	Each supported Region: 500	Yes	The maximum number of user-initiated backups that you can have for all Amazon FSx for Lustre file systems in this account.
ONTAP SSD IOPS	Each supported Region: 1,000,000	Yes	The total amount of SSD IOPS allowed for all

Name	Default	Adjust	Description
			Amazon FSx for NetApp ONTAP file systems in this account.
ONTAP SSD storage capacity	Each supported Region: 524,288	Yes	The maximum amount of SSD storage capacity (in GiB) for all Amazon FSx for NetApp ONTAP file systems that you can have in this account.
ONTAP backups	Each supported Region: 10,000	Yes	The maximum number of user-initiated backups for all Amazon FSx for NetApp ONTAP file systems that you can have in this account.
ONTAP file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for NetApp ONTAP file systems that you can create in this account.
ONTAP throughput capacity	Each supported Region: 10,240	Yes	The total amount of throughput capacity (in Mbps) allowed for all Amazon FSx for NetApp ONTAP file systems in this account.
OpenZFS SSD storage capacity	us-east-1: 262,144 us-east-2: 262,144 us-west-2: 262,144 Each of the other supported Regions: 65,536	Yes	The maximum amount of SSD storage capacity (in GiB) that you can configure for all Amazon FSx for OpenZFS file systems in this account.
OpenZFS SSD storage capacity (per file system)	Each supported Region: 524,288	Yes	The maximum amount of SSD storage capacity (in GiB) that you can configure for an Amazon FSx for OpenZFS file system.
OpenZFS backups	Each supported Region: 10,000	Yes	The maximum number of user-initiated backups for all Amazon FSx for OpenZFS file systems that you can have in this account.

Name	Default	Adjust	Description
OpenZFS disk IOPS	Each supported Region: 160,000	Yes	The total amount of disk IOPS allowed for all Amazon FSx for OpenZFS file systems in this account.
OpenZFS file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for OpenZFS file systems that you can create in this account.
OpenZFS throughput capacity	Each supported Region: 10,240	Yes	The total amount of throughput capacity (in Mbps) allowed for all Amazon FSx for OpenZFS file systems in this account.
Windows HDD storage capacity	Each supported Region: 524,288	Yes	The maximum amount of HDD storage capacity (in GiB) allowed for all Amazon FSx for Windows File Server file systems in this account.
Windows SSD storage capacity	Each supported Region: 524,288	Yes	The maximum amount of SSD storage capacity (in GiB) for all Amazon FSx for Windows File Server file systems that you can have in this account.
Windows backups	Each supported Region: 500	Yes	The maximum number of user-initiated backups for all Amazon FSx for Windows File Server file systems that you can have in this account.
Windows file systems	Each supported Region: 100	Yes	The maximum number of Amazon FSx for Windows Server file systems that you can create in this account.
Windows throughput capacity	Each supported Region: 10,240	Yes	The total amount of throughput capacity (in MBps) allowed for all Amazon FSx for Windows file systems in this account.

For more information, see the following:

- FSx for Lustre quotas in the *Amazon FSx for Lustre User Guide*
- FSx for ONTAP quotas in the *FSx for ONTAP User Guide*
- FSx for OpenZFS quotas in the *FSx for OpenZFS User Guide*
- FSx for Windows quotas in the *Amazon FSx for Windows File Server User Guide*

Amazon GameLift endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Note
The following service endpoints table displays AWS Regions available as GameLift fleet home Regions. For remote location availability, see AWS Global Infrastructure.

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	gamelift.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	gamelift.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	gamelift.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	gamelift.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	gamelift.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	gamelift.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	gamelift.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	gamelift.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	gamelift.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	gamelift.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	gamelift.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	gamelift.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	gamelift.eu-west-2.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	gamelift.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Aliases per region	Each supported Region: 100	Yes	The maximum number of aliases allowed per region.
Build capacity	Each supported Region: 100 Gigabytes	No	The maximum capacity (in gigabytes) available for uploaded game builds per region. You can delete unused builds as needed to make room for additional or larger builds.
Builds per region	Each supported Region: 1,000	Yes	The maximum number of game server builds allowed (in any status) per region.
Fleets per region	Each supported Region: 10	Yes	The maximum number of fleets allowed (in any status) per region.
Game server groups per region	Each supported Region: 20	Yes	The maximum number of game server groups allowed per region.
Game servers per game server group	Each supported Region: 1,000	Yes	The maximum number of game servers allowed per game server group.
Game session log file size	Each supported Region: 200 Megabytes	No	The maximum file size (in megabytes) allowed for game session logs that are uploaded to Amazon GameLift at the conclusion of a game session.
Game session queues per region	Each supported Region: 20	Yes	The maximum number of game session queues allowed per region.
Instances per region	Each supported Region: 15	Yes	The maximum number of instances that can be used simultaneously per region. Limit includes on-

Name	Default	Adjust	Description
			demand and spot instances. Instances are also limited by instance type; view these limits and current allocations in the Amazon GameLift console.
Key-value pairs per string to double map matchmaking player attribute	Each supported Region: 10	No	The maximum number of key-value pairs in a string to double map (SDM) matchmaking player attribute.
Locations in a fleet per region	Each supported Region: 4	Yes	The maximum number of locations allowed (in any status) in a fleet per region.
Matchmaking configurations per region	Each supported Region: 100	Yes	The maximum number of matchmaking configurations allowed per region.
Matchmaking rule sets per region	Each supported Region: 1,000	Yes	The maximum number of matchmaking rule sets allowed per region.
Player attributes per matchmaking player	Each supported Region: 10	No	The maximum number of player attributes for each player in a matchmaking ticket.
Player sessions per game session	Each supported Region: 200	No	The maximum number of player sessions that can join a game session.
Players per matchmaking ticket	Each supported Region: 10	No	The maximum number of players that can be included in a matchmaking ticket.
Queue destinations per game session queue	Each supported Region: 10	Yes	The maximum number of queue destinations allowed per game session queue.
Scripts per region	Each supported Region: 1,000	Yes	The maximum number of game server scripts allowed per region.
Server processes per instance (GameLift SDK v2)	Each supported Region: 1	No	The maximum number of concurrent server processes that can run on a single instance when using the Amazon GameLift SDK version 2 or earlier.

Name	Default	Adjust	Description
Server processes per instance (GameLift SDK v3 and up)	Each supported Region: 50	No	The maximum number of concurrent server processes that can run on a single instance when using the Amazon GameLift SDK version 3 or later.
Strings per string list matchmaking player attribute	Each supported Region: 100	No	The maximum number of strings in a string list (SL) matchmaking player attribute.

Amazon GameSparks endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	gamesparks.us-east-1.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	ws.gamesparks.us-east-1.amazonaws.com	WSS	

Service quotas

Name	Default	Adjust	Description
Cloud code script size	Each supported Region: 8,000	No	The maximum number of characters in a cloud code script.
Concurrent active players	Each supported Region: 10	No	The maximum number of concurrent active players for each stage of a game. The limit is not adjustable during preview.
Game configuration size	Each supported Region: 1 Megabytes	No	The maximum size (in MB) of your game configuration.

Name	Default	Adjust	Description
Games	Each supported Region: 10	No	The maximum number of games that you can create in this account.
Rate of game client messages	Each supported Region: 1	No	The maximum number of messages per second that a game client can send to the GameSparks backend. The limit is not adjustable during preview.
Rate of game management calls	Each supported Region: 2 per second	No	The maximum number of game management service API calls per second that you can make in this account. The limit is not adjustable during preview.
Rate of runtime calls	Each supported Region: 10 per second	No	The maximum number of runtime service API calls per second that you can make in this account. The limit is not adjustable during preview.
Snapshots per game	Each supported Region: 1,000	No	The maximum number of snapshots that you can store in a game.
WebSocket message size	Each supported Region: 16,384 Bytes	No	The maximum size (in bytes) of a WebSocket message.

Amazon S3 Glacier endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	glacier.us-east-2.amazonaws.com glacier-fips.us-east-2.amazonaws.com	HTTP and HTTPS HTTPS	
US East (N. Virginia)	us-east-1	glacier.us-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
		glacier-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	glacier.us-west-1.amazonaws.com glacier-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	glacier.us-west-2.amazonaws.com glacier-fips.us-west-2.amazonaws.com	HTTP and HTTPS HTTPS	
Africa (Cape Town)	af-south-1	glacier.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	glacier.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	glacier.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	glacier.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	glacier.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	glacier.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	glacier.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	glacier.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	glacier.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	glacier.ca-central-1.amazonaws.com glacier-fips.ca-central-1.amazonaws.com	HTTP and HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	glacier.eu-central-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	glacier.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	glacier.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	glacier.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	glacier.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	glacier.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	glacier.me-south-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	glacier.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	glacier.us-gov-east-1.amazonaws.com glacier.us-gov-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	glacier.us-gov-west-1.amazonaws.com glacier.us-gov-west-1.amazonaws.com	HTTP and HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Archive size in GB.	Each supported Region: 40,000 Gigabytes	No	The maximum size of an archive.
Archive size.	Each supported Region: 4 Megabytes	No	The minimum size (in MB) of an archive (or part).
Multipart parts size.	Each supported Region: 4 Gigabytes	No	The maximum size (in GB) of parts allowed in a multipart upload.
Number of multipart parts.	Each supported Region: 10,000	No	The maximum number of parts allowed in a multipart upload.

Name	Default	Adjust	Description
Number of random restore requests.	Each supported Region: 35	No	The number of random restore requests per PiB stored per day.
Number of vault tags.	Each supported Region: 50	No	The maximum number of tags that can be applied to a vault.
Provisioned capacity units	Each supported Region: 2	No	The maximum number of provisioned capacity units available to purchase per account.
Vaults per account	Each supported Region: 1,000	No	The maximum number of vaults an account can have.

AWS Global Accelerator endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	Amazon Route 53 Hosted Zone ID*
US West (Oregon) Region	us-west-2	globalaccelerator.amazonaws.com	HTTPS	`Z2BJ6XQ5FK7U4H`

Service quotas

Name	Default	Adjust	Description
Accelerators per AWS account	Each supported Region: 20	Yes	The maximum number of accelerators for each AWS account.
Endpoint groups per accelerator	Each supported Region: 42	No	The maximum number of endpoint groups per accelerator.
Endpoints per endpoint group - Application Load Balancers	Each supported Region: 10	No	The maximum number of Application Load Balancers

Name	Default	Adjust	Description
			in an endpoint group containing only ALB endpoints.
Endpoints per endpoint group - EC2 instances	Each supported Region: 10	Yes	The maximum number of EC2 instances in an endpoint group containing only EC2 instance endpoints.
Endpoints per endpoint group - Elastic IP addresses	Each supported Region: 10	Yes	The maximum number of Elastic IP addresses in an endpoint group containing only Elastic IP address endpoints.
Endpoints per endpoint group - Network Load Balancers	Each supported Region: 10	No	The maximum number of Network Load Balancers in an endpoint group containing only NLB endpoints.
Endpoints per endpoint group - VPC subnets	Each supported Region: 10	Yes	The maximum number of VPC subnets in an endpoint group containing only subnet endpoints.
Endpoints per endpoint group - more than one endpoint type	Each supported Region: 10	No	The maximum number of endpoints in an endpoint group containing more than one endpoint type.
Listeners per accelerator	Each supported Region: 10	Yes	The maximum number of listeners for each accelerator.
Port overrides per endpoint group	Each supported Region: 10	Yes	The maximum number of port overrides for each endpoint group.
Port ranges per listener	Each supported Region: 10	No	The maximum number of port ranges for each listener.
Tags per accelerator	Each supported Region: 50	No	The maximum number of tags for each accelerator.

AWS Glue endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	glue.us-east-2.amazonaws.com glue-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	glue.us-east-1.amazonaws.com glue-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	glue.us-west-1.amazonaws.com glue-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	glue.us-west-2.amazonaws.com glue-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	glue.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	glue.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	glue.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	glue.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	glue.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	glue.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	glue.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	glue.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	glue.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	glue.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	glue.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	glue.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	glue.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	glue.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	glue.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	glue.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	glue.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	glue.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	glue.us-gov-east-1.amazonaws.com glue-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	glue.us-gov-west-1.amazonaws.com glue-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent machine learning task runs per transform	Each supported Region: 3	Yes	The maximum number of concurrent task runs per machine learning transform for this account.
Label file size	Each supported Region: 10 Megabytes	Yes	The maximum file size of an individual label file that can be imported.
Max concurrent job runs per account	Each supported Region: 200	Yes	The maximum number of concurrent job runs in your account.

Name	Default	Adjust	Description
Max concurrent job runs per job	Each supported Region: 1,000	Yes	The maximum number of concurrent job runs for a job.
Max connection per account	Each supported Region: 1,000	Yes	The maximum number of connections in your account.
Max databases per account	Each supported Region: 10,000	Yes	The maximum number of databases in your account.
Max databases per catalog	Each supported Region: 10,000	Yes	The maximum number of databases per catalog.
Max development endpoint per account	Each supported Region: 25	Yes	The maximum number of development endpoints in your account.
Max dpus per dev endpoint	Each supported Region: 50	Yes	The maximum number of DPUs in your development endpoint.
Max functions per account	Each supported Region: 100	Yes	The maximum number of functions in your account.
Max functions per database	Each supported Region: 100	Yes	The maximum number of functions per database.
Max jobs per account	Each supported Region: 1,000	Yes	The maximum number of jobs in your account.
Max jobs per trigger	Each supported Region: 50	Yes	The maximum number of jobs that a trigger can start.
Max partitions per account	Each supported Region: 20,000,000	Yes	The maximum number of partitions in your account.
Max partitions per table	Each supported Region: 10,000,000	Yes	The maximum number of partitions per table.
Max security configurations per account	Each supported Region: 250	Yes	The maximum number of security configurations in your account.
Max spare compute capacity consumed in data processing units (DPUs) per account.	Each supported Region: 50	Yes	The maximum spare compute capacity in data processing units (DPUs) you can use concurrently in your account.
Max table versions per account	Each supported Region: 1,000,000	Yes	The maximum number of table versions in your account.
Max table versions per table	Each supported Region: 100,000	Yes	The maximum number of table versions per table.

Name	Default	Adjust	Description
Max tables per account	Each supported Region: 1,000,000	Yes	The maximum number of tables in your account.
Max tables per database	Each supported Region: 200,000	Yes	The maximum number of tables per database.
Max task dpus per account	us-east-1: 1,000 us-east-2: 1,000 us-west-2: 1,000 ap-northeast-1: 1,000 ap-southeast-2: 1,000 eu-west-1: 1,000 Each of the other supported Regions: 500	Yes	The maximum compute capacity in data processing units (DPUs) you can use concurrently in your account.
Max triggers per account	Each supported Region: 1,000	Yes	The maximum number of triggers in your account.
Number of Schema Registries.	Each supported Region: 10	Yes	The maximum number of Schema Registries per AWS Region for this account.
Number of Schema Versions.	Each supported Region: 1,000	Yes	The maximum number of Schema Versions per AWS Region for this account.
Number of crawlers per account	Each supported Region: 1,000	Yes	The maximum number of crawlers in your account.
Number of crawlers running concurrently per account	Each supported Region: 150	Yes	The maximum number of crawlers running concurrently in your account.
Number of machine learning transforms	Each supported Region: 100	Yes	The maximum number of machine learning transforms for this account.
Number of metadata key value pairs per Schema Version.	Each supported Region: 10	No	The maximum number of Schema Version metadata key value pairs per Schema Version.
Number of workflows	Each supported Region: 250	Yes	The maximum number of workflows in your account.

Name	Default	Adjust	Description
Total concurrent machine learning task runs for transforms per account	Each supported Region: 30	Yes	The total number of concurrent machine learning transform task runs for machine learning transforms for this account.

For more information, see AWS Glue in the *AWS GovCloud (US) User Guide*.

Amazon Managed Grafana endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	grafana.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	grafana.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	grafana.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	grafana.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	grafana.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	grafana.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	grafana.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	grafana.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	grafana.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	grafana.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of workspaces	Each supported Region: 5	Yes	The maximum number of workspaces that you can have in this account in the current region.
Rate of AssociateLicense requests	Each supported Region: 1 per second	No	The maximum number of AssociateLicense requests that you can make, per second, in this account in the current region.
Rate of CreateWorkspace requests	Each supported Region: 1 per second	No	The maximum number of CreateWorkspace requests that you can make, per second, in this account in the current region.
Rate of DeleteWorkspace requests	Each supported Region: 1 per second	No	The maximum number of DeleteWorkspace requests that you can make, per second, in this account in the current region.
Rate of DescribeWorkspace requests	Each supported Region: 5 per second	No	The maximum number of DescribeWorkspace requests that you can make, per second, in this account in the current region.
Rate of DescribeWorkspaceAuthentication requests	Each supported Region: 1 per second	No	The maximum number of DescribeWorkspaceAuthentication requests that you can make, per second, in this account in the current region.
Rate of DisassociateLicense requests	Each supported Region: 1 per second	No	The maximum number of DisassociateLicense requests that you can make, per second, in this account in the current region.

Name	Default	Adjust	Description
Rate of ListPermissions requests	Each supported Region: 10 per second	No	The maximum number of ListPermissions requests that you can make, per second, in this account in the current region.
Rate of ListWorkspaces requests	Each supported Region: 5 per second	No	The maximum number of ListWorkspaces requests that you can make, per second, in this account in the current region.
Rate of UpdatePermissions requests	Each supported Region: 10 per second	No	The maximum number of UpdatePermissions requests that you can make, per second, in this account in the current region.
Rate of UpdateWorkspace requests	Each supported Region: 10 per second	No	The maximum number of UpdateWorkspace requests that you can make, per second, in this account in the current region.
Rate of UpdateWorkspaceAuthentication requests	Each supported Region: 1 per second	No	The maximum number of UpdateWorkspaceAuthentication requests that you can make, per second, in this account in the current region.

Your account has the following quotas related to workspaces.

Name	Default	Adjustable	Adjustable quotas
Alerts	100 per workspace	No	Not applicable
Dashboards	100 per workspace	No	Not applicable
Data sources	100 per workspace	No	Not applicable
Users	500 per workspace	No	Not applicable

AWS Glue DataBrew endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	databrew.us-east-2.amazonaws.com databrew-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	databrew.us-east-1.amazonaws.com databrew-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	databrew.us-west-1.amazonaws.com databrew-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	databrew.us-west-2.amazonaws.com databrew-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	databrew.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	databrew.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	databrew.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	databrew.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	databrew.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	databrew.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	databrew.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	databrew.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	databrew.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	databrew.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	databrew.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	databrew.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	databrew.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	databrew.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	databrew.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	databrew.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent jobs per AWS account	Each supported Region: 10	Yes	The maximum number of jobs that you can run at the same time in this AWS account.
Datasets per AWS account	Each supported Region: 100	Yes	The maximum number of datasets that you can create in this AWS account.
Jobs per AWS account	Each supported Region: 100	Yes	The maximum number of jobs that you can create in this AWS account.
Node capacity per AWS account	Each supported Region: 300	Yes	The maximum number of nodes available to jobs running in this AWS account.
Open projects per AWS account	Each supported Region: 10	Yes	The maximum number of projects that you can open concurrently in this AWS account.
Projects per AWS account	Each supported Region: 100	Yes	The maximum number of projects that you can create in this AWS account.

Name	Default	Adjust	Description
Recipes per AWS account	Each supported Region: 100	Yes	The maximum number of recipes that you can create in this AWS account.
Rules per ruleset	Each supported Region: 100	Yes	The maximum number of rules that you can have in a ruleset.
Rulesets per AWS account	Each supported Region: 100	Yes	The maximum number of rulesets that you can create in this AWS account.
Rulesets per dataset	Each supported Region: 10	Yes	The maximum number of rulesets that you can create for a dataset.
Schedules per AWS account	Each supported Region: 10	Yes	The maximum number of schedules that you can create in this AWS account.
Versions per recipe	Each supported Region: 100	Yes	The maximum number of versions that you can create for a recipe.

AWS Ground Station endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	groundstation.us-east-2.amazonaws.com groundstation-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	groundstation.us-east-1.amazonaws.com groundstation-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	groundstation.us-west-2.amazonaws.com groundstation-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	groundstation.af-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	groundstation.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	groundstation.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	groundstation.ap-southeast-2.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	groundstation.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	groundstation.eu-west-1.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	groundstation.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	groundstation.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	groundstation.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Config limit	Each supported Region: 100	Yes	The maximum number of configs allowed.
Contact Lead Time Maximum	Each supported Region: 7	Yes	Maximum lead time allowed for scheduling a contact in days
Dataflow endpoint group limit	Each supported Region: 100	Yes	The maximum number of dataflow endpoint groups allowed.
Dataflow endpoints per group limit	Each supported Region: 20	Yes	The maximum number of dataflow endpoints per group allowed.
Maximum Contact Duration	Each supported Region: 20	Yes	The maximum contact duration permitted in minutes

Name	Default	Adjust	Description
Mission profile limit	Each supported Region: 100	Yes	The maximum number of mission profiles allowed.
Scheduled Contacts Limit	Each supported Region: 100	Yes	Maximum number of scheduled contacts allowed
Scheduled Minutes Limit	Each supported Region: 1,000	Yes	The maximum number of scheduled minutes allowed

Amazon GuardDuty endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	guardduty.us-east-2.amazonaws.com guardduty-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	guardduty.us-east-1.amazonaws.com guardduty-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	guardduty.us-west-1.amazonaws.com guardduty-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	guardduty.us-west-2.amazonaws.com guardduty-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	guardduty.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	guardduty.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	guardduty.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	guardduty.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Osaka)	ap-northeast-3	guardduty.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	guardduty.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	guardduty.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	guardduty.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	guardduty.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	guardduty.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	guardduty.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	guardduty.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	guardduty.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	guardduty.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	guardduty.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	guardduty.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	guardduty.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	guardduty.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	guardduty.us-gov-east-1.amazonaws.com guardduty.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	guardduty.us-gov-west-1.amazonaws.com guardduty.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Detectors	Each supported Region: 1	No	The maximum number of detector resources that you can create per AWS account per region.
Filters	Each supported Region: 100	No	The maximum number of saved filters per AWS account per region.
Finding retention period	Each supported Region: 90	No	The maximum number of days a finding is retained. After 90 days findings are deleted.
Member accounts	Each supported Region: 5,000	No	The maximum number of member accounts associated with a master account. You can have one master account per detector.
Threat intel sets	Each supported Region: 6	Yes	The maximum number of Threat intel sets that you can add per AWS account per region.
Trusted IP sets	Each supported Region: 1	No	The maximum number of Trusted IP sets that you can add per AWS account per region.

AWS Health endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	health.us-east-2.amazonaws.com global.health.amazonaws.com health-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	health.us-east-1.amazonaws.com global.health.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	health.us-gov-west-1.amazonaws.com health-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

For more information, see Accessing the AWS Health API in the *AWS Health User Guide*.

Amazon HealthLake endpoints and quotas

Regions and endpoints for Amazon HealthLake

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	healthlake.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	healthlake.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	healthlake.us-west-2.amazonaws.com	HTTPS	

Throttling and quotas for Amazon HealthLake

The following table describes throttling limits for resource management within Amazon HealthLake for each customer account. For information about limits that can be changed, see AWS Service Limits. For all operations, users will receive a `ThrottlingException` error message if throttling limits are exceeded.

A maxmimum quota of ten Data Stores are allowed per an account. For information about requesting a quota increase, see the console support center to create a case.

Description	Limit in Transactions per second(TPS) or requests per minute
CreateFHIRDatastore and DeleteFHIRDatastore	1 request per minute
DescribeFHIRDatastore	10 TPS
ListFHIRDatastores	10 TPS
CreateResource, ReadResource, DeleteResource	20 TPS
UpdateResource	100 TPS
GetCapabilities	10 TPS

Description	Limit in Transactions per second(TPS) or requests per minute
SearchWithGet and SearchWithPost	100 TPS
StartFHIRImportJob and StartFHIRExportJob	1 request per minute, only 1 job permitted at a time
DescribeFHIRImportJob, DescribeFHIRExportJob, ListFHIRImportJob, ListFHIRExportJob	10 TPS
ListFHIRImportJobs, ListFHIRExportJobs	10 TPS
TagResource, UntagResource, ListTagsforResource	10 TPS
Maximum characters for a medical note within the DocumentReference ResourceType (CreateResource/UpdateResource)	40,000 characters

The following table lists the quotas for `Import` jobs.

Description	Limit
Maximum import job size	50 GB
Maximum import file size	50 MB
Maximum number of files	10,000
Supported file extension	'.ndjson'

Amazon Honeycode endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Honeycode has a single endpoint: honeycode.us-west-2.amazonaws.com (HTTPS).

Service quotas

For more information, see System Limits.

AWS Identity and Access Management endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iam.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	iam.amazonaws.com iam-fips.amazonaws.com iam-fips.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	iam.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	iam.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	iam.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	iam.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	iam.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iam.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	iam.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iam.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	iam.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iam.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iam.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iam.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	iam.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iam.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iam.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	iam.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	iam.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	iam.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	iam.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	iam.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	iam.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	iam.us-gov.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	iam.us-gov.amazonaws.com iam.us-gov.amazonaws.com iam.us-gov.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Access keys per user	Each supported Region: 2	No	The maximum number of access keys that you can create for an IAM user.
Customer managed policies per account	Each supported Region: 1,500	Yes	The maximum number of customer managed policies that you can create in this account.
Groups per account	Each supported Region: 300	Yes	The maximum number of IAM groups that you can create in this account.
IAM groups per user	Each supported Region: 10	No	The maximum number of IAM groups to which you can add an IAM user.
Identity providers per IAM SAML provider object	Each supported Region: 10	No	The maximum number of identity providers (IdPs) that you can add to an IAM SAML provider object.
Instance profiles per account	Each supported Region: 1,000	Yes	The maximum number of instance profiles that you can create in this account.
Keys per SAML provider	Each supported Region: 10	No	The maximum number of keys that you can assign to a SAML provider.
MFA devices per user	Each supported Region: 1	No	The maximum number of MFA devices that you can configure for an IAM user.
Managed policies per group	Each supported Region: 10	No	The maximum number of IAM managed policies that you can attach to an IAM group.
Managed policies per role	Each supported Region: 10	Yes	The maximum number of IAM managed policies that you can attach to an IAM role.
Managed policies per user	Each supported Region: 10	Yes	The maximum number of IAM managed policies that you can attach to an IAM user.
Managed policy length	Each supported Region: 6,144	No	The maximum number of characters in an IAM managed policy.

Name	Default	Adjust	Description
OpenId connect providers per account	Each supported Region: 100	No	Maximum number of OpenID connectors allowed for an AWS account.
Role trust policy length	Each supported Region: 2,048	Yes	The maximum number of characters in an IAM role trust policy.
Roles per account	Each supported Region: 1,000	Yes	The maximum number of IAM roles that you can create in this account.
SAML providers per account	Each supported Region: 100	No	The maximum number of SAML providers that you can create in this account.
SSH Public keys per user	Each supported Region: 5	No	The maximum number of SSH public keys that you can assign to an IAM user.
Server certificates per account	Each supported Region: 20	Yes	The maximum number of server certificates that you can store in this account.
Signing certificates per user	Each supported Region: 2	No	The maximum number of signing certificates that you can upload for an IAM user.
Tags per role	Each supported Region: 50	No	The maximum number of tags that you can assign to an IAM role.
Tags per user	Each supported Region: 50	No	The maximum number of tags that you can assign to an IAM user.
Users per account	Each supported Region: 5,000	No	The maximum number of IAM users you can create for your AWS account.
Versions per managed policy	Each supported Region: 5	No	The maximum number of versions that you can save to an IAM managed policy in this account before you must overwrite an existing version.

For more information about IAM quotas, see IAM and AWS STS quotas in the *IAM User Guide*.

IAM Access Analyzer endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	access-analyzer.us-east-2.amazonaws.com access-analyzer-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	access-analyzer.us-east-1.amazonaws.com access-analyzer-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	access-analyzer.us-west-1.amazonaws.com access-analyzer-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	access-analyzer.us-west-2.amazonaws.com access-analyzer-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	access-analyzer.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	access-analyzer.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	access-analyzer.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	access-analyzer.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	access-analyzer.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	access-analyzer.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	access-analyzer.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	access-analyzer.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	access-analyzer.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	access-analyzer.ca-central-1.amazonaws.com access-analyzer-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	access-analyzer.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	access-analyzer.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	access-analyzer.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	access-analyzer.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	access-analyzer.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	access-analyzer.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	access-analyzer.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	access-analyzer.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	access-analyzer.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	access-analyzer.us-gov-east-1.amazonaws.com access-analyzer.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	access-analyzer.us-gov-west-1.amazonaws.com access-analyzer.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Access previews per analyzer per hour	Each supported Region: 1,000	Yes	The maximum number of access previews per analyzer per hour.

Name	Default	Adjust	Description
Analyzers with an account zone of trust	Each supported Region: 1	No	The maximum number of analyzers with an account zone of trust per AWS account per Region.
Analyzers with an organization zone of trust	Each supported Region: 5	Yes	The maximum number of analyzers per Region in an AWS account with an organization zone of trust.
Archive rules per analyzer	Each supported Region: 100	Yes	The maximum number of archive rules per analyzer.
CloudTrail log files processed per policy generation	Each supported Region: 100,000	No	The maximum number of CloudTrail log files that can be processed per policy generation.
Concurrent policy generations	Each supported Region: 1	No	The maximum number of concurrent policy generations.
Policy generation CloudTrail data size	Each supported Region: 25 Gigabytes	No	The maximum size of CloudTrail data per policy generation.
Policy generation CloudTrail time range	Each supported Region: 90	No	The maximum CloudTrail time range that you can select in days when you generate a policy.
Policy generations per day	af-south-1: 5 ap-east-1: 5 eu-south-1: 5 me-south-1: 5 Each of the other supported Regions: 50	No	The maximum number of policy generations per day.

AWS Identity and Access Management Roles Anywhere endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rolesanywhere.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	rolesanywhere.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	rolesanywhere.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	rolesanywhere.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	rolesanywhere.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	rolesanywhere.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	rolesanywhere.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	rolesanywhere.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	rolesanywhere.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rolesanywhere.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rolesanywhere.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rolesanywhere.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rolesanywhere.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	rolesanywhere.ca-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	rolesanywhere.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	rolesanywhere.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	rolesanywhere.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	rolesanywhere.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	rolesanywhere.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	rolesanywhere.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	rolesanywhere.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	rolesanywhere.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Resource	Description	Default value	Adjustable
Combined rate of trust anchor requests	The maximum transactions per second for ListTrustAnchors, CreateTrustAnchor, GetTrustAnchor, UpdateTrustAnchor, DeleteTrustAnchor, EnableTrustAnchor, and DisableTrustAnchor requests combined.	1 per second	Yes
Combined rate of profile requests	The maximum transactions per second for ListProfiles, CreateProfile, GetProfile, UpdateProfile, DeleteProfile, EnableProfile, and DisableProfile requests combined.	1 per second	Yes

Resource	Description	Default value	Adjustable
Combined rate of subject requests	The maximum transactions per second for ListSubjects and GetSubject requests combined.	1 per second	Yes
Combined rate of tagging requests	The maximum transactions per second for TagResource, UntagResource, and ListTagsForResource requests combined.	1 per second	Yes
Combined rate of CRL requests	The maximum transactions per second for ListCrls, GetCrl, ImportCrl, UpdateCrl, DeleteCrl, EnableCrl, and DisableCrl requests combined.	1 per second	Yes
Rate of CreateSession requests	The maximum transactions per second for CreateSession requests.	10 per second	Yes
Trust anchors	The maximum number of trust anchors that you can create within an account.	50	Yes
Profiles	The maximum number of profiles that you can create within an account.	250	Yes
CRLs per trust anchor	The maximum number of Certificate Revocation Lists (CRLs) that you can create per trust anchor within an account.	2	No
Certificates per trust anchor	The maximum number of certificates that you can create per trust anchor within an account.	2	No

For more information, see IAM Roles Anywhere quotas in the *IAM Roles Anywhere User Guide*.

AWS Systems Manager Incident Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Incident Manager incidents

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ssm-incidents.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	ssm-incidents.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	ssm-incidents.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	ssm-incidents.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ssm-incidents.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ssm-incidents.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ssm-incidents.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ssm-incidents.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ssm-incidents.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ssm-incidents.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	ssm-incidents.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	ssm-incidents.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ssm-incidents.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ssm-incidents.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ssm-incidents.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ssm-incidents.sa-east-1.amazonaws.com	HTTPS	

Incident Manager contacts

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	ssm-contacts.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	ssm-contacts.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	ssm-contacts.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	ssm-contacts.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	ssm-contacts.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	ssm-contacts.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	ssm-contacts.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	ssm-contacts.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	ssm-contacts.ap-southeast-2.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	ssm-contacts.ca-central-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	ssm-contacts.eu-central-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Europe (Ireland)	eu-west-1	ssm-contacts.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	ssm-contacts.eu-west-2.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	ssm-contacts.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	ssm-contacts.eu-north-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	ssm-contacts.sa-east-1.amazonaws.com	HTTPS

Service quotas

Incident Manager incidents

Name	Default	Adjust	Description
All other operations requests per second	Each supported Region: 10	Yes	The maximum number of all other operation requests per second that you can send in this account in the current region.
CreateReplicationSet requests per second	Each supported Region: 1	Yes	The maximum number of CreateReplicationSet requests per second that you can send in this account in the current region.
CreateResponsePlan requests per second	Each supported Region: 5	Yes	The maximum number of CreateResponsePlan requests per second that you can send in this account in the current region.
CreateTimelineEvent requests per second	Each supported Region: 5	Yes	The maximum number of CreateTimelineEvent requests per second that you can send in this account in the current region.
DeleteIncidentRecord requests per second	Each supported Region: 5	Yes	The maximum number of DeleteIncidentRecord requests per second that you can send in this account in the current region.

Name	Default	Adjust	Description
DeleteReplicationSet requests per second	Each supported Region: 1	Yes	The maximum number of DeleteReplicationSet requests per second that you can send in this account in the current region.
DeleteResourcePolicy requests per second	Each supported Region: 5	Yes	The maximum number of DeleteResourcePolicy requests per second that you can send in this account in the current region.
DeleteResponsePlan requests per second	Each supported Region: 5	Yes	The maximum number of DeleteResponsePlan requests per second that you can send in this account in the current region.
DeleteTimelineEvent requests per second	Each supported Region: 5	Yes	The maximum number of DeleteTimelineEvent requests per second that you can send in this account in the current region.
Incidents per response plan per month	Each supported Region: 200	Yes	The maximum number of incidents per response plan per month.
PutResourcePolicy requests per second	Each supported Region: 5	Yes	The maximum number of PutResourcePolicy requests per second that you can send in this account in the current region.
Regions per replication set	Each supported Region: 3	No	The maximum number of regions per replication set in this account.
Related items per incident	Each supported Region: 50	Yes	The maximum number of related items per incident.
Replication sets per account	Each supported Region: 1	No	The maximum number of replication sets in this account.
StartIncident requests per second	Each supported Region: 5	Yes	The maximum number of StartIncident requests per second that you can send in this account in the current region.

Name	Default	Adjust	Description
TagResource requests per second	Each supported Region: 5	Yes	The maximum number of TagResource requests per second that you can send in this account in the current region.
Timeline events per incident	Each supported Region: 1,000	Yes	The maximum number of timeline events per incident.
UntagResource requests per second	Each supported Region: 5	Yes	The maximum number of UntagResource requests per second that you can send in this account in the current region.
UpdateDeleteProtection requests per second	Each supported Region: 1	Yes	The maximum number of UpdateDeleteProtection requests per second that you can send in this account in the current region.
UpdateIncidentRecord requests per second	Each supported Region: 5	Yes	The maximum number of UpdateIncidentRecord requests per second that you can send in this account in the current region.
UpdateRelatedItems requests per second	Each supported Region: 5	Yes	The maximum number of UpdateRelatedItems requests per second that you can send in this account in the current region.
UpdateReplicationSet requests per second	Each supported Region: 1	Yes	The maximum number of UpdateReplicationSet requests per second that you can send in this account in the current region.
UpdateResponsePlan requests per second	Each supported Region: 5	Yes	The maximum number of UpdateResponsePlan requests per second that you can send in this account in the current region.

Name	Default	Adjust	Description
UpdateTimelineEvent requests per second	Each supported Region: 5	Yes	The maximum number of UpdateTimelineEvent requests per second that you can send in this account in the current region.

Incident Manager contacts

Name	Default	Adjust	Description
AcceptPage API throttle quota	Each supported Region: 20	Yes	The maximum number of AcceptPage requests per second that you can send in this account in the current region.
All other operations API throttle quota	Each supported Region: 1	Yes	The maximum number of all other operation requests per second that you can send in this account in the current region.
Contact channels per stage	Each supported Region: 10	Yes	The maximum number of contact channels per plan stage in this account in the current region.
Contacts per account	Each supported Region: 1,000	Yes	The maximum number of contacts in this account in the current region.
DescribeEngagement API throttle quota	Each supported Region: 5	Yes	The maximum number of DescribeEngagement requests per second that you can send in this account in the current region.
DescribePage API throttle quota	Each supported Region: 5	Yes	The maximum number of DescribePage requests per second that you can send in this account in the current region.
Email engagement throttle quota	Each supported Region: 0.05	No	The maximum number of email engagements per contact per second that the service can send in this account in the current region
ListEngagements API throttle quota	Each supported Region: 2	Yes	The maximum number of ListEngagements requests

Name	Default	Adjust	Description
			per second that you can send in this account in the current region.
ListPageReceipts API throttle quota	Each supported Region: 1	Yes	The maximum number of ListPageReceipts requests per second that you can send in this account in the current region.
ListPagesByContact API throttle quota	Each supported Region: 1	Yes	The maximum number of ListPagesByContact requests per second that you can send in this account in the current region.
ListPagesByEngagement API throttle quota	Each supported Region: 2	Yes	The maximum number of ListPagesByEngagement requests per second that you can send in this account in the current region.
SMS engagement throttle quota	Each supported Region: 0.05	No	The maximum number of SMS engagements per contact per second that the service can send in this account in the current region
Stages per plan	Each supported Region: 5	No	The maximum number of stages per plan in this account in the current region.
StartEngagement API throttle quota	Each supported Region: 20	Yes	The maximum number of StartEngagement requests per second that you can send in this account in the current region.
StopEngagement API throttle quota	Each supported Region: 10	Yes	The maximum number of StopEngagement requests per second that you can send in this account in the current region.
Voice engagement throttle quota	Each supported Region: 0.01	No	The maximum number of voice engagements per contact per second that the service can send in this account in the current region

The unit for the API throttle quotas is requests per second.

Amazon Inspector endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	inspector2.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	inspector2.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	inspector2.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	inspector2.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	inspector2.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	inspector2.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	inspector2.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	inspector2.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	inspector2.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	inspector2.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	inspector2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	inspector2.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	inspector2.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	inspector2.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	inspector2.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	inspector2.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	inspector2.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	inspector2.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	inspector2.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of Suppression Rules	Each supported Region: 500	No	The maximum number of Suppression Rules allowed per account.

For more information, see the Amazon Inspector quotas in the *Amazon Inspector User Guide*.

Amazon Inspector Classic endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	inspector.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		inspector-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	inspector.us-east-1.amazonaws.com inspector-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	inspector.us-west-1.amazonaws.com inspector-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	inspector.us-west-2.amazonaws.com inspector-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	inspector.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	inspector.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	inspector.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	inspector.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	inspector.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	inspector.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	inspector.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	inspector.eu-north-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	inspector.us-gov-east-1.amazonaws.com inspector-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	inspector.us-gov-west-1.amazonaws.com inspector-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Assessment Targets	Each supported Region: 50	Yes	The maximum number of assessment targets that you can have at any given time per account per region.
Assessment Templates	Each supported Region: 500	Yes	The maximum number of assessment templates that you can have at any given time per account per region.
Assessment runs	Each supported Region: 50,000	Yes	The maximum number of assessment runs that you can create per account per region. You can have multiple assessment runs happening at the same time as long as the assessment targets used for these runs do not contain overlapping EC2 instances.
Instances in running assessments	Each supported Region: 500	Yes	The maximum number of EC2 instances that can be included across all running assessments per account per region.

For more information, see the Amazon Inspector Classic quotas in the *Amazon Inspector User Guide*.

AWS IoT 1-Click endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

AWS IoT 1-Click Projects API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	projects.iot1click.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	projects.iot1click.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	projects.iot1click.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	projects.iot1click.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	projects.iot1click.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	projects.iot1click.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	projects.iot1click.eu-west-2.amazonaws.com	HTTPS	

For more information, see the AWS IoT 1-Click Projects API Reference.

AWS IoT 1-Click Devices API

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	devices.iot1click.us-west-2.amazonaws.com	HTTPS	

For more information, see the AWS IoT 1-Click Devices API Reference.

Service quotas

Name	Default	Adjust	Description
AssociateDeviceWithPlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the AssociateDeviceWithPlacement API.
ClaimDevicesByClaimCode API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ClaimDevicesByClaimCode API.
CreatePlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second

Name	Default	Adjust	Description
			(TPS) that can be made for the CreatePlacement API.
CreateProject API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the CreateProject API.
DeletePlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DeletePlacement API.
DeleteProject API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DeleteProject API.
DescribeDevice API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DescribeDevice API.
DescribePlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DescribePlacement API.
DescribeProject API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DescribeProject API.
DisassociateDeviceFromPlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the DisassociateDeviceFromPlacement API.
FinalizeDeviceClaim API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the FinalizeDeviceClaim API.
GetDeviceMethods API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the GetDeviceMethods API.
GetDevicesInPlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the GetDevicesInPlacement API.

Name	Default	Adjust	Description
InitiateDeviceClaim API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the InitiateDeviceClaim API.
InvokeDeviceMethod API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the InvokeDeviceMethod API.
ListDeviceEvents API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ListDeviceEvents API.
ListDevices API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ListDevices API.
ListPlacements API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ListPlacements API.
ListProjects API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ListProjects API.
ListTagsForResource API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the ListTagsForResource API.
TagResource API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the TagResource API.
UnclaimDevice API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the UnclaimDevice API.
UntagResource API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the UntagResource API.
UpdateDeviceState API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the UpdateDeviceState API.

Name	Default	Adjust	Description
UpdatePlacement API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the UpdatePlacement API.
UpdateProject API TPS	Each supported Region: 10	No	The maximum number of transactions per second (TPS) that can be made for the UpdateProject API.

AWS IoT Analytics endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iotanalytics.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	iotanalytics.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	iotanalytics.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iotanalytics.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iotanalytics.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iotanalytics.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	iotanalytics.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iotanalytics.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Activities per pipeline	Each supported Region: 25	No	The maximum number of activities you can have in a pipeline.
Batch size of BatchPutMessage messages	Each supported Region: 100	No	The maximum number of messages you can send per batch using the BatchPutMessage API.
Channels per account	Each supported Region: 50	Yes	The maximum number of channels you can create in this account.
Concurrent container dataset runs	Each supported Region: 20	No	The maximum number of container data set runs that can happen simultaneously.
Concurrent data set content generation	Each supported Region: 2	No	The maximum number of data set contents that you can generate simultaneously.
Container datasets triggered per SQL data set	Each supported Region: 10	No	The maximum number of container data sets that can be triggered from a single SQL data set.
Data sets per account	Each supported Region: 100	Yes	The maximum number of data sets you can create in this account.
Data stores per account	Each supported Region: 25	Yes	The maximum number of data stores you can create in this account.
Depth of Parquet SchemaDefinition column	Each supported Region: 100	Yes	The maximum depth you can define for each column in a data store using Parquet format.
Minimum data set refresh interval	Each supported Region: 15	Yes	The minimum time between data set refreshes (in minutes).
Number of Parquet SchemaDefinition columns	Each supported Region: 100	Yes	The maximum number of columns you can define for a data store using Parquet format.
Number of StartPipelineReprocessing requests	Each supported Region: 1,000	Yes	The maximum number of StartPipelineReprocessing API requests you can make for every 24 hours to reprocess the same

Name	Default	Adjust	Description
			channel messages through a pipeline.
Number of partitions in a data store	Each supported Region: 100,000	Yes	The maximum number of partitions in a data store.
Pipelines per account	Each supported Region: 100	Yes	The maximum number of pipelines you can create in this account.
Rate of BatchPutMessage messages	Each supported Region: 100,000	Yes	The maximum number of messages you can send per second per channel using the BatchPutMessage API.
Rate of CreateDatasetContent requests	Each supported Region: 1	Yes	The maximum number of CreateDatasetContent API requests you can make per second per data set.
Rate of RunPipelineActivity requests	Each supported Region: 1	Yes	The maximum number of RunPipelineActivity API requests you can make per second.
Rate of SampleChannelData requests	Each supported Region: 1	Yes	The maximum number of SampleChannelData API requests that you can make per second per channel.
Size of BatchPutMessage messages	Each supported Region: 128 Kilobytes	No	The maximum size of a message you can send using the BatchPutMessage API.

For more information, see AWS IoT Analytics quotas in the *AWS IoT Analytics User Guide*.

AWS IoT Core endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The following sections describe the service endpoints for AWS IoT Core.

Note

You can use these endpoints to perform the operations in the AWS IoT API Reference. The endpoints in the following sections are different from the device endpoints, which provide devices an MQTT publish/subscribe interface and a subset of the API operations. For more information about the data, credential access, and job management endpoints used by devices, see AWS IoT device endpoints.

For information about connecting to and using the AWS IoT endpoints, see Connecting devices to AWS IoT in the *AWS IoT Developer Guide*.

Topics

- AWS IoT Core - control plane endpoints (p. 444)
- AWS IoT Core - data plane endpoints (p. 445)
- AWS IoT Device Management - jobs data endpoints (p. 447)
- AWS IoT Device Management - secure tunneling endpoints (p. 449)
- AWS IoT Core for LoRaWAN API endpoints (p. 450)
- AWS IoT FIPS endpoints (p. 452)

AWS IoT Core - control plane endpoints

The following table contains AWS Region-specific endpoints for AWS IoT Core - control plane operations. For information about the operations supported by the AWS IoT Core - control plane endpoints, see AWS IoT operations in the *AWS IoT API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iot.us-east-2.amazonaws.com iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	iot.us-east-1.amazonaws.com iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	iot.us-west-1.amazonaws.com iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	iot.us-west-2.amazonaws.com iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iot.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iot.ca-central-1.amazonaws.com iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	iot.us-gov-east-1.amazonaws.com iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	iot.us-gov-west-1.amazonaws.com iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS IoT Core - data plane endpoints

The AWS IoT Core - data plane endpoints are specific to each AWS account and AWS Region. To find the AWS IoT Core - data plane endpoint for your AWS account and AWS Region, use the **describe-endpoint** CLI command shown here, or the `DescribeEndpoint` REST API.

```
aws iot describe-endpoint --endpoint-type iot:Data-ATS
```

This command returns your data plane API endpoint in the following format:

```
account-specific-prefix.iot.aws-region.amazonaws.com
```

For information about the actions supported by the AWS IoT Core - data plane endpoints, see AWS IoT data plane operations in the *AWS IoT API Reference*.

The following table contains generic representations of the AWS account-specific endpoints for each AWS Region that AWS IoT Core supports. In the **Endpoint** column, the *account-specific-prefix* from your Account-specific endpoint replaces `data` shown in the generic endpoint representation.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	data-ats.iot.us-east-2.amazonaws.com data.iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	data-ats.iot.us-east-1.amazonaws.com data.iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	data-ats.iot.us-west-1.amazonaws.com data.iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	data-ats.iot.us-west-2.amazonaws.com data.iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	data-ats.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	data-ats.iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	data-ats.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	data-ats.iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	data-ats.iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	data-ats.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	data-ats.iot.ca-central-1.amazonaws.com data.iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	data-ats.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	data-ats.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	data-ats.iot.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	data-ats.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	data-ats.iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	data-ats.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	data-ats.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	data-ats.iot.us-gov-east-1.amazonaws.com data.iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	data-ats.iot.us-gov-west-1.amazonaws.com data.iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS IoT Device Management - jobs data endpoints

The AWS IoT Device Management - jobs data endpoints are specific to each AWS account and AWS Region. To find the AWS IoT Device Management - jobs data endpoint for your AWS account and AWS Region, use the **describe-endpoint** CLI command shown here, or the `DescribeEndpoint` REST API.

```
aws iot describe-endpoint --endpoint-type iot:Jobs
```

This command returns your Jobs data plane API endpoint in the following format:

```
account-specific-prefix.jobs.iot.aws-region.amazonaws.com.
```

For information about the actions supported by the AWS IoT Device Management - jobs data endpoints, see AWS IoT jobs data plane operations in the *AWS IoT API Reference*.

The following table contains AWS Region-specific endpoints that AWS IoT Core supports for job data operations. In the **Endpoint** column, the *account-specific-prefix* from your account-specific endpoint replaces the *prefix* shown in the generic endpoint representation.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	*prefix*.jobs.iot.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	*prefix*.jobs.iot.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (N. California)	us-west-1	*prefix*.jobs.iot.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	*prefix*.jobs.iot.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	*prefix*.jobs.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	*prefix*.jobs.iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	*prefix*.jobs.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	*prefix*.jobs.iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.jobs.iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.jobs.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	*prefix*.jobs.iot.ca-central-1.amazonaws.com	HTTPS	
China (Beijing)	cn-north-1	*prefix*.jobs.iot.cn-north-1.amazonaws.com.cn	HTTPS	
China (Ningxia)	cn-northwest-1	*prefix*.jobs.iot.cn-northwest-1.amazonaws.com.cn	HTTPS	
Europe (Frankfurt))	eu-central-1	*prefix*.jobs.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	*prefix*.jobs.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	*prefix*.jobs.iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	*prefix*.jobs.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	*prefix*.jobs.iot.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	*prefix*.jobs.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	*prefix*.jobs.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	*prefix*.jobs.iot.us-gov-west-1.amazonaws.com	HTTPS	

AWS IoT Device Management - secure tunneling endpoints

The following table contains AWS Region-specific endpoints that AWS IoT Core supports for secure tunneling operations. For more information, see AWS IoT secure tunneling operations in the *AWS IoT API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	api.tunneling.iot.us-east-2.amazonaws.com api.tunneling.iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	api.tunneling.iot.us-east-1.amazonaws.com api.tunneling.iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	api.tunneling.iot.us-west-1.amazonaws.com api.tunneling.iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	api.tunneling.iot.us-west-2.amazonaws.com api.tunneling.iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	api.tunneling.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	api.tunneling.iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	api.tunneling.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	api.tunneling.iot.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	api.tunneling.iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.tunneling.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	api.tunneling.iot.ca-central-1.amazonaws.com api.tunneling.iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	api.tunneling.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	api.tunneling.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	api.tunneling.iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	api.tunneling.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	api.tunneling.iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	api.tunneling.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	api.tunneling.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	api.tunneling.iot.us-gov-east-1.amazonaws.com api.tunneling.iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	api.tunneling.iot.us-gov-west-1.amazonaws.com api.tunneling.iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS IoT Core for LoRaWAN API endpoints

AWS IoT Core for LoRaWAN provides control plane and data plane endpoints for its API.

AWS IoT Core for LoRaWAN control plane API endpoints

The following table contains AWS Region-specific endpoints that AWS IoT Core for LoRaWAN supports for operations to manage LoRaWAN gateways and devices.

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	api.iotwireless.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	api.iotwireless.us-west-2.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	api.iotwireless.eu-west-1.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	api.iotwireless.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	api.iotwireless.ap-southeast-2.amazonaws.com	HTTPS

AWS IoT Core for LoRaWAN data plane API endpoints

The data plane API endpoints are specific to each AWS Account and Region. To find the data plane API endpoint for your AWS Account and Region, use the get-service-endpoint CLI command shown here, or the GetServiceEndpoint REST API.

```
aws iotwireless get-service-endpoint
```

This command returns information about:

- The service type for which you want to get endpoint information about, which can be `CUPS` or `LNS`.
- The CUPS or LNS server trust certificate depending on the endpoint specified.
- Your data plane API endpoint in the following format:

```
account-specific-prefix.service.lorawan.aws-region.amazonaws.com
```

where *`service`* can be `cups` or `lns`.

The following table contains generic representations of the AWS Account-specific LNS endpoints for each Region that AWS IoT Core supports. In the **Endpoint** column, the *`account-specific-prefix`* from your Account-specific endpoint replaces *`prefix`* shown in the generic endpoint representation.

LNS endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	*prefix*.lns.lorawan.us-east-1.amazonaws.com	WSS
US West (Oregon)	us-west-2	*prefix*.lns.lorawan.us-west-2.amazonaws.com	WSS
Europe (Ireland)	eu-west-1	*prefix*.lns.lorawan.eu-west-1.amazonaws.com	WSS
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.lns.lorawan.ap-northeast-1.amazonaws.com	WSS

Region Name	Region	Endpoint	Protocol
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.lns.lorawan.ap-southeast-2.amazonaws.com	WSS

The following table contains generic representations of the AWS Account-specific CUPS endpoints for each Region that AWS IoT Core supports. In the **Endpoint** column, the *account-specific-prefix* from your Account-specific endpoint replaces *prefix* shown in the generic endpoint representation.

CUPS endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	*prefix*.cups.lorawan.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	*prefix*.cups.lorawan.us-west-2.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	*prefix*.cups.lorawan.eu-west-1.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.cups.lorawan.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.cups.lorawan.ap-southeast-2.amazonaws.com	HTTPS

AWS IoT FIPS endpoints

AWS IoT provides endpoints that support the Federal Information Processing Standard (FIPS) 140-2. Choose the appropriate FIPS compliant endpoint to access AWS IoT features in your AWS Region from FIPS Endpoints by Service. For more information about the FIPs endpoints provided by AWS IoT, see Connecting to AWS IoT FIPS endpoints.

Service quotas

Contents

- AWS IoT Core rules engine limits and quotas (p. 453)
- AWS IoT Core API throttling limits (p. 455)
- AWS IoT Core for LoRaWAN limits and quotas (p. 471)
- AWS IoT Core Device Shadow service limits and quotas (p. 482)
- AWS IoT Core Fleet Provisioning limits and quotas (p. 484)
- AWS IoT Core message broker and protocol limits and quotas (p. 485)
- AWS IoT Core protocol-related limits and quotas (p. 493)
- AWS IoT Core credential provider limits and quotas (p. 493)
- AWS IoT Core security and identity limits and quotas (p. 494)
- MQTT-based File Delivery (p. 497)
- AWS IoT Core Device Advisor limits and quotas (p. 498)

Note
The limits and quotas for these AWS IoT Device Management features: AWS IoT registry, AWS IoT Fleet Indexing, AWS IoT Jobs, AWS IoT Secure Tunneling, and Fleet Hub for AWS IoT Device Management can be found in AWS IoT Device Management Service quotas (p. 519).

AWS IoT Core rules engine limits and quotas

This section describes the limits and quotas of the AWS IoT Core rules engine.

AWS IoT Core rules engine

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Maximum number of actions per rule	The maximum number of entries in the rule's actions property.	10	10	No
Maximum number of rules per AWS account	The maximum number of rules that can be defined in a single AWS account.	1000	1000	Yes
Rule evaluations per second per AWS account	The maximum number of rules that can be evaluated per second per AWS account. This quota includes rule evaluations that result from inbound Basic Ingest messages.	20000	2000	Yes
Rule size	The maximum size that a rule document definition can contain, measured by number of UTF-8 encoded characters, including white spaces.	256 Kilobytes	256 Kilobytes	No

*__Select AWS Regions__: Europe (Stockholm), Middle East (Bahrain), Europe (Paris), Asia Pacific (Hong Kong), AWS GovCloud (US-East), AWS GovCloud (US-West), US West (N. California), Canada (Central), China (Ningxia)

AWS IoT Core rules engine HTTP actions limits and quotas

AWS IoT Core HTTP action

Limit display name	Description	Default value	Adjustable
HTTP Action: Maximum length of an endpoint URL	Maximum length of an endpoint URL for topic rule HTTP Action.	2 Kilobytes	No
HTTP Action: Maximum number of headers per action	Maximum number of headers per HTTP action. When specifying the list of headers to include in the HTTP request, it must contain a header key and a header value. To learn more, see https://docs.aws.amazon.com/iot/latest/developerguide/https-rule-action.html.	100	No
HTTP Action: Maximum size of a header key	Maximum size of a header key for topic rule HTTP action. The header file for a HTTP request includes this header key and a header value.	256 Bytes	No
HTTP Action: Maximum topic rule destinations per AWS account	Maximum number of topic rule destinations per AWS account for topic rule HTTPS action. You must confirm and enable HTTPS endpoints before the rules engine can use them. For more information, see https://docs.aws.amazon.com/iot/latest/developerguide/rule-destination.html.	1000	No
HTTP Action: Request timeout	Request timeout for topic rule HTTP action. The AWS IoT rules engine retries the HTTPS action until the total time to complete a request exceeds the timeout quota.	3000 Milliseconds	No

Resource	Value	Adjustable
TCP ports used for HTTP actions	443, 8443	No

AWS IoT Core rules engine Apache Kafka actions limits and quotas

Resource	Limits
Bootstrap server ports	9000-9100
Kerberos key distribution center (KDC)	88

AWS IoT Core rules engine VPC actions limits and quotas

Resource	Quota
Maximum number of VPC destinations	5 per account per Region

AWS IoT Core API throttling limits

This table describes the maximum number of transactions per second (TPS) that can be made to each of these AWS IoT Core API actions.

AWS IoT Core API rate limits

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
AcceptCertificateTransfer API TPS	The maximum number of transactions per second (TPS) that can be made for the AcceptCertificateTransfer API.	10	10	Yes
AttachPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the AttachPolicy API.	15	15	Yes
AttachPrincipalPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the	15	15	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
	AttachPrincipalPolicy API.			
CancelCertificateTransfer API TPS	The maximum number of transactions per second (TPS) that can be made for the CancelCertificateTransfer API.	10	10	Yes
ClearDefaultAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the ClearDefaultAuthorizer API.	10	10	Yes
CreateAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateAuthorizer API.	10	10	No
CreateCertificateFromCsr API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateCertificateFromCsr API.	15	15	Yes
CreateDomainConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateDomainConfiguration API.	1	1	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
CreateKeysAndCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateKeysAndCertificate API.	10	10	Yes
CreatePolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the CreatePolicy API.	10	10	Yes
CreatePolicyVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the CreatePolicyVersion API.	10	10	Yes
CreateProvisioningClaim API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateProvisioningClaim API.	10	10	Yes
CreateProvisioningTemplate API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateProvisioningTemplate API.	10	10	No
CreateProvisioningTemplateVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateProvisioningTemplateVersion API.	10	10	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
CreateRoleAlias API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateRoleAlias API.	10	10	No
CreateTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateTopicRule API.	5	5	No
CreateTopicRuleDestination API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateTopicRuleDestination API.	5	5	No
DeleteAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteAuthorizer API.	10	10	No
DeleteCACertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteCACertificate API.	10	10	Yes
DeleteCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteCertificate API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DeleteDomainConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteDomainConfiguration API.	10	10	No
DeletePolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the DeletePolicy API.	10	10	Yes
DeletePolicyVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the DeletePolicyVersion API.	10	10	Yes
DeleteProvisioningTemplate API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteProvisioningTemplate API.	10	10	Yes
DeleteProvisioningTemplateVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteProvisioningTemplateVersion API.	10	10	No
DeleteRegistrationCode API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteRegistrationCode API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DeleteRoleAlias API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteRoleAlias API.	10	10	No
DeleteTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteTopicRule API.	20	5	No
DeleteTopicRuleDestination API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteTopicRuleDestination API.	5	5	No
DeleteV2LoggingLevel API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteV2LoggingLevel API.	2	2	No
DescribeAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAuthorizer API.	10	10	Yes
DescribeCACertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeCACertificate API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DescribeCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeCertificate API.	10	10	Yes
DescribeCertificateTag API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeCertificateTag API.	10	10	Yes
DescribeDefaultAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeDefaultAuthorizer API.	10	10	Yes
DescribeDomainConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeDomainConfiguration API.	10	10	Yes
DescribeEndpoint API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeEndpoint API.	10	10	No
DescribeProvisioningTemplate API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeProvisioningTemplate API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DescribeProvisioningTemplateVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeProvisioningTemplateVersion API.	10	10	Yes
DescribeRoleAlias API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeRoleAlias API.	10	10	Yes
DetachPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the DetachPolicy API.	15	15	Yes
DetachPrincipalPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the DetachPrincipalPolicy API.	15	15	Yes
DisableTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the DisableTopicRule API.	5	5	No
EnableTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the EnableTopicRule API.	5	5	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
GetEffectivePolicies API TPS	The maximum number of transactions per second (TPS) that can be made for the GetEffectivePolicies API.	5	5	Yes
GetLoggingOptions API TPS	The maximum number of transactions per second (TPS) that can be made for the GetLoggingOptions API.	2	2	No
GetPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the GetPolicy API.	10	10	Yes
GetPolicyVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the GetPolicyVersion API.	15	15	Yes
GetRegistrationCode API TPS	The maximum number of transactions per second (TPS) that can be made for the GetRegistrationCode API.	10	10	Yes
GetRetainedMessage API TPS	The maximum number of transactions per second that can be made for the GetRetainedMessage API.	500	50	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
GetTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the GetTopicRule API.	200	20	No
GetTopicRuleDestination API TPS	The maximum number of transactions per second (TPS) that can be made for the GetTopicRuleDestination API.	50	5	No
GetV2LoggingOptions API TPS	The maximum number of transactions per second (TPS) that can be made for the GetV2LoggingOptions API.	2	2	No
ListAttachedPolicies API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAttachedPolicies API.	15	15	Yes
ListAuthorizers API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuthorizers API.	10	10	Yes
ListCACertificates API TPS	The maximum number of transactions per second (TPS) that can be made for the ListCACertificates API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
ListCertificates API TPS	The maximum number of transactions per second (TPS) that can be made for the ListCertificates API.	10	10	Yes
ListCertificatesByCA API TPS	The maximum number of transactions per second (TPS) that can be made for the ListCertificatesByCA API.	10	10	Yes
ListDomainConfigurations API TPS	The maximum number of transactions per second (TPS) that can be made for the ListDomainConfigurations API.	10	10	Yes
ListOutgoingCertificates API TPS	The maximum number of transactions per second (TPS) that can be made for the ListOutgoingCertificates API.	10	10	Yes
ListPolicies API TPS	The maximum number of transactions per second (TPS) that can be made for the ListPolicies API.	10	10	Yes
ListPolicyPrincipals API TPS	The maximum number of transactions per second (TPS) that can be made for the ListPolicyPrincipals API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
ListPolicyVersions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListPolicyVersions API.	10	10	Yes
ListPrincipalPolicies API TPS	The maximum number of transactions per second (TPS) that can be made for the ListPrincipalPolicies API.	15	15	Yes
ListProvisioningTemplateVersions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListProvisioningTemplateVersions API.	10	10	Yes
ListProvisioningTemplates API TPS	The maximum number of transactions per second (TPS) that can be made for the ListProvisioningTemplates API.	10	10	Yes
ListRetainedMessages API TPS	The maximum number of transactions per second that can be made for the ListRetainedMessages API.	10	10	Yes
ListRoleAliases API TPS	The maximum number of transactions per second (TPS) that can be made for the ListRoleAliases API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
ListTargetsForPolicy API TPS	The maximum number of transactions per second (TPS) that can be made for the ListTargetsForPolicy API.	10	10	Yes
ListTopicRuleDestinations API TPS	The maximum number of transactions per second (TPS) that can be made for the ListTopicRuleDestinations API.	1	1	No
ListTopicRules API TPS	The maximum number of transactions per second (TPS) that can be made for the ListTopicRules API.	1	1	No
ListV2LoggingLevels API TPS	The maximum number of transactions per second (TPS) that can be made for the ListV2LoggingLevels API.	2	2	No
RegisterCACertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the RegisterCACertificate API.	10	10	Yes
RegisterCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the RegisterCertificate API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
RegisterCertificateWithoutCA API TPS	The maximum number of transactions per second (TPS) that can be made for the RegisterCertificateWithoutCA API.	10	10	Yes
RejectCertificateTransfer API TPS	The maximum number of transactions per second (TPS) that can be made for the RejectCertificateTransfer API.	10	10	Yes
ReplaceTopicRule API TPS	The maximum number of transactions per second (TPS) that can be made for the ReplaceTopicRule API.	5	5	No
SetDefaultAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the SetDefaultAuthorizer API.	10	10	Yes
SetDefaultPolicyVersion API TPS	The maximum number of transactions per second (TPS) that can be made for the SetDefaultPolicyVersion API.	10	10	Yes
SetLoggingOptions API TPS	The maximum number of transactions per second (TPS) that can be made for the SetLoggingOptions API.	2	2	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
SetV2LoggingLevel API TPS	The maximum number of transactions per second (TPS) that can be made for the SetV2LoggingLevel API.	2	2	No
SetV2LoggingOptions API TPS	The maximum number of transactions per second (TPS) that can be made for the SetV2LoggingOptions API.	2	2	No
TestAuthorization API TPS	The maximum number of transactions per second (TPS) that can be made for the TestAuthorization API.	10	10	No
TestInvokeAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the TestInvokeAuthorizer API.	10	10	No
TransferCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the TransferCertificate API.	10	10	Yes
UpdateAuthorizer API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateAuthorizer API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
UpdateCACertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateCACertificate API.	10	10	Yes
UpdateCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateCertificate API.	10	10	Yes
UpdateCertificateMode API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateCertificateMode API.	10	10	Yes
UpdateCertificateTag API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateCertificateTag API.	10	10	Yes
UpdateDomainConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateDomainConfiguration API.	10	10	Yes
UpdateProvisioningTemplate API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateProvisioningTemplate API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
UpdateRoleAlias API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateRoleAlias API.	10	10	Yes
UpdateTopicRuleDestination API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateTopicRuleDestination API.	5	5	No

*Select AWS Regions: Europe (Stockholm), Middle East (Bahrain), Europe (Paris), Asia Pacific (Hong Kong), AWS GovCloud (US-East), AWS GovCloud (US-West), US West (N. California), Canada (Central), China (Ningxia)

AWS IoT Core for LoRaWAN limits and quotas

Device data quotas

The following service quotas apply to AWS IoT Core for LoRaWAN device data, which are transmitted between LoRaWAN devices, gateways, and AWS IoT Core for LoRaWAN.

AWS IoT Wireless devices API throttling

Limit display name	Description	Default value	Adjustable
TPS limit for AssociateWirelessDeviceWithThing	TPS limit for AssociateWirelessDeviceWithThing	10	Yes
TPS limit for CreateNetworkAnalyzerConfiguration	TPS limit for CreateNetworkAnalyzerConfiguration	10	Yes
TPS limit for CreateWirelessDevice	TPS limit for CreateWirelessDevice	10	Yes
TPS limit for DeleteNetworkAnalyzerConfiguration	TPS limit for DeleteNetworkAnalyzerConfiguration	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for DeleteWirelessDevice	TPS limit for DeleteWirelessDevice	10	Yes
TPS limit for DisassociateWirelessDeviceFromThing	TPS limit for DisassociateWirelessDeviceFromThing	10	Yes
TPS limit for GetEventConfigurationByResourceTypes	TPS limit for GetEventConfigurationByResourceTypes	10	Yes
TPS limit for GetWirelessDevice	TPS limit for GetWirelessDevice	10	Yes
TPS limit for GetWirelessDeviceStatistics	TPS limit for GetWirelessDeviceStatistics	10	No
TPS limit for ListEventConfigurations	TPS limit for ListEventConfigurations	10	Yes
TPS limit for ListNetworkAnalyzerConfigurations	TPS limit for ListNetworkAnalyzerConfigurations	10	Yes
TPS limit for ListWirelessDevices	TPS limit for ListWirelessDevices	10	Yes
TPS limit for SendDataToWirelessDevice	TPS limit for SendDataToWirelessDevice	10	Yes
TPS limit for TestWirelessDevice	TPS limit for TestWirelessDevice	10	Yes
TPS limit for UpdateEventConfigurationByResourceTypes	TPS limit for UpdateEventConfigurationByResourceTypes	10	Yes
TPS limit for UpdateWirelessDevice	TPS limit for UpdateWirelessDevice	10	Yes

AWS IoT Core for LoRaWAN API throttling

The following tables describes the maximum number of transactions per second (TPS) that can be made to each action in the AWS IoT Wireless API, which includes AWS IoT Core for LoRaWAN and Amazon Sidewalk Integration.

AWS IoT Wireless gateway API throttling

This table describes the maximum TPS for APIs used with LoRaWAN gateways. The gateways route messages between LoRaWAN devices and AWS IoT Core for LoRaWAN.

AWS IoT Wireless gateway API throttling

Limit display name	Description	Default value	Adjustable
`TPS limit for AssociateWirelessGatewayWithCertificate`	TPS limit for AssociateWirelessGatewayWithCertificate	10	No
`TPS limit for AssociateWirelessGatewayWithThing`	TPS limit for AssociateWirelessGatewayWithThing	10	Yes
`TPS limit for CreateWirelessGateway`	TPS limit for CreateWirelessGateway	10	Yes
`TPS limit for CreateWirelessGatewayTask`	TPS limit for CreateWirelessGatewayTask	10	No
`TPS limit for CreateWirelessGatewayTaskDefinition`	TPS limit for CreateWirelessGatewayTaskDefinition	10	No
`TPS limit for DeleteWirelessGateway`	TPS limit for DeleteWirelessGateway	10	Yes
`TPS limit for DeleteWirelessGatewayTask`	TPS limit for DeleteWirelessGatewayTask	10	No
`TPS limit for DeleteWirelessGatewayTaskDefinition`	TPS limit for DeleteWirelessGatewayTaskDefinition	10	No
`TPS limit for DisassociateWirelessGatewayFromCertificate`	TPS limit for DisassociateWirelessGatewayFromCertificate	10	No
	TPS limit for DisassociateWirelessGatewayFromThing	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for DisassociateWirelessGatewayFromThing			
TPS limit for GetWirelessGateway	TPS limit for GetWirelessGateway	10	Yes
TPS limit for GetWirelessGatewayCertificate	TPS limit for GetWirelessGatewayCertificate	10	No
TPS limit for GetWirelessGatewayFirmwareInformation	TPS limit for GetWirelessGatewayFirmwareInformation	10	No
TPS limit for GetWirelessGatewayStatistics	TPS limit for GetWirelessGatewayStatistics	10	No
TPS limit for GetWirelessGatewayTask	TPS limit for GetWirelessGatewayTask	10	No
TPS limit for GetWirelessGatewayTaskDefinition	TPS limit for GetWirelessGatewayTaskDefinition	10	No
TPS limit for ListWirelessGatewayTaskDefinitions	TPS limit for ListWirelessGatewayTaskDefinitions	10	No
TPS limit for ListWirelessGateways	TPS limit for ListWirelessGateways	10	Yes
TPS limit for UpdateWirelessGateway	TPS limit for UpdateWirelessGateway	10	Yes

LoRaWAN devices API throttling

This table describes the maximum TPS for APIs used with LoRaWAN devices.

AWS IoT Wireless devices API throttling

Limit display name	Description	Default value	Adjustable
	TPS limit for AssociateWirelessDeviceWithThing	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for AssociateWirelessDeviceWithThing			
TPS limit for CreateNetworkAnalyzerConfiguration	TPS limit for CreateNetworkAnalyzerConfiguration	10	Yes
TPS limit for CreateWirelessDevice	TPS limit for CreateWirelessDevice	10	Yes
TPS limit for DeleteNetworkAnalyzerConfiguration	TPS limit for DeleteNetworkAnalyzerConfiguration	10	Yes
TPS limit for DeleteWirelessDevice	TPS limit for DeleteWirelessDevice	10	Yes
TPS limit for DisassociateWirelessDeviceFromThing	TPS limit for DisassociateWirelessDeviceFromThing	10	Yes
TPS limit for GetEventConfigurationByResourceTypes	TPS limit for GetEventConfigurationByResourceTypes	10	Yes
TPS limit for GetWirelessDevice	TPS limit for GetWirelessDevice	10	Yes
TPS limit for GetWirelessDeviceStatistics	TPS limit for GetWirelessDeviceStatistics	10	No
TPS limit for ListEventConfigurations	TPS limit for ListEventConfigurations	10	Yes
TPS limit for ListNetworkAnalyzerConfigurations	TPS limit for ListNetworkAnalyzerConfigurations	10	Yes
TPS limit for ListWirelessDevices	TPS limit for ListWirelessDevices	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for SendDataToWirelessDevice	TPS limit for SendDataToWirelessDevice	10	Yes
TPS limit for TestWirelessDevice	TPS limit for TestWirelessDevice	10	Yes
TPS limit for UpdateEventConfigurationByResourceTypes	TPS limit for UpdateEventConfigurationByResourceTypes	10	Yes
TPS limit for UpdateWirelessDevice	TPS limit for UpdateWirelessDevice	10	Yes

Device Profiles and destination API throttling

This table describes device profiles and service profiles and destinations that can route messages to other AWS services.

AWS IoT Wireless device profiles and destination API throttling

Limit display name	Description	Default value	Adjustable
TPS limit for CreateDestination	TPS limit for CreateDestination	10	Yes
TPS limit for CreateDeviceProfile	TPS limit for CreateDeviceProfile	10	Yes
TPS limit for CreateServiceProfile	TPS limit for CreateServiceProfile	10	Yes
TPS limit for DeleteDestination	TPS limit for DeleteDestination	10	Yes
TPS limit for DeleteDeviceProfile	TPS limit for DeleteDeviceProfile	10	Yes
TPS limit for DeleteServiceProfile	TPS limit for DeleteServiceProfile	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for GetDestination	TPS limit for GetDestination	10	Yes
TPS limit for GetDeviceProfile	TPS limit for GetDeviceProfile	10	Yes
TPS limit for GetServiceProfile	TPS limit for GetServiceProfile	10	Yes
TPS limit for ListDestinations	TPS limit for ListDestinations	10	Yes
TPS limit for ListDeviceProfiles	TPS limit for ListDeviceProfiles	10	Yes
TPS limit for ListServiceProfiles	TPS limit for ListServiceProfiles	10	Yes
TPS limit for UpdateDestination	TPS limit for UpdateDestination	10	Yes

Sidewalk and logging API throttling

This table describes the maximum TPS for Amazon Sidewalk APIs and APIs that are used for log levels based on resource types.

AWS IoT Wireless Sidewalk and logging API throttling

Limit display name	Description	Default value	Adjustable
TPS limit for AssociateAwsAccountWithPartnerAccount	TPS limit for AssociateAwsAccountWithPartnerAccount	10	Yes
TPS limit for GetLogLevelsByResourceTypes	TPS limit for GetLogLevelsByResourceTypes	10	Yes
TPS limit for GetPartnerAccount	TPS limit for GetPartnerAccount	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for GetResourceLogLevel	TPS limit for GetResourceLogLevel	10	Yes
TPS limit for ListPartnerAccounts	TPS limit for ListPartnerAccounts	10	Yes
TPS limit for PutResourceLogLevel	TPS limit for PutResourceLogLevel	10	Yes
TPS limit for ResetAllResourceLogLevels	TPS limit for ResetAllResourceLogLevels	10	Yes
TPS limit for ResetResourceLogLevel	TPS limit for ResetResourceLogLevel	10	Yes
TPS limit for UpdateLogLevelsByResourceTypes	TPS limit for UpdateLogLevelsByResourceTypes	10	Yes
TPS limit for UpdatePartnerAccount	TPS limit for UpdatePartnerAccount	10	Yes

Tagging and `GetServiceEndpoint` API throttling

This table describes the maximum TPS for the `GetServiceEndpoint` API and APIs used for tagging resources.

AWS IoT Wireless tagging and GetServiceEndpoint API throttling

Limit display name	Description	Default value	Adjustable
TPS limit for GetServiceEndpoint	TPS limit for GetServiceEndpoint	10	No
TPS limit for ListTagsForResource	TPS limit for ListTagsForResource	10	Yes
TPS limit for TagResource	TPS limit for TagResource	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for UntagResource	TPS limit for UntagResource	10	Yes

Additional AWS IoT Wireless API limits

AWS IoT Wireless limits and quotas

Limit display name	Description	Default value	Adjustable
TPS limit for AssociateMulticastGroupWithFuotaTask	TPS limit for AssociateMulticastGroupWithFuotaTask	10	Yes
TPS limit for AssociateWirelessDeviceWithFuotaTask	TPS limit for AssociateWirelessDeviceWithFuotaTask	10	Yes
TPS limit for AssociateWirelessDeviceWithMulticastGroup	TPS limit for AssociateWirelessDeviceWithMulticastGroup	10	Yes
TPS limit for CancelMulticastGroupSession	TPS limit for CancelMulticastGroupSession	10	Yes
TPS limit for CreateFuotaTask	TPS limit for CreateFuotaTask	10	Yes
TPS limit for CreateMulticastGroup	TPS limit for CreateMulticastGroup	10	Yes
TPS limit for DeleteFuotaTask	TPS limit for DeleteFuotaTask	10	Yes
TPS limit for DeleteMulticastGroup	TPS limit for DeleteMulticastGroup	10	Yes
TPS limit for DeleteQueuedMessages	TPS limit for DeleteQueuedMessages	10	Yes
	TPS limit for DisassociateAwsAccountFromPartnerAccount	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for DisassociateAwsAccountFromPartnerAccount			
TPS limit for DisassociateMulticastGroupFromFuotaTask	TPS limit for DisassociateMulticastGroupFromFuotaTask	10	Yes
TPS limit for DisassociateWirelessDeviceFromFuotaTask	TPS limit for DisassociateWirelessDeviceFromFuotaTask	10	Yes
TPS limit for DisassociateWirelessDeviceFromMulticastGroup	TPS limit for DisassociateWirelessDeviceFromMulticastGroup	10	Yes
TPS limit for GetFuotaTask	TPS limit for GetFuotaTask	10	Yes
TPS limit for GetMulticastGroup	TPS limit for GetMulticastGroup	10	Yes
TPS limit for GetMulticastGroupSession	TPS limit for GetMulticastGroupSession	10	Yes
TPS limit for GetNetworkAnalyzerConfiguration	TPS limit for GetNetworkAnalyzerConfiguration	10	Yes
TPS limit for GetPosition	TPS limit for GetPosition	10	Yes
TPS limit for GetPositionConfiguration	TPS limit for GetPositionConfiguration	10	Yes
TPS limit for GetResourceEventConfiguration	TPS limit for GetResourceEventConfiguration	10	Yes
TPS limit for ListFuotaTasks	TPS limit for ListFuotaTasks	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for ListMulticastGroups	TPS limit for ListMulticastGroups	10	Yes
TPS limit for ListMulticastGroupsByFuotaTask	TPS limit for ListMulticastGroupsByFuotaTask	10	Yes
TPS limit for ListPositionConfigurations	TPS limit for ListPositionConfigurations	10	Yes
TPS limit for ListQueuedMessages	TPS limit for ListQueuedMessages	10	Yes
TPS limit for PutPositionConfiguration	TPS limit for PutPositionConfiguration	10	Yes
TPS limit for SendDataToMulticastGroup	TPS limit for SendDataToMulticastGroup	10	Yes
TPS limit for StartBulkAssociateWirelessDeviceWithMulticastGroup	TPS limit for StartBulkAssociateWirelessDeviceWithMulticastGroup	10	Yes
TPS limit for StartBulkDisassociateWirelessDeviceFromMulticastGroup	TPS limit for StartBulkDisassociateWirelessDeviceFromMulticastGroup	10	Yes
TPS limit for StartFuotaTask	TPS limit for StartFuotaTask	10	Yes
TPS limit for StartMulticastGroupSession	TPS limit for StartMulticastGroupSession	10	Yes
TPS limit for StartNetworkAnalyzerStream	TPS limit for StartNetworkAnalyzerStream	10	Yes
TPS limit for UpdateFuotaTask	TPS limit for UpdateFuotaTask	10	Yes

Limit display name	Description	Default value	Adjustable
TPS limit for UpdateMulticastGroup	TPS limit for UpdateMulticastGroup	10	Yes
TPS limit for UpdateNetworkAnalyzerConfiguration	TPS limit for UpdateNetworkAnalyzerConfiguration	10	Yes
TPS limit for UpdatePosition	TPS limit for UpdatePosition	10	Yes
TPS limit for UpdateResourceEventConfiguration	TPS limit for UpdateResourceEventConfiguration	10	Yes

AWS IoT Core Device Shadow service limits and quotas

AWS IoT Core Device Shadow actions

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Device Shadow API requests/second per account	Number of device shadow API requests per second per account. This value is adjustable and subject to per-account quotas, depending on the region.	4000	400	Yes
Maximum depth of JSON device state documents	The maximum number of levels in the desired or reported section of the JSON device state document is 5.	5	5	No
Maximum number of in-flight, unacknowledged messages per thing	The Device Shadow service supports up to 10 in-flight unacknowledged messages per thing on a single connection. When this quota is	10	10	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
	reached, all new shadow requests are rejected with a 429 error code until the number of in-flight requests drop below the limit.			
Maximum shadow name size	Maximum size of a thing shadow name, which is 64 bytes of UTF-8 encoded characters.	64 Bytes	64 Bytes	No
Maximum size of a JSON state document	Each individual shadow document must be 8KB or less in size. Metadata doesn't contribute to the document size for service quotas or pricing.	8 Kilobytes	8 Kilobytes	Yes
Maximum thing name size	Maximum size of a thing name, which is 128 bytes of UTF-8 encoded characters.	128 Bytes	128 Bytes	No
Requests per second per thing	The Device Shadow service supports up to 20 requests per second per thing. This quota is per thing, not per API.	20	20	Yes

*__Select AWS Regions__: Europe (Paris), Europe (Stockholm), Asia Pacific (Hong Kong), South America (São Paulo), Canada (Central), Middle East (Bahrain), China (Ningxia), AWS GovCloud (US-East), AWS GovCloud (US-West)

The levels in the `desired` and `reported` sections of the Device Shadow's JSON state document are counted as shown here for the `desired` object.

```
"desired": {
    "one": {
        "two": {
            "three": {
                "four": {
                    "five":{
```

```
                    }
                }
            }
        }
    }
}
```

Note
AWS IoT Core deletes a Device Shadow document after the creating account is deleted or upon customer request. For operational purposes, AWS IoT service backups are retained for 6 months.

AWS IoT Core Fleet Provisioning limits and quotas

Following are throttling limits for some fleet provisioning APIs per AWS account.

AWS IoT Core fleet provisioning limits and quotas

Limit display name	Description	Default value	Adjustable
Fleet Provisioning CreateCertificateFromCsr MQTT API TPS	The maximum number of transactions per second (TPS) that can be made for the Fleet Provisioning CreateCertificateFromCsr MQTT API.	100	Yes
Fleet Provisioning CreateKeysAndCertificate MQTT API TPS	The maximum number of transactions per second (TPS) that can be made for the Fleet Provisioning CreateKeysAndCertificate MQTT API.	10	Yes
Fleet Provisioning RegisterThing MQTT API TPS	The maximum number of transactions per second (TPS) that can be made for the Fleet Provisioning RegisterThing MQTT API.	10	Yes

Fleet provisioning also has these limits, which can't be changed.

Resource	Description	Limit	
Versions per fleet provisioning template	The maximum number of versions that a fleet provisioning template can have. Each template version has a version ID and a creation date for devices that connect to AWS IoT using fleet previsioning.	5	

Resource	Description	Limit	
Fleet provisioning templates per customer	The maximum number of fleet provisioning templates per customer. Use fleet provisioning templates to generate certificates and private keys for your devices to securely connect to AWS IoT.	256	
Fleet provisioning template size	The maximum size of a fleet provisioning template in Kilobytes. Fleet provisioning templates allow you to generate certificates and private keys for your devices to securely connect to AWS IoT.	10 Kilobytes	

AWS IoT Core message broker and protocol limits and quotas

AWS IoT Core message broker limits and quotas

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
`Client ID size`	Size of the client ID, which is 128 bytes of UTF-8 encoded characters.	128 Bytes	128 Bytes	No
`Connect requests per second per account`	The maximum number of MQTT CONNECT requests per second per account.	500	100	Yes
`Connect requests per second per client ID`	AWS IoT Core restricts MQTT CONNECT requests from the same accountId and clientId to 1 MQTT CONNECT operation per second.	1	1	No
`Connection inactivity`	The default keep-alive interval is 1200 seconds. It is used when a	1200 Seconds	1200 Seconds	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
(keep-alive interval)	client requests a keep-alive interval of zero. If a client requests an interval > 1200 seconds, the default interval is used. If a client requests a keep-alive interval < 30 seconds but > zero, the server treats the client as though it requested a keep-alive interval of 30 seconds.			
Inbound publish requests per second per account	Inbound publish requests counts all messages that IoT Core processes before routing them to the clients or rules engine. Ex: A single message published on reserved topic can result in publishing 3 additional messages for shadow update, documents and delta, hence counted as 4 requests; whereas on an unreserved topic like a/b is counted as 1 request.	20000	2000	Yes
Maximum concurrent client connections per account	The maximum number of concurrent connections allowed per account.	500000	100000	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Maximum inbound unacknowledged QoS 1 publish requests	AWS IoT Core restricts the number of unacknowledged inbound publish requests per client. When this quota is reached, no new publish requests are accepted from this client until a PUBACK message is returned by the server.	100	100	No
Maximum number of retained messages per account	The number of stored retained messages per account.When this limit is reached, no new retained messages are stored for this account and all retained publishes with payloads greater than 0 bytes are throttled.	5000	500	Yes
Maximum number of slashes in topic and topic filter	A topic in a publish or subscribe request can have no more than 7 forward slashes (/). This excludes the first 3 slashes in the mandatory segments for Basic Ingest topics ($AWS/rules/rule-name/).	7	7	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Maximum outbound unacknowledged QoS 1 publish requests	AWS IoT Core restricts the number of unacknowledged outbound publish requests per client. When this quota is reached, no new publish requests are sent to the client until the client acknowledges the publish requests.	100	100	No
Maximum retry interval for delivering QoS 1 messages	AWS IoT Core retries delivery of unacknowledged quality of service 1 (QoS 1) publish requests to a client for up to one hour. If AWS IoT Core does not receive a PUBACK message from the client after one hour, it drops the publish requests.	3600 Seconds	3600 Seconds	No
Maximum subscriptions per subscribe request	A single SUBSCRIBE request has a quota of 8 subscriptions.	8	8	No
Message size	The payload for every publish request can be no larger than 128 KB. AWS IoT Core rejects publish and connect requests larger than this size.	128 Kilobytes	128 Kilobytes	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Outbound publish requests per second per account	Outbound publish requests count for every message that resulted in matching a client's subscription. For example, 2 clients are subscribed to topic filter a/b. An inbound publish request on topic a/b results in a total of 2 outbound publish requests.	20000	2000	Yes
Persistent session expiry period	The duration for which the message broker stores an MQTT persistent session. The expiry period begins when the message broker detects the session has become disconnected. After the expiry period has elapsed, the message broker terminates the session and discards any associated queued messages. You can adjust this to a value from 1 hour to 7 days.	3600 Seconds	3600 Seconds	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Publish requests per second per connection	AWS IoT Core restricts each client connection to a maximum number of inbound and outbound publish requests per second. This limit includes messages sent to offline persistent session. Publish requests that exceed that quota are discarded.	100	100	No
Queued messages per second per account	AWS IoT Core restricts an account to a maximum number of queued messages per second per account. This limit applies when AWS IoT Core stores the messages send to offline persistent sessions.	500	500	Yes
Retained message inbound publish requests per second per account	The maximum rate that AWS IoT Core can accept inbound publish requests of MQTT messages with the RETAIN flag set.This rate includes all inbound publish requests whether invoked by the HTTP or MQTT protocol.	500	50	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Retained message inbound publish requests per second per topic	MQTT/HTTP publish requests with RETAIN flag set made to the same topic per second.	1	1	No
Subscriptions per account	AWS IoT Core restricts an account to a maximum number of subscriptions across all active connections.	500000	100000	Yes
Subscriptions per connection	AWS IoT Core supports 50 subscriptions per connection. AWS IoT Core might reject subscription requests on the same connection in excess of this amount and the connection is closed. Clients should validate the SUBACK message to ensure that their subscription requests have been successfully processed.	50	50	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
Subscriptions per second per account	AWS IoT Core restricts an account to a maximum number of subscriptions per second. For example, if there are 2 MQTT SUBSCRIBE requests sent within a second, each with 3 subscriptions (topic filters), AWS IoT Core counts those as 6 subscriptions.	500	200	Yes
Throughput per second per connection	Data received or sent over a client connection is processed at a maximum throughput rate. Data that exceeds the maximum throughput is delayed in processing.	512 Kilobytes	512 Kilobytes	No
Topic size	The topic passed to AWS IoT Core when sending a publish request can be no larger than 256 bytes of UTF-8 encoded characters. This excludes the first 3 mandatory segments for Basic Ingest topics ($AWS/rules/rule-name/).	256 Bytes	256 Bytes	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
WebSocket connection duration	The WebSocket connection lifetime is 24 hours. If the lifetime is exceeded, The WebSocket connection will be closed.	86400 Seconds	86400 Seconds	No

*Select AWS Regions: Europe (Stockholm), Middle East (Bahrain), Europe (Paris), Asia Pacific (Hong Kong), AWS GovCloud (US-East), AWS GovCloud (US-West), US West (N. California), Canada (Central), China (Ningxia)

AWS IoT Core protocol-related limits and quotas

These limits are now found in the section called "AWS IoT Core message broker and protocol limits and quotas" (p. 485).

AWS IoT Core credential provider limits and quotas

AWS IoT Core credential limits and quotas

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
AssumeRoleWithCertificate API TPS	The maximum number of transactions per second (TPS) that can be made for the AssumeRoleWithCertificate API.	50	100	Yes
Maximum number of AWS IoT Core role aliases	Maximum number of AWS IoT Core role aliases registered in your AWS account. AWS IoT role alias allows connected devices to authenticate to AWS IoT using X.509 certificates and obtain short-lived AWS credentials from an IAM role that	100	100	No

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
	is associated with the role alias.			

*Select AWS Regions: US East (N. Virginia), US West (Oregon), Europe (Ireland)

Note
Large Region limits apply to AWS Regions: US East (N. Virginia), US West (Oregon), and Europe (Ireland)

AWS IoT Core security and identity limits and quotas

AWS IoT Core security and identity limits and quotas

Limit display name	Description	Default value	Adjustable
Configurable endpoints: maximum number of domain configurations per account	Configurable endpoints: maximum number of domain configurations per account	10	Yes
Custom authentication: maximum number of authorizers per account	Custom authentication: maximum number of authorizers that can be registered to your AWS account. Authorizers have a lambda function that implements custom authentication and authorization.	10	No
Maximum number of CA certificates with the same subject field allowed per AWS account per Region	The maximum number of CA certificates with the same subject field allowed per AWS account per region. If you have more than one CA certificate with the same subject field, you must specify the CA certificate that was used to sign the device certificate being registered.	10	No
Maximum number of device certificates that	The maximum number of device certificates that can be registered per second. You can select up to 15 files to register.	15	Yes

Limit display name	Description	Default value	Adjustable
can be registered per second			
Maximum number of domain configurations per account per region	Maximum number of domain configurations per AWS account per AWS Region.	10	Yes
Maximum number of fleet provisioning template versions per template	Maximum number of fleet provisioning template versions per template. Each template version has a version ID and a creation date for devices connecting to AWS IoT using fleet previsioning.	5	No
Maximum number of fleet provisioning templates per customer	Maximum number of fleet provisioning templates per customer. Use fleet provisioning templates to generate certificates and private keys for your devices to securely connect to AWS IoT.	256	No
Maximum number of named policy versions	The maximum number of named policy versions. A managed AWS IoT policy can have up to five versions. To update a policy, create a new policy version. If the policy has five versions, you must delete an existing version before creating a new one.	5	No

Limit display name	Description	Default value	Adjustable
Maximum number of policies that can be attached to a certificate or Amazon Cognito identity	The maximum number of policies that can be attached to a client certificate or an Amazon Cognito identity, which is 10. Amazon Cognito identity enables you to create temporary, limited-privilege AWS credentials for use in mobile and web applications.	10	No
Maximum number of provisioning claims that can be generated per second by trusted user	The maximum number of provisioning claims that can be generated per second by a trusted user. A trusted user can be an end user or installation technician who uses a mobile app or web application to configure the device in its deployed location.	10	No
Maximum policy document size	The maximum size of the policy document, which is 2048 characters excluding white spaces.	2048	No
Maximum size of fleet provisioning template	Maximum size of fleet provisioning templates in Kilobytes. Fleet provisioning templates allow you to generate certificates and private keys for your devices to securely connect to AWS IoT.	10 Kilobytes	No

Additional AWS IoT Core security limits

Resource	Description	Default	Adjustable
Maximum number of domain names per server certificate	When you're providing the server certificates for AWS IoT custom domain configuration, certificates can have a maximum of four domain names.	4	No
Custom authentication: minimum connection duration (value of `DisconnectAfterInSecs`)	The Lambda function of a custom authorizer uses a DisconnectAfterInSeconds parameter to indicate the maximum duration (in seconds) of the connection to	300	No

Resource	Description	Default	Adjustable
	the AWS IoT Core gateway. The connection is terminated if it exceeds this value.		
Custom authentication: maximum connection duration (value of `DisconnectAfterInSecs`)	The maximum duration (in seconds) of the connection to the AWS IoT Core gateway, defined by the value of `DisconnectAfterInSecs`.	86,400	No
Custom authentication: minimum policy refresh rate (value of `RefreshAfterInSecs`)	The Lambda function of a custom authorizer uses a `RefreshAfterInSeconds` parameter to indicate the interval (in seconds) between policy refreshes when connected to the AWS IoT Core gateway. When this interval passes, AWS IoT Core invokes the Lambda function to allow for policy refreshes.	300	No
Custom authentication: maximum policy refresh rate (value of `RefreshAfterInSecs`)	The maximum time interval between policy refreshes when connected to the AWS IoT Core gateway, defined by the value of `RefreshAfterInSeconds`.	86,400	No

MQTT-based File Delivery

MQTT-based File Delivery Resource Quotas

Resource	Description	Default	Adjustable
Streams per account	The maximum number of streams per account.	10,000*	No
Files per stream	The maximum number of files per stream.	10	No
File size	The maximum file size (in MB).	24 MB	No
Maximum data block size	The maximum data block size.	128 KB	No
Minimum data block size	The minimum data block size.	256 bytes	No
Maximum block offset specified in a stream file request	The maximum block offset specified in a stream file request.	98,304	No
Maximum blocks that can be requested per stream file request	The maximum number of blocks that can be requested per stream file request.	98,304	No
Maximum block bitmap size	The maximum block bitmap size.	12,288 bytes	No

***** For additional information, see Using AWS IoT MQTT-based file delivery in devices in the *AWS IoT Developer Guide*.

MQTT-based File Delivery Throttling

API	Transactions Per Second
CreateStream	15 TPS
DeleteStream	15 TPS
DescribeStream	15 TPS
ListStreams	15 TPS
UpdateStream	15 TPS

AWS IoT Core Device Advisor limits and quotas

AWS IoT Core Device Advisor limits and quotas

Limit display name	Description	Default value	Adjustable
Concurrently connected devices	The maximum number of test devices that can be concurrently connected per test suite run.	1	No
Concurrently running test suites	The maximum number of suites an AWS account can run concurrently.	1	No
Connections per test endpoint	The maximum number of connections to an account-specific test endpoint.	5	No
MQTT CONNECT requests per account	The maximum number of MQTT Connect requests sent from a test device per second per account.	5	No
MQTT CONNECT requests per client ID	The maximum number of MQTT Connect requests sent from a test device per second per client ID.	1	No
Rate of CreateSuiteDefinition API requests	The maximum number of CreateSuiteDefinition API requests you can make per second.	1	No
	The maximum number of DeleteSuiteDefinition API requests you can make per second.	10	No

Limit display name	Description	Default value	Adjustable
Rate of DeleteSuiteDefinition API requests			
Rate of GetSuiteDefinition API requests	The maximum number of GetSuiteDefinition API requests you can make per second.	10	No
Rate of GetSuiteRun API requests	The maximum number of GetSuiteRun API requests you can make per second.	10	No
Rate of GetSuiteRunReport API requests	The maximum number of GetSuiteRunReport API requests you can make per second.	10	No
Rate of ListSuiteDefinitions API requests	The maximum number of ListSuiteDefinitions API requests you can make per second.	10	No
Rate of ListSuiteRuns API requests	The maximum number of ListSuiteRuns API requests you can make per second.	10	No
Rate of ListTagsForResource API requests	The maximum number of ListTagsForResource API requests you can make per second.	10	No
Rate of ListTestCases API requests	The maximum number of ListTestCases API requests you can make per second.	10	No
Rate of StartSuiteRun API requests	The maximum number of StartSuiteRun API requests you can make per second.	1	No
Rate of TagResource API requests	The maximum number of TagResource API requests you can make per second.	10	No

Limit display name	Description	Default value	Adjustable
Rate of UntagResource API requests	The maximum number of UntagResource API requests you can make per second.	10	No
Rate of UpdateSuiteDefinition API requests	The maximum number of UpdateSuiteDefinition API requests you can make per second.	10	No
Test case execution time	The maximum time until a test case fails if not completed.	10800 Seconds	No
Test cases per test suite	The maximum number of test cases in one test suite.	50	No

AWS IoT Device Defender endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iot.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	iot.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	iot.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	iot.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	iot.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iot.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	iot.me-south-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	iot.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	iot.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

AWS IoT Device Defender audits limits and quotas

Limit display name	Description	Default value	Adjustable
Scheduled audits	The maximum number of scheduled audits.	5	No
Simultaneous in progress on-demand audits	The maximum number of simultaneous in progress on-demand audits.	10	No
Storage duration for audit findings	The maximum time, in days, that audit findings are stored after being reported.	90	No

The following service quotas apply to mitigation actions and audit mitigation action tasks:

AWS IoT Device Defender mitigation limits and quotas

Limit display name	Description	Default value	Adjustable
Mitigation actions	The maximum number of mitigation actions.	100	No

Audit mitigation action limits

Resource	Limit
Number of audit mitigation action tasks running at the same time	10 tasks
Retention period for audit mitigation action tasks	90 days

AWS IoT Device Defender detect limits and quotas

Limit display name	Description	Default value	Adjustable
Behavior metric value elements for each security profile	The maximum number of behavior metric value elements (counts, IP addresses, ports) for each security profile.	1000	No
Behaviors for each security profile	The maximum number of behaviors for each security profile	100	No

Limit display name	Description	Default value	Adjustable
Custom metrics	The maximum number of detect custom metrics.	100	Yes
Device metric minimum delay	The minimum time, in seconds, that a device must wait between sending metric reports.	300 Seconds	Yes
Device metric peak reporting rate for an account	The maximum number of device-side metric reports that can be sent, per second, from all devices in an account.	3500	Yes
Metric dimensions	The maximum number of detect metric dimensions.	10	No
Security profiles for each target	The maximum number of security profiles for each target (thing group or user account).	5	No
Storage duration for detect metrics	The maximum time, in days, that detect metrics are stored after being ingested.	14	No
Storage duration for detect violations	The maximum time, in days, that detect violations are stored after being generated.	30	No

ML Detect limits

Resource	Quota	Adjustable
Number of Detect mitigation action tasks that can be running at the same time	5 maximum	Yes
Retention period for Detect mitigation action tasks	90 days maximum	Yes
Retention period for models (time after which models are expired)	30 days maximum	No

AWS IoT Device Defender API throttling limits

This table describes the maximum number of transactions per second (TPS) that can be made to each of these AWS IoT Device Defender API actions.

AWS IoT Device Defender API throttling limits

Limit display name	Description	Default value	Adjustable
AttachSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the AttachSecurityProfile API.	10	No
CancelAuditMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the CancelAuditMitigationActionsTask API.	10	No
CancelAuditTask API TPS	The maximum number of transactions per second (TPS) that can be made for the CancelAuditTask API.	10	No
CancelDetectMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the CancelDetectMitigationActionsTask API.	10	No
CreateAuditSuppression API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateAuditSuppression API.	10	No
CreateCustomMetric API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateCustomMetric API.	10	No
CreateMitigationAction API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateMitigationAction API.	10	No
CreateScheduledAudit API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateScheduledAudit API.	5	No

Limit display name	Description	Default value	Adjustable
CreateSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateSecurityProfile API.	10	No
DeleteAccountAuditConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteAccountAuditConfiguration API.	5	No
DeleteAuditSuppression API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteAuditSuppression API.	10	No
DeleteCustomMetric API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteCustomMetric API.	10	No
DeleteDimension API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteDimension API.	10	No
DeleteMitigationAction API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteMitigationAction API.	10	No
DeleteScheduledAudit API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteScheduledAudit API.	5	No
DeleteSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteSecurityProfile API.	10	No

Limit display name	Description	Default value	Adjustable
DescribeAccountAuditConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAccountAuditConfiguration API.	5	No
DescribeAuditFinding API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAuditFinding API.	25	No
DescribeAuditMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAuditMitigationActionsTask API.	25	No
DescribeAuditSuppression API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAuditSuppression API.	10	No
DescribeAuditTask API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeAuditTask API.	25	No
DescribeCustomMetric API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeCustomMetric API.	25	No
DescribeDetectMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeDetectMitigationActionsTask API.	10	No
DescribeDimension API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeDimension API.	10	No

Limit display name	Description	Default value	Adjustable
DescribeMitigationAction API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeMitigationAction API.	25	No
DescribeScheduledAudit API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeScheduledAudit API.	5	No
DescribeSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeSecurityProfile API.	25	No
DetachSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the DetachSecurityProfile API.	10	No
ListActiveViolations API TPS	The maximum number of transactions per second (TPS) that can be made for the ListActiveViolations API.	10	No
ListAuditFindings API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuditFindings API.	10	No
ListAuditMitigationActionsExecutions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuditMitigationActionsExecutions API.	10	No
ListAuditMitigationActionsTasks API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuditMitigationActionsTasks API.	10	No

Limit display name	Description	Default value	Adjustable
ListAuditSuppressions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuditSuppressions API.	10	No
ListAuditTasks API TPS	The maximum number of transactions per second (TPS) that can be made for the ListAuditTasks API.	10	No
ListCustomMetrics API TPS	The maximum number of transactions per second (TPS) that can be made for the ListCustomMetrics API.	10	No
ListDetectMitigationActionsExecutions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListDetectMitigationActionsExecutions API.	10	No
ListDetectMitigationActionsTasks API TPS	The maximum number of transactions per second (TPS) that can be made for the ListDetectMitigationActionsTasks API.	10	No
ListDimensions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListDimensions API.	10	No
ListMetricValues API TPS	The maximum number of transactions per second (TPS) that can be made for the ListMetricValues API.	15	Yes
ListMitigationActions API TPS	The maximum number of transactions per second (TPS) that can be made for the ListMitigationActions API.	10	No

Limit display name	Description	Default value	Adjustable
ListScheduledAudits API TPS	The maximum number of transactions per second (TPS) that can be made for the ListScheduledAudits API.	5	No
ListSecurityProfiles API TPS	The maximum number of transactions per second (TPS) that can be made for the ListSecurityProfiles API.	10	No
ListSecurityProfilesForTarget API TPS	The maximum number of transactions per second (TPS) that can be made for the ListSecurityProfilesForTarget API.	10	No
ListTargetsForSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the ListTargetsForSecurityProfile API.	10	No
ListViolationEvents API TPS	The maximum number of transactions per second (TPS) that can be made for the ListViolationEvents API.	10	No
PutVerificationStateOnViolation API TPS	The maximum number of transactions per second (TPS) that can be made for the PutVerificationStateOnViolation API.	10	No
StartAuditMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the StartAuditMitigationActionsTask API.	10	No
StartDetectMitigationActionsTask API TPS	The maximum number of transactions per second (TPS) that can be made for the StartDetectMitigationActionsTask API.	10	No

Limit display name	Description	Default value	Adjustable
StartOnDemandAuditTask API TPS	The maximum number of transactions per second (TPS) that can be made for the StartOnDemandAuditTask API.	10	No
UpdateAccountAuditConfiguration API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateAccountAuditConfiguration API.	5	No
UpdateAuditSuppression API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateAuditSuppression API.	10	No
UpdateCustomMetric API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateCustomMetric API.	10	No
UpdateDimension API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateDimension API.	10	No
UpdateMitigationAction API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateMitigationAction API.	10	No
UpdateScheduledAudit API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateScheduledAudit API.	5	No
UpdateSecurityProfile API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateSecurityProfile API.	10	No

Limit display name	Description	Default value	Adjustable
ValidateSecurityProfileBehaviors API TPS	The maximum number of transactions per second (TPS) that can be made for the ValidateSecurityProfileBehaviors API.	10	No

AWS IoT Device Management endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Topics

- AWS IoT Core - control plane endpoints (p. 511)
- AWS IoT Core - data plane endpoints (p. 513)
- AWS IoT Device Management - jobs data endpoints (p. 515)
- AWS IoT Device Management - secure tunneling endpoints (p. 516)
- AWS IoT FIPS endpoints (p. 519)

AWS IoT Core - control plane endpoints

The following table contains AWS Region-specific endpoints for AWS IoT Core - control plane operations. For information about the operations supported by the AWS IoT Core - control plane endpoints, see AWS IoT operations in the *AWS IoT API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iot.us-east-2.amazonaws.com iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	iot.us-east-1.amazonaws.com iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	iot.us-west-1.amazonaws.com iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	iot.us-west-2.amazonaws.com iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Hong Kong)	ap-east-1	iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iot.ca-central-1.amazonaws.com iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	iot.us-gov-east-1.amazonaws.com iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	iot.us-gov-west-1.amazonaws.com iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS IoT Core - data plane endpoints

The AWS IoT Core - data plane endpoints are specific to each AWS account and AWS Region. To find the AWS IoT Core - data plane endpoint for your AWS account and AWS Region, use the **describe-endpoint** CLI command shown here, or the `DescribeEndpoint` REST API.

```
aws iot describe-endpoint --endpoint-type iot:Data-ATS
```

This command returns your Data Plane API endpoint in the following format:

```
account-specific-prefix.iot.aws-region.amazonaws.com
```

For information about the actions supported by the AWS IoT Core - data plane endpoints, see AWS IoT data plane operations in the *AWS IoT API Reference*.

The following table contains generic representations of the AWS account-specific endpoints for each AWS Region that AWS IoT Core supports. In the **Endpoint** column, the *account-specific-prefix* from your Account-specific endpoint replaces `data` shown in the generic endpoint representation.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	data-ats.iot.us-east-2.amazonaws.com data.iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	data-ats.iot.us-east-1.amazonaws.com data.iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	data-ats.iot.us-west-1.amazonaws.com data.iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	data-ats.iot.us-west-2.amazonaws.com data.iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	data-ats.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	data-ats.iot.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	data-ats.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	data-ats.iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	data-ats.iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	data-ats.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	data-ats.iot.ca-central-1.amazonaws.com data.iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	data-ats.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	data-ats.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	data-ats.iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	data-ats.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	data-ats.iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	data-ats.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	data-ats.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	data-ats.iot.us-gov-east-1.amazonaws.com data.iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	data-ats.iot.us-gov-west-1.amazonaws.com data.iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

AWS IoT Device Management - jobs data endpoints

The AWS IoT Device Management - jobs data endpoints are specific to each AWS account and AWS Region. To find the AWS IoT Device Management - jobs data endpoint for your AWS account and AWS Region, use the **describe-endpoint** CLI command shown here, or the `DescribeEndpoint` REST API.

```
aws iot describe-endpoint --endpoint-type iot:Jobs
```

This command returns your Jobs data plane API endpoint in the following format:

```
account-specific-prefix.jobs.iot.aws-region.amazonaws.com.
```

For information about the actions supported by the AWS IoT Device Management - jobs data endpoints, see AWS IoT jobs data plane operations in the *AWS IoT API Reference*.

The following table contains AWS Region-specific endpoints that AWS IoT Core supports for job data operations. In the **Endpoint** column, the *account-specific-prefix* from your account-specific endpoint replaces the *prefix* shown in the generic endpoint representation.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	*prefix*.jobs.iot.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	*prefix*.jobs.iot.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	*prefix*.jobs.iot.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	*prefix*.jobs.iot.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	*prefix*.jobs.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	*prefix*.jobs.iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	*prefix*.jobs.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	*prefix*.jobs.iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.jobs.iot.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.jobs.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	*prefix*.jobs.iot.ca-central-1.amazonaws.com	HTTPS	
China (Beijing)	cn-north-1	*prefix*.jobs.iot.cn-north-1.amazonaws.com.cn	HTTPS	
China (Ningxia)	cn-northwest-1	*prefix*.jobs.iot.cn-northwest-1.amazonaws.com.cn	HTTPS	
Europe (Frankfurt))	eu-central-1	*prefix*.jobs.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	*prefix*.jobs.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	*prefix*.jobs.iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	*prefix*.jobs.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	*prefix*.jobs.iot.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	*prefix*.jobs.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	*prefix*.jobs.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	*prefix*.jobs.iot.us-gov-west-1.amazonaws.com	HTTPS	

AWS IoT Device Management - secure tunneling endpoints

AWS IoT supports additional endpoints for secure tunneling.

Secure Tunneling Management APIs Endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	api.tunneling.iot.us-east-2.amazonaws.com api.tunneling.iot-fips.us-east-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	api.tunneling.iot.us-east-1.amazonaws.com api.tunneling.iot-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	api.tunneling.iot.us-west-1.amazonaws.com api.tunneling.iot-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	api.tunneling.iot.us-west-2.amazonaws.com api.tunneling.iot-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	api.tunneling.iot.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	api.tunneling.iot.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	api.tunneling.iot.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	api.tunneling.iot.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	api.tunneling.iot.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.tunneling.iot.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	api.tunneling.iot.ca-central-1.amazonaws.com api.tunneling.iot-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	api.tunneling.iot.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	api.tunneling.iot.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	api.tunneling.iot.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	api.tunneling.iot.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	api.tunneling.iot.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	api.tunneling.iot.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	api.tunneling.iot.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	api.tunneling.iot.us-gov-east-1.amazonaws.com api.tunneling.iot-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	api.tunneling.iot.us-gov-west-1.amazonaws.com api.tunneling.iot-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Secure Tunneling Device Connection Endpoints

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	wss://data.tunneling.iot.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	wss://data.tunneling.iot.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	wss://data.tunneling.iot.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	wss://data.tunneling.iot.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	wss://data.tunneling.iot.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	wss://data.tunneling.iot.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	wss://data.tunneling.iot.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	wss://data.tunneling.iot.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	wss://data.tunneling.iot.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	wss://data.tunneling.iot.ap-east-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	wss://data.tunneling.iot.ca-central-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
China (Beijing)	cn-north-1	wss://data.tunneling.iot.cn-north-1.amazonaws.com.cn	HTTPS
China (Ningxia)	cn-northwest-1	wss://data.tunneling.iot.cn-northwest-1.amazonaws.com.cn	HTTPS
Europe (Frankfurt)	eu-central-1	wss://data.tunneling.iot.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	wss://data.tunneling.iot.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	wss://data.tunneling.iot.eu-west-2.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	wss://data.tunneling.iot.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	wss://data.tunneling.iot.eu-north-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	wss://data.tunneling.iot.sa-east-1.amazonaws.com	HTTPS
Middle East (Bahrain)	me-south-1	wss://data.tunneling.iot.me-south-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	wss://data.tunneling.iot.us-gov-east-1.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	wss://data.tunneling.iot.us-gov-west-1.amazonaws.com	HTTPS

AWS IoT FIPS endpoints

AWS IoT provides endpoints that support the Federal Information Processing Standard (FIPS) 140-2. Choose the appropriate FIPS compliant endpoint to access AWS IoT features in your AWS Region from FIPS Endpoints by Service. For more information about the FIPs endpoints provided by AWS IoT, see Connecting to AWS IoT FIPS endpoints.

Service quotas

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- AWS IoT Core thing group resource limits and quotas (p. 521)
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- Fleet Hub for AWS IoT Device Management (p. 538)

AWS IoT Core thing resource limits and quotas

AWS IoT Core thing limits and quotas

Limit display name	Description	Default value	Adjustable
Maximum number of thing attributes for a thing with a thing type	Maximum number of thing attributes for a thing with a thing type. Thing types are optional and make it easier to discover things. Things with a thing type can have up to 50 attributes.	50	Yes
Maximum number of thing attributes for a thing without a thing type	Maximum number of thing attributes for a thing without a thing type. Things without a thing type can have up to three attributes.	3	No
Maximum thing name size	Maximum size of a thing name, which is 128 bytes of UTF-8 encoded characters.	128 Bytes	No
Number of thing types that can be associated with a thing	Number of thing types that can be associated with a thing, which can be zero or one. Thing types are optional and their use makes it easier to discover things.	1	No
Size of thing attributes per thing	The size of thing attributes per thing, which is 47 kilobytes. Thing attributes are optional name-value pairs that store information about the thing, which makes their use easier to discover things.	47 Kilobytes	Yes

Note

Thing types

The number of thing types that can be defined in an AWS account is not limited.Thing types allow you to store description and configuration information that is common to all things associated with the same thing type.

AWS IoT Core thing group resource limits and quotas

AWS IoT Core thing group limits and quotas

Limit display name	Description	Default value	Adjustable
Maximum depth of a thing group hierarchy	The maximum depth of a hierarchy of thing groups. When you build a hierarchy of groups, the policy attached to the parent group is inherited by its child group, and by all the things in the group and its child groups. This makes it easier to manage permissions for large number of things.	7	No
Maximum number of attributes associated with a thing group	Maximum number of attributes associated with a thing group. Attributes are name-value pairs you can use to store information about a group. You can add, delete, or update the attributes of a group.	50	No
Maximum number of direct child groups	The maximum number of direct child groups that a thing group can have in a thing group hierarchy.	100	No
Maximum number of dynamic groups	Maximum number of dynamic groups.	100	No
Maximum number of thing groups a thing can belong to	A thing can be added to a maximum of 10 thing groups. But you cannot add a thing to more than one group in the same hierarchy. This means that a thing cannot be added to two groups that share a common parent.	10	No
Maximum size of a thing group	Maximum size of a thing group attribute name, in chars.	128	No

Limit display name	Description	Default value	Adjustable
attribute name, in chars			
Maximum size of a thing group attribute value, in chars	Maximum size of a thing group attribute value, in chars.	800	No
Maximum thing group name size	Maximum thing group name size.	128 Bytes	No

Note

Thing group assignment

The maximum number of things that can be assigned to a thing group is not limited.

AWS IoT Core bulk thing registration limits and quotas

AWS IoT Core bulk thing registration

Limit display name	Description	Default value	Adjustable
Allowed registration tasks	For any given AWS account, only one bulk registration task can run at a time.	1	No
Data retention policy	After the bulk registration task (which can be long lived) is complete, data related to bulk thing registration is permanently deleted after 30 days.	2592000 Seconds	No
Maximum line length	Each line in an Amazon S3 input JSON file can't exceed 256K in length.	256000	No
Registration task termination	Any pending or incomplete bulk registration tasks are terminated after 30 days.	2592000 Seconds	No

For more information about the JSON file used for bulk registration, see Amazon S3 input JSON file.

AWS IoT Core billing group restrictions

- A thing can belong to exactly one billing group.
- Unlike thing groups, billing groups cannot be organized into hierarchies.
- For its usage to be registered for tagging or billing purposes, a device must:
  - Be registered as a thing in AWS IoT Core.
  - Communicate with AWS IoT Core using MQTT only.
  - Authenticate with AWS IoT Core using only its thing name as the client ID.
  - Use an X.509 certificate or Amazon Cognito Identity to authenticate.

  For more information, see Managing Devices with AWS IoT, Authentication, and Device Provisioning. You can use the AttachThingPrincipal API operation to attach a certificate or other credential to a thing.
- The maximum number of billing groups per AWS account is 20,000.

AWS IoT Device Management API action limits

AWS IoT Device Management API action limits

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
AddThingToBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the AddThingToBillingGroup API.	60	60	Yes
AddThingToThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the AddThingToThingGroup API.	100	60	Yes
AttachThingPrincipal API TPS	The maximum number of transactions per second (TPS) that can be made for the AttachThingPrincipal API.	100	50	Yes
CreateBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be	25	25	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
	made for the CreateBillingGroup API.			
CreateDynamicThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateDynamicThingGroup API.	5	5	Yes
CreateThing API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateThing API.	100	50	Yes
CreateThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateThingGroup API.	25	25	Yes
CreateThingType API TPS	The maximum number of transactions per second (TPS) that can be made for the CreateThingType API.	15	15	Yes
DeleteBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteBillingGroup API.	15	15	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DeleteDynamicThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteDynamicThingGroup API.	5	5	Yes
DeleteThing API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteThing API.	100	50	Yes
DeleteThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteThingGroup API.	15	15	Yes
DeleteThingType API TPS	The maximum number of transactions per second (TPS) that can be made for the DeleteThingType API.	15	15	Yes
DeprecateThingType API TPS	The maximum number of transactions per second (TPS) that can be made for the DeprecateThingType API.	15	15	Yes
DescribeBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeBillingGroup API.	100	15	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
DescribeThing API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeThing API.	350	50	Yes
DescribeThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeThingGroup API.	100	100	Yes
DescribeThingType API TPS	The maximum number of transactions per second (TPS) that can be made for the DescribeThingType API.	100	50	Yes
DetachThingPrincipal API TPS	The maximum number of transactions per second (TPS) that can be made for the DetachThingPrincipal API.	100	50	Yes
ListBillingGroups API TPS	The maximum number of transactions per second (TPS) that can be made for the ListBillingGroups API.	10	10	Yes
ListPrincipalThings API TPS	The maximum number of transactions per second (TPS) that can be made for the ListPrincipalThings API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
ListTagsForResource API TPS	The maximum number of transactions per second (TPS) that can be made for the ListTagsForResource API.	10	10	Yes
ListThingGroups API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingGroups API.	10	10	Yes
ListThingGroupsForThing API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingGroupsForThing API.	100	50	Yes
ListThingPrincipals API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingPrincipals API.	10	10	Yes
ListThingTypes API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingTypes API.	10	10	Yes
ListThings API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThings API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
ListThingsInBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingsInBillingGroup API.	25	25	Yes
ListThingsInThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the ListThingsInThingGroup API.	25	25	Yes
RegisterThing API TPS	The maximum number of transactions per second (TPS) that can be made for the RegisterThing API.	10	10	Yes
RemoveThingFromBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the RemoveThingFromBillingGroup API.	15	15	Yes
RemoveThingFromThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the RemoveThingFromThingGroup API.	100	50	Yes
TagResource API TPS	The maximum number of transactions per second (TPS) that can be made for the TagResource API.	10	10	Yes

Limit display name	Description	Default value	Default value in select AWS Regions*	Adjustable
UntagResource API TPS	The maximum number of transactions per second (TPS) that can be made for the UntagResource API.	10	10	Yes
UpdateBillingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateBillingGroup API.	15	15	Yes
UpdateDynamicThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateDynamicThingGroup API.	5	5	Yes
UpdateThing API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateThing API.	100	50	Yes
UpdateThingGroup API TPS	The maximum number of transactions per second (TPS) that can be made for the UpdateThingGroup API.	15	15	Yes

*__Select AWS Regions__: Europe (Stockholm), Middle East (Bahrain), Europe (Paris), Asia Pacific (Hong Kong), AWS GovCloud (US-East), AWS GovCloud (US-West), US West (N. California), Canada (Central), China (Ningxia)

AWS IoT Fleet Indexing

AWS IoT Device Management fleet indexing limits and quotas

Limit display name	Description	Default value	Adjustable
Maximum length of a custom field name	The maximum length of a custom field name.	1024	Yes
Maximum length of a query	The maximum length of a query in UTF-8 encoded characters.	1000	Yes
Maximum number of * wildcard operators per query term	The maximum number of * wildcard operators per query term.	2	No
Maximum number of ? wildcard operators per query term	The maximum number of ? wildcard operators per query term.	5	No
Maximum number of custom fields in AWS thing groups index	The maximum number of custom fields in AWS thing groups index.	5	Yes
Maximum number of custom fields in AWS things index	The maximum number of custom fields in AWS things index.	5	Yes
Maximum number of dynamic groups	The maximum number of dynamic groups per customer.	100	Yes
Maximum number of fleet metrics	The maximum number of fleet metrics per customer.	100	Yes
Maximum number of names in the named shadow names filter	The maximum number of names in the named shadow names filter	10	Yes

Limit display name	Description	Default value	Adjustable
Maximum number of percentile values per fleet metric	The maximum number of values for percentile aggregation type per fleet metric.	5	No
Maximum number of query terms per fleet metric	The maximum number of query terms per fleet metric.	7	Yes
Maximum number of query terms per query	The maximum number of query terms per query.	7	Yes
Maximum number of results per search query	The maximum number of results per search query.	500	No
Maximum period of a fleet metric	The maximum period of a fleet metric in seconds.	86400 Seconds	No
Minimum period of a fleet metric	The minimum period of a fleet metric in seconds.	60 Seconds	No

AWS IoT Device Management fleet indexing API limits

Limit display name	Description	Default value	Adjustable
DescribeIndex rate	The maximum number of DescribeIndex calls per second.	10	Yes
GetCardinality rate	The maximum number of GetCardinality calls per second.	15	Yes
GetIndexingConfiguration rate	The maximum number of GetIndexingConfiguration calls per second.	20	Yes
GetPercentiles rate	The maximum number of GetPercentiles calls per second.	15	Yes

Limit display name	Description	Default value	Adjustable
GetStatistics rate	The maximum number of GetStatistics calls per second.	15	Yes
ListIndices rate	The maximum number of ListIndices calls per second.	5	Yes
SearchIndex rate	The maximum number of SearchIndex calls per second.	15	Yes
UpdateIndexingConfiguration rate	The maximum number of UpdateIndexingConfiguration calls per second.	1	Yes

AWS IoT Jobs

AWS IoT Device Management jobs limits and quotas

Limit display name	Description	Default value	Adjustable
Active continuous jobs	The maximum number of active Jobs in your AWS account per region. This limit value is an aggregation of both active snapshot jobs and active continuous jobs.	100000	Yes
Active snapshot jobs	The maximum number of active Jobs in your AWS account per region. This limit value is an aggregation of both active snapshot jobs and active continuous jobs.	100000	Yes
Comment length	The maximum comment length (in characters).	2028	No
Concurrent jobs	The maximum number of concurrent jobs in your AWS account per region.	500	Yes
CreateJobTemplate throttle limit	The throttle limit for CreateJobTemplate.	10	Yes

Limit display name	Description	Default value	Adjustable
Data retention	The maximum number of days that job data and job execution data will be retained for inactive jobs (jobs that aren't IN_PROGRESS).	730	No
DeleteJobTemplate throttle limit	The throttle limit for DeleteJobTemplate.	10	Yes
DescribeJobExecution/ GetPendingJobExecutions throttle limit	The maximum number of total read transactions per second per account which can be caused by invoking DescribeJobExecution and/or GetPendingJobExecutions. In the control plane, DescribeJobExecution is limited to 10 TPS per invocation.	200	No
DescribeJobTemplate throttle limit	The throttle limit for DescribeJobTemplate.	10	Yes
DocumentSource length	The maximum number of characters in a job document source.	1350	No
In Progress timeout	The maximum job execution InProgress timeout value (in minutes).	10080	No
Job Targets	The maximum number of targets you can assign to a job.	100	No
Job Template description length	The maximum number of characters in a job template description.	2028	No
Job description length	The maximum number of characters in a job description.	2028	No

Limit display name	Description	Default value	Adjustable
Job execution roll out rate	The maximum number of job executions that you can roll out per minute.	1000	Yes
JobId Length	The maximum number of characters in a Job id.	64	No
JobTemplateId Length	The maximum number of characters in a job template id.	64	No
List results per page	The maximum number of list results per page.	250	No
ListJobTemplates throttle limit	The throttle limit for ListJobTemplates.	10	Yes
Maximum number of job templates	The maximum number of job templates you can own.	100	Yes
Minimum job execution roll out rate	The minimum number of job executions that you can roll out per minute.	1	No
Minimum pre-signed URL lifetime	The minimum lifetime (in seconds) of a pre-signed URL.	60 Seconds	No
Pre-signed URL lifetime	The maximum lifetime (in seconds) of a pre-signed URL.	3600 Seconds	No
S3 job document length	The maximum length of an S3 job document that can be sent to an AWS IoT device (in Bytes).	32768 Bytes	Yes

Limit display name	Description	Default value	Adjustable
StartNextPendingJobExecution/ UpdateJobExecution throttle limit	The maximum number of total write transactions per second per account which can be caused by invoking StartNextPendingJobExecution and/or UpdatePendingJobExecution.	200	No
StatusDetail map key length	The maximum length of a StatusDetail map key (in characters).	128	No
StatusDetail map key-value pairs	The maximum number of key-value pairs you can have in a StatusDetail map.	10	No
StatusDetail map value length	The maximum length of a StatusDetail map value (in characters).	1024	No
Step Timer	The maximum job execution step timeout value (in minutes).	10080	No

AWS IoT Device Management jobs API action limits

Limit display name	Description	Default value	Adjustable
AssociateTargetsWithJob throttle limit	The throttle limit for AssociateTargetsWithJob.	10	Yes
CancelJob throttle limit	The throttle limit for CancelJob.	10	Yes
CancelJobExecution throttle limit	The throttle limit for CancelJobExecution.	10	Yes
CreateJob throttle limit	The throttle limit for CreateJob.	10	No
DeleteJob throttle limit	The throttle limit for DeleteJob.	10	Yes

Limit display name	Description	Default value	Adjustable
DeleteJobExecution throttle limit	The throttle limit for DeleteJobExecution.	10	Yes
DescribeJob throttle limit	The throttle limit for DescribeJob.	10	Yes
DescribeJobExecution throttle limit	The throttle limit for DescribeJobExecution.	10	Yes
GetJobDocument throttle limit	The throttle limit for GetJobDocument.	10	Yes
ListJobExecutionsForJob throttle limit	The throttle limit for ListJobExecutionsForJob.	10	Yes
ListJobExecutionsForThing throttle limit	The throttle limit for ListJobExecutionsForThing.	10	Yes
ListJobs throttle limit	The throttle limit for ListJobs.	10	Yes
UpdateJob throttle limit	The throttle limit for UpdateJob.	10	Yes

† For definitions of data plane and control plane, see **What are the ways for accessing AWS IoT Core?** in the AWS IoT Core FAQs

AWS IoT Secure Tunneling

AWS IoT Device Management secure tunneling limits and quotas

Limit display name	Description	Default value	Adjustable
CloseTunnel API throttle limit	The maximum number of transactions per second per account which can be caused by invoking CloseTunnel.	1	Yes
	The maximum number of transactions	10	Yes

Limit display name	Description	Default value	Adjustable
DescribeTunnel API throttle limit	per second per account which can be caused by invoking DescribeTunnel.		
ListTagsForResource API throttle limit	The maximum number of transactions per second per account which can be caused by invoking ListTagsForResource.	10	Yes
ListTunnels API throttle limit	The maximum number of transactions per second per account which can be caused by invoking ListTunnels.	10	Yes
Maximum bandwidth per tunnel	The maximum bandwidth per tunnel (in kbps).	800	No
Maximum connection rate	The maximum number of transactions for connecting to a tunnel per second.	10	Yes
Maximum number of tags per resource	The maximum number of tags that can be used per resource.	50	No
Maximum tag key length	The maximum number of Unicode characters in a tag key. Each resource and tag key must be unique.	128	No
Maximum tag value length	The maximum number of Unicode characters in a tag value. Each tag key can have one value.	256	No
Maximum tunnel lifetime	The maximum tunnel lifetime (in hours), after which a tunnel will be closed after reaching.	12	No
OpenTunnel API throttle limit	The maximum number of transactions per second per account which can be caused by invoking OpenTunnel.	1	Yes

Limit display name	Description	Default value	Adjustable
TagResource API throttle limit	The maximum number of transactions per second per account which can be caused by invoking TagResource.	10	Yes
UntagResource API trottle limit	The maximum number of transactions per second per account which can be caused by invoking UntagResource.	10	Yes

Fleet Hub for AWS IoT Device Management

Fleet Hub limits and quotas

Limit display name	Description	Default value	Adjustable
Number of applications per Region per AWS account	The maximum number of applications per Region per AWS account.	10	Yes

Fleet Hub API throttling limits

Resource	Quota	Adjustable
Alarms	100 per Region per account	Yes
CreateApplication	10 TPS	Yes
DeleteApplication	10 TPS	Yes
DescribeApplication	10 TPS	Yes
ListApplications	10 TPS	Yes
ListTagsForResource	10 TPS	Yes
TagResource	10 TPS	Yes
UntagResource	10 TPS	Yes
UpdateApplication	10 TPS	Yes

AWS IoT Events endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Control plane endpoints

The following table contains AWS Region-specific endpoints that AWS IoT Events supports for control plane operations. For more information, see AWS IoT Events operations in the *AWS IoT Events API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iotevents.us-east-2.amazonaws.com iotevents-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	iotevents.us-east-1.amazonaws.com iotevents-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	iotevents.us-west-2.amazonaws.com iotevents-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iotevents.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iotevents.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iotevents.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iotevents.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iotevents.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iotevents.ca-central-1.amazonaws.com iotevents-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	iotevents.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iotevents.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	iotevents.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	iotevents.us-gov-west-1.amazonaws.com iotevents-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Data plane endpoints

The following table contains AWS Region-specific endpoints that AWS IoT Events supports for data plane operations. For more information, see AWS IoT Events data operations in the *AWS IoT Events API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	data.iotevents.us-east-2.amazonaws.com data.iotevents-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	data.iotevents.us-east-1.amazonaws.com data.iotevents-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	data.iotevents.us-west-2.amazonaws.com data.iotevents-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	data.iotevents.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	data.iotevents.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	data.iotevents.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	data.iotevents.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	data.iotevents.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	data.iotevents.ca-central-1.amazonaws.com data.iotevents-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	data.iotevents.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	data.iotevents.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	data.iotevents.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	data.iotevents.us-gov-west-1.amazonaws.com data.iotevents-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Detector model definition size	Each supported Region: 512 Kilobytes	No	The maximum size (in Kilobytes) of a detector model definition.
Detector model versions	Each supported Region: 500	Yes	The maximum number of versions of a single detector model for this account.
Detector models	Each supported Region: 50	Yes	The maximum number of Detector models for this account.
Detector models per input	Each supported Region: 10	No	The maximum number of Detector models associated with a single input.
Detectors per detector model	Each supported Region: 100,000	Yes	The maximum number of detectors created by a detector model.
Inputs	Each supported Region: 50	Yes	The maximum number of inputs for this account.
Maximum actions per alarm model	Each supported Region: 10	Yes	The maximum number of actions allowed in an alarm model.
Maximum actions per event	Each supported Region: 10	Yes	The maximum number of actions allowed in an event in a detector model.
Maximum alarm model versions per alarm model	Each supported Region: 500	Yes	The maximum number of versions of a single alarm model for this account.
Maximum alarm models per account	Each supported Region: 200	Yes	The maximum number of alarm models for this account.

Name	Default	Adjust	Description
Maximum alarm models per input	Each supported Region: 10	No	The maximum number of alarm models associated with a single input.
Maximum alarms per alarm model	Each supported Region: 100,000	Yes	The maximum number of alarms created by an alarm model.
Maximum events per state	Each supported Region: 20	Yes	The maximum number of events allowed in a state in a detector model.
Maximum messages per alarm per second	Each supported Region: 10	No	The maximum number of messages sent in 1 second to an alarm.
Maximum number of alarm models per property in an AWS IoT SiteWise asset model	Each supported Region: 10	Yes	The maximum number of alarm models that can be created for a given property in an AWS IoT SiteWise asset model
Maximum number of recipients per notification action in an alarm model	Each supported Region: 10	Yes	The maximum number of recipients that can be specified in a notification action in an alarm model
Maximum total messages evaluated per second	Each supported Region: 1,000	Yes	The maximum number of message evaluations across all detectors and alarms in a second for this account.
Maximum transition events per state	Each supported Region: 20	Yes	The maximum number of transition events allowed in a state in a detector model.
Message size	Each supported Region: 1 Kilobytes	Yes	The maximum size of a message (in Kilobytes).
Messages per detector per second	Each supported Region: 10	No	The maximum number of messages sent in 1 second to a detector.
Minimum timer duration	Each supported Region: 60 Seconds	Yes	The smallest duration a detector model timer can be set (in seconds).
Number of detector model analyses in RUNNING status	Each supported Region: 10	Yes	The maximum number of detector model analyses in RUNNING status for this account.
State variables per detector model definition	Each supported Region: 50	Yes	The maximum number of state variables in a detector model definition.

Name	Default	Adjust	Description
States per detector model	Each supported Region: 20	Yes	The maximum number of states allowed in a detector model.
Timers scheduled per detector	Each supported Region: 5	Yes	The maximum number of timers scheduled by a detector.
Trigger expressions	Each supported Region: 20	Yes	The maximum number of trigger expressions per state

For more information, see AWS IoT Events quotas in the *AWS IoT Events User Guide*.

AWS IoT Greengrass V1 endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Control Plane Operations

The following table contains AWS Region-specific endpoints that AWS IoT Greengrass supports for group management operations.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	greengrass.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	greengrass.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	greengrass.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	greengrass.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	greengrass.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	greengrass.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	greengrass.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	greengrass.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	greengrass.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	greengrass.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	greengrass.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	greengrass.us-gov-east-1.amazonaws.com greengrass.us-gov-east-1.amazonaws.com greengrass-ats.iot.us-gov-east-1.amazonaws.com greengrass-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS MQTT and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	greengrass.us-gov-west-1.amazonaws.com greengrass-ats.iot.us-gov-west-1.amazonaws.com greengrass.us-gov-west-1.amazonaws.com	HTTPS MQTT and HTTPS HTTPS	

AWS IoT Device Operations

The following table contains AWS Region-specific Amazon Trust Services (ATS) endpoints for AWS IoT device management operations, such as shadow sync. This is a data plane API.

To look up your account-specific endpoint, use the aws iot describe-endpoint --endpoint-type iot:Data-ATS command.

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	*prefix*-ats.iot.us-east-2.amazonaws.com	HTTPS, MQTT
US East (N. Virginia)	us-east-1	*prefix*-ats.iot.us-east-1.amazonaws.com	HTTPS, MQTT
US West (Oregon)	us-west-2	*prefix*-ats.iot.us-west-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Mumbai)	ap-south-1	*prefix*-ats.iot.ap-south-1.amazonaws.com	HTTPS, MQTT

Region Name	Region	Endpoint	Protocol
Asia Pacific (Seoul)	ap-northeast-2	*prefix*-ats.iot.ap-northeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Singapore)	ap-southeast-1	*prefix*-ats.iot.ap-southeast-1.amazonaws.com	HTTPS, MQTT
Asia Pacific (Sydney)	ap-southeast-2	*prefix*-ats.iot.ap-southeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*-ats.iot.ap-northeast-1.amazonaws.com	HTTPS, MQTT
China (Beijing)	cn-north-1	*prefix*.ats.iot.cn-north-1.amazonaws.com.cn	HTTPS, MQTT
Europe (Frankfurt)	eu-central-1	*prefix*-ats.iot.eu-central-1.amazonaws.com	HTTPS, MQTT
Europe (Ireland)	eu-west-1	*prefix*-ats.iot.eu-west-1.amazonaws.com	HTTPS, MQTT
Europe (London)	eu-west-2	*prefix*-ats.iot.eu-west-2.amazonaws.com	HTTPS, MQTT
AWS GovCloud (US-West)	us-gov-west-1	*prefix*-ats.iot.us-gov-west-1.amazonaws.com	HTTPS, MQTT
AWS GovCloud (US-East)	us-gov-east-1	*prefix*-ats.iot.us-gov-east-1.amazonaws.com	HTTPS, MQTT

Note
Legacy Verisign endpoints are currently supported for some Regions (p. 546), but we recommend that you use ATS endpoints with ATS root certificate authority (CA) certificates. For more information, see Server Authentication in the *AWS IoT Developer Guide*.

Discovery Operations

The following table contains AWS Region-specific ATS endpoints for device discovery operations using the AWS IoT Greengrass Discovery API. This is a data plane API.

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	greengrass-ats.iot.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	greengrass-ats.iot.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	greengrass-ats.iot.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	greengrass-ats.iot.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	greengrass-ats.iot.ap-northeast-2.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Asia Pacific (Singapore)	ap-southeast-1	greengrass-ats.iot.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	greengrass-ats.iot.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	greengrass-ats.iot.ap-northeast-1.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	greengrass.ats.iot.cn-north-1.amazonaws.com.cn	HTTPS
Europe (Frankfurt)	eu-central-1	greengrass-ats.iot.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	greengrass-ats.iot.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	greengrass-ats.iot.eu-west-2.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	greengrass-ats.iot.us-gov-west-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	greengrass-ats.iot.us-gov-east-1.amazonaws.com	HTTPS

Note
Legacy Verisign endpoints are currently supported for some Regions (p. 546), but we recommend that you use ATS endpoints with ATS root CA certificates. For more information, see Server authentication in the *AWS IoT Developer Guide*.

Supported Legacy Endpoints

We recommend that you use the ATS endpoints in the preceding tables with ATS root CA certificates. For backward compatibility, AWS IoT Greengrass currently supports legacy Verisign endpoints in the following AWS Regions. This support is expected to end in the future. For more information, see Server authentication in the *AWS IoT Developer Guide*.

When using legacy Verisign endpoints, you must use Verisign root CA certificates.

AWS IoT Device Operations (Legacy Endpoints)

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	*prefix*.iot.us-east-1.amazonaws.com	HTTPS, MQTT
US West (Oregon)	us-west-2	*prefix*.iot.us-west-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.iot.ap-southeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.iot.ap-northeast-1.amazonaws.com	HTTPS, MQTT

Region Name	Region	Endpoint	Protocol
Europe (Frankfurt)	eu-central-1	*prefix*.iot.eu-central-1.amazonaws.com	HTTPS, MQTT
Europe (Ireland)	eu-west-1	*prefix*.iot.eu-west-1.amazonaws.com	HTTPS, MQTT

To look up your account-specific legacy endpoint, use the aws iot describe-endpoint --endpoint-type iot:Data command.

Discovery Operations (Legacy Endpoints)

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	greengrass.iot.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	greengrass.iot.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	greengrass.iot.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	greengrass.iot.ap-northeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	greengrass.iot.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	greengrass.iot.eu-west-1.amazonaws.com	HTTPS

Service quotas

AWS IoT Greengrass Cloud API

Description	Default
Maximum number of AWS IoT devices per AWS IoT Greengrass group.	2500
Maximum number of Lambda functions per group.	200
Maximum number of resources per Lambda function.	20
Maximum number of resources per group.	200
Maximum number of transactions per second (TPS) on the AWS IoT Greengrass APIs.	See the section called “TPS” (p. 548).
Maximum number of subscriptions per group.	10000
Maximum number of subscriptions that specify `Cloud` as the source per group.	50

Description	Default
Maximum length of a core thing name.	124 bytes of UTF-8 encoded characters.

TPS

The default quota for the maximum number of transactions per second on the AWS IoT Greengrass APIs depends on the API and the AWS Region where AWS IoT Greengrass is used.

For most APIs and supported AWS Regions (p. 543), the default quota is 30. Exceptions are noted in the following tables.

API exceptions

API	Default
CreateDeployment	20

AWS Region exceptions

AWS Region	Default
China (Beijing)	10
AWS GovCloud (US-West)	10
AWS GovCloud (US-East)	10

This quota applies per AWS account. For example, in the US East (N. Virginia) Region, each account has a default quota of 30 TPS. Each API (such as `CreateGroupVersion` or `ListFunctionDefinitions`) has a quota of 30 TPS. This includes control plane and data plane operations. Requests that exceed the account or API quotas are throttled. To request account and API quota increases, including quotas for specific APIs, contact your AWS Enterprise Support representative.

AWS IoT Greengrass Core

Description	Default
Maximum number of routing table entries that specify `Cloud` as the source.	50 (matches AWS IoT subscription quota)
Maximum size of messages sent by an AWS IoT device.	128 KB (matches AWS IoT message size quota)
Minimum message queue size in the Greengrass core router.	256 KB
Maximum length of a topic string.	256 bytes of UTF-8 encoded characters.
Maximum number of forward slashes (/) in a topic or topic filter.	7
Minimum disk space needed to run the Greengrass Core software.	128 MB 400 MB when using OTA updates

Description	Default
Minimum RAM to run the Greengrass Core software.	128 MB 198 MB when using stream manager

The Greengrass Core software provides a service to detect the IP addresses of your Greengrass core devices. It sends this information to the AWS IoT Greengrass cloud service and allows AWS IoT devices to download the IP address of the Greengrass core they need to connect to.

Do not use this feature if any of the following is true:

- The IP address of a Greengrass core device changes frequently.
- The Greengrass core device is not always available to AWS IoT devices in its group.
- The Greengrass core has multiple IP addresses and an AWS IoT device is unable to reliably determine which address to use.
- Your organization's security policies don't allow you to send devices' IP addresses to the AWS Cloud.

AWS IoT Greengrass V2 endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Control Plane Operations

The following table contains AWS Region-specific endpoints that AWS IoT Greengrass V2 supports for operations to manage components, devices, and deployments.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	greengrass.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	greengrass.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	greengrass.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	greengrass.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	greengrass.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	greengrass.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	greengrass.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	greengrass.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	greengrass.ca-central-1.amazonaws.com	HTTPS	
China (Beijing)	cn-north-1	greengrass.cn-north-1.amazonaws.com.cn	HTTPS	
Europe (Frankfurt))	eu-central-1	greengrass.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	greengrass.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	greengrass.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	greengrass.us-gov-west-1.amazonaws.com greengrass.us-gov-west-1.amazonaws.com greengrass-ats.iot.us-gov-west-1.amazonaws.com	HTTPS HTTPS MQTT and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	greengrass.us-gov-east-1.amazonaws.com greengrass.us-gov-east-1.amazonaws.com greengrass-ats.iot.us-gov-east-1.amazonaws.com	HTTPS HTTPS MQTT and HTTPS	

AWS IoT Device Operations

The following table contains AWS Region-specific Amazon Trust Services (ATS) endpoints for AWS IoT device management operations, such as shadow sync. This is a data plane API.

To look up your account-specific endpoint, use the aws iot describe-endpoint --endpoint-type iot:Data-ATS command.

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	*prefix*-ats.iot.us-east-2.amazonaws.com	HTTPS, MQTT
US East (N. Virginia)	us-east-1	*prefix*-ats.iot.us-east-1.amazonaws.com	HTTPS, MQTT

Region Name	Region	Endpoint	Protocol
US West (Oregon)	us-west-2	*prefix*-ats.iot.us-west-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Mumbai)	ap-south-1	*prefix*-ats.iot.ap-south-1.amazonaws.com	HTTPS, MQTT
Asia Pacific (Seoul)	ap-northeast-2	*prefix*-ats.iot.ap-northeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Singapore)	ap-southeast-1	*prefix*-ats.iot.ap-southeast-1.amazonaws.com	HTTPS, MQTT
Asia Pacific (Sydney)	ap-southeast-2	*prefix*-ats.iot.ap-southeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*-ats.iot.ap-northeast-1.amazonaws.com	HTTPS, MQTT
Canada (Central)	ca-central-1	*prefix*-ats.iot.ca-central-1.amazonaws.com	HTTPS, MQTT
China (Beijing)	cn-north-1	*prefix*.ats.iot.cn-north-1.amazonaws.com.cn	HTTPS, MQTT
Europe (Frankfurt)	eu-central-1	*prefix*-ats.iot.eu-central-1.amazonaws.com	HTTPS, MQTT
Europe (Ireland)	eu-west-1	*prefix*-ats.iot.eu-west-1.amazonaws.com	HTTPS, MQTT
Europe (London)	eu-west-2	*prefix*-ats.iot.eu-west-2.amazonaws.com	HTTPS, MQTT
AWS GovCloud (US-West)	us-gov-west-1	*prefix*-ats.iot.us-gov-west-1.amazonaws.com	HTTPS, MQTT
AWS GovCloud (US-East)	us-gov-east-1	*prefix*-ats.iot.us-gov-east-1.amazonaws.com	HTTPS, MQTT

Note
Legacy Verisign endpoints are currently supported for some Regions (p. 552), but we recommend that you use ATS endpoints with ATS root certificate authority (CA) certificates. For more information, see Server Authentication in the *AWS IoT Developer Guide*.

Date Plane Operations

The following table contains AWS Region-specific ATS endpoints for data plane API operations, such as ResolveComponentCandidates.

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	greengrass-ats.iot.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	greengrass-ats.iot.us-east-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
US West (Oregon)	us-west-2	greengrass-ats.iot.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	greengrass-ats.iot.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	greengrass-ats.iot.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	greengrass-ats.iot.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	greengrass-ats.iot.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	greengrass-ats.iot.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	greengrass-ats.iot.ap-northeast-1.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	greengrass.ats.iot.cn-north-1.amazonaws.com.cn	HTTPS
Europe (Frankfurt)	eu-central-1	greengrass-ats.iot.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	greengrass-ats.iot.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	greengrass-ats.iot.eu-west-2.amazonaws.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	greengrass-ats.iot.us-gov-west-1.amazonaws.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	greengrass-ats.iot.us-gov-east-1.amazonaws.com	HTTPS

Note
Legacy Verisign endpoints are currently supported for some Regions (p. 552), but we recommend that you use ATS endpoints with ATS root CA certificates. For more information, see Server authentication in the *AWS IoT Developer Guide*.

Supported Legacy Endpoints

We recommend that you use the ATS endpoints in the preceding tables with ATS root CA certificates. For backward compatibility, AWS IoT Greengrass V2 currently supports legacy Verisign endpoints in the following AWS Regions. This support is expected to end in the future. For more information, see Server authentication in the *AWS IoT Developer Guide*.

When using legacy Verisign endpoints, you must use Verisign root CA certificates.

AWS IoT Device Operations (Legacy Endpoints)

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	*prefix*.iot.us-east-1.amazonaws.com	HTTPS, MQTT
US West (Oregon)	us-west-2	*prefix*.iot.us-west-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Sydney)	ap-southeast-2	*prefix*.iot.ap-southeast-2.amazonaws.com	HTTPS, MQTT
Asia Pacific (Tokyo)	ap-northeast-1	*prefix*.iot.ap-northeast-1.amazonaws.com	HTTPS, MQTT
Europe (Frankfurt)	eu-central-1	*prefix*.iot.eu-central-1.amazonaws.com	HTTPS, MQTT
Europe (Ireland)	eu-west-1	*prefix*.iot.eu-west-1.amazonaws.com	HTTPS, MQTT

To look up your account-specific legacy endpoint, use the aws iot describe-endpoint --endpoint-type iot:Data command.

Data Plane Operations (Legacy Endpoints)

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	greengrass.iot.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	greengrass.iot.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	greengrass.iot.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	greengrass.iot.ap-northeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	greengrass.iot.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	greengrass.iot.eu-west-1.amazonaws.com	HTTPS

Service quotas

The following tables describe quotas in AWS IoT Greengrass V2. For more information about quotas and how to request quota increases, see AWS service quotas (p. 986).

Quotas for core devices

Resource	Quota	Adjustable
Maximum length of a core device thing name	124 bytes of UTF-8 encoded characters	No

Quotas for components

Resource	Quota	Adjustable	Notes
Maximum number of components	5,000 components per Region	Yes	
Maximum number of component versions	5,000 versions per component per Region	Yes	
Maximum size of component recipe	8 KB	No	
Maximum total size of component artifacts	2 GB	No	This quota applies to the sum of all artifacts for a component.

Quotas for deployments

Resource	Quota	Adjustable	Notes
Maximum size of deployment document for a thing deployment (without large configuration support)	7 KB	No	The deployment document includes the component configurations, deployment configurations, and payload overhead.
Maximum size of deployment document for a thing group deployment (without large configuration support)	31 KB	No	The deployment document includes the component configurations, deployment configurations, and payload overhead.
Maximum size of deployment document with large configuration support	6 MB	No	The deployment document includes the component configurations, deployment configurations, and payload overhead.

Quotas for API operations

Resource	Quota	Adjustable	Notes
Request rate for CreateComponentVersion	1 request per second per Region	No	
Request rate for other API operations	30 requests per second per Region	No	This quota applies to the combination of API requests for all control plane operations. **Exceptions** • China (Beijing) – 10 requests per second per Region • AWS GovCloud (US-West) – 10 requests per second per Region • AWS GovCloud (US-East) – 10 requests per second per Region

AWS IoT RoboRunner endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	iotroborunner.us-east-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	iotroborunner.eu-central-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
Action templates	Each supported Region: 150	Yes	The maximum number of action templates you can

Name	Default	Adjust	Description
			create in this account in the current region.
Actions	Each supported Region: 150	Yes	The maximum number of actions you can create in this account in the current region.
Activities	Each supported Region: 30	Yes	The maximum number of activities you can create in this account in the current region.
Destination relationships	Each supported Region: 30	Yes	The maximum number of destination relationships you can create in this account in the current region.
Destinations	Each supported Region: 15	Yes	The maximum number of destinations you can create in this account in the current region.
Rate of CreateAction requests	Each supported Region: 10	No	The maximum number of CreateAction requests that you can make per second.
Rate of CreateActionTemplate requests	Each supported Region: 10	No	The maximum number of CreateActionTemplate requests that you can make per second.
Rate of CreateActionTemplateDependency requests	Each supported Region: 10	No	The maximum number of CreateActionTemplateDependency requests that you can make per second.
Rate of CreateActivity requests	Each supported Region: 10	No	The maximum number of CreateActivity requests that you can make per second.
Rate of CreateActivityDependency requests	Each supported Region: 10	No	The maximum number of CreateActivityDependency requests that you can make per second.
Rate of CreateDestination requests	Each supported Region: 5	No	The maximum number of CreateDestination requests that you can make per second.
Rate of CreateDestinationRelationship requests	Each supported Region: 5	No	The maximum number of CreateDestinationRelationship requests that you can make per second.

Name	Default	Adjust	Description
Rate of CreateSite requests	Each supported Region: 5	No	The maximum number of CreateSite requests that you can make per second.
Rate of CreateTask requests	Each supported Region: 10	No	The maximum number of CreateTask requests that you can make per second.
Rate of CreateTaskDependency requests	Each supported Region: 10	No	The maximum number of CreateTaskDependency requests that you can make per second.
Rate of CreateWorker requests	Each supported Region: 5	No	The maximum number of CreateWorker requests that you can make per second.
Rate of CreateWorkerFleet requests	Each supported Region: 5	No	The maximum number of CreateWorkerFleet requests that you can make per second.
Rate of DeleteAction requests	Each supported Region: 3	No	The maximum number of DeleteAction requests that you can make per second.
Rate of DeleteActionTemplate requests	Each supported Region: 3	No	The maximum number of DeleteActionTemplate requests that you can make per second.
Rate of DeleteActionTemplateDependency requests	Each supported Region: 3	No	The maximum number of DeleteActionTemplateDependency requests that you can make per second.
Rate of DeleteActivity requests	Each supported Region: 3	No	The maximum number of DeleteActivity requests that you can make per second.
Rate of DeleteActivityDependency requests	Each supported Region: 3	No	The maximum number of DeleteActivityDependency requests that you can make per second.
Rate of DeleteDestination requests	Each supported Region: 3	No	The maximum number of DeleteDestination requests that you can make per second.
Rate of DeleteDestinationRelationship requests	Each supported Region: 3	No	The maximum number of DeleteDestinationRelationship requests that you can make per second.

Name	Default	Adjust	Description
Rate of DeleteSite requests	Each supported Region: 3	No	The maximum number of DeleteSite requests that you can make per second.
Rate of DeleteTask requests	Each supported Region: 3	No	The maximum number of DeleteTask requests that you can make per second.
Rate of DeleteTaskDependency requests	Each supported Region: 3	No	The maximum number of DeleteTaskDependency requests that you can make per second.
Rate of DeleteWorker requests	Each supported Region: 3	No	The maximum number of DeleteWorker requests that you can make per second.
Rate of DeleteWorkerFleet requests	Each supported Region: 3	No	The maximum number of DeleteWorkerFleet requests that you can make per second.
Rate of GetAction requests	Each supported Region: 20	No	The maximum number of GetAction requests that you can make per second.
Rate of GetActionTemplate requests	Each supported Region: 20	No	The maximum number of GetActionTemplate requests that you can make per second.
Rate of GetActivity requests	Each supported Region: 20	No	The maximum number of GetActivity requests that you can make per second.
Rate of GetDestination requests	Each supported Region: 20	No	The maximum number of GetDestination requests that you can make per second.
Rate of GetDestinationRelationship requests	Each supported Region: 20	No	The maximum number of GetDestinationRelationship requests that you can make per second.
Rate of GetSite requests	Each supported Region: 20	No	The maximum number of GetSite requests that you can make per second.
Rate of GetTask requests	Each supported Region: 20	No	The maximum number of GetTask requests that you can make per second.
Rate of GetWorker requests	Each supported Region: 20	No	The maximum number of GetWorker requests that you can make per second.

Name	Default	Adjust	Description
Rate of GetWorkerFleet requests	Each supported Region: 20	No	The maximum number of GetWorkerFleet requests that you can make per second.
Rate of ListActionTemplates requests	Each supported Region: 30	No	The maximum number of ListActionTemplates requests that you can make per second.
Rate of ListActions requests	Each supported Region: 30	No	The maximum number of ListActions requests that you can make per second.
Rate of ListActivities requests	Each supported Region: 30	No	The maximum number of ListActivities requests that you can make per second.
Rate of ListDestinationRelationships requests	Each supported Region: 30	No	The maximum number of ListDestinationRelationships requests that you can make per second.
Rate of ListDestinations requests	Each supported Region: 30	No	The maximum number of ListDestinations requests that you can make per second.
Rate of ListSites requests	Each supported Region: 30	No	The maximum number of ListSites requests that you can make per second.
Rate of ListTasks requests	Each supported Region: 30	No	The maximum number of ListTasks requests that you can make per second.
Rate of ListWorkerFleets requests	Each supported Region: 30	No	The maximum number of ListWorkerFleets requests that you can make per second.
Rate of ListWorkers requests	Each supported Region: 30	No	The maximum number of ListWorkers requests that you can make per second.
Rate of UpdateActionState requests	Each supported Region: 10	No	The maximum number of UpdateActionState requests that you can make per second.
Rate of UpdateActivity requests	Each supported Region: 10	No	The maximum number of UpdateActivity requests that you can make per second.

Name	Default	Adjust	Description
Rate of UpdateDestination requests	Each supported Region: 5	No	The maximum number of UpdateDestination requests that you can make per second.
Rate of UpdateSite requests	Each supported Region: 5	No	The maximum number of UpdateSite requests that you can make per second.
Rate of UpdateTask requests	Each supported Region: 10	No	The maximum number of UpdateTask requests that you can make per second.
Rate of UpdateWorker requests	Each supported Region: 5	No	The maximum number of UpdateWorker requests that you can make per second.
Rate of UpdateWorkerFleet requests	Each supported Region: 5	No	The maximum number of UpdateWorkerFleet requests that you can make per second.
Sites	Each supported Region: 3	Yes	The maximum number of sites you can create in this account in the current region.
Tasks	Each supported Region: 30	Yes	The maximum number of tasks you can create in this account in the current region.
Worker fleets	Each supported Region: 9	Yes	The maximum number of worker fleets you can create in this account in the current region.
Workers	Each supported Region: 60	Yes	The maximum number of workers you can create in this account in the current region.

AWS IoT SiteWise endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	iotsitewise.us-east-2.amazonaws.com iotsitewise-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	iotsitewise.us-east-1.amazonaws.com iotsitewise-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	iotsitewise.us-west-2.amazonaws.com iotsitewise-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	iotsitewise.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	iotsitewise.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	iotsitewise.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	iotsitewise.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	iotsitewise.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	iotsitewise.ca-central-1.amazonaws.com iotsitewise-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	iotsitewise.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	iotsitewise.eu-west-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	iotsitewise.us-gov-west-1.amazonaws.com iotsitewise-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

For more information, see AWS IoT SiteWise endpoints in the *AWS IoT SiteWise User Guide*.

Service quotas

Name	Default	Adjust	Description
Depth of asset hierarchy tree	Each supported Region: 10	Yes	The maximum asset hierarchy tree depth.
Number of OPC UA sources per gateway	Each supported Region: 100	No	The maximum number of OPC-UA sources per gateway.
Number of asset hierarchy definitions per asset model	Each supported Region: 20	Yes	The maximum number of asset hierarchy definitions per asset model.
Number of asset models per Region per AWS account	Each supported Region: 100	Yes	The maximum number of asset models per Region per AWS account.
Number of asset models per hierarchy tree	Each supported Region: 50	Yes	The maximum number of asset models per hierarchy tree.
Number of assets per asset model	Each supported Region: 10,000	Yes	The maximum number of assets per asset model.
Number of child assets per parent asset	Each supported Region: 100	Yes	The maximum number of child assets per parent asset.
Number of dashboards per project	Each supported Region: 100	Yes	The maximum number of dashboards per project.
Number of data points per second per data quality per asset property	Each supported Region: 10	No	The maximum number of data points with the same timestamp in seconds per data quality for each asset property. You can store up to this number of good-quality, uncertain-quality, and bad-quality data points for any given second for each asset property.
Number of days between the start date in the past and today for GetInterpolatedAssetPropertyValues	Each supported Region: 28	Yes	The maximum number of days between the start date and today. This quota applies to the startTimeInSeconds parameter when you specify a start date in the past for GetInterpolatedAssetPropertyValues requests.
Number of functions per property formula expression	Each supported Region: 10	No	The maximum number of functions that can be used

Name	Default	Adjust	Description
			in one property formula expression.
Number of gateways per Region per AWS account	Each supported Region: 100	Yes	The maximum number of gateways per Region per AWS account.
Number of metrics per dashboard visualization	Each supported Region: 5	Yes	The maximum number of metrics per dashboard visualization.
Number of parent asset models per child asset model	Each supported Region: 10	Yes	The maximum number of parent asset models per child asset model.
Number of portals per Region per AWS account	Each supported Region: 100	Yes	The maximum number of portals per Region per AWS account.
Number of projects per portal	Each supported Region: 100	Yes	The maximum number of projects per portal.
Number of properties per asset model	Each supported Region: 200	Yes	The maximum number of properties per asset model.
Number of properties that depend on a single property	Each supported Region: 30	No	The maximum number of properties that directly or indirectly depend on a single property, as defined across all formula expressions.
Number of properties that directly depend on a single property	Each supported Region: 20	Yes	The maximum number of properties that directly depend on a single property, as defined across all formula expressions.
Number of property variables per property formula expression	Each supported Region: 10	No	The maximum number of property variables that can be used in one property formula expression.
Number of results per GetInterpolatedAssetPropertyValues request	Each supported Region: 10	Yes	The maximum number of results to return per paginated GetInterpolatedAssetPropertyValues request.
Number of root assets per project	Each supported Region: 1	No	The maximum number of root assets associated per project.
Number of visualizations per dashboard	Each supported Region: 10	Yes	The maximum number of visualizations per dashboard.

Name	Default	Adjust	Description
Rate of BatchPutAssetPropertyValue entries ingested per asset property	Each supported Region: 10	No	The maximum number of BatchPutAssetPropertyValue entries ingested per second per asset property per Region per AWS account.
Rate of GetAssetPropertyAggregates request and BatchGetAssetPropertyAggregates entry queries per asset property	Each supported Region: 50	No	The maximum number of total GetAssetPropertyAggregates requests and BatchGetAssetPropertyAggregates entries for each asset property per second per Region per AWS Account.
Rate of GetAssetPropertyValue request and BatchGetAssetPropertyValue entry queries per asset property	Each supported Region: 500	No	The maximum number of total GetAssetPropertyValue requests and BatchGetAssetPropertyValue entries for each asset property per second per Region per AWS Account.
Rate of GetAssetPropertyValueHistory request and BatchGetAssetPropertyValueHistory entry queries per asset property	Each supported Region: 30	No	The maximum number of total GetAssetPropertyValueHistory requests and BatchGetAssetPropertyValueHistory entries for each asset property per second per Region per AWS Account.
Rate of GetInterpolatedAssetPropertyValues requests	Each supported Region: 500	Yes	The maximum number of GetInterpolatedAssetPropertyValues requests per second that you can perform in this account in the current Region.
Rate of data points ingested	Each supported Region: 1,000	Yes	The maximum number of timestamp-quality-value (TQV) data points ingested per second per Region per AWS account.
Request rate for AssociateAssets	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for AssociateAssets.
Request rate for AssociateTimeSeriesToAssetProperty	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for AssociateTimeSeriesToAssetProperty.

Name	Default	Adjust	Description
Request rate for BatchGetAssetPropertyAggregates	Each supported Region: 200	Yes	The maximum number of requests per second per Region per AWS account for BatchGetAssetPropertyAggregates.
Request rate for BatchGetAssetPropertyValue	Each supported Region: 500	Yes	The maximum number of requests per second per Region per AWS account for BatchGetAssetPropertyValue.
Request rate for BatchGetAssetPropertyValueHistory	Each supported Region: 200	Yes	The maximum number of requests per second per Region per AWS account for BatchGetAssetPropertyValueHistory.
Request rate for BatchPutAssetPropertyValue	Each supported Region: 1,000	Yes	The maximum number of requests per second per Region per AWS account for BatchPutAssetPropertyValue.
Request rate for CreateAsset	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for CreateAsset.
Request rate for CreateAssetModel	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for CreateAssetModel.
Request rate for DeleteAsset	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DeleteAsset.
Request rate for DeleteAssetModel	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for DeleteAssetModel.
Request rate for DeleteTimeSeries	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DeleteTimeSeries.
Request rate for DescribeAsset	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DescribeAsset.
Request rate for DescribeAssetModel	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for DescribeAssetModel.

Name	Default	Adjust	Description
Request rate for DescribeAssetProperty	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DescribeAssetProperty.
Request rate for DescribeDefaultEncryptionConfiguration	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for DescribeDefaultEncryptionConfiguration.
Request rate for DescribeLoggingOptions	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DescribeLoggingOptions.
Request rate for DescribeStorageConfiguration	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for DescribeStorageConfiguration.
Request rate for DescribeTimeSeries	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DescribeTimeSeries.
Request rate for DisassociateAssets	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DisassociateAssets.
Request rate for DisassociateTimeSeriesFromAssetProperty	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for DisassociateTimeSeriesFromAssetProperty
Request rate for GetAssetPropertyAggregates	Each supported Region: 1,000	Yes	The maximum number of requests per second per Region per AWS account for GetAssetPropertyAggregates.
Request rate for GetAssetPropertyValue	Each supported Region: 1,000	Yes	The maximum number of requests per second per Region per AWS account for GetAssetPropertyValue.
Request rate for GetAssetPropertyValueHistory	Each supported Region: 1,000	Yes	The maximum number of requests per second per Region per AWS account for GetAssetPropertyValueHistory.
Request rate for ListAssetModels	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for ListAssetModels.

Name	Default	Adjust	Description
Request rate for ListAssetRelationships	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for ListAssetRelationships.
Request rate for ListAssets	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for ListAssets.
Request rate for ListAssociatedAssets	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for ListAssociatedAssets.
Request rate for ListTagsForResource	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for ListTagsForResource.
Request rate for ListTimeSeries	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for ListTimeSeries.
Request rate for PutDefaultEncryptionConfiguration	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for PutDefaultEncryptionConfiguration.
Request rate for PutLoggingOptions	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for PutLoggingOptions.
Request rate for PutStorageConfiguration	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for PutStorageConfiguration.
Request rate for TagResource	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for TagResource.
Request rate for UntagResource	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for UntagResource.
Request rate for UpdateAsset	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for UpdateAsset.

Name	Default	Adjust	Description
Request rate for UpdateAssetModel	Each supported Region: 10	Yes	The maximum number of requests per second per Region per AWS account for UpdateAssetModel.
Request rate for UpdateAssetProperty	Each supported Region: 30	Yes	The maximum number of requests per second per Region per AWS account for UpdateAssetProperty.

For more information, see AWS IoT SiteWise quotas in the *AWS IoT SiteWise User Guide*.

AWS IoT TwinMaker endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	iottwinmaker.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	iottwinmaker.us-west-2.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	iottwinmaker.eu-west-1.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	iottwinmaker.ap-southeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	iottwinmaker.eu-central-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	iottwinmaker.ap-southeast-2.amazonaws.com	HTTPS

Service quotas

Resource	Description	Quota	Adjustable
Workspaces in this account in the current Region	The maximum number of workspaces in this account in the current Region.	15	Yes

Resource	Description	Quota	Adjustable
Component types per workspace	The maximum number of unique component types per workspace.	150	Yes
Depth of component type hierarchy	The maximum depth of the component type hierarchy tree.	10	Yes
Parent component types per child component type	The maximum number of multi-inheritance parent component types or `extendsFrom` relationships one component type can have.	10	No
Properties per component type or component	The maximum number of properties that can be defined on a component type or added to any given component instance.	200	Yes
Entities per workspace	The maximum number of entities allowed per workspace.	10000	Yes
Components per entity	The maximum number of components that can be defined on one entity.	10	Yes
Depth of entity hierarchy	The maximum depth of the entity hierarchy tree.	10	Yes
Child entities per parent entity	The maximum number of direct children for one entity in the entity hierarchy tree.	100	Yes
Scenes per workspace	The maximum number of scenes within a workspace.	100	Yes
Tags per resource	The maximum number of tags that can be placed on any resource with an ARN (such as workspace, entity, component type, etc.).	50	No

AWS IoT TwinMaker API throttling limits

This topic describes the maximum number of transactions per second (TPS) that can be made to AWS IoT TwinMaker API actions per AWS account.

- **Request rate for Model and Scene API operations limit:** 10 TPS per AWS account.
- **Request rate for Data read and write API operations limit:** 100 TPS per AWS account.

Note
The TPS limits apply to all regions, and are not adjustable.

Amazon Interactive Video Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon IVS uses an API for setting up and configuring IVS streaming applications. Amazon IVS Chat uses the main Chat API for setting up and managing chat rooms, and the Chat Messaging API for sending and receiving chat messages.

IVS endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	ivs.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	ivs.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	ivs.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	ivs.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	ivs.ap-northeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	ivs.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	ivs.eu-west-1.amazonaws.com	HTTPS

IVS Chat endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	ivschat.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	ivschat.us-west-2.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Europe (Ireland)	eu-west-1	ivschat.eu-west-1.amazonaws.com	HTTPS

IVS Chat Messaging endpoints

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	edge.ivschat.us-east-1.amazonaws.com	WSS
US West (Oregon)	us-west-2	edge.ivschat.us-west-2.amazonaws.com	WSS
Europe (Ireland)	eu-west-1	edge.ivschat.eu-west-1.amazonaws.com	WSS

Service quotas

For more information, see Service Quotas in the *Amazon IVS User Guide*.

If there is a discrepancy, regard the *User Guide* as definitive.

IVS quotas

Name	Default	Adjustable	Description
Channels	5,000	Yes	Maximum number of channels, per AWS Region.
Concurrent streams	100	Yes	Maximum number of channels that can be streamed simultaneously, per AWS Region. If you exceed this threshold, the stream is rejected.
Concurrent views	15,000	Yes	Maximum number of views allowed to playback a live channel simultaneously, across all channels, in an AWS Region. (A *view* is a unique viewing session which is actively downloading or playing video.)
Ingest bitrate (channel type `BASIC`)	1.5 Mbps or 3.5 Mbps	No	Maximum bits per second that can be streamed to a channel whose `type` is `BASIC`. • If input video quality is 480p or less, the default quota is 1.5 Mbps. • If input video quality is more than 480p but less than 1080p, the default quota is 3.5 Mbps. Warning: If you exceed this threshold, the stream probably will disconnect immediately. See the Amazon IVS API Reference for details about channel `type`.
Ingest bitrate (channel type `STANDARD`)	8.5 Mbps	No	Maximum bits per second that can be streamed to a channel whose `type` is `STANDARD` (the default). Warning: If you exceed this threshold, the stream probably will disconnect immediately. See the

Name	Default	Adjustable	Description
			Amazon IVS API Reference for details about channel `type`.
Metadata payload	1 KB	No	Maximum size of a `PutMetadata` request payload (Amazon IVS API).
Playback authorization key pairs	3	No	Maximum number of playback authorization key pairs, per AWS Region.
Playback token size	2 KB	No	Maximum size of the entire JSON web token (JWT) used to initiate playback.
PutMetadata rate per channel	5	No	Maximum `PutMetadata` transactions per second per channel.
Recording configurations	20	Yes	Maximum number of recording configurations, per AWS Region.
Stream key	1	No	Maximum number of stream keys per channel.

IVS Chat quotas

Name	Default	Adjustable	Description
Concurrent chat connections	5,000	Yes	Maximum number of concurrent chat connections per account, across all your rooms in an AWS Region.
Message review handler timeout period	200	No	Timeout period in milliseconds for all your message review handlers in the current AWS Region. If this is exceeded, the message is allowed or denied depending on the value of the `fallbackResult` field you configured for the message review handler.
Rate of DeleteMessage requests across all your rooms	10	Yes	Maximum number of `DeleteMessage` requests that can be made per second across all your rooms. The requests can come from either the Amazon IVS Chat API or the Amazon IVS Chat Messaging API (WebSocket).
Rate of DisconnectUser requests across all your rooms	10	Yes	Maximum number of `DisconnectUser` requests that can be made per second across all your rooms. The requests can come from either the Amazon IVS Chat API or the Amazon IVS Chat Messaging API (WebSocket).
Rate of messaging requests per connection	3	No	Maximum number of messaging requests per second that a chat connection can make. The message rate limit per chat room is configurable with the `maximumMessageRatePerSecond` field of Create Room and Update Room.
Rate of SendMessage requests across all your rooms	100	Yes	Maximum number of `SendMessage` requests that can be made per second across all your rooms.

Name	Default	Adjustable	Description
			These requests come from the Amazon IVS Chat Messaging API (WebSocket).
Rate of SendMessage requests per room	10	No	Maximum number of `SendMessage` requests that can be made per second for any one of your rooms. This is configurable with the `maximumMessageRatePerSecond` field of Create Room and Update Room. These requests come from the Amazon IVS Chat Messaging API (WebSocket).
Rooms	5,000	Yes	Maximum number of chat rooms per account, per AWS Region.

Amazon Kendra endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kendra.us-east-2.amazonaws.com kendra-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	kendra.us-east-1.amazonaws.com kendra-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	kendra.us-west-2.amazonaws.com kendra-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kendra.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kendra.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kendra.ca-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kendra.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	kendra.us-gov-west-1.amazonaws.com kendra-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Data sources (developer edition)	Each supported Region: 5	No	The maximum number of data sources per developer edition index.
Data sources (enterprise edition)	Each supported Region: 50	Yes	The maximum number of data sources per enterprise edition index.
Developer edition indexes	Each supported Region: 5	Yes	The maximum number of developer edition indexes that can be created per account.
Enterprise edition indexes	Each supported Region: 5	Yes	The maximum number of enterprise edition indexes that can be created per account.
Extracted text size	Each supported Region: 5 Megabytes	Yes	The maximum extracted text size, in MB, from a file that can be ingested.
FAQs	Each supported Region: 30	Yes	The maximum number of FAQs that can be created per index.
File size	Each supported Region: 50 Megabytes	Yes	The maximum file size, in MB, that can be ingested.
Ingestion attributes string list size	Each supported Region: 10	Yes	The maximum string list size per ingestion attribute.
Items in a query suggestions block list	Each supported Region: 20,000	Yes	The maximum number of items in a query suggestions block list.
Query attributes user group list size	Each supported Region: 10	Yes	The maximum user group list size per query attribute.
Query capacity units	Each supported Region: 100	Yes	The maximum number of query capacity units per index.

Name	Default	Adjust	Description
Query suggestions block list file size	Each supported Region: 2 Megabytes	Yes	The maximum query suggestions block list file size in MB.
Query suggestions block lists	Each supported Region: 1	No	The maximum number of query suggestions block lists per index.
Query suggestions returned in API	Each supported Region: 10	Yes	The maximum number of query suggestions returned in a GetQuerySuggestions API call.
Spell correction query suggestions	Each supported Region: 1	Yes	The maximum number of spell-corrected query suggestions to return in a Query API call.
Storage capacity units	Each supported Region: 100	Yes	The maximum number of storage capacity units per index.
Synonym rules per thesaurus	Each supported Region: 10,000	Yes	The maximum number of synonym rules per thesaurus.
Synonyms per term	Each supported Region: 10	No	The maximum number of synonyms per term in all thesauri in a index.
Thesauri	Each supported Region: 1	No	The maximum number of thesauri per index.
Thesaurus file size	Each supported Region: 5 Megabytes	Yes	The maximum thesaurus file size in MB.

Amazon Keyspaces (for Apache Cassandra) endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	cassandra.us-east-2.amazonaws.com	HTTPS and TLS	
US East (N. Virginia)	us-east-1	cassandra.us-east-1.amazonaws.com cassandra-fips.us-east-1.amazonaws.com	HTTPS and TLS TLS	
US West (N. California)	us-west-1	cassandra.us-west-1.amazonaws.com	HTTPS and TLS	
US West (Oregon)	us-west-2	cassandra.us-west-2.amazonaws.com cassandra-fips.us-west-2.amazonaws.com	HTTPS and TLS TLS	
Asia Pacific (Hong Kong)	ap-east-1	cassandra.ap-east-1.amazonaws.com	HTTPS and TLS	
Asia Pacific (Mumbai)	ap-south-1	cassandra.ap-south-1.amazonaws.com	HTTPS and TLS	
Asia Pacific (Seoul)	ap-northeast-2	cassandra.ap-northeast-2.amazonaws.com	HTTPS and TLS	
Asia Pacific (Singapore)	ap-southeast-1	cassandra.ap-southeast-1.amazonaws.com	HTTPS and TLS	
Asia Pacific (Sydney)	ap-southeast-2	cassandra.ap-southeast-2.amazonaws.com	HTTPS and TLS	
Asia Pacific (Tokyo)	ap-northeast-1	cassandra.ap-northeast-1.amazonaws.com	HTTPS and TLS	
Canada (Central)	ca-central-1	cassandra.ca-central-1.amazonaws.com	HTTPS and TLS	
Europe (Frankfurt)	eu-central-1	cassandra.eu-central-1.amazonaws.com	HTTPS and TLS	
Europe (Ireland)	eu-west-1	cassandra.eu-west-1.amazonaws.com	HTTPS and TLS	
Europe (London)	eu-west-2	cassandra.eu-west-2.amazonaws.com	HTTPS and TLS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	cassandra.eu-west-3.amazonaws.com	HTTPS and TLS	
Europe (Stockholm)	eu-north-1	cassandra.eu-north-1.amazonaws.com	HTTPS and TLS	
Middle East (Bahrain)	me-south-1	cassandra.me-south-1.amazonaws.com	HTTPS and TLS	
South America (São Paulo)	sa-east-1	cassandra.sa-east-1.amazonaws.com	HTTPS and TLS	
AWS GovCloud (US-East)	us-gov-east-1	cassandra.us-gov-east-1.amazonaws.com cassandra.us-gov-east-1.amazonaws.com	HTTPS and TLS TLS	
AWS GovCloud (US-West)	us-gov-west-1	cassandra.us-gov-west-1.amazonaws.com cassandra.us-gov-west-1.amazonaws.com	HTTPS and TLS TLS	

For the following AWS Regions, FIPS endpoints are available.

Region Name	Region	FIPS Endpoint	Protocol
US East (N. Virginia)	us-east-1	cassandra-fips.us-east-1.amazonaws.com	TLS
US West (Oregon)	us-west-2	cassandra-fips.us-west-2.amazonaws.com	TLS

Service quotas

Name	Default	Adjust	Description
Account-level read throughput quota (Provisioned mode)	Each supported Region: 80,000	Yes	The maximum number of aggregate read capacity units (RCUs) allocated for the account per region; applicable only for tables in provisioned read/write capacity mode. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html

Name	Default	Adjust	Description
Account-level write throughput quota (Provisioned mode)	Each supported Region: 80,000	Yes	The maximum number of aggregate write capacity units (WCUs) allocated for the account per region; applicable only for tables in provisioned read/write capacity mode. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Concurrent DDL operations	Each supported Region: 50	No	The maximum number of concurrent DDL operations allowed per region. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Keyspaces per region	Each supported Region: 256	Yes	The maximum number of keyspaces that can be created per region.
Max Schema size	Each supported Region: 358,400 Bytes	No	The maximum size for a table schema. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Max amount of data restored using Point-in-time Recovery (PITR)	Each supported Region: 5 Terabytes	Yes	The maximum size of data that can be restored using PITR within 24 hours.
Max clustering key size	Each supported Region: 850 Bytes	No	The maximum combined size of all clustering columns. Up to 4 bytes of additional storage are added to the raw size of each clustering column for metadata. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Max concurrent table restores using Point-in-time Recovery (PITR)	Each supported Region: 4	Yes	The maximum number of concurrent table restores using PITR per subscriber is 4

Name	Default	Adjust	Description
Max partition key size	Each supported Region: 2,048 Bytes	No	The maximum size of the compound partition key. Up to 3 bytes of additional storage are added to the raw size of each column included in the partition key for metadata. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Max row size	Each supported Region: 1 Megabytes	No	The maximum size of a row, excluding static column data. For details see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Max static data per logical partition	Each supported Region: 1 Megabytes	No	The maximum aggregate size of static data in a logical partition. For details see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Table-level read throughput quota	Each supported Region: 40,000	Yes	The maximum read throughput (RCUs & RRUs per second) that can be allocated to a table in the region. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Table-level write throughput quota	Each supported Region: 40,000	Yes	The maximum write throughput (WCUs & WRUs per second) that can be allocated to a table per region. For more information, see https://docs.aws.amazon.com/keyspaces/latest/devguide/quotas.html
Tables per region	Each supported Region: 256	Yes	The maximum number of tables that can be created per region across all keyspaces.

For more information, see Quotas for Amazon Keyspaces (for Apache Cassandra) in the *Amazon Keyspaces (for Apache Cassandra) Developer Guide*.

AWS Key Management Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kms.us-east-2.amazonaws.com	HTTPS	
		kms-fips.us-east-2.amazonaws.com	HTTPS	
		kms-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	kms.us-east-1.amazonaws.com	HTTPS	
		kms-fips.us-east-1.amazonaws.com	HTTPS	
		kms-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	kms.us-west-1.amazonaws.com	HTTPS	
		kms-fips.us-west-1.amazonaws.com	HTTPS	
		kms-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	kms.us-west-2.amazonaws.com	HTTPS	
		kms-fips.us-west-2.amazonaws.com	HTTPS	
		kms-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	kms.af-south-1.amazonaws.com	HTTPS	
		kms-fips.af-south-1.amazonaws.com	HTTPS	
		kms-fips.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	kms.ap-east-1.amazonaws.com	HTTPS	
		kms-fips.ap-east-1.amazonaws.com	HTTPS	
		kms-fips.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	kms.ap-southeast-3.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-3.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	kms.ap-south-1.amazonaws.com	HTTPS	
		kms-fips.ap-south-1.amazonaws.com	HTTPS	
		kms-fips.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	kms.ap-northeast-3.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-3.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	kms.ap-northeast-2.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-2.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kms.ap-southeast-1.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-1.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kms.ap-southeast-2.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-2.amazonaws.com	HTTPS	
		kms-fips.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kms.ap-northeast-1.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-1.amazonaws.com	HTTPS	
		kms-fips.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kms.ca-central-1.amazonaws.com	HTTPS	
		kms-fips.ca-central-1.amazonaws.com	HTTPS	
		kms-fips.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kms.eu-central-1.amazonaws.com	HTTPS	
		kms-fips.eu-central-1.amazonaws.com	HTTPS	
		kms-fips.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kms.eu-west-1.amazonaws.com	HTTPS	
		kms-fips.eu-west-1.amazonaws.com	HTTPS	
		kms-fips.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kms.eu-west-2.amazonaws.com	HTTPS	
		kms-fips.eu-west-2.amazonaws.com	HTTPS	
		kms-fips.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Milan)	eu-south-1	kms.eu-south-1.amazonaws.com	HTTPS	
		kms-fips.eu-south-1.amazonaws.com	HTTPS	
		kms-fips.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kms.eu-west-3.amazonaws.com	HTTPS	
		kms-fips.eu-west-3.amazonaws.com	HTTPS	
		kms-fips.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	kms.eu-north-1.amazonaws.com	HTTPS	
		kms-fips.eu-north-1.amazonaws.com	HTTPS	
		kms-fips.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	kms.me-south-1.amazonaws.com	HTTPS	
		kms-fips.me-south-1.amazonaws.com	HTTPS	
		kms-fips.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	kms.me-central-1.amazonaws.com	HTTPS	
		kms-fips.me-central-1.amazonaws.com	HTTPS	
		kms-fips.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	kms.sa-east-1.amazonaws.com	HTTPS	
		kms-fips.sa-east-1.amazonaws.com	HTTPS	
		kms-fips.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	kms.us-gov-east-1.amazonaws.com	HTTPS	
		kms-fips.us-gov-east-1.amazonaws.com	HTTPS	
		kms-fips.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	kms.us-gov-west-1.amazonaws.com	HTTPS	
		kms-fips.us-gov-west-1.amazonaws.com	HTTPS	
		kms-fips.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Aliases per CMK	Each supported Region: 50	Yes	The maximum number of customer-created aliases per CMK permitted in each AWS Region of this AWS

Name	Default	Adjust	Description
			account. Aliases that AWS creates in your account with the aws/ prefix do not count against this quota. An alias is a friendly name for a customer master key (CMK). Each alias is associated with one CMK, but a CMK can have multiple aliases.
CancelKeyDeletion request rate	Each supported Region: 5 per second	Yes	Maximum CancelKeyDeletion requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ConnectCustomKeyStore request rate	Each supported Region: 5 per second	Yes	Maximum ConnectCustomKeyStore requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
CreateAlias request rate	Each supported Region: 5 per second	Yes	Maximum CreateAlias requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
CreateCustomKeyStore request rate	Each supported Region: 5 per second	Yes	Maximum CreateCustomKeyStore requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
CreateGrant request rate	Each supported Region: 50 per second	Yes	Maximum CreateGrant requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
CreateKey request rate	Each supported Region: 5 per second	Yes	Maximum CreateKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
Cryptographic operations (ECC) request rate	Each supported Region: 300 per second	Yes	Maximum Sign and Verify requests with ECC CMKs per second. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
Cryptographic operations (RSA) request rate	Each supported Region: 500 per second	Yes	Maximum requests for cryptographic operations with RSA CMKs per second. This shared quota applies to Encrypt, Decrypt, ReEncrypt, Sign, and Verify requests using RSA CMKs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
Cryptographic operations (symmetric) request rate	us-east-1: 50,000 per second us-east-2: 10,000 per second us-west-2: 50,000 per second ap-northeast-1: 10,000 per second ap-southeast-1: 10,000 per second ap-southeast-2: 10,000 per second eu-central-1: 10,000 per second eu-west-1: 50,000 per second eu-west-2: 10,000 per second Each of the other supported Regions: 5,500 per second	Yes	Maximum requests for cryptographic operations with a symmetric CMK per second. This shared quota applies to Decrypt, Encrypt, GenerateDataKey, GenerateDataKeyWithoutPlaintext, GenerateMac, GenerateRandom, ReEncrypt, and VerifyMac requests. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
Customer Master Keys (CMKs)	Each supported Region: 100,000	Yes	The maximum number of customer managed CMKs permitted in each AWS Region of this AWS account. This quota does not apply to AWS managed CMKs.

Name	Default	Adjust	Description
DeleteAlias request rate	Each supported Region: 15 per second	Yes	Maximum DeleteAlias requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DeleteCustomKeyStore request rate	Each supported Region: 5 per second	Yes	Maximum DeleteCustomKeyStore requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DeleteImportedKeyMaterial request rate	Each supported Region: 5 per second	Yes	Maximum DeleteImportedKeyMaterial requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DescribeCustomKeyStores request rate	Each supported Region: 5 per second	Yes	Maximum DescribeCustomKeyStores requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DescribeKey request rate	Each supported Region: 2,000 per second	Yes	Maximum DescribeKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DisableKey request rate	Each supported Region: 5 per second	Yes	Maximum DisableKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
DisableKeyRotation request rate	Each supported Region: 5 per second	Yes	Maximum DisableKeyRotation requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
DisconnectCustomKeyStore request rate	Each supported Region: 5 per second	Yes	Maximum DisconnectCustomKeyStore requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
EnableKey request rate	Each supported Region: 5 per second	Yes	Maximum EnableKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
EnableKeyRotation request rate	Each supported Region: 15 per second	Yes	Maximum EnableKeyRotation requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
GenerateDataKeyPair (ECC_NIST_P256) request rate	Each supported Region: 25 per second	Yes	Maximum requests per second to generate ECC_NIST_P256 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for ECC_NIST_P256 data key pairs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
GenerateDataKeyPair (ECC_NIST_P384) request rate	Each supported Region: 10 per second	Yes	Maximum requests per second to generate ECC_NIST_P384 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for ECC_NIST_P384 data key pairs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.

Name	Default	Adjust	Description
GenerateDataKeyPair (ECC_NIST_P521) request rate	Each supported Region: 5 per second	Yes	Maximum requests per second to generate ECC_NIST_P521 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for ECC_NIST_P521 data key pairs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
GenerateDataKeyPair (ECC_SECG_P256K1) request rate	Each supported Region: 25 per second	Yes	Maximum requests per second to generate ECC_SECG_P256K1 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for ECC_SECG_P256K1 data key pairs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
GenerateDataKeyPair (RSA_2048) request rate	Each supported Region: 1 per second	Yes	Maximum requests per second to generate RSA_2048 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for RSA_2048 data key pairs. When you reach this quota, KMS rejects this type of request for the remainder of the interval.

Name	Default	Adjust	Description
GenerateDataKeyPair (RSA_3072) request rate	Each supported Region: 0.5 per second	Yes	Maximum requests per second to generate RSA_3072 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for RSA_3072 data key pairs. By default, KMS allows one request in each 2-second interval. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
GenerateDataKeyPair (RSA_4096) request rate	Each supported Region: 0.1 per second	Yes	Maximum requests per second to generate RSA_4096 data key pairs. This shared quota applies to GenerateDataKeyPair and GenerateDataKeyPairWithoutPlaintext requests for RSA_4096 data key pairs. By default, KMS allows one request in each 10-second interval. When you reach this quota, KMS rejects this type of request for the remainder of the interval.
GetKeyPolicy request rate	Each supported Region: 1,000 per second	Yes	Maximum GetKeyPolicy requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
GetKeyRotationStatus request rate	Each supported Region: 1,000 per second	Yes	Maximum GetKeyRotationStatus requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
GetParametersForImport request rate	Each supported Region: 0.25 per second	Yes	Maximum GetParametersForImport requests per second. KMS allows one GetParametersForImport request in each 4-second interval. It rejects any additional requests for this operation during the interval.
GetPublicKey request rate	Each supported Region: 2,000 per second	Yes	Maximum GetPublicKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
Grants per CMK	Each supported Region: 50,000	Yes	The maximum number of grants permitted for each customer managed CMK. This quota includes grants created by AWS services, but it does not apply to AWS managed CMKs.
ImportKeyMaterial request rate	Each supported Region: 5 per second	Yes	Maximum ImportKeyMaterial requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
Key policy document size	Each supported Region: 32,768 Bytes	No	The maximum number of bytes in each key policy document. If a key policy document exceeds this length, operations that use the key policy document to set or change the key policy fail.
ListAliases request rate	Each supported Region: 500 per second	Yes	Maximum ListAliases requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ListGrants request rate	Each supported Region: 100 per second	Yes	Maximum ListGrants requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
ListKeyPolicies request rate	Each supported Region: 100 per second	Yes	Maximum ListKeyPolicies requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ListKeys request rate	Each supported Region: 500 per second	Yes	Maximum ListKeys requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ListResourceTags request rate	Each supported Region: 2,000 per second	Yes	Maximum ListResourceTags requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ListRetirableGrants request rate	Each supported Region: 100 per second	Yes	Maximum ListRetirableGrants requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
PutKeyPolicy request rate	Each supported Region: 15 per second	Yes	Maximum PutKeyPolicy requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
ReplicateKey request rate	Each supported Region: 5 per second	Yes	Maximum ReplicateKey requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
RetireGrant request rate	Each supported Region: 30 per second	Yes	Maximum RetireGrant requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
RevokeGrant request rate	Each supported Region: 30 per second	Yes	Maximum RevokeGrant requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Name	Default	Adjust	Description
ScheduleKeyDeletion request rate	Each supported Region: 15 per second	Yes	Maximum ScheduleKeyDeletion requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
TagResource request rate	Each supported Region: 10 per second	Yes	Maximum TagResource requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
UntagResource request rate	Each supported Region: 5 per second	Yes	Maximum UntagResource requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
UpdateAlias request rate	Each supported Region: 5 per second	Yes	Maximum UpdateAlias requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
UpdateCustomKeyStore request rate	Each supported Region: 5 per second	Yes	Maximum UpdateCustomKeyStore requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
UpdateKeyDescription request rate	Each supported Region: 5 per second	Yes	Maximum UpdateKeyDescription requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.
UpdatePrimaryRegion request rate	Each supported Region: 5 per second	Yes	Maximum UpdatePrimaryRegion requests per second. When you reach this quota, KMS rejects requests for this operation for the remainder of the interval.

Amazon Kinesis Data Analytics endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kinesisanalytics.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	kinesisanalytics.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	kinesisanalytics.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	kinesisanalytics.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	kinesisanalytics.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	kinesisanalytics.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	kinesisanalytics.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	kinesisanalytics.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	kinesisanalytics.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	kinesisanalytics.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kinesisanalytics.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	kinesisanalytics.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kinesisanalytics.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kinesisanalytics.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kinesisanalytics.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kinesisanalytics.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kinesisanalytics.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	kinesisanalytics.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kinesisanalytics.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	kinesisanalytics.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	kinesisanalytics.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	kinesisanalytics.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	kinesisanalytics.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	kinesisanalytics.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Apache Flink Kinesis Processing Units (KPUs)	Each supported Region: 32	Yes	The maximum number of Kinesis Processing Units (KPUs) that your Apache Flink application can use.

Name	Default	Adjust	Description
Application count	Each supported Region: 50	Yes	The maximum number of applications per account per Region.
Input Parallelism in input streams for SQL applications	Each supported Region: 64	No	The maximum number of in-application input streams for SQL applications.
Kinesis Processing Units (KPUs)	Each supported Region: 8	Yes	The maximum number of Kinesis Processing Units (KPUs) that your application can use.
SQL Kinesis Processing Units (KPUs)	Each supported Region: 8	Yes	The maximum number of Kinesis Processing Units (KPUs) that your SQL application can use.

For more information, see Quotas in the *Amazon Kinesis Data Analytics for Apache Flink Developer Guide*.

Amazon Kinesis Data Firehose endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	firehose.us-east-2.amazonaws.com firehose-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	firehose.us-east-1.amazonaws.com firehose-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	firehose.us-west-1.amazonaws.com firehose-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	firehose.us-west-2.amazonaws.com firehose-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	firehose.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	firehose.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	firehose.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	firehose.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	firehose.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	firehose.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	firehose.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	firehose.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	firehose.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	firehose.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	firehose.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	firehose.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	firehose.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	firehose.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	firehose.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	firehose.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	firehose.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	firehose.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	firehose.us-gov-east-1.amazonaws.com firehose-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	firehose.us-gov-west-1.amazonaws.com firehose-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Delivery streams	Each supported Region: 50	Yes	The maximum number of delivery streams you can create in this account in the current Region.
Dynamic Partitions	Each supported Region: 500	No	The maximum number of dynamic partitions for a delivery stream in the current Region.
Rate of CreateDeliveryStream requests	Each supported Region: 5	No	The maximum number of CreateDeliveryStream requests you can make per second in this account in the current Region.
Rate of DeleteDeliveryStream requests	Each supported Region: 5	No	The maximum number of DeleteDeliveryStream requests you can make per second in this account in the current Region.
Rate of DescribeDeliveryStream requests	Each supported Region: 5	No	The maximum number of DescribeDeliveryStream requests you can make per second in this account in the current Region.
Rate of ListDeliveryStream requests	Each supported Region: 5	No	The maximum number of ListDeliveryStream requests you can make per second in

Name	Default	Adjust	Description
			this account in the current Region.
Rate of ListTagsForDeliveryStream requests	Each supported Region: 5	No	The maximum number of ListTagsForDeliveryStream requests you can make per second in this account in the current Region.
Rate of Put requests	us-east-1: 2,000 us-west-2: 2,000 eu-west-1: 2,000 Each of the other supported Regions: 1,000	No	The maximum number of combined PutRecord and PutRecordBatch requests per second for a delivery stream in the current Region.
Rate of StartDeliveryStreamEncryption requests	Each supported Region: 5	No	The maximum number of StartDeliveryStreamEncryption requests you can make per second in this account in the current Region.
Rate of StopDeliveryStreamEncryption requests	Each supported Region: 5	No	The maximum number of StopDeliveryStreamEncryption requests you can make per second in this account in the current Region.
Rate of TagDeliveryStream requests	Each supported Region: 5	No	The maximum number of TagDeliveryStream requests you can make per second in this account in the current Region.
Rate of UntagDeliveryStream requests	Each supported Region: 5	No	The maximum number of UntagDeliveryStream requests you can make per second in this account in the current Region.
Rate of UpdateDestination requests	Each supported Region: 5	No	The maximum number of UpdateDestination requests you can make per second in this account in the current Region.
Rate of data	us-east-1: 5 us-west-2: 5 eu-west-1: 5 Each of the other supported Regions: 1	No	The maximum capacity in mebibyte per second for a delivery stream in the current Region.

Name	Default	Adjust	Description
Rate of records	us-east-1: 500,000 us-west-2: 500,000 eu-west-1: 500,000 Each of the other supported Regions: 100,000	No	The maximum capacity in records per second for a delivery stream in the current Region.

For more information, see Amazon Kinesis Data Firehose Quotas in the *Amazon Kinesis Data Firehose Developer Guide*.

Amazon Kinesis Data Streams endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kinesis.us-east-2.amazonaws.com kinesis-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	kinesis.us-east-1.amazonaws.com kinesis-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	kinesis.us-west-1.amazonaws.com kinesis-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	kinesis.us-west-2.amazonaws.com kinesis-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	kinesis.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	kinesis.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	kinesis.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	kinesis.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	kinesis.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	kinesis.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kinesis.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kinesis.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kinesis.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kinesis.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kinesis.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kinesis.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kinesis.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	kinesis.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kinesis.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	kinesis.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	kinesis.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	kinesis.me-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	kinesis.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	kinesis.us-gov-east-1.amazonaws.com kinesis.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	kinesis.us-gov-west-1.amazonaws.com kinesis.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Shards per Region	us-east-1: 500 us-west-2: 500 eu-west-1: 500 Each of the other supported Regions: 200	Yes	The maximum number of shards that you can create in this account in the current Region.

For more information, see Amazon Kinesis Data Streams Quotas in the *Amazon Kinesis Data Streams Developer Guide*.

Amazon Kinesis Video Streams endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kinesisvideo.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	kinesisvideo.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	kinesisvideo.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	kinesisvideo.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	kinesisvideo.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	kinesisvideo.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	kinesisvideo.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kinesisvideo.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kinesisvideo.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kinesisvideo.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kinesisvideo.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kinesisvideo.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kinesisvideo.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kinesisvideo.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kinesisvideo.eu-west-3.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	kinesisvideo.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
ConnectAsMaster GO_AWAY message grace period	Each supported Region: 60 Seconds	No	The maximum duration of the grace period that follows the received GO_AWAY message, after which the master connection is terminated in this account in the current Region.
ConnectAsMaster connection duration	Each supported Region: 3,600 Seconds	No	The maximum duration of a master connection per signaling channel in this account in the current Region.
ConnectAsMaster connections per signaling channel	Each supported Region: 1	No	The maximum number of master connections per signaling channel in this account in the current Region.
ConnectAsMaster idle connection timeout	Each supported Region: 600 Seconds	No	The maximum duration of an idle master connection before the connection times out in this account in the current Region.
ConnectAsViewer GO_AWAY message grace period	Each supported Region: 60 Seconds	No	The maximum duration of the grace period that follows the received GO_AWAY message, after which the viewer connection is terminated in this account in the current Region.
ConnectAsViewer connection duration	Each supported Region: 3,600 Seconds	No	The maximum duration of a viewer connection per signaling channel in this account in the current Region.
ConnectAsViewer connections per signaling channel	Each supported Region: 10	Yes	The maximum number of viewer connections per signaling channel in this account in the current Region.
ConnectAsViewer idle connection timeout	Each supported Region: 600 Seconds	No	The maximum duration of an idle viewer connection before the connection times out in this account in the current Region.

Name	Default	Adjust	Description
GetClip file size	Each supported Region: 100 Megabytes	No	The maximum size of a video file in megabytes retrieved by the GetClip API in this AWS account and Region.
GetClip fragments	Each supported Region: 200	No	The maximum number of fragments that can be contained in a video file retrieved by the GetClip API in this AWS account and Region.
GetDASHManifestPlaylist fragments	Each supported Region: 5,000	No	The maximum number of fragments per GetDASHManifestPlaylist request per playlist in this account in the current Region.
GetHLSMediaPlaylist fragments	Each supported Region: 5,000	No	The maximum number of fragments per GetHLSMediaPlaylist request per playlist in this account in the current Region.
GetMedia bandwidth	Each supported Region: 200 Megabits per second	Yes	The maximum bandwidth for GetMedia requests in megabits per second (Mbps) in this account in the current Region.
GetMedia concurrent connections per stream	Each supported Region: 3	Yes	The maximum number of concurrent connections that you can make with GetMedia per stream in this account in the current Region.
GetMediaForFragmentList bandwidth	Each supported Region: 200 Megabits per second	Yes	The maximum bandwidth for GetMediaForFragmentList requests in megabits per second (Mbps) in this account in the current Region.
GetMediaForFragmentList connections per stream	Each supported Region: 5	No	The maximum number of concurrent connections that you can make with GetMediaForFragmentList per stream in this account in the current Region.

Name	Default	Adjust	Description
GetMediaForFragmentList fragments	Each supported Region: 1,000	No	The maximum number of fragments per GetMediaForFragmentList request in this account in the current Region.
Number of signaling channels	us-east-1: 10,000 us-west-2: 10,000 Each of the other supported Regions: 5,000	Yes	The maximum number of signaling channels that you can create in this account in the current Region.
Number of video streams	us-east-1: 10,000 us-west-2: 10,000 Each of the other supported Regions: 5,000	Yes	The maximum number of video streams that you can create in this account in the current Region.
PutMedia bandwidth	Each supported Region: 100 Megabits per second	Yes	The maximum bandwidth for PutMedia requests in megabits per second (Mbps) in this account in the current Region.
PutMedia concurrent connections per stream	Each supported Region: 1	No	The maximum number of concurrent connections that you can make with PutMedia per stream in this account in the current Region.
PutMedia fragment duration	Each supported Region: 10 Seconds	Yes	The maximum fragment duration in seconds for PutMedia requests in this account in the current Region.
PutMedia fragment size	Each supported Region: 50 Megabytes	No	The maximum fragment size in megabytes for PutMedia requests in this account in the current Region.
PutMedia minimum fragment duration	Each supported Region: 1 Seconds	No	The minimum fragment duration in seconds for PutMedia requests in this account in the current Region.

Name	Default	Adjust	Description
PutMedia tracks	Each supported Region: 3	No	The maximum number of tracks within the media that is uploaded with PutMedia into this stream in this account in the current Region.
Rate of ConnectAsMasterAPI requests per signaling channel	Each supported Region: 3 per second	No	The maximum number of ConnectAsMaster requests that you can make per second per signaling channel in this account in the current Region.
Rate of ConnectAsViewerAPI requests per signaling channel	Each supported Region: 3 per second	No	The maximum number of ConnectAsViewer burst requests that you can make per second per signaling channel in this account in the current Region.
Rate of CreateSignalingChannelAPI requests	Each supported Region: 50 per second	Yes	The maximum number of CreateSignalingChannel requests that you can make per second in this account in the current Region.
Rate of CreateStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of CreateStream requests that you can make per second in this account in the current Region.
Rate of DeleteSignalingChannelAPI requests	Each supported Region: 50 per second	Yes	The maximum number of DeleteSignalingChannel requests that you can make per second in this account in the current Region.
Rate of DeleteSignalingChannelAPI requests per signaling channel	Each supported Region: 5 per second	Yes	The maximum number of DeleteSignalingChannel requests that you can make per second per signaling channel in this account in the current Region.
Rate of DeleteStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of DeleteStream requests that you can make per second in this account in the current Region.

Name	Default	Adjust	Description
Rate of DeleteStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of DeleteStream requests that you can make per second per stream in this account in the current Region.
Rate of DescribeSignalingChannelAPI requests	Each supported Region: 300 per second	Yes	The maximum number of DescribeSignalingChannel requests that you can make per second in this account in the current Region.
Rate of DescribeSignalingChannelAPI requests per signaling channel	Each supported Region: 5 per second	Yes	The maximum number of DescribeSignalingChannel requests that you can make per second per signaling channel in this account in the current Region.
Rate of DescribeStreamAPI requests	Each supported Region: 300 per second	Yes	The maximum number of DescribeStream requests that you can make per second in this account in the current Region.
Rate of DescribeStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of DescribeStream requests that you can make per second per stream in this account in the current Region.
Rate of GetDASHManifestPlaylistAPI requests per session	Each supported Region: 5 per second	Yes	The maximum number of GetDASHManifestPlaylist requests that you can make per second per session in this account in the current Region.
Rate of GetDASHStreamingSessionURLAPI requests per stream	Each supported Region: 25 per second	Yes	The maximum number of GetDASHStreamingSessionURL requests that you can make per stream per second in this account in the current Region.
Rate of GetDataEndpointAPI requests	Each supported Region: 300 per second	Yes	The maximum number of GetDataEndpoint requests that you can make per second in this account in the current Region.

Name	Default	Adjust	Description
Rate of GetDataEndpointAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of GetDataEndpoint requests that you can make per second per stream in this account in the current Region.
Rate of GetHLSMasterPlaylistAPI requests per session	Each supported Region: 5 per second	Yes	The maximum number of GetHLSMasterPlaylist requests that you can make per second per session in this account in the current Region.
Rate of GetHLSMediaPlaylistAPI requests per session	Each supported Region: 5 per second	Yes	The maximum number of GetHLSMediaPlaylist requests that you can make per second per session in this account in the current Region.
Rate of GetHLSStreamingSessionURLAPI requests per stream	Each supported Region: 25 per second	Yes	The maximum number of GetHLSStreamingSessionURL requests that you can make per stream per second in this account in the current Region.
Rate of GetICEServerConfigAPI requests per signaling channel	Each supported Region: 5 per second	No	The maximum number of GetICEServerConfig requests that you can make per second for this signaling channel in this account in the current Region.
Rate of GetMP4InitFragmentAPI requests per session	Each supported Region: 5 per second	Yes	The maximum number of GetMP4InitFragment requests that you can make per second per session in this account in the current Region.
Rate of GetMP4MediaFragmentAPI requests per session	Each supported Region: 20 per second	Yes	The maximum number of GetMP4MediaFragment requests that you can make per second per session in this account in the current Region.
Rate of GetMediaAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of GetMedia requests that you can make per second per stream in this account in the current Region.

Name	Default	Adjust	Description
Rate of GetSignalingChannelEndpointAPI requests	Each supported Region: 300 per second	Yes	The maximum number of GetSignalingChannelEndpoint requests that you can make per second in this account in the current Region.
Rate of GetSignalingChannelEndpointAPI requests per signaling channel	Each supported Region: 5 per second	Yes	The maximum number of GetSignalingChannelEndpoint requests that you can make per second per signaling channel in this account in the current Region.
Rate of GetTSFragmentAPI requests per session	Each supported Region: 20 per second	Yes	The maximum number of GetTSFragment requests that you can make per second per session in this account in the current Region.
Rate of ListSignalingChannelsAPI requests	Each supported Region: 50 per second	Yes	The maximum number of ListSignalingChannels requests that you can make per second in this account in the current Region.
Rate of ListStreamsAPI requests	Each supported Region: 50 per second	Yes	The maximum number of ListStreams requests that you can make per second in this account in the current Region.
Rate of ListTagsForResourceAPI requests	Each supported Region: 50 per second	Yes	The maximum number of ListTagsForResource requests that you can make per second in this account in the current Region.
Rate of ListTagsForResourceAPI requests per resource	Each supported Region: 5 per second	Yes	The maximum number of ListTagsForResource requests that you can make per second per resource in this account in the current Region.
Rate of ListTagsForStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of ListTagsForStream requests that you can make per second in this account in the current Region.

Name	Default	Adjust	Description
Rate of ListTagsForStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of ListTagsForStream requests that you can make per second per stream in this account in the current Region.
Rate of PutMediaAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of PutMedia requests that you can make per second per stream in this account in the current Region.
Rate of SendAlexaOfferToMasterAPI requests per signaling channel	Each supported Region: 5 per second	No	The maximum number of SendAlexaOfferToMaster requests that you can make per second for this signaling channel in this account in the current Region.
Rate of SendICECandidateAPI requests per websocket connection	Each supported Region: 20 per second	No	The maximum number of SendICECandidate requests that you can make per second per websocket in this account in the current Region.
Rate of SendSDPAnswerAPI requests per websocket connection	Each supported Region: 5 per second	No	The maximum number of SendSDPAnswer requests that you can make per second per websocket in this account in the current Region.
Rate of SendSDPOfferAPI requests per websocket connection	Each supported Region: 5 per second	No	The maximum number of SendSDPOffer requests that you can make per second per websocket in this account in the current Region.
Rate of TagResourceAPI requests	Each supported Region: 50 per second	Yes	The maximum number of TagResource requests that you can make per second in this account in the current Region.
Rate of TagResourceAPI requests per resource	Each supported Region: 5 per second	Yes	The maximum number of TagResource requests that you can make per second per resource in this account in the current Region.

Name	Default	Adjust	Description
Rate of TagStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of TagStream requests that you can make per second in this account in the current Region.
Rate of TagStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of TagStream requests that you can make per second per stream in this account in the current Region.
Rate of UntagResourceAPI requests	Each supported Region: 50 per second	Yes	The maximum number of UntagResource requests that you can make per second in this account in the current Region.
Rate of UntagResourceAPI requests per resource	Each supported Region: 5 per second	Yes	The maximum number of TagResource requests that you can make per second per resource in this account in the current Region.
Rate of UntagStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of UntagStream requests that you can make per second in this account in the current Region.
Rate of UntagStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of UntagStream requests that you can make per second per stream in this account in the current Region.
Rate of UpdateDataRetentionAPI requests	Each supported Region: 50 per second	Yes	The maximum number of UpdateDataRetention requests that you can make per second in this account in the current Region.
Rate of UpdateDataRetentionAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of UpdateDataRetention requests that you can make per second per stream in this account in the current Region.
Rate of UpdateSignalingChannelAPI requests	Each supported Region: 50 per second	Yes	The maximum number of UpdateSignalingChannel requests that you can make per second in this account in the current Region.

Name	Default	Adjust	Description
Rate of UpdateSignalingChannelAPI requests per signaling channel	Each supported Region: 5 per second	Yes	The maximum number of UpdateSignalingChannel requests that you can make per second per signaling channel in this account in the current Region.
Rate of UpdateStreamAPI requests	Each supported Region: 50 per second	Yes	The maximum number of UpdateStream requests that you can make per second in this account in the current Region.
Rate of UpdateStreamAPI requests per stream	Each supported Region: 5 per second	Yes	The maximum number of UpdateStream requests that you can make per second per stream in this account in the current Region.
Rate of archived fragment media per stream	Each supported Region: 500 per second	Yes	The maximum number of fragments that you can request media for per stream per second in this account in the current Region.
Rate of archived fragment metadata per stream	Each supported Region: 10,000 per second	Yes	The maximum number of fragments that you can request metadata for per stream per second in this account in the current Region.
SendICECandidate message payload size	Each supported Region: 10 Kilobytes	No	The maximum size (in kilobytes) of SendICECandidate message payload.
SendSDPAnswer message payload size	Each supported Region: 10 Kilobytes	No	The maximum size (in kilobytes) of SendSDPAnswer message payload.
SendSDPOffer message payload size	Each supported Region: 10 Kilobytes	No	The maximum size (in kilobytes) of SendSDPOffer message payload.
TURN session bandwidth	Each supported Region: 5 Megabits per second	No	The maximum bandwidth in megabits per second (Mbps) that is supported per TURN session in this account in the current Region.

Name	Default	Adjust	Description
TURN session concurrent allocations per signaling channel	Each supported Region: 50	No	The maximum number of concurrent allocated TURN sessions per signaling channel in this account in the current Region.
TURN session expiration	Each supported Region: 300 Seconds	No	The maximum valid duration of TURN session credentials in this account in the current Region.

For more information, see Kinesis Video Streams quotas in the *Amazon Kinesis Video Streams Developer Guide*.

AWS Lake Formation endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	lakeformation.us-east-2.amazonaws.com lakeformation-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	lakeformation.us-east-1.amazonaws.com lakeformation-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	lakeformation.us-west-1.amazonaws.com lakeformation-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	lakeformation.us-west-2.amazonaws.com lakeformation-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	lakeformation.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	lakeformation.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	lakeformation.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	lakeformation.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	lakeformation.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	lakeformation.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	lakeformation.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	lakeformation.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	lakeformation.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	lakeformation.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	lakeformation.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	lakeformation.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	lakeformation.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	lakeformation.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	lakeformation.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	lakeformation.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	lakeformation.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	lakeformation.us-gov-east-1.amazonaws.com lakeformation-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	lakeformation.us-gov-west-1.amazonaws.com lakeformation-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Length of a path that can be registered	Each supported Region: 700	Yes	The maximum length of a path that can be registered per catalog.
Number of data lake administrators	Each supported Region: 30	Yes	The maximum number of data lake administrators per catalog.
Number of lf tag per account	Each supported Region: 1,000	Yes	The maximum number of lf tag per account
Number of lf tag policy per principal per resource type	Each supported Region: 50	Yes	The maximum number of lf tag policy per principal per resource type
Number of registered paths	Each supported Region: 10,000	Yes	The maximum number of registered paths per catalog.
Number of subfolders in an Amazon S3 path	Each supported Region: 20	Yes	The maximum number of subfolders in an Amazon S3 path per catalog.
Number of tag values per lf tag	Each supported Region: 15	Yes	The maximum number of tag values per lf tag.

AWS Lambda endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	lambda.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		lambda-fips.us-east-2.amazonaws.com	HTTPS	
		lambda.us-east-2.api.aws	HTTPS	
US East (N. Virginia)	us-east-1	lambda.us-east-1.amazonaws.com	HTTPS	
		lambda-fips.us-east-1.amazonaws.com	HTTPS	
		lambda.us-east-1.api.aws	HTTPS	
US West (N. California)	us-west-1	lambda.us-west-1.amazonaws.com	HTTPS	
		lambda-fips.us-west-1.amazonaws.com	HTTPS	
		lambda.us-west-1.api.aws	HTTPS	
US West (Oregon)	us-west-2	lambda.us-west-2.amazonaws.com	HTTPS	
		lambda-fips.us-west-2.amazonaws.com	HTTPS	
		lambda.us-west-2.api.aws	HTTPS	
Africa (Cape Town)	af-south-1	lambda.af-south-1.amazonaws.com	HTTPS	
		lambda.af-south-1.api.aws	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	lambda.ap-east-1.amazonaws.com	HTTPS	
		lambda.ap-east-1.api.aws	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	lambda.ap-southeast-3.amazonaws.com	HTTPS	
		lambda.ap-southeast-3.api.aws	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	lambda.ap-south-1.amazonaws.com	HTTPS	
		lambda.ap-south-1.api.aws	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	lambda.ap-northeast-3.amazonaws.com	HTTPS	
		lambda.ap-northeast-3.api.aws	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	lambda.ap-northeast-2.amazonaws.com	HTTPS	
		lambda.ap-northeast-2.api.aws	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	lambda.ap-southeast-1.amazonaws.com	HTTPS	
		lambda.ap-southeast-1.api.aws	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	lambda.ap-southeast-2.amazonaws.com	HTTPS	
		lambda.ap-southeast-2.api.aws	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	lambda.ap-northeast-1.amazonaws.com	HTTPS	
		lambda.ap-northeast-1.api.aws	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	lambda.ca-central-1.amazonaws.com lambda.ca-central-1.api.aws	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	lambda.eu-central-1.amazonaws.com lambda.eu-central-1.api.aws	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	lambda.eu-west-1.amazonaws.com lambda.eu-west-1.api.aws	HTTPS HTTPS	
Europe (London)	eu-west-2	lambda.eu-west-2.amazonaws.com lambda.eu-west-2.api.aws	HTTPS HTTPS	
Europe (Milan)	eu-south-1	lambda.eu-south-1.amazonaws.com lambda.eu-south-1.api.aws	HTTPS HTTPS	
Europe (Paris)	eu-west-3	lambda.eu-west-3.amazonaws.com lambda.eu-west-3.api.aws	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	lambda.eu-north-1.amazonaws.com lambda.eu-north-1.api.aws	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	lambda.me-south-1.amazonaws.com lambda.me-south-1.api.aws	HTTPS HTTPS	
Middle East (UAE)	me-central-1	lambda.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	lambda.sa-east-1.amazonaws.com lambda.sa-east-1.api.aws	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	lambda.us-gov-east-1.amazonaws.com lambda-fips.us-gov-east-1.amazonaws.com lambda.us-gov-east-1.api.aws	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	lambda.us-gov-west-1.amazonaws.com lambda-fips.us-gov-west-1.amazonaws.com lambda.us-gov-west-1.api.aws	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Asynchronous payload	Each supported Region: 256 Kilobytes	No	The maximum size of an incoming asynchronous invocation request.
Burst concurrency	us-east-1: 3,000 us-east-2: 1,000 us-west-2: 3,000 ap-northeast-1: 1,000 eu-central-1: 1,000 eu-west-1: 3,000 Each of the other supported Regions: 500	No	The maximum immediate increase in function concurrency that can occur when your functions scale in response to a burst of traffic. After the initial burst, concurrency scales by 500 executions per minute up to your concurrency limit.
Concurrent executions	Each supported Region: 1,000	Yes	The maximum number of events that functions can process simultaneously in the current Region.
Deployment package size (console editor)	Each supported Region: 3 Megabytes	No	The maximum size of a deployment package or layer archive when you upload it through the console editor. Upload larger files with Amazon S3.
Deployment package size (direct upload)	Each supported Region: 50 Megabytes	No	The maximum size of a deployment package or layer archive when you upload it directly to Lambda. Upload larger files with Amazon S3.
Deployment package size (unzipped)	Each supported Region: 250 Megabytes	No	The maximum size of the contents of a deployment package or layer archive when its unzipped.
Elastic network interfaces per VPC	Each supported Region: 250	Yes	The maximum number of network interfaces that Lambda creates for a VPC with functions attached. Lambda creates a network interface for each combination of subnet and security group that functions connect to.

Name	Default	Adjust	Description
Environment variable size	Each supported Region: 4 Kilobytes	No	The maximum combined size of environment variables that are configured on a function.
File descriptors	Each supported Region: 1,024	No	The maximum number of file descriptors that a function can have open.
Function and layer storage	Each supported Region: 75 Gigabytes	Yes	The amount of storage thats available for deployment packages and layer archives in the current Region.
Function layers	Each supported Region: 5	No	The maximum number of layers that you can add to your function.
Function memory maximum	Each supported Region: 10,240 Megabytes	No	The maximum amount of memory that you can configure for a function.
Function memory minimum	Each supported Region: 128 Megabytes	No	The minimum amount of memory that you can configure for a function.
Function resource-based policy	Each supported Region: 20 Kilobytes	No	The maximum combined size of resource-based policies that are configured on a function.
Function timeout	Each supported Region: 900	No	The maximum timeout that you can configure for a function.
Processes and threads	Each supported Region: 1,024	No	The maximum combined number of processes and threads that a function can have open.
Rate of GetFunction API requests	Each supported Region: 100	No	The maximum number of GetFunction API requests per second.
Rate of GetPolicy API requests	Each supported Region: 15	No	The maximum number of GetPolicy API requests per second.
Rate of control plane API requests (excludes invocation, GetFunction, and GetPolicy requests)	Each supported Region: 15	No	The maximum number of API requests per second (excluding invocation, GetFunction, and GetPolicy requests).

Name	Default	Adjust	Description
Synchronous payload	Each supported Region: 6 Megabytes	No	The maximum size of an incoming synchronous invocation request or outgoing response.
Temporary storage	Each supported Region: 512 Megabytes	No	The amount of storage space thats available to a function in the /tmp directory.
Test events (console editor)	Each supported Region: 10	No	The maximum amount of test events for a function through the console editor.

For more information, see Lambda quotas in the *AWS Lambda Developer Guide*.

AWS Launch Wizard endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	appwizard.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	appwizard.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	appwizard.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	appwizard.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	appwizard.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	appwizard.ap-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	appwizard.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	appwizard.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	appwizard.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	appwizard.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	appwizard.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	appwizard.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	appwizard.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	appwizard.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	appwizard.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	appwizard.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	appwizard.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	appwizard.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	appwizard.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	appwizard.me-south-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	appwizard.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	appwizard.us-gov-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	appwizard.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjust	Description
Active applications	Each supported Region: 25	Yes	The maximum number of active applications with status IN_PROGRESS or COMPLETED in this account in the current Region.
Application name length	Each supported Region: 10	No	The maximum number of characters in the name of an application deployed by Launch Wizard.
Applications	Each supported Region: 150	Yes	The maximum number of applications in this account in the current Region.
Parallel deployments	Each supported Region: 3	No	The maximum number of parallel IN_PROGRESS application deployments in this account in the current Region.

Amazon Lex endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

V2 service endpoints

Model building endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	models-v2-lex.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	models-v2-lex.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	models-v2-lex.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	models-v2-lex.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	models-v2-lex.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	models-v2-lex.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	models-v2-lex.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	models-v2-lex.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	models-v2-lex.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	models-v2-lex.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	models-v2-lex.eu-west-2.amazonaws.com	HTTPS	

Runtime endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	runtime-v2-lex.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	runtime-v2-lex.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	runtime-v2-lex.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	runtime-v2-lex.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	runtime-v2-lex.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	runtime-v2-lex.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	runtime-v2-lex.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	runtime-v2-lex.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	runtime-v2-lex.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	runtime-v2-lex.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	runtime-v2-lex.eu-west-2.amazonaws.com	HTTPS	

V1 service endpoints

Model building endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	models.lex.us-east-1.amazonaws.com models-fips.lex.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	models.lex.us-west-2.amazonaws.com models-fips.lex.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	models.lex.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	models.lex.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	models.lex.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	models.lex.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	models.lex.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	models.lex.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	models.lex.us-gov-west-1.amazonaws.com models-fips.lex.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Runtime endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	runtime.lex.us-east-1.amazonaws.com runtime-fips.lex.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	runtime.lex.us-west-2.amazonaws.com runtime-fips.lex.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	runtime.lex.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	runtime.lex.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	runtime.lex.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	runtime.lex.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	runtime.lex.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	runtime.lex.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	runtime.lex.us-gov-west-1.amazonaws.com runtime-fips.lex.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Bot channel associations per bot alias (V2)	Each supported Region: 10	No	The maximum number of bot channel associations that you can create per bot

Name	Default	Adjust	Description
			alias in this account in the current Region.
Bots per account (V2)	Each supported Region: 100	Yes	The maximum number of bots that you can create in this account in the current Region.
Characters per custom slot type value (V2)	Each supported Region: 500	No	The maximum number of characters that you can have per custom slot type value in this account in the current Region.
Characters per sample utterance (V2)	Each supported Region: 500	No	The maximum number of characters that you can have per intent or slot sample utterance in this account in the current Region.
Custom slot type values and synonyms per bot locale (V2)	Each supported Region: 50,000	No	The maximum number of custom slot type values and synonyms that you can have per locale per bot in this account in the current Region.
Custom slot types per bot locale (V2)	Each supported Region: 100	No	The maximum number of custom slot types that you can create per locale per bot in this account in the current Region.
Sample utterances per intent (V2)	Each supported Region: 1,500	Yes	The maximum number of sample utterances that you can create per intent in this account in the current Region.
Sample utterances per slot (V2)	Each supported Region: 10	Yes	The maximum number of sample utterances that you can create per slot in this account in the current Region.
Slots per bot locale (V2)	Each supported Region: 2,000	No	The maximum number of slots that you can create per locale per bot in this account in the current Region.
Slots per intent (V2)	Each supported Region: 100	No	The maximum number of slots that you can create per intent in this account in the current Region.

Name	Default	Adjust	Description
Total characters in sample utterances per bot locale (V2)	Each supported Region: 200,000	No	The maximum number of characters that you can use per locale per bot for all intent and slot sample utterances in this account in the current Region.
Values and synonyms per custom slot type (V2)	Each supported Region: 10,000	No	The maximum number of values and synonyms that you can have per custom slot type in this account in the current Region.
Versions per bot (V2)	Each supported Region: 100	No	The maximum number of versions that you can create per bot in this account in the current Region.

AWS License Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Topics

- Endpoints for working with licenses (p. 626)
- Endpoints for user-based subscriptions (p. 628)

Endpoints for working with licenses

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	license-manager.us-east-2.amazonaws.com license-manager-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	license-manager.us-east-1.amazonaws.com license-manager-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	license-manager.us-west-1.amazonaws.com license-manager-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	license-manager.us-west-2.amazonaws.com license-manager-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	license-manager.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	license-manager.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	license-manager.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	license-manager.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	license-manager.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	license-manager.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	license-manager.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	license-manager.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	license-manager.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	license-manager.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	license-manager.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	license-manager.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	license-manager.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	license-manager.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	license-manager.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	license-manager.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	license-manager.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	license-manager.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	license-manager.us-gov-east-1.amazonaws.com license-manager-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	license-manager.us-gov-west-1.amazonaws.com license-manager-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Endpoints for user-based subscriptions

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	license-manager-user-subscriptions.us-east-2.amazonaws.com license-manager-user-subscriptions-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	license-manager-user-subscriptions.us-east-1.amazonaws.com license-manager-user-subscriptions-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	license-manager-user-subscriptions.us-west-1.amazonaws.com license-manager-user-subscriptions-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	license-manager-user-subscriptions.us-west-2.amazonaws.com license-manager-user-subscriptions-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	license-manager-user-subscriptions.af-south-1.amazonaws.com	HTTPS	
Asia Pacific	ap-east-1	license-manager-user-subscriptions.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
(Hong Kong)				
Asia Pacific (Mumbai)	ap-south-1	license-manager-user-subscriptions.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	license-manager-user-subscriptions.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	license-manager-user-subscriptions.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	license-manager-user-subscriptions.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	license-manager-user-subscriptions.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	license-manager-user-subscriptions.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	license-manager-user-subscriptions.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	license-manager-user-subscriptions.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	license-manager-user-subscriptions.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	license-manager-user-subscriptions.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	license-manager-user-subscriptions.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	license-manager-user-subscriptions.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	license-manager-user-subscriptions.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	license-manager-user-subscriptions.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	license-manager-user-subscriptions.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Topics

- Quotas for working with licenses (p. 630)
- Quotas for working with user-based subscriptions (p. 631)

Quotas for working with licenses

Name	Default	Adjust	Description
Extend license consumption per consumption token	Each supported Region: 1	No	The number of ExtendLicenseConsumption calls that can be made for a consumption token per hour.
GetAccessTokens calls	Each supported Region: 10	No	The total number of GetAccessToken calls that can be made for a license per hour.
License configuration associations per resource	Each supported Region: 10	Yes	Number of license configurations that can be associated with a resource.
License configurations	Each supported Region: 25	Yes	Total number of license configurations that can be created in an account.
License conversion tasks per resource per day	Each supported Region: 5	Yes	Number of license conversion tasks that can be created per resource per day.
Maximum number of concurrent organization grant activities	Each supported Region: 10	No	The maximum number of concurrent grant activities for an organization.
Number of Report generators	Each supported Region: 25	No	The Total number of report generators that can be created.
Number of account discovery mode updates per day	Each supported Region: 1	No	The maximum number of account discovery mode updates per day for an account.
Number of grants per license	Each supported Region: 2,000	No	The total number of active grants per license.
Number of licenses you can create	Each supported Region: 2,000	No	The total number of licenses that can be created in an account.

Name	Default	Adjust	Description
Number of received licenses per product	Each supported Region: 10	No	The total number of licenses received with same product SKU.
Number of tokens per account and license	Each supported Region: 10	No	The total number of tokens per license that can be created in an account.
Number of updates for a report generator per day	Each supported Region: 25	No	The maximum number of updates per day for a given report generator.
Total number counted entitlements per checkout	Each supported Region: 5	No	The total number of counted entitlements that can be specified on a single CheckoutLicense call.
Total number counted entitlements per license	Each supported Region: 25	No	The total number of counted entitlements allowed per license.
Total number uncounted entitlements per license	Each supported Region: 25	No	The total number of uncounted entitlements allowed per license.

Quotas for working with user-based subscriptions

Name	Default	Adjust	Description
Instance associations per user	Each supported Region: 25	Yes	No Description Available
User-based subscriptions for Visual Studio Enterprise	Each supported Region: 30	Yes	No Description Available
User-based subscriptions for Visual Studio Professional	Each supported Region: 50	Yes	No Description Available

Amazon Lightsail endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	lightsail.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	lightsail.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	lightsail.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	lightsail.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	lightsail.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	lightsail.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	lightsail.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	lightsail.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	lightsail.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	lightsail.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	lightsail.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	lightsail.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	lightsail.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	lightsail.eu-north-1.amazonaws.com	HTTPS	

Service quotas

New AWS accounts might start with quotas that are lower than those described here.

Name	Default	Adjust	Description
Allowed cookies per cache behavior for a distribution	Each supported Region: 10	No	The maximum number of allowed cookies per cache behavior.
Allowed headers per cache behavior for a distribution	Each supported Region: 10	No	The maximum number of allowed headers per cache behavior.
Allowed query strings per cache behavior for a distribution	Each supported Region: 10	No	The maximum number of allowed query strings per cache behavior.
Block storage disks per instance	Each supported Region: 15	No	The maximum number of block storage disks that can be attached per instance.
Container service certificates	Each supported Region: 4	No	The maximum number of certificates that can be attached per container service.
Container service custom domains	Each supported Region: 4	No	The maximum number of custom domains per container service.
Container service deployment containers	Each supported Region: 10	No	The maximum number of containers per deployment on a container service.
Container service deployment versions	Each supported Region: 50	No	The maximum number of deployment versions per container service.
Container service logs storage days	Each supported Region: 4	No	The maximum number of days that container service logs are stored.
Container service nodes	Each supported Region: 20	No	The maximum number of nodes per container service.
Container service stored container images	Each supported Region: 150	No	The maximum number of stored container images per container service.
Container services	Each supported Region: 100	No	The maximum number of container services per region.
Custom domain names per distribution	Each supported Region: 10	No	The maximum number of custom domain names per distribution. You can specify up to 10 domains for a Lightsail SSL/TLS certificate. You can then use the certificate to enable custom domains on your Lightsail distribution.

Name	Default	Adjust	Description
DNS zones (or domains)	Each supported Region: 3	No	The maximum number of DNS zones (or domains) per account.
Data transfer rate per distribution	Each supported Region: 150	No	The maximum data transfer rate (in GB per second) per distribution.
Databases	Each supported Region: 40	No	The maximum number of databases per region.
Default behaviors (default cache behavior) per distribution	Each supported Region: 1	No	The maximum number of default behaviors (default cache behavior) per distribution.
Directory and file overrides per distribution	Each supported Region: 25	No	The maximum number of directory and file overrides per distribution. You can create up to 25 directory and file overrides, and you can specify one cache behavior per override.
Distributions	Each supported Region: 20	No	The maximum number of distributions per account.
Instances	Each supported Region: 20	Yes	The maximum number of instances per region.
Load balancers	Each supported Region: 5	No	The maximum number of load balancers per region.
Maximum active certificates	Each supported Region: 10	No	The maximum number of active certificates per region, per account.
Maximum block storage disk space	Each supported Region: 16,000 Gigabytes	No	The maximum amount of disk space (in GB) per block storage disk.
Maximum buckets per account	Each supported Region: 20	No	The maximum number of buckets per account
Maximum certificates	Each supported Region: 20	No	The maximum number of certificates per region, per account in the last 365 days.
Maximum keys per bucket	Each supported Region: 2	No	The maximum number of keys per bucket
Minimum block storage disk space	Each supported Region: 8 Gigabytes	No	The minimum amount of disk space (in GB) per block storage disk.

Name	Default	Adjust	Description
Origins per distribution	Each supported Region: 1	No	The maximum number of origins per distribution. You can specify one instance or one load balancer per distribution.
Parallel RDP connections using the browser-based RDP client	Each supported Region: 1	No	The maximum number of parallel RDP connections using the browser-based RDP client per region, per account.
Parallel SSH connections using the browser-based SSH client	Each supported Region: 5	No	The maximum number of parallel SSH connections using the browser-based SSH client per region, per account.
Response timeout per origin for a distribution	Each supported Region: 60 Seconds	No	The response timeout per origin (4-60 seconds).
Static IP addresses	Each supported Region: 5	Yes	The maximum number of static IP addresses per region.
Tags	Each supported Region: 50	No	The maximum number of tags per resource.
Total attached block storage disk space	Each supported Region: 20,000 Gigabytes	No	The maximum amount of attached block storage disk space (in GB) per region.

Amazon Location Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Location is available in the following AWS Regions:

Region name	Region code
Asia Pacific (Tokyo)	ap-northeast-1
Asia Pacific (Singapore)	ap-southeast-1
Asia Pacific (Sydney)	ap-southeast-2
Europe (Frankfurt)	eu-central-1

Region name	Region code
Europe (Ireland)	eu-west-1
Europe (Stockholm)	eu-north-1
US East (N. Virginia)	us-east-1
US East (Ohio)	us-east-2
US West (Oregon)	us-west-2

The general syntax for an Amazon Location regional endpoint is as follows:

```
protocol://service-code.geo.region-code.amazonaws.com
```

Within this syntax, Amazon Location uses the following service codes:

Service	Service code
Amazon Location Maps	maps
Amazon Location Places	places
Amazon Location Routes	routes
Amazon Location Geofences	geofencing
Amazon Location Trackers	tracking

For example, the regional endpoint for Amazon Location Maps for US East (N. Virginia) is: https://*maps*.geo.*us-east-1*.amazonaws.com.

Service quotas

Name	Default	Adjust	Description
Geofence Collection resources per account	Each supported Region: 1,500	No	The maximum number of Geofence Collection resources that you can create per account.
Geofences per Geofence Collection	Each supported Region: 50,000	No	The maximum number of Geofences that you can create per Geofence Collection.
Map resources per account	Each supported Region: 40	No	The maximum number of Map resources that you can create per account.
Place Index resources per account	Each supported Region: 40	No	The maximum number of Place Index resources that you can create per account.

Name	Default	Adjust	Description
Rate of AssociateTrackerConsumer API requests	Each supported Region: 10 per second	Yes	The maximum number of AssociateTrackerConsumer requests that you can make per second. Additional requests are throttled.
Rate of BatchDeleteDevicePositionHistory API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchDeleteDevicePositionHistory requests that you can make per second. Additional requests are throttled.
Rate of BatchDeleteGeofence API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchDeleteGeofence requests that you can make per second. Additional requests are throttled.
Rate of BatchEvaluateGeofences API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchEvaluateGeofences requests that you can make per second. Additional requests are throttled.
Rate of BatchGetDevicePosition API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchGetDevicePosition requests that you can make per second. Additional requests are throttled.
Rate of BatchPutGeofence API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchPutGeofence requests that you can make per second. Additional requests are throttled.
Rate of BatchUpdateDevicePosition API requests	Each supported Region: 50 per second	Yes	The maximum number of BatchUpdateDevicePosition requests that you can make per second. Additional requests are throttled.
Rate of CalculateRoute API requests	Each supported Region: 10 per second	Yes	The maximum number of CalculateRoute requests that you can make per second. Additional requests are throttled.
Rate of CalculateRouteMatrix API requests	Each supported Region: 5 per second	Yes	The maximum number of CalculateRouteMatrix requests that you can make per second. Additional requests are throttled.

Name	Default	Adjust	Description
Rate of CreateGeofenceCollection API requests	Each supported Region: 10 per second	Yes	The maximum number of CreateGeofenceCollection requests that you can make per second. Additional requests are throttled.
Rate of CreateMap API requests	Each supported Region: 10 per second	Yes	The maximum number of CreateMap requests that you can make per second. Additional requests are throttled.
Rate of CreatePlaceIndex API requests	Each supported Region: 10 per second	Yes	The maximum number of CreatePlaceIndex requests that you can make per second. Additional requests are throttled.
Rate of CreateRouteCalculator API requests	Each supported Region: 10 per second	Yes	The maximum number of CreateRouteCalculator requests that you can make per second. Additional requests are throttled.
Rate of CreateTracker API requests	Each supported Region: 10 per second	Yes	The maximum number of CreateTracker requests that you can make per second. Additional requests are throttled.
Rate of DeleteGeofenceCollection API requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteGeofenceCollection requests that you can make per second. Additional requests are throttled.
Rate of DeleteMap API requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteMap requests that you can make per second. Additional requests are throttled.
Rate of DeletePlaceIndex API requests	Each supported Region: 10 per second	Yes	The maximum number of DeletePlaceIndex requests that you can make per second. Additional requests are throttled.
Rate of DeleteRouteCalculator API requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteRouteCalculator requests that you can make per second. Additional requests are throttled.

Name	Default	Adjust	Description
Rate of DeleteTracker API requests	Each supported Region: 10 per second	Yes	The maximum number of DeleteTracker requests that you can make per second. Additional requests are throttled.
Rate of DescribeGeofenceCollection API requests	Each supported Region: 10 per second	Yes	The maximum number of DescribeGeofenceCollection requests that you can make per second. Additional requests are throttled.
Rate of DescribeMap API requests	Each supported Region: 10 per second	Yes	The maximum number of DescribeMap requests that you can make per second. Additional requests are throttled.
Rate of DescribePlaceIndex API requests	Each supported Region: 10 per second	Yes	The maximum number of DescribePlaceIndex requests that you can make per second. Additional requests are throttled.
Rate of DescribeRouteCalculator API requests	Each supported Region: 10 per second	Yes	The maximum number of DescribeRouteCalculator requests that you can make per second. Additional requests are throttled.
Rate of DescribeTracker API requests	Each supported Region: 10 per second	Yes	The maximum number of DescribeTracker requests that you can make per second. Additional requests are throttled.
Rate of DisassociateTrackerConsumer API requests	Each supported Region: 10 per second	Yes	The maximum number of DisassociateTrackerConsumer requests that you can make per second. Additional requests are throttled.
Rate of GetDevicePosition API requests	Each supported Region: 50 per second	Yes	The maximum number of GetDevicePosition requests that you can make per second. Additional requests are throttled.
Rate of GetDevicePositionHistory API requests	Each supported Region: 50 per second	Yes	The maximum number of GetDevicePositionHistory requests that you can make per second. Additional requests are throttled.

Name	Default	Adjust	Description
Rate of GetGeofence API requests	Each supported Region: 50 per second	Yes	The maximum number of GetGeofence requests that you can make per second. Additional requests are throttled.
Rate of GetMapGlyphs API requests	Each supported Region: 50 per second	Yes	The maximum number of GetMapGlyphs requests that you can make per second. Additional requests are throttled.
Rate of GetMapSprites API requests	Each supported Region: 50 per second	Yes	The maximum number of GetMapSprites requests that you can make per second. Additional requests are throttled.
Rate of GetMapStyleDescriptor API requests	Each supported Region: 50 per second	Yes	The maximum number of GetMapStyleDescriptor requests that you can make per second. Additional requests are throttled.
Rate of GetMapTile API requests	Each supported Region: 500 per second	Yes	The maximum number of GetMapTile requests that you can make per second. Additional requests are throttled.
Rate of ListDevicePositions API requests	Each supported Region: 50 per second	Yes	The maximum number of ListDevicePositions requests that you can make per second. Additional requests are throttled.
Rate of ListGeofenceCollections API requests	Each supported Region: 10 per second	Yes	The maximum number of ListGeofenceCollections requests that you can make per second. Additional requests are throttled.
Rate of ListGeofences API requests	Each supported Region: 50 per second	Yes	The maximum number of ListGeofences requests that you can make per second. Additional requests are throttled.
Rate of ListMaps API requests	Each supported Region: 10 per second	Yes	The maximum number of ListMaps requests that you can make per second. Additional requests are throttled.

Name	Default	Adjust	Description
Rate of ListPlaceIndexes API requests	Each supported Region: 10 per second	Yes	The maximum number of ListPlaceIndexes requests that you can make per second. Additional requests are throttled.
Rate of ListRouteCalculators API requests	Each supported Region: 10 per second	Yes	The maximum number of ListRouteCalculators requests that you can make per second. Additional requests are throttled.
Rate of ListTagsForResource API requests	Each supported Region: 10 per second	Yes	The maximum number of ListTagsForResource requests that you can make per second. Additional requests are throttled.
Rate of ListTrackerConsumers API requests	Each supported Region: 10 per second	Yes	The maximum number of ListTrackerConsumers requests that you can make per second. Additional requests are throttled.
Rate of ListTrackers API requests	Each supported Region: 10 per second	Yes	The maximum number of ListTrackers requests that you can make per second. Additional requests are throttled.
Rate of PutGeofence API requests	Each supported Region: 50 per second	Yes	The maximum number of PutGeofence requests that you can make per second. Additional requests are throttled.
Rate of SearchPlaceIndexForPosition API requests	Each supported Region: 50 per second	Yes	The maximum number of SearchPlaceIndexForPosition requests that you can make per second. Additional requests are throttled.
Rate of SearchPlaceIndexForSuggestions API requests	Each supported Region: 50 per second	Yes	The maximum number of SearchPlaceIndexForSuggestions requests that you can make per second. Additional requests are throttled.
Rate of SearchPlaceIndexForText API requests	Each supported Region: 50 per second	Yes	The maximum number of SearchPlaceIndexForText requests that you can make per second. Additional requests are throttled.

Name	Default	Adjust	Description
Rate of TagResource API requests	Each supported Region: 10 per second	Yes	The maximum number of TagResource requests that you can make per second. Additional requests are throttled.
Rate of UntagResource API requests	Each supported Region: 10 per second	Yes	The maximum number of UntagResource requests that you can make per second. Additional requests are throttled.
Rate of UpdateGeofenceCollection API requests	Each supported Region: 10 per second	Yes	The maximum number of UpdateGeofenceCollection requests that you can make per second. Additional requests are throttled.
Rate of UpdateMap API requests	Each supported Region: 10 per second	Yes	The maximum number of UpdateMap requests that you can make per second. Additional requests are throttled.
Rate of UpdatePlaceIndex API requests	Each supported Region: 10 per second	Yes	The maximum number of UpdatePlaceIndex requests that you can make per second. Additional requests are throttled.
Rate of UpdateRouteCalculator API requests	Each supported Region: 10 per second	Yes	The maximum number of UpdateRouteCalculator requests that you can make per second. Additional requests are throttled.
Rate of UpdateTracker API requests	Each supported Region: 10 per second	Yes	The maximum number of UpdateTracker requests that you can make per second. Additional requests are throttled.
Route Calculator resources per account	Each supported Region: 40	No	The maximum number of Route Calculator resources that you can create per account.
Tracker consumers per tracker	Each supported Region: 5	No	The maximum number of Geofence Collection that Tracker resource can be associated with.
Tracker resources per account	Each supported Region: 500	No	The maximum number of Tracker resources that you can create per account.

For more information, see Amazon Location Service Quotas in the *Amazon Location Service Developer Guide*.

Amazon Lookout for Equipment endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	lookoutequipment.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	lookoutequipment.ap-northeast-2.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	lookoutequipment.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Components per dataset	Each supported Region: 3,000	No	Maximum number of components per dataset.
Datasets	Each supported Region: 15	Yes	Maximum number of datasets per account.
Inference schedulers per model	Each supported Region: 1	No	Maximum number of inference schedulers per model.
Label groups	Each supported Region: 15	Yes	Maximum number of label groups per account.
Length of component name	Each supported Region: 200	No	Maximum length of component name.
Models	Each supported Region: 15	Yes	Maximum number of models per account.
Number of columns across components in training data (excluding timestamp)	Each supported Region: 300	No	Maximum number of columns across

Name	Default	Adjust	Description
			components in training data (excluding timestamp)
Number of columns across components per dataset (excluding timestamp)	Each supported Region: 3,000	No	Maximum number of columns across components per dataset (excluding timestamp).
Number of components in training data	Each supported Region: 300	No	Maximum number of components in training data.
Number of files per component (per dataset)	Each supported Region: 1,000	No	Maximum number of files per component (per dataset).
Number of files per component (per inference execution)	Each supported Region: 60	No	Maximum number of files per component (per inference execution).
Number of labels per label group	Each supported Region: 5,000	Yes	Maximum number of labels per label group.
Number of rows in evaluation data (after resampling)	Each supported Region: 1,500,000	No	Maximum number of rows in evaluation data (after resampling).
Number of rows in inference input data, after resampling (1-hour scheduling frequency)	Each supported Region: 3,600	No	Maximum number of rows in inference input data, after resampling (1-hour scheduling frequency).
Number of rows in inference input data, after resampling (10-min scheduling frequency)	Each supported Region: 600	No	Maximum number of rows in inference input data, after resampling (10-min scheduling frequency).
Number of rows in inference input data, after resampling (15-min scheduling frequency)	Each supported Region: 900	No	Maximum number of rows in inference input data, after resampling (15-min scheduling frequency).
Number of rows in inference input data, after resampling (30-min scheduling frequency)	Each supported Region: 1,800	No	Maximum number of rows in inference input data, after resampling (30-min scheduling frequency).
Number of rows in inference input data, after resampling (5-min scheduling frequency)	Each supported Region: 300	No	Maximum number of rows in inference input data, after resampling (5-min scheduling frequency).
Number of rows in training data (after resampling)	Each supported Region: 1,500,000	No	Maximum number of rows in training data (after resampling).

Name	Default	Adjust	Description
Pending data ingestion jobs	Each supported Region: 5	Yes	Maximum number of pending data ingestion jobs per account.
Pending models	Each supported Region: 5	Yes	Maximum number of pending models per account.
Size of raw data in inference input data (1-hour scheduling frequency)	Each supported Region: 60 Megabytes	No	Maximum size of raw data in inference input data (1-hour scheduling frequency).
Size of raw data in inference input data (10-min scheduling frequency)	Each supported Region: 10 Megabytes	No	Maximum size of raw data in inference input data (10-min scheduling frequency).
Size of raw data in inference input data (15-min scheduling frequency)	Each supported Region: 15 Megabytes	No	Maximum size of raw data in inference input data (15-min scheduling frequency).
Size of raw data in inference input data (30-min scheduling frequency)	Each supported Region: 30 Megabytes	No	Maximum size of raw data in inference input data (30-min scheduling frequency).
Size of raw data in inference input data (5-min scheduling frequency)	Each supported Region: 5 Megabytes	No	Maximum size of raw data in inference input data (5-min scheduling frequency).
Size per dataset	Each supported Region: 50 Gigabytes	No	Maximum size per dataset.
Size per file	Each supported Region: 5 Gigabytes	No	Maximum size per file.
Timespan of training data	Each supported Region: 180 per day	No	Minimum timespan of training data

Amazon Lookout for Metrics endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	lookoutmetrics.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	lookoutmetrics.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	lookoutmetrics.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	lookoutmetrics.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	lookoutmetrics.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	lookoutmetrics.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	lookoutmetrics.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	lookoutmetrics.eu-west-1.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	lookoutmetrics.eu-north-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Alerts	Each supported Region: 10	Yes	The maximum number of alerts that you can add to a detector.
Data size for historical data (backtest mode)	Each supported Region: 102,400	No	The maximum size of the data (in MB) that can be processed in historical data for backtest mode.
Data size for historical data (continuous mode)	Each supported Region: 102,400	No	The maximum size of the data (in MB) that can be processed in historical data for continuous mode.
Data size per interval (10m)	Each supported Region: 200 Megabytes	No	The maximum size of the data (in MB) that can be processed for a 10-minute interval.
Data size per interval (1d)	Each supported Region: 200 Megabytes	No	The maximum size of the data (in MB) that can be processed for a 1-day interval.

Name	Default	Adjust	Description
Data size per interval (1h)	Each supported Region: 200 Megabytes	No	The maximum size of the data (in MB) that can be processed for a 1-hour interval.
Data size per interval (5m)	Each supported Region: 200 Megabytes	No	The maximum size of the data (in MB) that can be processed for a 5-minute interval.
Datasets per detector	Each supported Region: 1	No	The maximum number of datasets that you can add to a detector.
Datasources per dataset	Each supported Region: 1	No	The maximum number of datasources that you can add to a dataset.
Detectors	Each supported Region: 10	Yes	The maximum number of detectors that you can create in this account in the current AWS Region.
Dimensions filters per dataset	Each supported Region: 5	No	The maximum number of dimension filters that you can add to a dataset.
Dimensions per dataset	Each supported Region: 10	No	The maximum number of dimensions that you can add to a dataset.
Files in historical data	Each supported Region: 3,000	No	The maximum number of files that can be processed in historical data.
Files per interval (10m)	Each supported Region: 5	Yes	The maximum number of files that can be ingested for a 10-minute interval.
Files per interval (1d)	Each supported Region: 10	Yes	The maximum number of files that can be ingested for a 1-day interval.
Files per interval (1h)	Each supported Region: 10	Yes	The maximum number of files that can be ingested for a 1-hour interval.
Files per interval (5m)	Each supported Region: 5	Yes	The maximum number of files that can be ingested for a 5-minute interval.
Intervals in historical data (backtest mode)	Each supported Region: 3,000	No	The maximum number of intervals that can be processed in historical data for backtest mode.

Name	Default	Adjust	Description
Intervals in historical data (continuous mode)	Each supported Region: 2,500	No	The maximum number of intervals that can be processed in historical data for continuous mode.
Measures per dataset	Each supported Region: 10	No	The maximum number of measures that you can add to a dataset.
Records per interval (10m)	Each supported Region: 24,000	Yes	The maximum number of records that can be processed for a 10-minute interval.
Records per interval (1d)	Each supported Region: 150,000	Yes	The maximum number of records that can be processed for a 1-day interval.
Records per interval (1h)	Each supported Region: 150,000	Yes	The maximum number of records that can be processed for a 1-hour interval.
Records per interval (5m)	Each supported Region: 15,000	Yes	The maximum number of records that can be processed for a 5-minute interval.
Throttle rate	Each supported Region: 10	Yes	The maximum number of requests allowed per second in this account in the current AWS Region.
Throttle rate (ActivateAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of ActivateAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (BackTestAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of BackTestAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (CreateAlert)	Each supported Region: 1	Yes	The maximum number of CreateAlert requests allowed per second in this account in the current AWS Region.
Throttle rate (CreateAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of CreateAnomalyDetector requests allowed per second in this account in the current AWS Region.

Name	Default	Adjust	Description
Throttle rate (CreateMetricSet)	Each supported Region: 1	Yes	The maximum number of CreateMetricSet requests allowed per second in this account in the current AWS Region.
Throttle rate (DeactivateAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of DeactivateAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (DeleteAlert)	Each supported Region: 1	Yes	The maximum number of DeleteAlert requests allowed per second in this account in the current AWS Region.
Throttle rate (DeleteAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of DeleteAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (DescribeAlert)	Each supported Region: 2	Yes	The maximum number of DescribeAlert requests allowed per second in this account in the current AWS Region.
Throttle rate (DescribeAnomalyDetectionExecutions)	Each supported Region: 2	Yes	The maximum number of DescribeAnomalyDetectionExecutions requests allowed per second in this account in the current AWS Region.
Throttle rate (DescribeAnomalyDetector)	Each supported Region: 2	Yes	The maximum number of DescribeAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (DescribeMetricSet)	Each supported Region: 2	Yes	The maximum number of DescribeMetricSet requests allowed per second in this account in the current AWS Region.
Throttle rate (DetectMetricSetConfig)	Each supported Region: 1	Yes	The maximum number of DetectMetricSetConfig requests allowed per second in this account in the current AWS Region.

Name	Default	Adjust	Description
Throttle rate (GetAnomalyGroup)	Each supported Region: 2	Yes	The maximum number of GetAnomalyGroup requests allowed per second in this account in the current AWS Region.
Throttle rate (GetDataQualityMetrics)	Each supported Region: 2	Yes	The maximum number of GetDataQualityMetrics requests allowed per second in this account in the current AWS Region.
Throttle rate (GetFeedback)	Each supported Region: 2	Yes	The maximum number of GetFeedback requests allowed per second in this account in the current AWS Region.
Throttle rate (GetSampleData)	Each supported Region: 2	Yes	The maximum number of GetSampleData requests allowed per second in this account in the current AWS Region.
Throttle rate (ListAlerts)	Each supported Region: 2	Yes	The maximum number of ListAlerts requests allowed per second in this account in the current AWS Region.
Throttle rate (ListAnomalyDetectors)	Each supported Region: 2	Yes	The maximum number of ListAnomalyDetectors requests allowed per second in this account in the current AWS Region.
Throttle rate (ListAnomalyGroupRelatedMetrics)	Each supported Region: 2	Yes	The maximum number of ListAnomalyGroupRelatedMetrics requests allowed per second in this account in the current AWS Region.
Throttle rate (ListAnomalyGroupSummaries)	Each supported Region: 2	Yes	The maximum number of ListAnomalyGroupSummaries requests allowed per second in this account in the current AWS Region.
Throttle rate (ListAnomalyGroupTimeSeries)	Each supported Region: 2	Yes	The maximum number of ListAnomalyGroupTimeSeries requests allowed per second in this account in the current AWS Region.

Name	Default	Adjust	Description
Throttle rate (ListMetricSets)	Each supported Region: 2	Yes	The maximum number of ListMetricSets requests allowed per second in this account in the current AWS Region.
Throttle rate (ListTagsForResource)	Each supported Region: 1	Yes	The maximum number of ListTagsForResource requests allowed per second in this account in the current AWS Region.
Throttle rate (PutFeedback)	Each supported Region: 1	Yes	The maximum number of PutFeedback requests allowed per second in this account in the current AWS Region.
Throttle rate (TagResource)	Each supported Region: 1	Yes	The maximum number of TagResource requests allowed per second in this account in the current AWS Region.
Throttle rate (UntagResource)	Each supported Region: 1	Yes	The maximum number of UntagResource requests allowed per second in this account in the current AWS Region.
Throttle rate (UpdateAnomalyDetector)	Each supported Region: 1	Yes	The maximum number of UpdateAnomalyDetector requests allowed per second in this account in the current AWS Region.
Throttle rate (UpdateMetricSet)	Each supported Region: 1	Yes	The maximum number of UpdateMetricSet requests allowed per second in this account in the current AWS Region.
Time series per interval (10m)	Each supported Region: 10,000	No	The maximum number of time series that can be processed for a 10-minute interval.
Time series per interval (1d)	Each supported Region: 50,000	Yes	The maximum number of time series that can be processed for a 1-day interval.
Time series per interval (1h)	Each supported Region: 50,000	Yes	The maximum number of time series that can be processed for a 1-hour interval.

Name	Default	Adjust	Description
Time series per interval (5m)	Each supported Region: 5,000	No	The maximum number of time series that can be processed for a 5-minute interval.
Value filters per dimension filter	Each supported Region: 10	No	The maximum number of value filters that you can add to a dimension filter.
Value length	Each supported Region: 40 Bytes	Yes	The maximum length of a value in a record.

Amazon Lookout for Vision endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	lookoutvision.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	lookoutvision.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	lookoutvision.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	lookoutvision.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	lookoutvision.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	lookoutvision.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	lookoutvision.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Maximum image dimension for a training or test image (in pixels)	Each supported Region: 4,096	No	Maximum image dimension (in pixels) for a training or test image in an Amazon S3 bucket.
Maximum image file size (in MB) for a training or test image	Each supported Region: 8 Megabytes	No	The maximum file size (in MB) for a training or test image stored in an Amazon S3 bucket.
Maximum number of API requests per second, excluding DetectAnomalies	Each supported Region: 5 per second	Yes	The maximum number of API requests (excluding DetectAnomalies) that you can make, per API, per second, in this AWS account, in the current AWS Region.
Maximum number of DetectAnomalies API requests per second	Each supported Region: 10 per second	Yes	The maximum number of DetectAnomalies API requests that you can make, per second, in this AWS account in the current AWS Region.
Maximum number of concurrent model packaging jobs	Each supported Region: 3	Yes	The maximum number of concurrently running Amazon Lookout for Vision model packaging jobs per AWS account.
Maximum number of concurrent training jobs	Each supported Region: 2	Yes	The maximum number of concurrently running Amazon Lookout for Vision training jobs per AWS account.
Maximum number of concurrent trial detection tasks	Each supported Region: 2	Yes	The maximum number of concurrently running Amazon Lookout for Vision trial detection tasks per AWS account.
Maximum number of images in a test dataset	Each supported Region: 4,000	No	The maximum number of images that you can have in a test dataset.
Maximum number of images in a training dataset	Each supported Region: 16,000	No	The maximum number of images that you can have in a training dataset.

Name	Default	Adjust	Description
Maximum number of images in a trial detection dataset	Each supported Region: 2,000	No	The maximum number of images in a trial detection dataset.
Maximum number of inference units per started model	Each supported Region: 5	Yes	The maximum number of inference units per started model.
Maximum number of models per project	Each supported Region: 100	Yes	The maximum number of Amazon Lookout for Vision models per project.
Maximum number of projects	Each supported Region: 100	Yes	The maximum number of Amazon Lookout for Vision projects per AWS account.
Maximum number of running models	Each supported Region: 2	Yes	The maximum number of concurrently running Amazon Lookout for Vision models per AWS account.
Minimum image dimension (in pixels) for a training or test image	Each supported Region: 64	No	The minimum image dimension (in pixels) for a training or test image in an Amazon S3 bucket.

For more information, see Quotas in Amazon Lookout for Vision.

Amazon Macie endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	macie2.us-east-2.amazonaws.com macie2-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	macie2.us-east-1.amazonaws.com macie2-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	macie2.us-west-1.amazonaws.com macie2-fips.us-west-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	macie2.us-west-2.amazonaws.com macie2-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	macie2.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	macie2.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	macie2.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	macie2.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	macie2.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	macie2.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	macie2.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	macie2.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	macie2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	macie2.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	macie2.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	macie2.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	macie2.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	macie2.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	macie2.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	macie2.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	macie2.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Apache Avro container (.avro) file size	Each supported Region: 8 Gigabytes	No	The maximum size (in GB) of an individual Apache Avro object container (.avro) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Apache Parquet (.parquet) file size	Each supported Region: 8 Gigabytes	No	The maximum size (in GB) of an individual Apache Parquet (.parquet) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Custom data identifiers per account	Each supported Region: 10,000	No	The maximum number of custom data identifiers that can be created for this account in the current Region.
Custom data identifiers per sensitive data discovery job	Each supported Region: 30	No	The maximum number of custom data identifiers that you can configure a sensitive data discovery job to use.
Extracted archive bytes	Each supported Region: 10 Gigabytes	No	The maximum amount of data (in GB) that Macie can extract and analyze in a compressed or archive file. If Macie starts analyzing this type of file and determines that the file contains more than this amount of data, Macie stops analyzing the file and creates sensitive data findings and discovery

Name	Default	Adjust	Description
			results only for the data that was processed.
Extracted archive files	Each supported Region: 1,000,000	No	The maximum number of files that Macie can extract and analyze in an archive file. If Macie starts analyzing data in an archive file and determines that the file contains more than the maximum number of files, Macie stops analyzing data in the file and creates sensitive data findings and discovery results only for the data that was processed.
Findings rules	Each supported Region: 1,000	No	The maximum number of filter rules and suppression rules that you can create for this account in the current Region.
Full names detected	Each supported Region: 1,000	No	The maximum number of full names that Macie can detect and report for a file, including individual archive files. After Macie detects the maximum number, Macie stops incrementing the count and reporting location data for full names.
GNU Zip compressed archive (.gz or .gzip) file size	Each supported Region: 8 Gigabytes	No	The maximum size (in GB) of an individual GNU Zip compressed archive (.gz or .gzip) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Mailing addresses detected	Each supported Region: 1,000	No	The maximum number of mailing addresses that Macie can detect and report for a file, including individual archive files. After Macie detects the maximum number, Macie stops incrementing the count and reporting location data for mailing addresses.

Name	Default	Adjust	Description
Member accounts by invitation	Each supported Region: 1,000	No	The maximum number of member accounts that can be associated with a Macie administrator account by invitation in the current Region.
Member accounts through AWS Organizations	Each supported Region: 5,000	No	The maximum number of member accounts that can be associated with the Macie administrator account for an AWS Organizations organization in the current Region.
Microsoft Excel workbook (.xls or .xlsx) file size	Each supported Region: 512 Megabytes	No	The maximum size (in MB) of an individual Microsoft Excel workbook (.xls or .xlsx) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Microsoft Word document (.doc or .docx) file size	Each supported Region: 512 Megabytes	No	The maximum size (in MB) of an individual Microsoft Word document (.doc or .docx) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Nested levels	Each supported Region: 10	No	The maximum number of nested levels that Macie can analyze in an archive file. If the metadata for an archive file indicates that the file contains more than the maximum number of nested levels, Macie doesnt extract or analyze any data in the file.
Nested levels in structured data	Each supported Region: 256	No	The maximum number of nested levels that Macie can analyze in a JSON (.json) or JSON Lines (.jsonl) file. If a file contains more than the maximum number of nested levels, Macie doesnt analyze any data in the file.

Name	Default	Adjust	Description
Non-binary text file size	Each supported Region: 20 Gigabytes	No	The maximum size (in GB) of an individual non-binary text file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
Portable Document Format (.pdf) file size	Each supported Region: 1,024 Megabytes	No	The maximum size (in MB) of an individual Portable Document Format (.pdf) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.
S3 buckets per sensitive data discovery job	Each supported Region: 1,000	No	The maximum number of S3 buckets that you can explicitly select for a sensitive data discovery job to analyze. If youre the Macie administrator for an organization, the buckets can span as many as 1,000 accounts in your organization.
Sensitive data discovery occurrences	Each supported Region: 1,000	No	The maximum number of occurrences of each type of sensitive data that Macie detects and provides detailed location data for in sensitive data discovery results.
Sensitive data discovery per month per account	Each supported Region: 5 Terabytes	Yes	The maximum amount of data (in TB) that you can analyze by running sensitive data discovery jobs for this account in the current Region.
Sensitive data finding occurrences	Each supported Region: 15	No	The maximum number of detection locations that Macie provides in a sensitive data finding.
TAR archive (.tar) file size	Each supported Region: 20 Gigabytes	No	The maximum size (in GB) of an individual TAR archive (.tar) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.

Name	Default	Adjust	Description
ZIP compressed archive (.zip) file size	Each supported Region: 8 Gigabytes	No	The maximum size (in GB) of an individual ZIP compressed archive (.zip) file that Macie can analyze. If a file is larger, Macie doesnt analyze any data in the file.

For more information, see Amazon Macie quotas in the *Amazon Macie User Guide*.

AWS Mainframe Modernization endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	m2.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	m2.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	m2.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	m2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	m2.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	m2.eu-west-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	m2.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjustable
Number of applications per AWS account	20	No
Number of runtime environments per AWS account	20	No
Number of instances per high availability cluster	12	No
Number of Amazon EFS file systems per runtime environment	1	No
Number of Amazon FSx file systems per runtime environment	1	No

Amazon Machine Learning endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	machinelearning.us-east-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	machinelearning.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Batch prediction input records	Each supported Region: 100,000,000	Yes	The maximum number of records of batch prediction input.
Batch prediction input size	Each supported Region: 1 Terabytes	Yes	The maximum size (in TB) of batch prediction input.

Name	Default	Adjust	Description
Classes for multiclass ML models	Each supported Region: 100	Yes	The maximum number of classes for multiclass ML models.
Job runtime	Each supported Region: 7	No	The maximum runtime length (in days) for any job.
ML model size	Each supported Region: 2 Gigabytes	No	The maximum ML model size (in GB).
Observation size	Each supported Region: 100 Kilobytes	Yes	The maximum size (in KB) of each observation.
Rate of real-time prediction requests per endpoint	Each supported Region: 200	Yes	The maximum number of requests per second that you can perform with each real-time prediction endpoint.
Recipe complexity	Each supported Region: 10,000	Yes	The maximum recipe complexity (number of processed output variables).
Simultaneous jobs	Each supported Region: 25	Yes	The maximum number of simultaneous jobs.
Tags per object	Each supported Region: 50	No	The maximum number of tags per object.
Total RAM for all real-time prediction endpoints	Each supported Region: 10 Gigabytes	Yes	The maximum total RAM (in GB) for all real-time prediction endpoints.
Total rate of all real-time prediction requests	Each supported Region: 10,000	Yes	The maximum total number of requests per second that you can perform with all of your real-time prediction endpoints.
Training data size	Each supported Region: 100 Gigabytes	Yes	The maximum size (in GB) of training data.
Variables per data file	Each supported Region: 1,000	Yes	The maximum number of variables in a data file (schema).

For more information, see Amazon ML Quotas in the *Amazon Machine Learning Developer Guide*.

Amazon Managed Blockchain endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	managedblockchain.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	managedblockchain.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	managedblockchain.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	managedblockchain.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	managedblockchain.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	managedblockchain.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	managedblockchain.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of Hyperledger Fabric channels per Standard Edition network	Each supported Region: 8	Yes	The maximum number of Hyperledger Fabric channels per Standard Edition network.
Number of Hyperledger Fabric channels per Starter Edition network	Each supported Region: 8	Yes	The maximum number of Hyperledger Fabric channels per Starter Edition network.

Name	Default	Adjust	Description
Number of Standard Edition networks in which an AWS account can have a member	Each supported Region: 6	Yes	The maximum number of Hyperledger Fabric Standard Edition networks in which an AWS account can have a member.
Number of Starter Edition networks in which an AWS account can have a member	Each supported Region: 6	Yes	The maximum number of Hyperledger Fabric Starter Edition networks in which an AWS account can have a member.

For information about attributes of Starter Edition and Standard Edition networks, such as the number of members per network, peer nodes per member, available instance types, and more, see Amazon Managed Blockchain Pricing.

AWS Managed Services endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

See AMS VPC endpoints and AMS Supported configurations in the *AWS Managed Services User Guide*.

Service quotas

See AMS account limits in the *AWS Managed Services User Guide*.

AWS Management Console service endpoints

AWS Management Console has Regional endpoints that allow you to directly access the console in a given AWS Region. The general syntax of a Regional endpoint is as follows:

```
https://region-code.console.aws.amazon.com
```

For example, `https://us-west-2.console.aws.amazon.com` is the endpoint for the AWS Management Console service in the US West (Oregon) Region.

The table below lists the name, code, and endpoint of each AWS Region.

Service endpoints

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	us-east-2.console.aws.amazon.com	HTTPS
US East (N. Virginia)	us-east-1	us-east-1.console.aws.amazon.com	HTTPS
US West (N. California)	us-west-1	us-west-1.console.aws.amazon.com	HTTPS
US West (Oregon)	us-west-2	us-west-2.console.aws.amazon.com	HTTPS
Africa (Cape Town)	af-south-1	af-south-1.console.aws.amazon.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	ap-east-1.console.aws.amazon.com	HTTPS
Asia Pacific (Jakarta)	ap-southeast-3	ap-southeast-3.console.aws.amazon.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	ap-south-1.console.aws.amazon.com	HTTPS
Asia Pacific (Osaka)	ap-northeast-3	ap-northeast-3.console.aws.amazon.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	ap-northeast-2.console.aws.amazon.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	ap-southeast-1.console.aws.amazon.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	ap-southeast-2.console.aws.amazon.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	ap-northeast-1.console.aws.amazon.com	HTTPS
Canada (Central)	ca-central-1	ca-central-1.console.aws.amazon.com	HTTPS
Europe (Frankfurt)	eu-central-1	eu-central-1.console.aws.amazon.com	HTTPS
Europe (Ireland)	eu-west-1	eu-west-1.console.aws.amazon.com	HTTPS
Europe (London)	eu-west-2	eu-west-2.console.aws.amazon.com	HTTPS
Europe (Milan)	eu-south-1	eu-south-1.console.aws.amazon.com	HTTPS

Region Name	Region	Endpoint	Protocol
Europe (Paris)	eu-west-3	eu-west-3.console.aws.amazon.com	HTTPS
Europe (Stockholm)	eu-north-1	eu-north-1.console.aws.amazon.com	HTTPS
Middle East (Bahrain)	me-south-1	me-south-1.console.aws.amazon.com	HTTPS
Middle East (UAE)	me-central-1	me-central-1.console.aws.amazon.com	HTTPS
South America (São Paulo)	sa-east-1	sa-east-1.console.aws.amazon.com	HTTPS
AWS GovCloud (US-East)	us-gov-east-1	us-gov-east-1.console.amazonaws-us-gov.com	HTTPS
AWS GovCloud (US-West)	us-gov-west-1	us-gov-west-1.console.amazonaws-us-gov.com	HTTPS

Amazon Managed Workflows for Apache Airflow endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	airflow.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	airflow.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	airflow.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	airflow.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	airflow.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	airflow.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	airflow.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	airflow.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	airflow.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	airflow.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	airflow.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	airflow.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	airflow.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	airflow.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	airflow.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Environments per account per Region	Each supported Region: 10	Yes	The maximum number of environments per account per Region.
Workers per environment	Each supported Region: 25	Yes	The maximum number of workers per environment.

AWS Marketplace endpoints and quotas

AWS Marketplace is a curated digital catalog that makes it easy for customers to find, buy, deploy, and manage third-party software and services that customers need to build solutions and run their businesses.

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The AWS Marketplace website is available globally. The AWS Marketplace console is available in the US East (N. Virginia) Region. The product vendor determines the Regions in which their products are available.

AWS Marketplace Catalog API

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	catalog.marketplace.us-east-1.amazonaws.com	HTTPS	

AWS Marketplace Commerce Analytics

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	marketplacecommerceanalytics.us-east-1.amazonaws.com	HTTPS	

AWS Marketplace Entitlement Service

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	entitlement.marketplace.us-east-1.amazonaws.com	HTTPS	

AWS Marketplace Metering Service

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	metering.marketplace.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	metering.marketplace.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	metering.marketplace.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	metering.marketplace.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	metering.marketplace.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	metering.marketplace.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	metering.marketplace.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	metering.marketplace.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	metering.marketplace.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	metering.marketplace.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	metering.marketplace.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	metering.marketplace.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	metering.marketplace.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	metering.marketplace.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	metering.marketplace.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	metering.marketplace.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	metering.marketplace.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	metering.marketplace.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	metering.marketplace.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	metering.marketplace.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	metering.marketplace.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	metering.marketplace.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	metering.marketplace.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	metering.marketplace.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	metering.marketplace.us-gov-west-1.amazonaws.com	HTTPS	

Amazon Mechanical Turk endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region	Endpoint	Protocol
Sandbox endpoint for Amazon Mechanical Turk actions.	mturk-requester-sandbox.us-east-1.amazonaws.com	HTTPS
Production endpoint for Amazon Mechanical Turk actions.	mturk-requester.us-east-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
Monthly Usage	Each supported Region: 1,000	Yes	The maximum monthly spend in USD

Amazon Managed Streaming for Apache Kafka endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kafka.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	kafka.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	kafka.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	kafka.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	kafka.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	kafka.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	kafka.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	kafka.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	kafka.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	kafka.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kafka.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kafka.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kafka.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kafka.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kafka.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kafka.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	kafka.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kafka.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	kafka.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	kafka.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	kafka.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	kafka.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	kafka.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of brokers per account	Each supported Region: 90	Yes	The maximum number of brokers that can be created per account.
Number of brokers per cluster	Each supported Region: 30	Yes	The maximum number of brokers that a cluster can contain.
Number of configurations per account	Each supported Region: 100	Yes	The maximum number of custom configurations that can be created per account.
Number of revisions per configuration	Each supported Region: 50	Yes	The maximum number of revisions that can be made to a custom configuration.

Amazon MSK Connect endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	kafkaconnect.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	kafkaconnect.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	kafkaconnect.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	kafkaconnect.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	kafkaconnect.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	kafkaconnect.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	kafkaconnect.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	kafkaconnect.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	kafkaconnect.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	kafkaconnect.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	kafkaconnect.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	kafkaconnect.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	kafkaconnect.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	kafkaconnect.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	kafkaconnect.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	kafkaconnect.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Dimension	Quota
Maximum custom plugins	100
Maximum worker configurations	100
Maximum connect workers	Up to 60 connect workers. If a connector is set up to have auto scaled capacity, MSK Connect uses the maximum number of workers configured for that connector to calculate the quota for the account.

AWS Elemental MediaConnect endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mediaconnect.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	mediaconnect.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	mediaconnect.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mediaconnect.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	mediaconnect.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mediaconnect.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mediaconnect.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mediaconnect.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mediaconnect.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mediaconnect.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mediaconnect.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	mediaconnect.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mediaconnect.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mediaconnect.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mediaconnect.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	mediaconnect.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Entitlements	Each supported Region: 50	No	The maximum number of entitlements that you can grant on a flow.
Flows	Each supported Region: 20	Yes	The maximum number of flows that you can create in each AWS Region.
Outputs	Each supported Region: 50	No	The maximum number of outputs that a flow can have.

For more information, see Quotas in the *AWS Elemental MediaConnect User Guide*.

AWS Elemental MediaConvert endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Use these endpoints only to request an account-specific endpoint, using the DescribeEndpoints operation. Send all your transcoding requests to the account-specific endpoint that the service returns. For more information, see Getting Started with the API in the *MediaConvert API Reference*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mediaconvert.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	mediaconvert.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	mediaconvert.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mediaconvert.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mediaconvert.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mediaconvert.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mediaconvert.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mediaconvert.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mediaconvert.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	mediaconvert.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mediaconvert.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mediaconvert.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mediaconvert.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mediaconvert.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mediaconvert.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	mediaconvert.sa-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	mediaconvert.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent jobs across all on-demand queues, baseline	us-east-1: 40 us-west-2: 40 eu-west-1: 40 Each of the other supported Regions: 20	Yes	The maximum number of jobs that the service will process at one time, across all of your on-demand queues in the current Region.
Concurrent jobs per on-demand queue, peak	us-east-1: 200 us-west-2: 200 eu-west-1: 200 Each of the other supported Regions: 100	Yes	The maximum number of jobs the service will process at one time per on-demand queue.
Custom job templates	Each supported Region: 100	Yes	The maximum number of custom job templates that you can create in this account in the current Region.
Custom output presets	Each supported Region: 100	Yes	The maximum number of custom output presets that you can create in this account in the current Region.
Queues (on-demand) per Region, per account	Each supported Region: 10	Yes	The maximum number of on-demand queues that you can create in this account in the current Region.
Queues (reserved) per Region, per account	Each supported Region: 30	Yes	The maximum number of reserved queues that you can create in this account in the current Region.
Request rate for API calls in aggregate	Each supported Region: 2	Yes	The maximum number of aggregate API requests per second that you can send in

Name	Default	Adjust	Description
			this account in the current Region.
Request rate for API calls in aggregate, in a burst	Each supported Region: 100	Yes	The maximum number of aggregate requests that you can send in one burst in this account in the current Region.
Request rate for DescribeEndpoints	Each supported Region: 0.01667	No	The maximum number of DescribeEndpoints requests per second that you can send in this account in the current Region. You send this request only to get your endpoint. This endpoint is specific to your AWS Region and won't change. Request this endpoint once, and then hardcode or cache it.
Request rate for DescribeEndpoints, in a burst	Each supported Region: 0	No	You can't send DescribeEndpoints requests in a burst. You send this request only to get your endpoint. This endpoint is specific to your AWS Region and won't change. Request this endpoint once, and then hardcode or cache it.

AWS Elemental MediaLive endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

When you submit requests using the AWS CLI or SDKs, either leave the Region and endpoint unspecified, or specify us-east-1 as the Region. When you submit requests using the MediaLive API, use the us-east-1 Region to sign requests. For more information about signing MediaLive API requests, see Signature Version 4 signing process (p. 1007).

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	medialive.us-east-2.amazonaws.com medialive-fips.us-east-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	medialive.us-east-1.amazonaws.com medialive-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	medialive.us-west-2.amazonaws.com medialive-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	medialive.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	medialive.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	medialive.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	medialive.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	medialive.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	medialive.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	medialive.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	medialive.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	medialive.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	medialive.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	medialive.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
CDI Channels	Each supported Region: 2	Yes	The maximum number of CDI channels (channels that include one or more CDI

Name	Default	Adjust	Description
			inputs) that you can create in the current region.
Channels	Each supported Region: 5	Yes	The maximum number of channels that you can create in the current region.
Device Inputs	Each supported Region: 100	Yes	The maximum number of device inputs (an input from a device) that you can create in the current region.
HEVC Channels	Each supported Region: 5	Yes	The maximum number of HEVC channels (channels that include one or more HEVC outputs) that you can create in the current region.
Input Security Groups	Each supported Region: 5	Yes	The maximum number of input security groups that you can create in the current region.
Multiplexes	Each supported Region: 2	Yes	The maximum number of multiplexes that you can create in the current region.
Pull Inputs	Each supported Region: 100	Yes	The maximum number of pull inputs that you can create in the current region.
Push Inputs	Each supported Region: 5	Yes	The maximum number of push inputs that you can create in the current region.
Reservations	Each supported Region: 50	Yes	The maximum number of reservations that you can create in the current region.
UHD Channels	Each supported Region: 1	Yes	The maximum number of UHD channels (channels that include one or more UHD outputs) that you can create in the current region.
VPC Inputs	Each supported Region: 50	Yes	The maximum number of VPC inputs that you can create in the current region.

AWS Elemental MediaPackage endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services

offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

These are the endpoints for live content workflows.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mediapackage.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	mediapackage.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	mediapackage.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mediapackage.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mediapackage.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mediapackage.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mediapackage.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mediapackage.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mediapackage.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mediapackage.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mediapackage.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mediapackage.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mediapackage.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mediapackage.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	mediapackage.sa-east-1.amazonaws.com	HTTPS	

These are the endpoints for video on demand (VOD) content workflows.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mediapackage-vod.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	mediapackage-vod.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	mediapackage-vod.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mediapackage-vod.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mediapackage-vod.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mediapackage-vod.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mediapackage-vod.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mediapackage-vod.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mediapackage-vod.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mediapackage-vod.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mediapackage-vod.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mediapackage-vod.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mediapackage-vod.eu-west-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	mediapackage-vod.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	mediapackage-vod.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Assets per packaging group	Each supported Region: 10,000	Yes	The maximum number of assets per packaging group that you can create. Remember that this is a per packaging group limit. If you have 1000 or fewer assets in a group, you dont need an asset limit increase, regardless of how many groups you have.
Burst rate of REST API requests (Live)	Each supported Region: 50	No	The maximum number of REST API requests per second that you can burst to this account in this region.
Burst rate of REST API requests (VOD)	Each supported Region: 50	No	The maximum number of REST API requests per second that you can burst to this account in this Region.
Channels	Each supported Region: 30	Yes	The maximum number of channels that you can create in this account in the current region. This limit doesnt affect endpoint limits. If you arent exceeding the endpoint limit per channel, you dont need to increase your endpoint limits when you increase your channels.
Concurrent harvest jobs	Each supported Region: 10	Yes	The maximum number of harvest jobs that can be in progress at the same time.

Name	Default	Adjust	Description
Content retention	Each supported Region: 336	No	The maximum number of hours that you can retain ingested content.
Endpoints per channel	Each supported Region: 10	Yes	The maximum number of endpoints per channel that you can create. Remember that this is a per channel limit. If you have 10 or fewer endpoints on a channel, you dont need an endpoint limit increase, regardless of how many channels you have.
Ingest streams per asset	Each supported Region: 20	No	The maximum number of streams per asset that you can ingest.
Ingest streams per channel	Each supported Region: 20	No	The maximum number of streams per channel that you can ingest.
Live manifest length	Each supported Region: 5	Yes	The maximum length of a live manifest, in minutes.
Packaging configurations per packaging group	Each supported Region: 10	Yes	The maximum number of packaging configurations per packaging group that you can create. Remember that this is a per packaging group limit. If you have 10 or fewer configurations in a group, you dont need a configuration limit increase, regardless of how many groups you have.
Packaging groups	Each supported Region: 10	Yes	The maximum number of packaging groups that you can create in this account in the current Region.
Rate of REST API requests (Live)	Each supported Region: 5	No	The maximum number of REST API requests per second that you can send to this account in this region.
Rate of REST API requests (VOD)	Each supported Region: 5	No	The maximum number of REST API requests per second that you can send to this account in this Region.

Name	Default	Adjust	Description
Rate of ingest requests per channel	Each supported Region: 50	No	The maximum number of ingest requests per second allowed per channel.
Rate of manifest egress requests per asset	Each supported Region: 1,000	No	The maximum number of manifest egress requests per second allowed per asset.
Rate of manifest egress requests per origin endpoint	Each supported Region: 5,000	No	The maximum number of manifest egress requests per second allowed per origin endpoint.
Rate of segment egress requests per asset	Each supported Region: 600	No	The maximum number of media segment egress requests per second allowed per asset.
Rate of segment egress requests per origin endpoint	Each supported Region: 300	No	The maximum number of media segment egress requests per second allowed per origin endpoint.
Time-shifted manifest length	Each supported Region: 24	No	The maximum length of a time-shifted manifest, in hours.
Tracks per ingest stream (Live)	Each supported Region: 10	No	The maximum number of tracks per stream that you can ingest.
Tracks per ingest stream (VOD)	Each supported Region: 10	No	The maximum number of tracks per stream that you can ingest.

For more information, see Quotas in the *AWS Elemental MediaPackage User Guide*.

AWS Elemental MediaStore endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	mediastore.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mediastore.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mediastore.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mediastore.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mediastore.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mediastore.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mediastore.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mediastore.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mediastore.eu-north-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Containers	Each supported Region: 100	No	The maximum number of containers that you can create in this account.
Folder levels	Each supported Region: 10	No	The maximum number of folder levels that you can create in a container. You can create as many folders as you want, as long as they are not nested more than 10 levels within a container.
Object size	Each supported Region: 25 Megabytes	No	The maximum size of a single object.

Name	Default	Adjust	Description
Rate of DeleteObject API requests	Each supported Region: 100	Yes	The maximum number of DeleteObject requests that you can make per second. Additional requests are throttled.
Rate of DescribeObject API requests	Each supported Region: 1,000	Yes	The maximum number of DescribeObject requests that you can make per second. Additional requests are throttled.
Rate of GetObject API requests for standard upload availability	Each supported Region: 1,000	Yes	The maximum number of GetObject requests that you can make per second, when you use standard upload availability. Additional requests are throttled.
Rate of GetObject API requests for streaming upload availability	Each supported Region: 25	Yes	The maximum number of GetObject requests that you can make per second, when you use streaming upload availability. Additional requests are throttled.
Rate of ListItems API requests	Each supported Region: 5	Yes	The maximum number of ListItems requests that you can make per second. Additional requests are throttled.
Rate of PutObject API requests for chunked transfer encoding (also known as streaming upload availability)	Each supported Region: 10	Yes	The maximum number of PutObject requests that you can make per second with chunked transfer encoding of the body (also known as streaming upload availability). Additional requests are throttled.
Rate of PutObject API requests for standard upload availability	Each supported Region: 100	Yes	The maximum number of PutObject requests that you can make per second, when you use standard upload availability. Additional requests are throttled.

For more information, see Quotas in the *AWS Elemental MediaStore User Guide*.

AWS Elemental MediaTailor endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	api.mediatailor.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	api.mediatailor.us-west-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	api.mediatailor.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	api.mediatailor.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.mediatailor.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	api.mediatailor.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	api.mediatailor.eu-west-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjust	Description
Ad decision server (ADS) length	Each supported Region: 25,000	No	The maximum number of characters in an ad decision server (ADS) specification.
Ad decision server (ADS) redirects	Each supported Region: 5	No	The maximum depth of redirects that MediaTailor follows in VAST wrapper tags.
Ad decision server (ADS) timeout	Each supported Region: 3 Seconds	No	The maximum number of seconds that MediaTailor waits before timing out on an open connection to an

Name	Default	Adjust	Description
			ad decision server (ADS). When a connection times out, MediaTailor is unable to fill the ad avail with ads due to no response from the ADS.
Configurations	Each supported Region: 1,000	No	The maximum number of configurations that MediaTailor allows.
Content origin length	Each supported Region: 512	No	The maximum number of characters in a content origin specification.
Content origin server timeout	Each supported Region: 2 Seconds	No	The maximum number of seconds that MediaTailor waits before timing out on an open connection to the content origin server when requesting template manifests. Timeouts generate HTTP 504 (GatewayTimeoutException) response errors.
Manifest size	Each supported Region: 2 Megabytes	No	The maximum size, in MB, of any playback manifest, whether in input or output. To ensure that you stay under the quota, use gzip to compress your input manifests into MediaTailor.
Session expiration	Each supported Region: 10 Megabytes	No	The maximum amount of time (quota times the manifest duration) that MediaTailor allows a session to remain inactive before ending the session. Session activity can be a player request or an advance by the origin server. When the session expires, MediaTailor returns an HTTP 400 (Bad Request) response error.

Name	Default	Adjust	Description
Transactions	Each supported Region: 10,000	Yes	The maximum number of concurrent transactions per second across all request types. This is an account-level quota. Your transaction count depends largely on how often players request updated manifests and the number of players. Each player request counts as a transaction.

For more information, see Quotas in the *AWS Elemental MediaTailor User Guide*.

AWS Migration Hub endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The migration tools that integrate with AWS Migration Hub send migration status to the Migration Hub in the home Region you choose. For information about choosing a home Region, see The AWS Migration Hub Home Region in the *AWS Migration Hub User Guide*.

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	mgh.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	mgh.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mgh.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mgh.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mgh.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mgh.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	mgh.eu-west-2.amazonaws.com	HTTPS	

Service quotas

The quotas associated with AWS Migration Hub are the AWS Application Discovery Service quotas. For more information, see AWS Application Discovery Service Quotas (p. 58).

Migration Hub Orchestrator endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	migrationhub-orchestrator.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	migrationhub-orchestrator.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	migrationhub-orchestrator.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	migrationhub-orchestrator.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	migrationhub-orchestrator.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	migrationhub-orchestrator.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	migrationhub-orchestrator.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjustable	Description
Maximum steps	15	No	The maximum number of steps in a step group.
Maximum step groups	15	No	The maximum number of step groups in a migration workflow.
Maximum migration workflows	50	No	The maximum number of migration workflows in progress.

AWS Migration Hub Refactor Spaces endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	refactor-spaces.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	refactor-spaces.us-east-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	refactor-spaces.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	refactor-spaces.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	refactor-spaces.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	refactor-spaces.ap-northeast-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	refactor-spaces.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	refactor-spaces.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	refactor-spaces.eu-west-2.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Europe (Stockholm)	eu-north-1	refactor-spaces.eu-north-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
Applications	Each supported Region: 600	Yes	The maximum number of Refactor Spaces applications that you can create in this account in the current Region.
Environments	Each supported Region: 50	Yes	The maximum number of Refactor Spaces environments that you can create in this account in the current Region.
Routes	Each supported Region: 1,000	Yes	The maximum number of Refactor Spaces routes that you can create in this account in the current Region.
Services	Each supported Region: 500	Yes	The maximum number of Refactor Spaces services that you can create in this account in the current Region.

Migration Hub Strategy Recommendations endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	migrationhub-strategy.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	migrationhub-strategy.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	migrationhub-strategy.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	migrationhub-strategy.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	migrationhub-strategy.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	migrationhub-strategy.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	migrationhub-strategy.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Active Assessment Maximum	Each supported Region: 1	Yes	The maximum number of concurrent active assessments
Active Import Maximum	Each supported Region: 5	Yes	The maximum number of concurrent active import tasks
Assessment Maximum	Each supported Region: 50	Yes	The maximum number of assessments per AWS account
Maximum Server per Assessment	Each supported Region: 300	Yes	The maximum number of servers per assessment

Amazon Monitron endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Monitron is currently supported in the following Regions:

- US East (N. Virginia): us-east-1
- Europe (Ireland): eu-west-1

Service quotas

Name	Default	Adjust	Description
Assets per site	Each supported Region: 100	Yes	The maximum number of assets per site.
Gateways per site	Each supported Region: 200	Yes	The maximum number of gateways per site.
Positions per asset	Each supported Region: 20	Yes	The maximum number of positions per asset.
Projects per account	Each supported Region: 10	Yes	The maximum number of projects that can be created for an account.
Sites per project	Each supported Region: 50	Yes	The maximum number of sites per project.
Users per site	Each supported Region: 20	Yes	The maximum number of users per site.

Amazon MQ endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	mq.us-east-2.amazonaws.com mq-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	mq.us-east-1.amazonaws.com mq-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	mq.us-west-1.amazonaws.com mq-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	mq.us-west-2.amazonaws.com mq-fips.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	mq.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	mq.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	mq.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	mq.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	mq.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	mq.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	mq.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	mq.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	mq.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	mq.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	mq.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	mq.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	mq.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	mq.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	mq.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	mq.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	mq.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	mq.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	mq.us-gov-east-1.amazonaws.com mq-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	mq.us-gov-west-1.amazonaws.com mq-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
API burst limit	Each supported Region: 100	No	The API burst limit, aggregated per AWS account, across all Amazon MQ APIs to maintain service bandwidth. This doesnt apply to ActiveMQ or RabbitMQ broker messaging APIs. For example, Amazon MQ doesnt throttle the sending or receiving of messages.
API rate limit	Each supported Region: 15	No	The API rate limit, aggregated per AWS account, across all Amazon MQ APIs to maintain service bandwidth. This doesnt apply to ActiveMQ or RabbitMQ broker messaging APIs. For example, Amazon MQ doesnt throttle the sending or receiving of messages.
Destinations monitored in CloudWatch (ActiveMQ)	Each supported Region: 200	No	The maximum number of destinations (ActiveMQ queues, ActiveMQ topics) monitored in CloudWatch.
Destinations monitored in CloudWatch (RabbitMQ)	Each supported Region: 500	No	The maximum number of destinations (RabbitMQ

Name	Default	Adjust	Description
			queues) monitored in CloudWatch.
Groups per user (simple auth)	Each supported Region: 20	No	The maximum number of groups per user (simple auth). This does not apply to RabbitMQ brokers.
Job scheduler usage limit per broker backed by Amazon EBS	Each supported Region: 50 Gigabytes	No	The job scheduler usage limit (in GB) per broker backed by Amazon EBS. This does not apply to RabbitMQ brokers.
Number of brokers, per region	Each supported Region: 50	Yes	The maximum number of brokers, per region.
Revisions per configuration	Each supported Region: 300	No	The maximum number of revisions per configuration. This does not apply to RabbitMQ brokers.
Security groups per broker	Each supported Region: 5	No	The maximum number of security groups per broker.
Storage capacity per larger broker	Each supported Region: 200 Gigabytes	No	The maximum storage capacity (in GB) per larger broker (mq.*.large instance type brokers).
Storage capacity per smaller broker	Each supported Region: 20 Gigabytes	No	The maximum storage capacity (in GB) per smaller broker (mq.*.micro instance type brokers).
Tags per broker	Each supported Region: 50	No	The maximum number of tags per broker.
Temporary storage capacity per larger broker	Each supported Region: 50 Gigabytes	No	The maximum temporary storage capacity (in GB) per larger broker (mq.*.*large instance type brokers). This does not apply to RabbitMQ brokers.
Temporary storage capacity per smaller broker	Each supported Region: 5 Gigabytes	No	The maximum temporary storage capacity (in GB) per smaller broker (mq.*.micro instance type brokers). This does not apply to RabbitMQ brokers.
Users per broker (simple auth)	Each supported Region: 250	No	The maximum number of users per broker (simple auth). This does not apply to RabbitMQ brokers.

Name	Default	Adjust	Description
Wire-level connections per larger broker	Each supported Region: 1,000	Yes	The maximum number of wire-level connections per larger broker (mq.*.*large instance type brokers). This does not apply to RabbitMQ brokers.
Wire-level connections per smaller broker	Each supported Region: 100	Yes	The maximum number of wire-level connections per smaller broker (mq.*.micro instance type brokers). This does not apply to RabbitMQ brokers.

For more information, see Quotas in Amazon MQ in the *Amazon MQ Developer Guide*.

Amazon Neptune endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rds.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	rds.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	rds.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	rds.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	rds.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	rds.ap-east-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	rds.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rds.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rds.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rds.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rds.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	rds.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	rds.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	rds.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	rds.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	rds.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	rds.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	rds.me-south-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	rds.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	rds.us-gov-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rds.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Name	Default	Adjust	Description
Cluster endpoints per DB cluster	Each supported Region: 5	Yes	The maximum number of cluster endpoints per DB cluster.
Cross-region snapshot copy requests	Each supported Region: 5	Yes	The maximum number of cross-region snapshot copy requests.
DB cluster Roles	Each supported Region: 5	Yes	The maximum number of DB cluster roles.
DB cluster manuals snapshots	Each supported Region: 100	Yes	The maximum number of DB cluster manual snapshots.
DB cluster parameter groups	Each supported Region: 50	Yes	The maximum number of DB cluster parameter groups.
DB clusters	Each supported Region: 40	Yes	The maximum number of DB clusters.
DB instance parameter groups	Each supported Region: 50	Yes	The maximum number of DB instance parameter groups.
DB instances	Each supported Region: 40	Yes	The maximum number of DB instances.
DB subnet groups	Each supported Region: 50	Yes	The maximum number of DB subnet groups.
Event subscriptions	Each supported Region: 20	Yes	The maximum number of event subscriptions.
Read replicas per cluster	Each supported Region: 15	No	The maximum number of read replicas per cluster.
Reserved DB instances	Each supported Region: 40	Yes	The maximum number of reserved DB instances.
Tags per resource	Each supported Region: 50	Yes	The maximum number of tags per resource.

For more information, see Amazon Neptune quotas in the *Amazon Neptune User Guide*.

AWS Network Firewall endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	network-firewall.us-east-2.amazonaws.com network-firewall-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	network-firewall.us-east-1.amazonaws.com network-firewall-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	network-firewall.us-west-1.amazonaws.com network-firewall-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	network-firewall.us-west-2.amazonaws.com network-firewall-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	network-firewall.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	network-firewall.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	network-firewall.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	network-firewall.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	network-firewall.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	network-firewall.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	network-firewall.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	network-firewall.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	network-firewall.ca-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		network-firewall-fips.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	network-firewall.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	network-firewall.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	network-firewall.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	network-firewall.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	network-firewall.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	network-firewall.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	network-firewall.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	network-firewall.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	network-firewall.us-gov-east-1.amazonaws.com network-firewall-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	network-firewall.us-gov-west-1.amazonaws.com network-firewall-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Firewall policies	Each supported Region: 20	Yes	The maximum number of firewall policies per account per Region.
Firewalls	Each supported Region: 5	Yes	The maximum number of firewalls per account per Region.
Stateful rulegroups	Each supported Region: 50	Yes	The maximum number of stateful rule groups per account per Region.

Name	Default	Adjust	Description
Stateless rulegroups	Each supported Region: 50	Yes	The maximum number of stateless rule groups per account per Region.

For more information, see AWS Network Firewall quotas in the *Network Firewall Developer Guide*.

AWS Network Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	networkmanager.us-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	networkmanager.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Attachments per core network	Each supported Region: 5,000	Yes	The maximum number of attachments per core network
Connect peers per connect attachment	Each supported Region: 4	No	The maximum number of connect peers per connect attachment
Connections per global network	Each supported Region: 500	Yes	The maximum number of connections per global network
Core network attachments per VPC	Each supported Region: 5	No	The maximum number of core network attachments per VPC
Core network policy size in KB	Each supported Region: 100 Kilobytes	No	The maximum size of a core network policy in KB

Name	Default	Adjust	Description
Core networks per global network	Each supported Region: 1	No	The maximum number of core networks per global network
Devices per global network	Each supported Region: 200	Yes	The maximum number of devices per global network
Edges per region per core network	Each supported Region: 1	No	The maximum number of edges per region per core network
Global networks per account	Each supported Region: 5	Yes	The maximum number of global networks per account
Links per global network	Each supported Region: 200	Yes	The maximum number of links per global network
Peerings per core network	Each supported Region: 50	Yes	The maximum number of peerings per core network
Policy versions per core network	Each supported Region: 10,000	Yes	The maximum number of policy versions per core network
Retention duration in seconds for core network policies with out of date change sets	Each supported Region: 7,776,000 Seconds	No	The maximum retention duration in seconds for core network policies with out of date change sets
Segments per core network	Each supported Region: 20	Yes	The maximum number of segments per core network
Sites per global network	Each supported Region: 200	Yes	The maximum number of sites per global network

For more information, see Network Manager quotas.

Amazon Nimble Studio endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	nimble.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	nimble.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	nimble.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	nimble.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	nimble.ca-central-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	nimble.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Active Directory studio components per studio	Each supported Region: 1	No	The maximum number of Active Directory components that can be created per studio in the current AWS Region.
Custom streaming images per studio	Each supported Region: 10	Yes	The maximum number of custom streaming images that can be created per studio in the current AWS Region.
G5 streaming sessions per studio	Each supported Region: 0	Yes	The maximum number of G5 streaming sessions that can be created per studio in the current AWS Region.
Launch profiles per studio	Each supported Region: 50	Yes	The maximum number of launch profiles that can be created per studio in the current AWS Region.
Shared file system studio components per studio	Each supported Region: 10	Yes	The maximum number of shared file system studio components that can be created per studio in the current AWS Region.
Streaming sessions per studio	Each supported Region: 2	Yes	The maximum number of streaming sessions that can be created per studio in the current AWS Region.

Name	Default	Adjust	Description
Studio components per studio	Each supported Region: 50	Yes	The maximum number of studio components that can be created per studio in the current AWS Region.
Studio creation per account	Each supported Region: 1	No	The maximum number of studios that can be created per account in the current AWS Region.

Amazon OpenSearch Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	es.us-east-2.amazonaws.com es-fips.us-east-2.amazonaws.com es-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	es.us-east-1.amazonaws.com es-fips.us-east-1.amazonaws.com es-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	es.us-west-1.amazonaws.com es-fips.us-west-1.amazonaws.com es-fips.us-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	es.us-west-2.amazonaws.com es-fips.us-west-2.amazonaws.com es-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	es.af-south-1.amazonaws.com	HTTPS	
Asia Pacific	ap-east-1	es.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
(Hong Kong)				
Asia Pacific (Jakarta)	ap-southeast-3	es.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	es.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	es.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	es.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	es.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	es.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	es.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	es.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	es.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	es.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	es.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	es.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	es.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	es.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	es.me-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (UAE)	me-central-1	es.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	es.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	es.us-gov-east-1.amazonaws.com es-fips.us-gov-east-1.amazonaws.com es-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	es.us-gov-west-1.amazonaws.com es-fips.us-gov-west-1.amazonaws.com es-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Dedicated master instances per domain	Each supported Region: 5	No	The maximum number of dedicated master instances in a single Amazon OpenSearch Service domain.
Domains per Region	Each supported Region: 100	Yes	The maximum number of Amazon OpenSearch Service domains you can create in each AWS Region.
Instances per domain	Each supported Region: 80	Yes	The maximum number of instances in a single Amazon OpenSearch Service domain. You can request an increase up to 200 instances per domain.
Instances per domain (T2 instance type)	Each supported Region: 10	No	The maximum number of T2 instances in a single Amazon OpenSearch Service domain.
Warm instances per domain	Each supported Region: 150	No	The maximum number of warm nodes in a single Amazon OpenSearch Service cluster.

For more information, see Amazon OpenSearch Service limits.

AWS OpsWorks endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

AWS OpsWorks CM

You can create and manage AWS OpsWorks for Chef Automate and AWS OpsWorks for Puppet Enterprise servers in the following Regions. Resources can be managed only in the Region in which they are created. Resources that are created in one Regional endpoint are not available, nor can they be cloned to, another Regional endpoint.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	opsworks-cm.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	opsworks-cm.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	opsworks-cm.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	opsworks-cm.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	opsworks-cm.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	opsworks-cm.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	opsworks-cm.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	opsworks-cm.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	opsworks-cm.eu-west-1.amazonaws.com	HTTPS	

AWS OpsWorks Stacks

You can create and manage AWS OpsWorks resources in all of the following Regions. The Canada (Central) Region Region is API-only; you cannot create stacks in Canada (Central) Region by using the

AWS Management Console. Resources can be managed only in the Region in which they are created. Resources that are created in one Regional endpoint are not available—nor can they be cloned to—another Regional endpoint.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	opsworks.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	opsworks.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	opsworks.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	opsworks.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	opsworks.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	opsworks.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	opsworks.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	opsworks.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	opsworks.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	opsworks.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	opsworks.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	opsworks.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	opsworks.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	opsworks.eu-west-3.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	opsworks.sa-east-1.amazonaws.com	HTTPS	

Service quotas

The following quotas are for AWS OpsWorks CM.

Name	Default	Adjust	Description
Automated (scheduled) backup generations per server	Each supported Region: 10	Yes	Automated (scheduled) backup generations per server. Each server (Chef Automate or Puppet Enterprise) can have a maximum of 30 generations of automated backups.
Chef Automate or Puppet Enterprise servers	Each supported Region: 5	Yes	Number of servers per account
Manual backups per server	Each supported Region: 10	Yes	Number of manual backups per server (Chef Automate or Puppet Enterprise)

The following quotas are for AWS OpsWorks stacks.

Name	Default	Adjust	Description
Apps per stack	Each supported Region: 40	Yes	The maximum number of apps that you can have in an OpsWorks stack. An AWS OpsWorks Stacks app represents code that you want to run on an application server. Apps are deployed by using Chef recipes.
Instances per stack	Each supported Region: 40	Yes	The maximum number of instances that you can have in an OpsWorks stack, including both instances created in OpsWorks and outside of OpsWorks. Instances within an OpsWorks stack serve a particular purpose, such as serving applications or hosting a database server.
Layers per stack	Each supported Region: 40	Yes	The maximum number of layers that you can create in an OpsWorks stack. A layer contains a set of EC2 instances within a stack that serve a particular purpose, such as serving

Name	Default	Adjust	Description
			applications or hosting a database server. Layers use Chef recipes to run tasks on instances such as installing packages, deploying apps, and running scripts.
Stacks	Each supported Region: 40	Yes	The maximum number of AWS OpsWorks stacks that you can create in this account. A stack is a group of OpsWorks instances that perform different roles--such as application servers, database servers, or load balancers--to run a web application.

AWS Organizations endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Because AWS Organizations is a global service, there is a single global endpoint for all of the AWS Regions in each partition.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		organizations.us-east-1.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	organizations.us-east-1.amazonaws.com	HTTPS	
		organizations-fips.us-east-1.amazonaws.com	HTTPS	
		organizations.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	organizations.us-gov-west-1.amazonaws.com organizations.us-gov-west-1.amazonaws.com organizations.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	organizations.us-gov-west-1.amazonaws.com organizations.us-gov-west-1.amazonaws.com organizations.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Default maximum number of accounts	Each supported Region: 10	Yes	The default maximum number of accounts allowed in an organization.
Enable all features request expiration	Each supported Region: 90	No	Maximum number of days to allow before request to enable all features expires.
Handshake expiration	Each supported Region: 30	No	Maximum number of days to allow to complete handshake.
Invitation acceptance expiration	Each supported Region: 15	No	Maximum number of days to allow before invitations to join an organization expire.
Member accounts you can concurrently close	Each supported Region: 3	No	Maximum number of accounts that you can concurrently close. As soon as one finishes, you can close another.
Member accounts you can concurrently create	Each supported Region: 5	No	Maximum number of accounts that you can concurrently create. As soon as one finishes, you can start another.
Minimum age for removal of created accounts	Each supported Region: 7	No	The minimum number of days a created account must exist before you can remove it from the organization.
Number of accounts you can close within a 30 day period. The actual number of	Each supported Region: 1	No	The default maximum number of member accounts that can be closed

Name	Default	Adjust	Description
accounts you can close is 10-percent of your total active member accounts			within a 30 day period. The actual number of accounts you can close is 10 percent of your total active member accounts. For more information, see https://docs.aws.amazon.com/organizations/latest/userguide/orgs_reference_limits.html
Number of invitation attempts you can perform in a 24-hour period	Each supported Region: 20	No	Maximum number of invitation attempts you can perform in a 24-hour period. The number of attempts can be either 20 or the maximum number of accounts allowed in your organization, whichever is greater.
OU maximum nesting in a root	Each supported Region: 5	No	The maximum number of levels that you can nest OUs under the root.
OUs in an organization	Each supported Region: 1,000	No	The maximum number of OUs that you can include in an organization.
Policies in an organization	Each supported Region: 1,000	No	The maximum number of policies allowed per organization.
Roots in an organization	Each supported Region: 1	No	The maximum number of root accounts allowed per organization.
Service control policies per OU	Each supported Region: 5	No	The maximum number of service control policies (SCPs) allowed per OU.
Service control policies per account	Each supported Region: 5	No	The maximum number of service control policies (SCPs) allowed per account.
Service control policies per root	Each supported Region: 5	No	The maximum number of service control policies (SCPs) allowed per root.
Service control policy (SCP) document size	Each supported Region: 5,120 Bytes	No	The maximum document size (in bytes) allowed for service control policies (SCPs).

For more information, see Quotas for AWS Organizations in the *AWS Organizations User Guide*.

AWS Outposts endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	outposts.us-east-2.amazonaws.com outposts-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	outposts.us-east-1.amazonaws.com outposts-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	outposts.us-west-1.amazonaws.com outposts-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	outposts.us-west-2.amazonaws.com outposts-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	outposts.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	outposts.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	outposts.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	outposts.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	outposts.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	outposts.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	outposts.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	outposts.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	outposts.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	outposts.ca-central-1.amazonaws.com outposts-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	outposts.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	outposts.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	outposts.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	outposts.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	outposts.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	outposts.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	outposts.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	outposts.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	outposts.us-gov-east-1.amazonaws.com outposts.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	outposts.us-gov-west-1.amazonaws.com outposts.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Amazon S3 on Outposts

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	s3-outposts.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		s3-outposts-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	s3-outposts.us-east-1.amazonaws.com s3-outposts-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	s3-outposts.us-west-1.amazonaws.com s3-outposts-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	s3-outposts.us-west-2.amazonaws.com s3-outposts-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	s3-outposts.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	s3-outposts.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	s3-outposts.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	s3-outposts.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	s3-outposts.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	s3-outposts.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	s3-outposts.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	s3-outposts.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	s3-outposts.ca-central-1.amazonaws.com s3-outposts-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	s3-outposts.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	s3-outposts.eu-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	s3-outposts.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	s3-outposts.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	s3-outposts.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	s3-outposts.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	s3-outposts.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	s3-outposts.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	s3-outposts.us-gov-east-1.amazonaws.com s3-outposts-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	s3-outposts.us-gov-west-1.amazonaws.com s3-outposts-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Outpost sites	Each supported Region: 100	Yes	The maximum number of Outpost sites that you can create in this account in the current region. An Outpost site is the customer-managed physical building where you power and attach your Outpost equipment to the network.
Outposts per site	Each supported Region: 10	Yes	The maximum number of Outposts that you can create per site. AWS Outposts includes hardware and virtual resources known as Outposts. This quota limits your Outpost virtual resources.

AWS Panorama endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	panorama.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	panorama.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	panorama.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	panorama.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	panorama.ca-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	panorama.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Applications per device	Each supported Region: 10	No	The maximum number of application instances that you can run on a device.
Assets per package	Each supported Region: 50	No	The maximum number of assets that you upload per node package.
Camera nodes per application	Each supported Region: 8	No	The maximum number of camera nodes that you can add to an application.
Devices	Each supported Region: 50	No	The maximum number of devices that you can register in this account in the current AWS Region.

Name	Default	Adjust	Description
Node packages	Each supported Region: 50	No	The maximum number of node packages that you can create in this account in the current AWS Region.
Package artifact size	Each supported Region: 8 Gigabytes	No	The maximum size of a node package artifact.
Rate of CreateApplicationInstance API requests	Each supported Region: 1	No	The maximum number of CreateApplicationInstance API requests per second that you can perform in this account in the current AWS Region.
Rate of CreateJobForDevices API requests	Each supported Region: 1	No	The maximum number of CreateJobForDevices API requests per second that you can perform in this account in the current AWS Region.
Rate of CreateNodeFromTemplateJob API requests	Each supported Region: 1	No	The maximum number of CreateNodeFromTemplateJob API requests per second that you can perform in this account in the current AWS Region.
Rate of CreatePackage API requests	Each supported Region: 1	No	The maximum number of CreatePackage API requests per second that you can perform in this account in the current AWS Region.
Rate of CreatePackageImportJob API requests	Each supported Region: 1	No	The maximum number of CreatePackageImportJob API requests per second that you can perform in this account in the current AWS Region.
Rate of DeleteDevice API requests	Each supported Region: 1	No	The maximum number of DeleteDevice API requests per second that you can perform in this account in the current AWS Region.
Rate of DeletePackage API requests	Each supported Region: 1	No	The maximum number of DeletePackage API requests per second that you can perform in this account in the current AWS Region.

Name	Default	Adjust	Description
Rate of DeregisterPackageVersion API requests	Each supported Region: 1	No	The maximum number of DeregisterPackageVersion API requests per second that you can perform in this account in the current AWS Region.
Rate of DescribePackage API requests	Each supported Region: 1	No	The maximum number of DescribePackage API requests per second that you can perform in this account in the current AWS Region.
Rate of ProvisionDevice API requests	Each supported Region: 1	No	The maximum number of ProvisionDevice API requests per second that you can perform in this account in the current AWS Region.
Rate of RegisterPackageVersion API requests	Each supported Region: 1	No	The maximum number of RegisterPackageVersion API requests per second that you can perform in this account in the current AWS Region.
Rate of RemoveApplicationInstance API requests	Each supported Region: 1	No	The maximum number of RemoveApplicationInstance API requests per second that you can perform in this account in the current AWS Region.
Rate of deployments	Each supported Region: 200	No	The maximum number of times that you can deploy an application per day, per device.
Rate of total API requests	Each supported Region: 5	No	The maximum number of API requests per second that you can perform in this account in the current AWS Region.
Versions per package	Each supported Region: 20	No	The maximum number of package versions that you can create per node package.

Amazon Personalize endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Personalize

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	personalize.us-east-1.amazonaws.com	HTTPS
US East (Ohio)	us-east-2	personalize.us-east-2.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	personalize.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	personalize.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	personalize.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	personalize.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	personalize.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	personalize.ap-southeast-2.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	personalize.cn-north-1.amazonaws.com.cn	HTTPS
Canada (Central)	ca-central-1	personalize.ca-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	personalize.eu-west-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	personalize.eu-central-1.amazonaws.com	HTTPS

Amazon Personalize Events

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	personalize-events.us-east-1.amazonaws.com	HTTPS
US East (Ohio)	us-east-2	personalize-events.us-east-2.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	personalize-events.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	personalize-events.ap-northeast-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	personalize-events.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	personalize-events.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	personalize-events.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	personalize-events.ap-southeast-2.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	personalize-events.cn-north-1.amazonaws.com.cn	HTTPS
Canada (Central)	ca-central-1	personalize-events.ca-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	personalize-events.eu-west-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	personalize-events.eu-central-1.amazonaws.com	HTTPS

Amazon Personalize Runtime

Region Name	Region	Endpoint	Protocol
US East (N. Virginia)	us-east-1	personalize-runtime.us-east-1.amazonaws.com	HTTPS
US East (Ohio)	us-east-2	personalize-runtime.us-east-2.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	personalize-runtime.us-west-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	personalize-runtime.ap-northeast-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Asia Pacific (Mumbai)	ap-south-1	personalize-runtime.ap-south-1.amazonaws.com	HTTPS
Asia Pacific (Seoul)	ap-northeast-2	personalize-runtime.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	personalize-runtime.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	personalize-runtime.ap-southeast-2.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	personalize-runtime.cn-north-1.amazonaws.com.cn	HTTPS
Canada (Central)	ca-central-1	personalize-runtime.ca-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	personalize-runtime.eu-west-1.amazonaws.com	HTTPS
Europe (Frankfurt)	eu-central-1	personalize-runtime.eu-central-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
Active campaigns per dataset group	Each supported Region: 5	Yes	The total number of active campaigns per dataset group in the current Region.
Active dataset groups	Each supported Region: 5	Yes	The total number of active dataset groups that you can create in this account in the current Region.
Active filters per dataset group	Each supported Region: 10	Yes	The total number of active filters per dataset group in the current Region.
Active solutions per dataset group	Each supported Region: 10	Yes	The total number of active solutions per dataset group in the current Region.
Amount of data for HRNN recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for an individual dataset for HRNN recipe
Amount of data for Personalized-Ranking recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for an individual dataset for Personalized-Ranking recipe

Name	Default	Adjust	Description
Amount of data for Popularity-Count recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for an individual dataset for Popularity-Count recipe
Amount of data for SIMS recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for an individual dataset for SIMS recipe
Amount of data per incremental import.	Each supported Region: 1 Gigabytes	Yes	The maximum amount of data (in GB) you can import with a single incremental import in this account in the current Region.
Amount of interactions data for HRNN-coldstart recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for interactions dataset for HRNN-coldstart recipe
Amount of interactions data for HRNN-metadata recipe	Each supported Region: 100 Gigabytes	No	The maximum amount of data for interactions dataset for HRNN-metadata recipe
Amount of users and items data combined for HRNN-coldstart recipe	Each supported Region: 5 Gigabytes	No	The maximum amount of data for users dataset and items dataset combined for HRNN-coldstart recipe
Amount of users and items data combined for HRNN-metadata recipe	Each supported Region: 5 Gigabytes	No	The maximum amount of data for users dataset and items dataset combined for HRNN-metadata recipe
Event size	Each supported Region: 10 Kilobytes	No	The maximum size of an event in kilobytes.
Maximum number of interactions per event type per user considered by a filter.	Each supported Region: 100	Yes	The maximum number of interactions per event type per user Amazon Personalize considers when filtering recommendations. This quota applies to each get recommendations request in this account in the current Region.
Maximum number of recommenders per dataset group	Each supported Region: 5	No	The total number of recommenders per dataset group in the current Region.
Minimum data points for model training	Each supported Region: 1,000	No	The minimum number of data points required for training a model (creating a solution)

Name	Default	Adjust	Description
Minimum unique users for model training	Each supported Region: 25	No	The minimum number of unique users required for training a model (creating a solution).
Number of events in PutEvents call	Each supported Region: 10	No	The maximum number of events in a PutEvents call.
Number of interactions for model training	Each supported Region: 500,000,000	No	The maximum number of interactions that are considered by a model during training.
Number of items used in model training	Each supported Region: 750,000	No	The maximum number of items that are considered by a model during training.
Number of schemas	Each supported Region: 500	No	The total number of active schemas that you can create in this account in the current Region.
Pending or In Progress batch inference jobs	Each supported Region: 5	Yes	The total number of pending or in progress batch inference jobs that you can create in this account in the current Region.
Pending or In Progress solution versions	Each supported Region: 20	Yes	The total number of pending or in progress solution versions that you can create in this account in the current Region.
Rate of CreateCampaign requests	Each supported Region: 1	No	The maximum number of CreateCampaign requests that you can make per second.
Rate of CreateDataset requests	Each supported Region: 1	No	The maximum number of CreateDataset requests that you can make per second.
Rate of CreateDatasetGroup requests	Each supported Region: 1	No	The maximum number of CreateDatasetGroup requests that you can make per second
Rate of CreateDatasetImportJob requests	Each supported Region: 1	No	The maximum number of CreateDatasetImportJob requests that you can make per second.

Name	Default	Adjust	Description
Rate of CreateEventTracker requests	Each supported Region: 1	No	The maximum number of CreateEventTracker requests that you can make per second.
Rate of CreateSchema requests	Each supported Region: 1	No	The maximum number of CreateSchema requests that you can make per second.
Rate of CreateSolution requests	Each supported Region: 1	No	The maximum number of CreateSolution requests that you can make per second.
Rate of CreateSolutionVersion requests	Each supported Region: 1	No	The maximum number of CreateSolutionVersion requests that you can make per second.
Rate of DeleteCampaign requests	Each supported Region: 1	No	The maximum number of DeleteCampaign requests that you can make per second.
Rate of DeleteDataset requests	Each supported Region: 1	No	The maximum number of DeleteDataset requests that you can make per second.
Rate of DeleteDatasetGroup requests	Each supported Region: 1	No	The maximum number of DeleteDatasetGroup requests that you can make per second.
Rate of DeleteDatasetImportJob requests	Each supported Region: 1	No	The maximum number of DeleteDatasetImportJob requests that you can make per second.
Rate of DeleteEventTracker requests	Each supported Region: 1	No	The maximum number of DeleteEventTracker requests that you can make per second.
Rate of DeleteSchema requests	Each supported Region: 1	No	The maximum number of DeleteSchema requests that you can make per second
Rate of DeleteSolution requests	Each supported Region: 1	No	The maximum number of DeleteSolution requests that you can make per second.

Name	Default	Adjust	Description
Rate of DescribeAlgorithm requests	Each supported Region: 1	No	The maximum number of DescribeAlgorithm requests that you can make per second.
Rate of DescribeCampaign requests	Each supported Region: 1	No	The maximum number of DescribeCampaign requests that you can make per second.
Rate of DescribeDataset requests	Each supported Region: 1	No	The maximum number of DescribeDataset requests that you can make per second.
Rate of DescribeDatasetGroup requests	Each supported Region: 1	No	The maximum number of DescribeDatasetGroup requests that you can make per second.
Rate of DescribeDatasetImportJob requests	Each supported Region: 1	No	The maximum number of DescribeDatasetImportJob requests that you can make per second.
Rate of DescribeEventTracker requests	Each supported Region: 1	No	The maximum number of DescribeEventTracker requests that you can make per second.
Rate of DescribeFeatureTransformation requests	Each supported Region: 1	No	The maximum number of DescribeFeatureTransformation requests that you can make per second.
Rate of DescribeRecipe requests	Each supported Region: 1	No	The maximum number of DescribeRecipe requests that you can make per second.
Rate of DescribeSchema requests	Each supported Region: 1	No	The maximum number of DescribeSchema requests that you can make per second.
Rate of DescribeSolution requests	Each supported Region: 1	No	The maximum number of DescribeSolution requests that you can make per second.
Rate of GetPersonalizedRanking requests per campaign	Each supported Region: 500	No	The maximum number of GetPersonalizedRanking requests that you can make per second per campaign.

Name	Default	Adjust	Description
Rate of GetRecommendations requests per campaign	Each supported Region: 500	No	The maximum number of GetRecommendations requests that you can make per second per campaign.
Rate of GetSolutionMetrics requests	Each supported Region: 1	No	The maximum number of GetSolutionMetrics requests that you can make per second.
Rate of ListCampaigns requests	Each supported Region: 1	No	The maximum number of ListCampaigns requests that you can make per second.
Rate of ListDatasetGroups requests	Each supported Region: 1	No	The maximum number of ListDatasetGroups requests that you can make per second.
Rate of ListDatasetImportJobRuns requests	Each supported Region: 1	No	The maximum number of ListDatasetImportJobRuns requests that you can make per second.
Rate of ListDatasetImportJobs requests	Each supported Region: 1	No	The maximum number of ListDatasetImportJobs requests that you can make per second.
Rate of ListDatasets requests	Each supported Region: 1	No	The maximum number of ListDatasets requests that you can make per second.
Rate of ListEventTrackers requests	Each supported Region: 1	No	The maximum number of ListEventTrackers requests that you can make per second.
Rate of ListRecipes requests	Each supported Region: 1	No	The maximum number of ListRecipes requests that you can make per second.
Rate of ListSchemas requests	Each supported Region: 1	No	The maximum number of ListSchemas requests that you can make per second.
Rate of ListSolutionVersions requests	Each supported Region: 1	No	The maximum number of ListSolutionVersions requests that you can make per second.
Rate of ListSolutions requests	Each supported Region: 1	No	The maximum number of ListSolutions requests that you can make per second.

Name	Default	Adjust	Description
Rate of PutEvents requests per dataset group	Each supported Region: 1,000	Yes	The maximum number of PutEvents requests that you can make per second per dataset group from this account in the current Region.
Rate of UpdateCampaign requests	Each supported Region: 1	No	The maximum number of UpdateCampaign requests that you can make per second.
Rate of UpdateDataset requests	Each supported Region: 1	No	The maximum number of UpdateDataset requests that you can make per second.
Rate of transactions per account	Each supported Region: 2,500	No	The maximum transactions per second per account. Transaction is a single recommendation request.

Amazon Pinpoint endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Amazon Pinpoint includes the Amazon Pinpoint API and the Amazon Pinpoint SMS and Voice API.

Service endpoints

Amazon Pinpoint API

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	pinpoint.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	pinpoint.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	pinpoint.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	pinpoint.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	pinpoint.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	pinpoint.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	pinpoint.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	pinpoint.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	pinpoint.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	pinpoint.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	pinpoint.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	pinpoint.us-gov-west-1.amazonaws.com	HTTPS	

Note
You can't use the Amazon Pinpoint API to send SMS messages in the Asia Pacific (Seoul) Region.

Amazon Pinpoint SMS and Voice API

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	sms-voice.pinpoint.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	sms-voice.pinpoint.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sms-voice.pinpoint.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sms-voice.pinpoint.ap-southeast-2.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sms-voice.pinpoint.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	sms-voice.pinpoint.eu-west-1.amazonaws.com	HTTPS	

Note
The Amazon Pinpoint SMS and Voice API is not available in the following Regions:

- Asia Pacific (Seoul) Region
- Asia Pacific (Singapore) Region
- Asia Pacific (Tokyo) Region
- Canada (Central) Region
- Europe (London) Region

Service quotas

Name	Default	Adjust	Description
APNs sandbox message payload size per message	Each supported Region: 4 Kilobytes	No	The maximum APNs sandbox message payload size (in KB) per message.
Active campaigns per account	Each supported Region: 200	Yes	The maximum number of active campaigns per account. An active campaign is a campaign that hasnt completed or failed. Active campaigns have a status of SCHEDULED, EXECUTING, or PENDING_NEXT_RUN.
All other operations burst quota	Each supported Region: 300	No	The maximum number of all other operation requests that you can make at one time.
All other operations rate quota	Each supported Region: 300	No	The maximum number of all other operation requests that you can make per second.
Amazon Device Messaging (ADM) message payload size per message	Each supported Region: 6 Kilobytes	No	The maximum Amazon Device Messaging (ADM) message payload size (in KB) per message.
Apple Push Notification service (APNs) message payload size per message	Each supported Region: 4 Kilobytes	No	The maximum Apple Push Notification service (APNs) message payload size (in KB) per message.

Name	Default	Adjust	Description
Attribute name length	Each supported Region: 50	No	The maximum attribute name length in characters.
Attribute value length	Each supported Region: 100	No	The maximum attribute value length in characters.
Baidu Cloud Push message payload size per message	Each supported Region: 4 Kilobytes	No	The maximum Baidu Cloud Push message payload size (in KB) per message.
CreateCampaign operation burst quota	Each supported Region: 25	No	The maximum number of CreateCampaign operation requests that you can make at one time.
CreateCampaign operation rate quota	Each supported Region: 25	No	The maximum number of CreateCampaign operation requests that you can make per second.
CreateSegment operation burst quota	Each supported Region: 25	No	The maximum number of CreateSegment operation requests that you can make at one time.
CreateSegment operation rate quota	Each supported Region: 25	No	The maximum number of CreateSegment operation requests that you can make per second.
DeleteCampaign operation burst quota	Each supported Region: 25	No	The maximum number of DeleteCampaign operation requests that you can make at one time.
DeleteCampaign operation rate quota	Each supported Region: 25	No	The maximum number of DeleteCampaign operation requests that you can make per second.
DeleteEndpoint operation burst quota	Each supported Region: 1,000	No	The maximum number of DeleteEndpoint operation requests that you can make at one time.
DeleteEndpoint operation rate quota	Each supported Region: 1,000	No	The maximum number of DeleteEndpoint operation requests that you can make per second.
DeleteSegment operation burst quota	Each supported Region: 25	No	The maximum number of DeleteSegment operation requests that you can make at one time.

Name	Default	Adjust	Description
DeleteSegment operation rate quota	Each supported Region: 25	No	The maximum number of DeleteSegment operation requests that you can make per second.
Firebase Cloud Messaging (FCM) message payload size per message	Each supported Region: 4 Kilobytes	No	The maximum Firebase Cloud Messaging (FCM) message payload size (in KB) per message.
GetEndpoint operation burst quota	Each supported Region: 7,000	No	The maximum number of GetEndpoint operation requests that you can make at one time.
GetEndpoint operation rate quota	Each supported Region: 7,000	No	The maximum number of GetEndpoint operation requests that you can make per second.
Import size per import job	Each supported Region: 1	Yes	The maximum import size (in GB) per import job.
Invocation payload size	Each supported Region: 7 Megabytes	No	The maximum invocation payload size (in MB).
Maximum amount of time to wait for a Lambda function to process data	Each supported Region: 15 Seconds	No	The maximum amount of time (in seconds) to wait for a Lambda function to process data.
Maximum length of a recommended attribute display name	Each supported Region: 25	No	The maximum length of a recommended attribute display name (the name that appears in the Attribute finder on the console).
Maximum length of a recommended attribute name	Each supported Region: 50	No	The maximum length of a recommended attribute name.
Maximum length of a recommended attribute value thats retrieved from Amazon Personalize	Each supported Region: 100	No	Maximum length (in characters) of a recommended attribute value thats retrieved from Amazon Personalize.
Maximum message size, including attachments	Each supported Region: 10 Megabytes	No	The maximum message size (in MB), including attachments.
Maximum number of active journeys per account	Each supported Region: 50	Yes	The maximum number of active journeys per account.

Name	Default	Adjust	Description
Maximum number of attempts to invoke a Lambda function	Each supported Region: 3 Seconds	No	The maximum number of attempts to invoke a Lambda function.
Maximum number of attribute keys and metric keys for each event per request	Each supported Region: 40	No	The maximum number of attribute keys and metric keys for each event per request.
Maximum number of characters for an event attribute name in a custom channel response	Each supported Region: 128	No	The maximum number of characters for an event attribute name in a custom channel response.
Maximum number of characters for an event attribute value in a custom channel response	Each supported Region: 128	No	The maximum number of characters for an event attribute value in a custom channel response.
Maximum number of characters in ADM-specific template parts of a push notification template	Each supported Region: 4,000	No	The maximum number of characters in ADM-specific template parts of a push notification template.
Maximum number of characters in APN-specific template parts of a push notification template	Each supported Region: 2,000	No	The maximum number of characters in APN-specific template parts of a push notification template.
Maximum number of characters in Baidu-specific template parts of a push notification template	Each supported Region: 4,000	No	The maximum number of characters in Baidu-specific template parts of a push notification template.
Maximum number of characters in FCM-specific template parts of a push notification template	Each supported Region: 4,000	No	The maximum number of characters in FCM-specific template parts of a push notification template.
Maximum number of characters in a voice template	Each supported Region: 10,000	No	The maximum number of characters in a voice template.
Maximum number of characters in an SMS template	Each supported Region: 1,600	No	The maximum number of characters in an SMS template.
Maximum number of characters in an email template	Each supported Region: 500,000	No	The maximum number of characters in an email template.
Maximum number of characters in the default template parts of a push notification template	Each supported Region: 2,000	No	The maximum number of characters in the default template parts of a push notification template.

Name	Default	Adjust	Description
Maximum number of characters per attribute key	Each supported Region: 50	No	The maximum number of characters per attribute key.
Maximum number of characters per attribute value	Each supported Region: 200	No	The maximum number of characters per attribute value. If the number of characters exceeds 200 the event is dropped.
Maximum number of custom attribute keys per app	Each supported Region: 500	No	The maximum number of custom attribute keys per app.
Maximum number of custom attribute values per attribute key	Each supported Region: 100,000	No	The maximum number of custom attribute values per attribute key.
Maximum number of custom event types per app	Each supported Region: 1,500	No	The maximum number of custom event types per app.
Maximum number of custom metric keys per app	Each supported Region: 500	No	The maximum number of custom metric keys per app.
Maximum number of dimensions that can be used to create a segment	Each supported Region: 100	No	The maximum number of dimensions that can be used to create a segment.
Maximum number of event attributes per endpoint in a custom channel response	Each supported Region: 5	No	The maximum number of event attributes per endpoint in a custom channel response.
Maximum number of events in a request	Each supported Region: 100	No	The maximum number of events in a request.
Maximum number of journey activities per journey	Each supported Region: 40	Yes	The maximum number of journey activities per journey.
Maximum number of message templates per account	Each supported Region: 10,000	Yes	The maximum number of message templates per account.
Maximum number of model configurations per account	Each supported Region: 100	No	The maximum number of model configurations per account.
Maximum number of model configurations per message template	Each supported Region: 1	No	The maximum number of model configurations per message template.

Name	Default	Adjust	Description
Maximum number of push notifications that can be sent per second in a campaign	Each supported Region: 25,000	Yes	The maximum number of push notifications that can be sent per second in a campaign.
Maximum number of recommendations per endpoint or user	Each supported Region: 5	No	The maximum number of recommendations per endpoint or user.
Maximum number of recommended attributes per endpoint or user	Each supported Region: 1	No	The maximum number of recommended attributes per endpoint or user if the attribute values arent processed by an AWS Lambda function.
Maximum number of recommended attributes per endpoint or user (AWS Lambda function)	Each supported Region: 10	No	The maximum number of recommended attributes per endpoint or user if the attribute values are processed by an AWS Lambda function.
Maximum number of versions per template	Each supported Region: 5,000	No	The maximum number of versions per template.
Maximum segment size per campaign	Each supported Region: 100,000,000	No	The maximum segment size for imported segments per campaign. For dynamic segments: unlimited.
Maximum segment size per journey	Each supported Region: 100,000,000	No	The maximum segment size per journey. For imported segments: 100,000,000 per journey. For dynamic segments: unlimited.
Maximum size of a request	Each supported Region: 4 Megabytes	No	The maximum size (in MB) of a request.
Maximum size of an individual event	Each supported Region: 1,000 Kilobytes	No	The maximum size (in KB) of an individual event.
Maximum size of an invocation payload (request and response) for a Lambda function	Each supported Region: 6 Megabytes	No	The maximum size (in MB) of an invocation payload (request and response) for a Lambda function.
Maximum size per endpoint	Each supported Region: 15 Kilobytes	No	The maximum size (in KB) per endpoint.
Number of Amazon Pinpoint projects	Each supported Region: 100	No	The maximum number of Amazon Pinpoint projects per account.

Name	Default	Adjust	Description
Number of Amazon SNS topics for two-way SMS per account	Each supported Region: 100,000	Yes	The maximum number of Amazon SNS topics for two-way SMS per account.
Number of EndpointBatchItem objects in an EndpointBatchRequest payload	Each supported Region: 100	No	The maximum number of EndpointBatchItem objects in an EndpointBatchRequest payload. The payload size cant exceed 7 MB.
Number of SMS messages that can be sent each second (sending rate)	Each supported Region: 20	Yes	The maximum number of SMS messages that can be sent each second (sending rate).
Number of SMS messages that can be sent to a single recipient each second	Each supported Region: 1	No	The maximum number of SMS messages that can be sent to a single recipient each second.
Number of attributes assigned to the Attributes parameter	Each supported Region: 250	Yes	The maximum number of attributes assigned to the Attributes parameter.
Number of attributes assigned to the Attributes, Metrics, and UserAttributes parameters collectively	Each supported Region: 250	Yes	The maximum number of attributes assigned to the Attributes, Metrics, and UserAttributes parameters collectively per endpoint.
Number of attributes assigned to the Metrics parameter	Each supported Region: 250	Yes	The maximum number of attributes assigned to the Metrics parameter.
Number of attributes assigned to the UserAttributes parameter	Each supported Region: 250	Yes	The maximum number of attributes assigned to the UserAttributes parameter.
Number of characters in a voice message	Each supported Region: 6,000	No	The maximum number of characters in a voice message. 3,000 billable characters, in words that are spoken 6,000 characters total, including billable characters and SSML tags.
Number of concurrent import jobs	Each supported Region: 10	Yes	The maximum number of concurrent import jobs per account.

Name	Default	Adjust	Description
Number of emails that can be sent each second (sending rate)	Each supported Region: 1	Yes	The maximum number of emails that can be sent each second (sending rate). If your account is in the sandbox, 1 email per second. If your account is out of the sandbox, the rate varies based on your specific use case. This rate is based on the number of recipients, as opposed to the number of unique messages sent.
Number of emails that can be sent per 24-hour period (sending quota)	Each supported Region: 200	Yes	The maximum number of emails that can be sent per 24-hour period (sending quota). If your account is in the sandbox, 200 emails per 24-hour period. If your account is out of the sandbox, the quota varies based on your specific use case. This quota is based on the number of recipients, as opposed to the number of unique messages sent.
Number of endpoints with the same user ID	Each supported Region: 10	No	The maximum number of endpoints with the same user ID.
Number of event-based campaigns	Each supported Region: 25	Yes	The maximum number of event-based campaigns. Campaigns that use event-based triggers have to use dynamic segments. They cant use imported segments.
Number of identities that you can verify	Each supported Region: 10,000	No	The maximum number of identities that you can verify per AWS region. Identities refers to email addresses or domains, or any combination of the two. Every email you send using Amazon Pinpoint must be sent from a verified identity.
Number of recipients per message	Each supported Region: 50	No	The maximum number of recipients per message.

Name	Default	Adjust	Description
Number of values assigned to the Attributes parameter attributes per attribute	Each supported Region: 50	No	The maximum number of values assigned to the Attributes parameter attributes per attribute.
Number of values assigned to the UserAttributes parameter attributes per attribute	Each supported Region: 50	No	The maximum number of values assigned to the UserAttributes parameter attributes per attribute.
Number of verified identities	Each supported Region: 10,000	No	The maximimum number of verified identities. Identities refers to email addresses or domains, or any combination of the two. Every email you send using Amazon Pinpoint must be sent from a verified identity.
Number of voice configuration sets per AWS region	Each supported Region: 10,000	No	The maximum number of configuration sets per AWS region.
Number of voice messages that can be sent during a 24-hour period	Each supported Region: 20	No	The maximum number of voice messages that can be sent during a 24-hour period. If your account is in the sandbox: 20 messages. If your account is out of the sandbox: unlimited.
Number of voice messages that can be sent from a single originating phone number per second	Each supported Region: 1	No	The maximum number of voice messages that can be sent from a single originating phone number per second.
Number of voice messages that can be sent per minute	Each supported Region: 5	No	The maximum number of voice messages that can be sent per minute. If your account is in the sandbox: 5 calls per minute. If your account is out of the sandbox: 20 calls per minute.
Number of voice messages that can be sent to a single recipient during a 24-hour period	Each supported Region: 5	No	The maximum number of voice messages that can be sent to a single recipient during a 24-hour period.
PhoneNumberValidate operation burst quota	Each supported Region: 20	No	The maximum number of PhoneNumberValidate operation requests that you can make at one time.

Name	Default	Adjust	Description
PhoneNumberValidate operation rate quota	Each supported Region: 20	No	The maximum number of PhoneNumberValidate operation requests that you can make per second.
PutEvents operation burst quota	Each supported Region: 7,000	No	The maximum number of PutEvents operation requests that you can make at one time.
PutEvents operation rate quota	Each supported Region: 7,000	No	The maximum number of PutEvents operation requests that you can make per second.
SMS spending threshold	Each supported Region: 1	Yes	The maximum SMS spending threshold per account (in USD).
SendMessages operation burst quota	Each supported Region: 4,000	No	The maximum number of SendMessages operation requests that you can make at one time.
SendMessages operation rate quota	Each supported Region: 4,000	No	The maximum number of SendMessages operation requests that you can make per second.
SendUsersMessages operation burst quota	Each supported Region: 6,000	No	The maximum number of SendUsersMessages operation requests that you can make at one time.
SendUsersMessages operation rate quota	Each supported Region: 6,000	No	The maximum number of SendUsersMessages operation requests that you can make per second.
UpdateCampaign operation burst quota	Each supported Region: 25	No	The maximum number of UpdateCampaign operation requests that you can make at one time.
UpdateCampaign operation rate quota	Each supported Region: 25	No	The maximum number of UpdateCampaign operation requests that you can make per second.
UpdateEndpoint operation burst quota	Each supported Region: 5,000	No	The maximum number of UpdateEndpoint operation requests that you can make at one time.

Name	Default	Adjust	Description
UpdateEndpoint operation rate quota	Each supported Region: 5,000	No	The maximum number of UpdateEndpoint operation requests that you can make per second.
UpdateEndpointsBatch operation burst quota	Each supported Region: 5,000	No	The maximum number of UpdateEndpointsBatch operation requests that you can make at one time.
UpdateEndpointsBatch operation rate quota	Each supported Region: 5,000	No	The maximum number of UpdateEndpointsBatch operation requests that you can make per second.
UpdateSegment operation burst quota	Each supported Region: 25	No	The maximum number of UpdateSegment operation requests that you can make at one time.
UpdateSegment operation rate quota	Each supported Region: 25	No	The maximum number of UpdateSegment operation requests that you can make per second.
Voice message length	Each supported Region: 30	No	The maximum voice message length. If your account is in the sandbox: 30 seconds. If your account is out of the sandbox: 5 minutes.

For more information, see Amazon Pinpoint quotas in the *Amazon Pinpoint Developer Guide*.

Amazon Polly endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	polly.us-east-2.amazonaws.com polly-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	polly.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		polly-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	polly.us-west-1.amazonaws.com polly-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	polly.us-west-2.amazonaws.com polly-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	polly.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	polly.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	polly.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	polly.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	polly.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	polly.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	polly.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	polly.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	polly.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	polly.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	polly.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	polly.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	polly.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	polly.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	polly.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	polly.us-gov-west-1.amazonaws.com polly-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent connections	Each supported Region: 90	Yes	The maximum number of concurrent connections in this account in the current region.
Lexicon count	Each supported Region: 100	No	The maximum number of lexicons you can have in this account in the current region.
Lexicon size	Each supported Region: 4,000	No	The maximum size of a single lexicon in characters.
Rate of GetSpeechSynthesisTask and ListSpeechSynthesisTasks requests	Each supported Region: 10	Yes	The maximum number of GetSpeechSynthesisTask and ListSpeechSynthesisTasks requests per second that you can send in this account in the current region.
Rate of StartSpeechSynthesisTask (neural) requests	Each supported Region: 1	Yes	The maximum number of StartSpeechSynthesisTask (neural engine) requests per second that you can send in this account in the current region.
Rate of StartSpeechSynthesisTask (standard) requests	Each supported Region: 10	Yes	The maximum number of StartSpeechSynthesisTask (standard engine) requests per second that you can send in this account in the current region.

Name	Default	Adjust	Description
Rate of SynthesizeSpeech (neural) requests	Each supported Region: 8	Yes	The maximum number of SynthesizeSpeech (neural engine) requests per second that you can send in this account in the current region.
Rate of SynthesizeSpeech (standard) requests	Each supported Region: 80	Yes	The maximum number of SynthesizeSpeech (standard engine) requests per second that you can send in this account in the current region. This also includes DescribeVoices requests.
Rate of lexicon management requests	Each supported Region: 2	Yes	The maximum number of lexicon management requests per second that you can send in this account in the current region. This limit applies to following operations combined: ListLexicon, GetLexicon, PutLexicon, DeleteLexicon.
StartSpeechSynthesisTask billed characters count	Each supported Region: 100,000	Yes	Maximum size of the StartSpeechSynthesisTask input text in billed characters. SSML tags are not counted as billed characters. Applies to both standard and neural synthesis.
StartSpeechSynthesisTask lexicon count	Each supported Region: 5	No	Maximum number of lexicons that can be used with StartSpeechSynthesisTask operation. Applies to both standard and neural synthesis.
StartSpeechSynthesisTask total characters limit	Each supported Region: 200,000	Yes	Maximum size of the StartSpeechSynthesisTask input text in characters, including SSML tags and whitespace. Applies to both standard and neural synthesis.

Name	Default	Adjust	Description
SynthesizeSpeech billed character count	Each supported Region: 3,000	Yes	Maximum size of the SynthesizeSpeech input text in billed characters. SSML tags are not counted as billed characters. Applies to both standard and neural synthesis.
SynthesizeSpeech lexicon count	Each supported Region: 5	No	Maximum number of lexicons that can be used with SynthesizeSpeech operation. Applies to both standard and neural synthesis.
SynthesizeSpeech total character count	Each supported Region: 6,000	Yes	Maximum size of the SynthesizeSpeech input text in characters, including SSML tags and whitespace. Applies to both standard and neural synthesis.

For more information, see Quotas in the *Amazon Polly Developer Guide*.

Amazon Managed Service for Prometheus endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	aps.us-east-2.amazonaws.com aps-workspaces.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	aps.us-east-1.amazonaws.com aps-workspaces.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	aps.us-west-2.amazonaws.com aps-workspaces.us-west-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	aps.ap-southeast-1.amazonaws.com aps-workspaces.ap-southeast-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	aps.ap-southeast-2.amazonaws.com aps-workspaces.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	aps.ap-northeast-1.amazonaws.com aps-workspaces.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	aps.eu-central-1.amazonaws.com aps-workspaces.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	aps.eu-west-1.amazonaws.com aps-workspaces.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	aps.eu-west-2.amazonaws.com aps-workspaces.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	aps.eu-north-1.amazonaws.com aps-workspaces.eu-north-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Amazon Managed Service for Prometheus has the following quotas for series, labels, and API requests. The **Possible error message** column shows what error message you might see if your Prometheus data exceeds a limit. If you see one of these error messages, you should request an increase to the corresponding limit.

Name	Default	Adjustable	Possible error message
Active series per workspace (metrics that have reported data in the past 2 hours)	1,000,000	Yes	per-user series limit of 1000000 exceeded, please contact administrator to raise it
Active series per metric name	200,000	Yes	per-metric series limit of 200000 exceeded, please contact administrator to raise it
Ingestion rate	70,000 samples per second	Yes	ingestion rate limit (...) exceeded
Ingestion burst size	1,000,000 samples	Yes	ingestion rate limit (...) exceeded
Labels per metric series	70	Yes	series has too many labels (...) series: '%s'

Name	Default	Adjustable	Possible error message
Query bytes for instant queries	750MB that can be scanned by a single instant query	No	the query hit the aggregated chunks size limit (A *chunk* stores raw samples of series for a certain time span.)
Query bytes for range queries	750MB that can be scanned per 24-hour interval in a single range query	No	the query hit the aggregated chunks size limit (A *chunk* stores raw samples of series for a certain time span.)
Query time range	32 days between the start time and the end time of a PromQL query	No	the query time range exceeds the limit (query length: xxx, limit: yyy)
Query samples	12,000,000 samples that can be scanned during a single query	No	query processing would load too many samples into memory in query execution
Retention time for ingested data	150 days. Data older than this is deleted from the workspace.	No	
Workspaces per Region per account	10	Yes	Limit exceeded. Maximum workspaces per account.
Workspace management API operations, including CreateWorkspace, DeleteWorkspace, DescribeWorkspaces, ListWorkspaces, and UpdateWorkspaceAlias	10 transactions per second (TPS), with a burst limit of 10 TPS	Yes	

Rules and alert manager quotas

Name	Default	Adjustable
Active alerts	1000	Yes
Alert aggregation group size	1 K	Yes
Alert manager API operations, including CreateAlertManagerDefinition, DeleteAlertManagerDefinition, DescribeAlertManagerDefinition, and PutAlertManagerDefinition	100 TPS	No

Name	Default	Adjustable
Alert manager definition file size	1 MB	No
Alerts per workspace, in size	20 MB	Yes
Inhibition rules	100	Yes
Nodes in the alert manager routing tree	100	Yes
Rule evaluation interval	60 seconds	No
Rule groups in a workspace	100	Yes
Rule groups namespaces in a workspace	10	Yes
Rules in a rule group	20	Yes
Rules definition file size	1 MB	No
Templates in the alert manager definition file	100	Yes

Additional quotas for ingested data

Amazon Managed Service for Prometheus has additional quotas for data that's ingested into Amazon Managed Service for Prometheus workspaces.

- Metric samples older than 1 hour are refused from being ingested.
- Every sample and metadata must have a metric name.
- Maximum length accepted for label names: 1024 bytes
- Maximum length accepted for label value: 2048 bytes
- Maximum number of metadata per metric: 10
- Maximum size of ingestion or query request: 1 MB
- Maximum length accepted for metric metadata, which includes metric name, HELP, and UNIT: 1024 bytes
- Maximum number of active metrics with metadata per workspace: 20,000
- Maximum retention time for ingested metrics: 150 days. Data older than this is deleted from the workspace.

AWS Proton endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	proton.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	proton.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	proton.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	proton.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	proton.eu-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Components per account	Each supported Region: 100	Yes	Maximum number of components per account
Environment account connections per environment account	Each supported Region: 5	Yes	Maximum number of environment account connections per environment account
Environments per account	Each supported Region: 100	Yes	Maximum number of environments per account
Service instances per service	Each supported Region: 20	Yes	Maximum number of service instances per service
Services per account	Each supported Region: 1,000	Yes	Maximum number of services per account
Template versions per template	Each supported Region: 500	Yes	Maximum number of template versions registered per template
Templates per account	Each supported Region: 100	Yes	Maximum number of registered templates per account, service and environment templates combined

For more information, see AWS Proton quotas in the *AWS Proton Administrator Guide*.

Amazon QLDB endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

QLDB resource management API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	qldb.us-east-2.amazonaws.com qldb-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	qldb.us-east-1.amazonaws.com qldb-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	qldb.us-west-2.amazonaws.com qldb-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	qldb.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	qldb.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	qldb.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	qldb.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	qldb.ca-central-1.amazonaws.com qldb-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	qldb.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	qldb.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	qldb.eu-west-2.amazonaws.com	HTTPS	

QLDB transactional data API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	session.qldb.us-east-2.amazonaws.com session.qldb-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	session.qldb.us-east-1.amazonaws.com session.qldb-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	session.qldb.us-west-2.amazonaws.com session.qldb-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	session.qldb.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	session.qldb.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	session.qldb.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	session.qldb.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	session.qldb.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	session.qldb.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	session.qldb.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	session.qldb.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Ledgers	Each supported Region: 5	Yes	The maximum number of active ledgers allowed per account in a given region.
QLDB exports per ledger	Each supported Region: 2	Yes	The maximum number of active exports allowed per

Name	Default	Adjust	Description
			ledger per account in a given region.
QLDB streams per ledger	Each supported Region: 5	Yes	The maximum number of active streams allowed per ledger per account in a given region.

For more information, see Quotas in Amazon QLDB in the *Amazon QLDB Developer Guide*.

Amazon QuickSight endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

QuickSight

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	quicksight.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	quicksight.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	quicksight.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	quicksight.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	quicksight.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	quicksight.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	quicksight.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	quicksight.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	quicksight.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	quicksight.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	quicksight.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	quicksight.eu-west-2.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	quicksight.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	quicksight.us-gov-west-1.amazonaws.com	HTTPS	

QuickSight Websites

Region Name	Region	Endpoint
US East (Ohio)	us-east-2	https://us-east-2.quicksight.amazonaws.com
US East (N. Virginia)	us-east-1	https://us-east-1.quicksight.amazonaws.com
US West (Oregon)	us-west-2	https://us-west-2.quicksight.aws.amazon.com
Asia Pacific (Singapore)	ap-southeast-1	https://ap-southeast-1.quicksight.aws.amazon.com
Asia Pacific (Sydney)	ap-southeast-2	https://ap-southeast-2.quicksight.aws.amazon.com
Asia Pacific (Tokyo)	ap-northeast-1	https://ap-northeast-1.quicksight.aws.amazon.com
Europe (Frankfurt)	eu-central-1	https://eu-central-1.quicksight.aws.amazon.com
Europe (Ireland)	eu-west-1	https://eu-west-1.quicksight.aws.amazon.com
Europe (London)	eu-west-2	https://eu-west-2.quicksight.aws.amazon.com

Service quotas

Name	Default	Adjust	Description
API_CREATE-INGESTION: Calls per 24 hour period from Enterprise edition	Each supported Region: 32	No	The maximum number of calls to the createIngestion API function in a floating 24-hour window. The

Name	Default	Adjust	Description
			time period is measured starting 24 hours before the current date and time. This maximum applies to AWS accounts that use Amazon QuickSight Enterprise edition.
API_CREATE-INGESTION: Calls per 24 hour period from Standard edition	Each supported Region: 8	No	The maximum number of calls to the createIngestion API function in a floating 24-hour window. The time period is measured starting 24 hours before the current date and time. This maximum applies to AWS accounts that use Amazon QuickSight Standard edition.
Calculated field expression length	Each supported Region: 250,000	No	The maximum number of characters that you can use in an expression for a calculated field.
Custom action name length	Each supported Region: 256	No	The maximum number of characters that you can use in naming a custom action.
Custom actions per visual	Each supported Region: 10	No	The maximum number of custom actions that you can configure for each visual in an analysis.
Data Prep: Fields per dataset	Each supported Region: 2,000	No	The maximum number of fields that a dataset can contain. File imports and query result sets can contain more than 2,000 columns. However, you must edit the dataset settings and manually exclude fields until there are less than 2,000 selected or included.
Display items per sheet control	Each supported Region: 10,000	No	The maximum number of distinct items that a sheet control can display.
Email aliases per group for email reports	Each supported Region: 5,000	No	The maximum number of members in any group that QuickSight sends email reports to. If you try to send reports to larger groups, the report fails.

Name	Default	Adjust	Description
Maximum number of characters per specified Control values	Each supported Region: 200,000	No	The maximum number of characters used in the entries that you type in to display inside sheet controls. An example is the values specified for a dropdown. This doesnt apply to values created from a dataset.
Query timeout for visuals	Each supported Region: 120 Seconds	No	The maximum amount of time that QuickSight waits for a database to finish sending data. This applies to queries initiated by visuals.
The maximum amount of time to wait for a dataset preview	Each supported Region: 45 Seconds	No	The maximum amount of time that QuickSight waits for a data preview to finish loading.
URL action hyperlink length	Each supported Region: 2,048	No	The maximum number of characters allowed in the hyperlink (URL) of a custom action thats defined as a URL action. This includes all variations of the link for the different parameters you include.

AWS Resource Access Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ram.us-east-2.amazonaws.com ram-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ram.us-east-1.amazonaws.com ram-fips.us-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (N. California)	us-west-1	ram.us-west-1.amazonaws.com ram-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ram.us-west-2.amazonaws.com ram-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ram.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ram.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ram.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ram.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ram.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ram.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ram.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ram.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ram.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ram.ca-central-1.amazonaws.com ram-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ram.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ram.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ram.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Milan)	eu-south-1	ram.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ram.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ram.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	ram.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ram.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ram.us-gov-east-1.amazonaws.com ram.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ram.us-gov-west-1.amazonaws.com ram.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of pending invitations	Each supported Region: 20	Yes	The maximum number of pending invitations.
Number of resource shares	Each supported Region: 5,000	Yes	The maximum number of resource shares.
Number of shared resources	Each supported Region: 5,000	Yes	The maximum number of shared resources.

Notes

- The quota for **Number of pending invitations** applies to only *sending* accounts who share with accounts that are ***not*** part of sender's AWS Organization.
- There is no quota for how many pending invitations a receiving account can have.
- Invitations are not used when sharing between accounts that are part of the same AWS Organization and resource sharing within that AWS Organization is turned on.

Amazon Redshift endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Redshift API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	redshift.us-east-2.amazonaws.com redshift-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	redshift.us-east-1.amazonaws.com redshift-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	redshift.us-west-1.amazonaws.com redshift-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	redshift.us-west-2.amazonaws.com redshift-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	redshift.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	redshift.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	redshift.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	redshift.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	redshift.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	redshift.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	redshift.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	redshift.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	redshift.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	redshift.ca-central-1.amazonaws.com redshift-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	redshift.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	redshift.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	redshift.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	redshift.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	redshift.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	redshift.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	redshift.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	redshift.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	redshift.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	redshift.us-gov-east-1.amazonaws.com redshift.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	redshift.us-gov-west-1.amazonaws.com redshift.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Redshift Serverless API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	redshift-serverless.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	redshift-serverless.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	redshift-serverless.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	redshift-serverless.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	redshift-serverless.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	redshift-serverless.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	redshift-serverless.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	redshift-serverless.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	redshift-serverless.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	redshift-serverless.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	redshift-serverless.eu-north-1.amazonaws.com	HTTPS	

Redshift Data API

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	redshift-data.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	redshift-data.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	redshift-data.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	redshift-data.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	redshift-data.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	redshift-data.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	redshift-data.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	redshift-data.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	redshift-data.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	redshift-data.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	redshift-data.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	redshift-data.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	redshift-data.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	redshift-data.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	redshift-data.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	redshift-data.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	redshift-data.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	redshift-data.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	redshift-data.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	redshift-data.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	redshift-data.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	redshift-data.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	redshift-data.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	redshift-data.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

For information, see Quotas and limits in Amazon Redshift in the *Amazon Redshift Cluster Management Guide*.

Amazon Rekognition endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rekognition.us-east-2.amazonaws.com	HTTPS	
		rekognition-fips.us-east-2.amazonaws.com	HTTPS	
		rekognition-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	rekognition.us-east-1.amazonaws.com	HTTPS	
		rekognition-fips.us-east-1.amazonaws.com	HTTPS	
		rekognition-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	rekognition.us-west-1.amazonaws.com	HTTPS	
		rekognition-fips.us-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		rekognition-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	rekognition.us-west-2.amazonaws.com rekognition-fips.us-west-2.amazonaws.com rekognition-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	rekognition.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rekognition.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rekognition.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rekognition.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rekognition.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	rekognition.ca-central-1.amazonaws.com rekognition-fips.ca-central-1.amazonaws.com rekognition-fips.ca-central-1.amazonaws.com	HTTPS HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	rekognition.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	rekognition.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	rekognition.eu-west-2.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rekognition.us-gov-west-1.amazonaws.com rekognition-fips.us-gov-west-1.amazonaws.com rekognition-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

The following are differences for certain Amazon Rekognition features and AWS Regions.

Amazon Rekognition Video streaming API

The Amazon Rekognition Video streaming API is available in the following Regions only.

- US East (N. Virginia)
- US West (Oregon)

- Asia Pacific (Tokyo)
- Europe (Frankfurt)
- Europe (Ireland)

Amazon Rekognition Custom Labels

Amazon Rekognition Custom Labels is available in the following Regions only.

- US East (N. Virginia)
- US East (Ohio)
- US West (Oregon)
- Europe (Ireland)
- Europe (London)
- Europe (Frankfurt)
- Asia Pacific (Mumbai)
- Asia Pacific (Singapore)
- Asia Pacific (Sydney)
- Asia Pacific (Tokyo)
- Asia Pacific (Seoul)

Canada (Central) Region

The Canada (Central) Region supports the following operations only.

- CompareFaces
- CreateCollection
- DeleteCollection
- DeleteFaces
- DescribeCollection
- DetectFaces
- IndexFaces
- ListCollections
- ListFaces
- SearchFaces
- SearchFacesByImage

> **Note**
> These operations are only available through use of the AWS CLI or SDK, as the Canada (Central) Region doesn't currently provide a console experience for these operations.

Service quotas

The quotas listed on this page are defaults. You can request a quota increase for Amazon Rekognition using the AWS Support Center. To request a quota increase for a Amazon Rekognition Transactions Per Second (TPS) limit, follow the instructions at Default quotas in the *Amazon Rekognition Developer Guide*.

Quotas increases affect only the specific API operation for the Region in which you make the request. Other API operations and Regions are not affected.

Resource	Default
Transactions per second per account for individual Amazon Rekognition Image data plane operations: • DetectLabels • DetectModerationLabels • DetectText • GetCelebrityInfo • IndexFaces • ListFaces • RecognizeCelebrities • SearchFaces • SearchFacesByImage	• US East (Ohio) Region – 5 • US East (N. Virginia) Region – 50 • US West (N. California) Region – 5 • US West (Oregon) Region – 50 • Asia Pacific (Mumbai) Region – 5 • Asia Pacific (Seoul) Region – 5 • Asia Pacific (Singapore) Region – 5 • Asia Pacific (Sydney) Region – 5 • Asia Pacific (Tokyo) Region – 5 • Canada (Central) – 5 (For supported operations, see Service endpoints (p. 767)). • Europe (Frankfurt) Region – 5 • Europe (Ireland) Region – 50 • Europe (London) Region – 5 • AWS GovCloud (US-West) – 5
Transactions per second per account for individual Amazon Rekognition Image data plane operations: • CompareFaces • DetectFaces	• US East (Ohio) Region – 25 • US East (N. Virginia) Region – 100 • US West (N. California) Region – 25 • US West (Oregon) Region – 100 • Asia Pacific (Mumbai) Region – 25 • Asia Pacific (Seoul) Region – 25 • Asia Pacific (Singapore) Region – 25 • Asia Pacific (Sydney) Region – 25 • Asia Pacific (Tokyo) Region – 25 • Canada (Central) – 25 (For supported operations, see Service endpoints (p. 767)). • Europe (Frankfurt) Region – 25 • Europe (Ireland) Region – 100 • Europe (London) Region – 25 • AWS GovCloud (US-West) – 25

Resource	Default
Transactions per second per account for the personal protective equipment data plane operation: • DetectProtectiveEquipment	In each Region that Amazon Rekognition Image supports – 5
Transactions per second per account for individual Amazon Rekognition Image control plane operations: • CreateCollection • DeleteCollection • DeleteFaces • DescribeCollection • ListCollections	In each Region that Amazon Rekognition Image supports – 5
Transactions per second per account for individual stored video start operations: • StartCelebrityRecognition • StartContentModeration • StartFaceDetection • StartFaceSearch • StartLabelDetection • StartPersonTracking • StartTextDetection • StartSegmentDetection	In each Region that Amazon Rekognition Video supports – 5 `StartCelebrityRecognition` is not available in AWS GovCloud (US).
Transactions per second per account for individual Amazon Rekognition Video stored video get operations: • GetCelebrityRecognition • GetContentModeration • GetFaceDetection • GetFaceSearch • GetLabelDetection • GetPersonTracking • GetTextDetection • GetSegmentDetection	• US East (Ohio) Region – 5 • US East (N. Virginia) Region – 20 • US West (N. California) Region – 5 • US West (Oregon) Region – 20 • Asia Pacific (Mumbai) Region – 5 • Asia Pacific (Seoul) Region – 5 • Asia Pacific (Singapore) Region – 5 • Asia Pacific (Sydney) Region – 5 • Asia Pacific (Tokyo) Region – 5 • Europe (Frankfurt) Region – 5 • Europe (Ireland) Region – 20 • Europe (London) Region – 5 • AWS GovCloud (US-West) – 20 (`GetCelebrityRecognition` is not available in this Region.)
Maximum number of concurrent stored video jobs per account	20

Resource	Default
Maximum number of streaming video stream processors per account that can simultaneously exist	In each Region that Amazon Rekognition Video supports – 10
Transactions per second per account for individual streaming video operations: • CreateStreamProcessor • DeleteStreamProcessor • DescribeStreamProcessor • ListStreamProcessors • StartStreamProcessor • StopStreamProcessor	In each Region that Amazon Rekognition Video supports – 1
Transactions per second per account for individual Amazon Rekognition Custom Label data plane operations: • DetectCustomLabels	In all Regions that Amazon Rekognition Custom Labels supports – 50
Transactions per second per account for individual Amazon Rekognition Custom Labels control plane operations: • CopyProjectVersion • CreateDataset • CreateProject • CreateProjectVersion • DeleteDataset • DeleteProject • DeleteProjectPolicy • DeleteProjectVersion • DescribeDataset • DescribeProjects • DescribeProjectVersions • DistributeDatasetEntries • ListDatasetEntries • ListDatasetLabels • ListProjectPolicies • PutProjectPolicy • StartProjectVersion • StopProjectVersion • UpdateDatasetEntries	In each Region that Amazon Rekognition Custom Labels supports – 5
Maximum number of Amazon Rekognition Custom Labels projects per account.	100
Maximum number of Amazon Rekognition Custom Labels models per project.	100
Maximum number of concurrent Amazon Rekognition Custom Labels training jobs per account.	• All Regions except Asia Pacific (Sydney) – 2 • Asia Pacific (Sydney) – 1

Resource	Default
Maximum number of concurrently running Amazon Rekognition Custom Labels models per account.	2
Maximum inference units per started model.	5
Maximum number of images per dataset.	250,000

For more information, see Guidelines and quotas in Amazon Rekognition in the *Amazon Rekognition Developer Guide*.

Amazon Relational Database Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon RDS

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	rds.us-east-2.amazonaws.com	HTTPS	
		rds-fips.us-east-2.api.aws	HTTPS	
		rds.us-east-2.api.aws	HTTPS	
		rds-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	rds.us-east-1.amazonaws.com	HTTPS	
		rds-fips.us-east-1.api.aws	HTTPS	
		rds-fips.us-east-1.amazonaws.com	HTTPS	
		rds.us-east-1.api.aws	HTTPS	
US West (N. California)	us-west-1	rds.us-west-1.amazonaws.com	HTTPS	
		rds.us-west-1.api.aws	HTTPS	
		rds-fips.us-west-1.amazonaws.com	HTTPS	
		rds-fips.us-west-1.api.aws	HTTPS	
US West (Oregon)	us-west-2	rds.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		rds-fips.us-west-2.amazonaws.com	HTTPS	
		rds.us-west-2.api.aws	HTTPS	
		rds-fips.us-west-2.api.aws	HTTPS	
Africa (Cape Town)	af-south-1	rds.af-south-1.amazonaws.com	HTTPS	
		rds.af-south-1.api.aws	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	rds.ap-east-1.amazonaws.com	HTTPS	
		rds.ap-east-1.api.aws	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	rds.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	rds.ap-south-1.amazonaws.com	HTTPS	
		rds.ap-south-1.api.aws	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	rds.ap-northeast-3.amazonaws.com	HTTPS	
		rds.ap-northeast-3.api.aws	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	rds.ap-northeast-2.amazonaws.com	HTTPS	
		rds.ap-northeast-2.api.aws	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	rds.ap-southeast-1.amazonaws.com	HTTPS	
		rds.ap-southeast-1.api.aws	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	rds.ap-southeast-2.amazonaws.com	HTTPS	
		rds.ap-southeast-2.api.aws	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	rds.ap-northeast-1.amazonaws.com	HTTPS	
		rds.ap-northeast-1.api.aws	HTTPS	
Canada (Central)	ca-central-1	rds.ca-central-1.amazonaws.com	HTTPS	
		rds.ca-central-1.api.aws	HTTPS	
		rds-fips.ca-central-1.api.aws	HTTPS	
		rds-fips.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	rds.eu-central-1.amazonaws.com	HTTPS	
		rds.eu-central-1.api.aws	HTTPS	
Europe (Ireland)	eu-west-1	rds.eu-west-1.amazonaws.com	HTTPS	
		rds.eu-west-1.api.aws	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (London)	eu-west-2	rds.eu-west-2.amazonaws.com rds.eu-west-2.api.aws	HTTPS HTTPS	
Europe (Milan)	eu-south-1	rds.eu-south-1.amazonaws.com rds.eu-south-1.api.aws	HTTPS HTTPS	
Europe (Paris)	eu-west-3	rds.eu-west-3.amazonaws.com rds.eu-west-3.api.aws	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	rds.eu-north-1.amazonaws.com rds.eu-north-1.api.aws	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	rds.me-south-1.amazonaws.com rds.me-south-1.api.aws	HTTPS HTTPS	
Middle East (UAE)	me-central-1	rds.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	rds.sa-east-1.amazonaws.com rds.sa-east-1.api.aws	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	rds.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	rds.us-gov-west-1.amazonaws.com	HTTPS	

Amazon RDS Performance Insights

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	pi.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	pi.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	pi.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	pi.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	pi.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	pi.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	pi.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	pi.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	pi.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	pi.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	pi.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	pi.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	pi.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	pi.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	pi.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	pi.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	pi.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	pi.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	pi.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	pi.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	pi.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	pi.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	pi.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Authorizations per DB security group	Each supported Region: 20	No	Number of security group authorizations per DB security group
Custom engine versions	Each supported Region: 40	Yes	The maximum number of custom engine versions allowed in this account in the current Region
DB cluster parameter groups	Each supported Region: 50	No	The maximum number of DB cluster parameter groups
DB clusters	Each supported Region: 40	Yes	The maximum number of Aurora clusters allowed in this account in the current Region
DB instances	Each supported Region: 40	Yes	The maximum number of DB instances allowed in this account in the current Region
DB subnet groups	Each supported Region: 50	Yes	The maximum number of DB subnet groups
Data API HTTP request body size	Each supported Region: 4 Megabytes	No	The maximum size allowed for the HTTP request body.
Data API maximum concurrent cluster-secret pairs	Each supported Region: 30	No	The maximum number of unique pairs of Aurora Serverless DB clusters and secrets in concurrent Data API requests for the current account and AWS Region.

Name	Default	Adjust	Description
Data API maximum concurrent requests	Each supported Region: 500	No	The maximum number of Data API requests to an Aurora Serverless DB cluster that use the same secret and can be processed at the same time. Additional requests are queued and processed as in-process requests complete.
Data API maximum result set size	Each supported Region: 1 Megabytes	No	The maximum size of the database result set that can be returned by the Data API.
Data API maximum size of JSON response string	Each supported Region: 10 Megabytes	No	The maximum size of the simplified JSON response string returned by the RDS Data API.
Data API requests per second	Each supported Region: 1,000 per second	No	The maximum number of requests to the Data API per second allowed in this account in the current AWS Region.
Event subscriptions	Each supported Region: 20	Yes	The maximum number of event subscriptions
IAM roles per DB cluster	Each supported Region: 5	Yes	The maximum number of IAM roles associated with a DB cluster
IAM roles per DB instance	Each supported Region: 5	Yes	The maximum number of IAM roles associated with a DB instance
Manual DB cluster snapshots	Each supported Region: 100	Yes	The maximum number of manual DB cluster snapshots
Manual DB instance snapshots	Each supported Region: 100	Yes	The maximum number of manual DB instance snapshots
Option groups	Each supported Region: 20	Yes	The maximum number of option groups
Parameter groups	Each supported Region: 50	Yes	The maximum number of parameter groups
Proxies	Each supported Region: 20	Yes	The maximum number of proxies allowed in this account in the current AWS Region

Name	Default	Adjust	Description
Read replicas per master	Each supported Region: 5	Yes	The maximum number of read replicas per master
Reserved DB instances	Each supported Region: 40	Yes	The maximum number of reserved DB instances allowed in this account in the current AWS Region
Rules per security group	Each supported Region: 20	No	The maximum number of rules per DB security group
Security groups	Each supported Region: 25	Yes	The maximum number of DB security groups
Security groups (VPC)	Each supported Region: 5	No	The maximum number of DB security groups per Amazon VPC
Subnets per DB subnet group	Each supported Region: 20	No	The maximum number of subnets per DB subnet group
Tags per resource	Each supported Region: 50	No	The maximum number of tags per Amazon RDS resource
Total storage for all DB instances	Each supported Region: 100,000 Gigabytes	Yes	The maximum total storage (in GB) for all DB instances added together

AWS Resilience Hub endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	resiliencehub.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	resiliencehub.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	resiliencehub.us-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	resiliencehub.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	resiliencehub.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	resiliencehub.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	resiliencehub.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	resiliencehub.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	resiliencehub.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	resiliencehub.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	resiliencehub.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	resiliencehub.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	resiliencehub.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	resiliencehub.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	resiliencehub.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	resiliencehub.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	resiliencehub.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	resiliencehub.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	resiliencehub.me-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	resiliencehub.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of Resiliency Policies	Each supported Region: 10	Yes	The maximum number of resiliency policies an AWS account can create in the current region
Number of application components per resource	Each supported Region: 5	No	The maximum number of application components an AWS account can have for a given resource
Number of application components per template	Each supported Region: 65	No	The maximum number of application components an AWS account can have for a given template
Number of applications	Each supported Region: 10	Yes	The maximum number of applications an AWS account can create in the current region
Number of assessments per application per month	Each supported Region: 200	Yes	The maximum number of assessments an AWS account can run for a given application in a given month
Number of concurrent assessments per account	Each supported Region: 20	No	The maximum number of concurrent assessments an AWS account can run
Number of concurrent assessments per application	Each supported Region: 1	No	The maximum number of concurrent assessments an AWS account can run for a given application
Number of concurrent recommendation templates per account	Each supported Region: 100	No	The maximum number of recommendation templates an AWS account can concurrently create
Number of concurrent recommendation templates per application	Each supported Region: 1	No	The maximum number of recommendation templates an AWS account can create for a given application

Name	Default	Adjust	Description
Number of recommendation templates per application per month	Each supported Region: 100	Yes	The maximum number of recommendation templates an AWS account can create for a given application in a given month
Number of resources per template	Each supported Region: 100	No	The maximum number of resources an AWS account can have for a given template
Number of stacks to import	Each supported Region: 20	No	The maximum number of stacks an AWS account can import
Number of terraform state files to import	Each supported Region: 20	No	The maximum number of terraform state files an AWS account can import
Retention period of past assessments/ recommendations in days	Each supported Region: 365	No	Retention period of past assessments/ recommendations in days
Retention period of past recommendation templates in days	Each supported Region: 365	No	Retention period of past recommendation templates in days
Template size in bytes	Each supported Region: 51,200	No	The maximum size of a template in bytes
Terraform state file maximum size	Each supported Region: 4,194,305	No	The maximum import size limit for terraform state files

AWS Resource Groups and Tagging endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

AWS Resource Groups

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	resource-groups.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		resource-groups-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	resource-groups.us-east-1.amazonaws.com resource-groups-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	resource-groups.us-west-1.amazonaws.com resource-groups-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	resource-groups.us-west-2.amazonaws.com resource-groups-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	resource-groups.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	resource-groups.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	resource-groups.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	resource-groups.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	resource-groups.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	resource-groups.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	resource-groups.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	resource-groups.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	resource-groups.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	resource-groups.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	resource-groups.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	resource-groups.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	resource-groups.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	resource-groups.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	resource-groups.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	resource-groups.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	resource-groups.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	resource-groups.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	resource-groups.us-gov-east-1.amazonaws.com resource-groups.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	resource-groups.us-gov-west-1.amazonaws.com resource-groups.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Resource groups per account	Each supported Region: 100	Yes	The maximum number of resource groups that you can create in this account. A resource group is a collection of AWS resources that match a specific criteria.

AWS Resource Groups Tagging API

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	tagging.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	tagging.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	tagging.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	tagging.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	tagging.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	tagging.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	tagging.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	tagging.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	tagging.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	tagging.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	tagging.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	tagging.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	tagging.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	tagging.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	tagging.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	tagging.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	tagging.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	tagging.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	tagging.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	tagging.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	tagging.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	tagging.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	tagging.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	tagging.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	tagging.us-gov-west-1.amazonaws.com	HTTPS	

AWS RoboMaker endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	robomaker.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	robomaker.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	robomaker.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	robomaker.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	robomaker.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	robomaker.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	robomaker.eu-west-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	robomaker.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Batch timeout	Each supported Region: 14	No	The maximum timeout in days for a simulation job batch
Concurrent GPU simulation jobs	Each supported Region: 1	Yes	The maximum number of concurrent GPU simulation jobs you can run in this account in the current Region.
Concurrent World Export Jobs	Each supported Region: 3	Yes	The maximum number of concurrent world export jobs that you can run in this account in this region.
Concurrent World Generation Jobs	Each supported Region: 3	Yes	The maximum number of concurrent world generation jobs that you

Name	Default	Adjust	Description
			can run in this account in this region.
Concurrent deployment jobs	Each supported Region: 20	Yes	The maximum number of concurrent deployment jobs you can run in this account in the current Region.
Concurrent simulation job batches	Each supported Region: 5	Yes	The maximum number of concurrent simulation job batches you can run in this account in the current Region.
Concurrent simulation jobs	Each supported Region: 1	Yes	The maximum number of concurrent simulation jobs you can run in this account in the current Region.
Fleets	Each supported Region: 20	Yes	The maximum number of fleets you can create in this account in the current Region.
GPU Simulation Job Creation Rate Per Minute	Each supported Region: 2	No	The maximum number of GPU simulation job you can create in this account in the current Region per minute.
Minimum batch timeout	Each supported Region: 5	No	The minimum timeout in minutes that you can specify for a simulation job batch.
Minimum simulation duration	Each supported Region: 5	No	The minimum duration in minutes that you can specify for a simulation job.
Robot applications	Each supported Region: 40	Yes	The maximum number of robot applications you can create in this account in the current Region.
Robots	Each supported Region: 100	Yes	The maximum number of robots you can create in this account in the current Region.
Robots per fleet	Each supported Region: 100	Yes	The maximum number of robots you can register to a fleet.

Name	Default	Adjust	Description
Simulation Job Creation Rate Per Minute	us-east-1: 10 us-west-2: 10 Each of the other supported Regions: 5	No	The maximum number of simulation job you can create in this account in the current Region per minute.
Simulation applications	Each supported Region: 40	Yes	The maximum number of simulation applications you can create in this account in the current Region.
Simulation duration	Each supported Region: 14	No	The maximum duration in days that a simulation job can run for including restarts.
Simulation job requests per batch	Each supported Region: 20	Yes	The maximum number of simulation job requests that can be submitted in a StartSimulationJobBatch call
Source size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) for any source of robot application or simulation application.
Versions per robot application	Each supported Region: 40	Yes	The maximum number of versions you can create for a Robot Application.
Versions per simulation application	Each supported Region: 40	Yes	The maximum number of versions you can create for a Simulation Application.
World Templates Per Account	Each supported Region: 40	Yes	The maximum number of world templates that you can create in this account in this region.
Worlds Per Export Job	Each supported Region: 1	No	The maximum number of worlds in a world export job request.
Worlds Per Generation Job	Each supported Region: 50	No	The maximum number of worlds in a world generation job request.

Amazon Route 53 endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982).

Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Hosted zones, records, health checks, DNS query logs, reusable delegation sets, traffic policies, and cost allocation tags

When you use the **AWS CLI or SDKs** to submit requests, you can either leave the Region and endpoint unspecified, or specify the applicable Region:

- Route 53 in AWS Regions other than the Beijing and Ningxia Regions: specify us-east-1 as the Region.
- Route 53 in the Beijing and Ningxia Regions: specify cn-northwest-1.

When you use the **Route 53 API** to submit requests, use the same Regions as above to sign requests. For more information about signing Route 53 API requests, see Signature Version 4 signing process (p. 1007).

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	route53.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	route53.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	route53.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	route53.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	route53.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	route53.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	route53.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	route53.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	route53.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	route53.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	route53.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	route53.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	route53.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	route53.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	route53.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	route53.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	route53.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	route53.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	route53.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	route53.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	route53.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	route53.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	route53.amazonaws.com	HTTPS	

Requests for domain registration

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	route53domains.us-east-1.amazonaws.com	HTTPS	

Requests for Route 53 Resolver

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	route53resolver.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	route53resolver.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	route53resolver.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	route53resolver.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	route53resolver.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	route53resolver.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	route53resolver.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	route53resolver.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	route53resolver.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	route53resolver.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	route53resolver.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	route53resolver.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	route53resolver.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	route53resolver.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	route53resolver.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	route53resolver.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	route53resolver.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	route53resolver.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	route53resolver.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	route53resolver.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	route53resolver.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	route53resolver.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	route53resolver.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	route53resolver.us-gov-west-1.amazonaws.com	HTTPS	

Requests for Route 53 auto naming

Amazon Route 53 auto naming has been released as a separate service, AWS Cloud Map. For a list of service endpoints, see Service endpoints (p. 146). For AWS Cloud Map documentation, see AWS Cloud Map Documentation.

Service quotas

Name	Default	Adjust	Description
Amazon VPCs that you can associate with a private hosted zone	Each supported Region: 300	Yes	The maximum number of Amazon VPCs that you can associate with a private hosted zone
Authorizations that let you associate VPCs with a hosted zone that was created by another account	Each supported Region: 1,000	No	The maximum number of authorizations that you can create that allow you to associate VPCs that were created using one account with a hosted zone that was created using another account
CIDR blocks per collection	Each supported Region: 1,000	Yes	The maximum number of CIDR blocks that you can create per CIDR collection
CIDR collections	Each supported Region: 5	Yes	The maximum number of CIDR collections that you can create per account
Child health checks that a calculated health check can monitor	Each supported Region: 255	No	The maximum number of child health checks that a calculated health check can monitor
Domain count limit	Each supported Region: 20	No	The maximum number of domains you can register using this account
Geolocation records that have the same name and type	Each supported Region: 100	No	The maximum number of records that you can create that have a geolocation routing policy and that have the same name and type
Geoproximity records that have the same name and type	Each supported Region: 30	No	The maximum number of records that you can create that have a geoproximity routing policy and that have the same name and type
Health checks	Each supported Region: 200	Yes	The maximum number of health checks that you can create using this account
Hosted zones	Each supported Region: 500	Yes	The maximum number of hosted zones that you can create using this account

Name	Default	Adjust	Description
Hosted zones that can use the same reusable delegation set	Each supported Region: 100	Yes	The maximum number of hosted zones that can use the same reusable delegation set
Key signing keys per hosted zone	Each supported Region: 2	No	The maximum number of key signing keys that you can create per hosted zone
Multivalue answer records that have the same name and type	Each supported Region: 100	No	The maximum number of records that you can create that have a multivalue answer routing policy and that have the same name and type
Query log configurations per hosted zone	Each supported Region: 1	No	The maximum number of query log configurations that you can create per hosted zone
Records per hosted zone	Each supported Region: 10,000	Yes	The maximum number of records that you can create in a hosted zone
Reusable delegation sets	Each supported Region: 100	Yes	The maximum number of reusable delegation sets that you can create using this account
Traffic flow policies	Each supported Region: 50	Yes	The maximum number of traffic flow policies that you can create using this account
Traffic flow policy records	Each supported Region: 5	Yes	The maximum number of traffic flow policy records that you can create using this account
Traffic flow policy versions per traffic flow policy	Each supported Region: 1,000	No	The maximum number of traffic flow policy versions that you can create per traffic flow policy
Values in a record	Each supported Region: 400	No	The maximum number of values that you can add to a record
Weighted records that have the same name and type	Each supported Region: 100	No	The maximum number of records that you can create that have a weighted routing policy and that have the same name and type

The following quotas are for Route 53 Resolver.

Name	Default	Adjust	Description
Associations between resolver rules and VPCs per AWS Region	Each supported Region: 2,000	Yes	Maximum number of associations between resolver rules and VPCs per AWS Region
DNS Firewall rule group associations per VPC	Each supported Region: 5	No	The maximum number of DNS Firewall rule groups that you can associate to a VPC.
DNS Firewall rules groups per Region	Each supported Region: 1,000	Yes	The maximum number of DNS Firewall rules groups per Region.
Domain lists per account	Each supported Region: 1,000	Yes	The maximum number of domain lists for an account.
Domains in a file imported from S3	Each supported Region: 250,000	Yes	The maximum number of domains that you can import from a single file thats stored in an Amazon S3 bucket.
Domains per account	Each supported Region: 100,000	Yes	The maximum number of domains that you can specify across all of the domain lists for an account.
IP addresses per resolver endpoint	Each supported Region: 6	Yes	Maximum number of IP addresses per resolver endpoint
Maximum number of resolver endpoints per AWS Region	Each supported Region: 4	Yes	Resolver endpoints per AWS Region
Resolver rules per AWS Region	Each supported Region: 1,000	Yes	Maximum number of resolver rules per AWS Region
Rules in a DNS Firewall rule group	Each supported Region: 100	Yes	The maximum number of rules in a DNS Firewall rule group.
Target IP addresses per resolver rule	Each supported Region: 6	No	Maximum number of target IP addresses per resolver rule

For more information, see Route 53 quotas in the *Amazon Route 53 Developer Guide*.

Amazon Route 53 Application Recovery Controller endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

When you use the **AWS CLI or SDKs** to submit requests with Route 53 ARC, you must specify the AWS Region as `us-west-2`.

For the Route 53 ARC **Recovery Readiness API** (for readiness checks) or **Recovery Control Configuration API**, use the following endpoints, respectively.

Region Name	Region	Endpoint	Protocol
US West (Oregon) Region	us-west-2	route53-recovery-readiness.amazonaws.com	HTTPS
US West (Oregon) Region	us-west-2	route53-recovery-control-config.amazonaws.com	HTTPS

For the Route 53 ARC **Recovery Cluster API**, in addition to specifying the Region as `us-west-2`, you also must specify one of your five Regional cluster endpoints. The endpoint that you specify must target the Route 53 ARC cluster that hosts the routing controls that you want to get or update the state for.

Route 53 ARC creates endpoints for each cluster in the following five Regions: US East (N. Virginia) (us-east-1), Europe (Ireland) (eu-west-1), Europe (London) (us-west-2), Asia Pacific (Tokyo) (ap-northeast-1), and Asia Pacific (Sydney) (ap-southeast-2). It's a best practice to retry with each of the available cluster endpoints. To learn more, see Get and update routing control states using the API and Best practices for Amazon Route 53 Application Recovery Controller in the Amazon Route 53 Application Recovery Controller Developer Guide.

The following are examples of the Regional cluster endpoints in Route 53 ARC.

Endpoint	Region
https://aaaaaaaa.route53-recovery-cluster.eu-west-1.amazonaws.com	eu-west-1
https://bbbbbbb.route53-recovery-cluster.ap-northeast-1.amazonaws.com	ap-northeast-1
https://ccccccc.route53-recovery-cluster.us-west-2.amazonaws.com	us-west-2
https://ddddddd.route53-recovery-cluster.us-east-1.amazonaws.com	us-east-1
https://eeeeeee.route53-recovery-cluster.ap-southeast-2.amazonaws.com	ap-southeast-2

Service quotas

For information, see Quotas in Amazon Route 53 Application Recovery Controller in the *Amazon Route 53 Application Recovery Controller Developer Guide*.

Amazon SageMaker endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

The following table provides a list of Region-specific endpoints that SageMaker supports for training and deploying models. This include creating and managing notebook instances, training jobs, model, endpoint configurations, and endpoints.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	api.sagemaker.us-east-2.amazonaws.com api-fips.sagemaker.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	api.sagemaker.us-east-1.amazonaws.com api-fips.sagemaker.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	api.sagemaker.us-west-1.amazonaws.com api-fips.sagemaker.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	api.sagemaker.us-west-2.amazonaws.com api-fips.sagemaker.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	api.sagemaker.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	api.sagemaker.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	api.sagemaker.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	api.sagemaker.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Osaka)	ap-northeast-3	api.sagemaker.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	api.sagemaker.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	api.sagemaker.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	api.sagemaker.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	api.sagemaker.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	api.sagemaker.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	api.sagemaker.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	api.sagemaker.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	api.sagemaker.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	api.sagemaker.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	api.sagemaker.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	api.sagemaker.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	api.sagemaker.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	api.sagemaker.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	api.sagemaker.us-gov-west-1.amazonaws.com api-fips.sagemaker.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

The following table provides a list of Region-specific endpoints that Amazon SageMaker supports for making inference requests against models hosted in SageMaker.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	runtime.sagemaker.us-east-2.amazonaws.com runtime-fips.sagemaker.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	runtime.sagemaker.us-east-1.amazonaws.com runtime-fips.sagemaker.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	runtime.sagemaker.us-west-1.amazonaws.com runtime-fips.sagemaker.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	runtime.sagemaker.us-west-2.amazonaws.com runtime-fips.sagemaker.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	runtime.sagemaker.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	runtime.sagemaker.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	runtime.sagemaker.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	runtime.sagemaker.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	runtime.sagemaker.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	runtime.sagemaker.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	runtime.sagemaker.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	runtime.sagemaker.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	runtime.sagemaker.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	runtime.sagemaker.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	runtime.sagemaker.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	runtime.sagemaker.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	runtime.sagemaker.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	runtime.sagemaker.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	runtime.sagemaker.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	runtime.sagemaker.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	runtime.sagemaker.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	runtime.sagemaker.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	runtime.sagemaker.us-gov-west-1.amazonaws.com runtime.sagemaker.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

The following table provides a list of Region-specific endpoints that Amazon SageMaker supports for SageMaker Edge Manager.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sagemaker-edge.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	sagemaker-edge.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	sagemaker-edge.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	sagemaker-edge.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sagemaker-edge.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	sagemaker-edge.eu-west-1.amazonaws.com	HTTPS	

The following table provides a list of Region-specific endpoints that Amazon SageMaker supports for SageMaker Feature Store.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	featurestore.us-east-2.amazonaws.com		
US East (N. Virginia)	us-east-1	featurestore.us-east-1.amazonaws.com		
US West (N. California)	us-west-1	featurestore.us-west-1.amazonaws.com		
US West (Oregon)	us-west-2	featurestore.us-west-2.amazonaws.com		
Africa (Cape Town)	af-south-1	featurestore.af-south-1.amazonaws.com		
Asia Pacific (Hong Kong)	ap-east-1	featurestore.ap-east-1.amazonaws.com		
Asia Pacific (Mumbai)	ap-south-1	featurestore.ap-south-1.amazonaws.com		
Asia Pacific (Seoul)	ap-northeast-2	featurestore.ap-northeast-2.amazonaws.com		
Asia Pacific (Singapore)	ap-southeast-1	featurestore.ap-southeast-1.amazonaws.com		
Asia Pacific (Sydney)	ap-southeast-2	featurestore.ap-southeast-2.amazonaws.com		

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	featurestore.ap-northeast-1.amazonaws.com		
Canada (Central)	ca-central-1	featurestore.ca-central-1.amazonaws.com		
Europe (Frankfurt)	eu-central-1	featurestore.eu-central-1.amazonaws.com		
Europe (Ireland)	eu-west-1	featurestore.eu-west-1.amazonaws.com		
Europe (London)	eu-west-2	featurestore.eu-west-2.amazonaws.com		
Europe (Milan)	eu-south-1	featurestore.eu-south-1.amazonaws.com		
Europe (Paris)	eu-west-3	featurestore.eu-west-3.amazonaws.com		
Europe (Stockholm)	eu-north-1	featurestore.eu-north-1.amazonaws.com		
Middle East (Bahrain)	me-south-1	featurestore.me-south-1.amazonaws.com		
South America (São Paulo)	sa-east-1	featurestore.sa-east-1.amazonaws.com		

Service quotas

Depending on your activities and resource usage over time, your SageMaker quotas might be different from the default SageMaker quotas listed in the following tables. The default quotas in this page are based on new accounts. If you encounter error messages that you've exceeded your quota, use AWS Support to request a service limit increase for SageMaker resources you want to scale up. For instructions on how to request a service limit increase, see Supported Regions and Quotas in *the Amazon SageMaker Developer Guide*. For information on Amazon EC2 instance types, see Amazon EC2 Instance Types.

SageMaker Studio

Resource	Default
Total Domains per Region	1
KernelGateway-ml.c5.large	0
KernelGateway-ml.c5.xlarge	0
KernelGateway-ml.c5.2xlarge	0

Resource	Default
KernelGateway-ml.c5.4xlarge	0
KernelGateway-ml.c5.9xlarge	0
KernelGateway-ml.c5.12xlarge	0
KernelGateway-ml.c5.18xlarge	0
KernelGateway-ml.c5.24xlarge	0
KernelGateway-ml.g4dn.xlarge	0
KernelGateway-ml.g4dn.2xlarge	0
KernelGateway-ml.g4dn.4xlarge	0
KernelGateway-ml.g4dn.8xlarge	0
KernelGateway-ml.g4dn.12xlarge	0
KernelGateway-ml.g4dn.16xlarge	0
KernelGateway-ml.m5.large	0
KernelGateway-ml.m5.xlarge	0
KernelGateway-ml.m5.2xlarge	0
KernelGateway-ml.m5.4xlarge	1
KernelGateway-ml.m5.8xlarge	0
KernelGateway-ml.m5.12xlarge	0
KernelGateway-ml.m5.16xlarge	0
KernelGateway-ml.m5.24xlarge	0
KernelGateway-ml.p3.2xlarge	0
KernelGateway-ml.p3.8xlarge	0
KernelGateway-ml.p3.16xlarge	0
KernelGateway-ml.t3.medium	2
KernelGateway-ml.t3.large	0
KernelGateway-ml.t3.xlarge	0
KernelGateway-ml.t3.2xlarge	0
Maximum number of UserProfiles per Domain	2
Maximum number of Running Apps per Domain	20
Maximum number of custom images per Domain	30
Maximum number of custom images per UserProfile	5

SageMaker Images

Resource	Default
Number of SageMaker Images	250
Number of image versions per SageMaker image	1,000

SageMaker Notebooks

Resource	Default
ml.t2.medium instances	2
ml.t2.large instances	0
ml.t2.xlarge instances	0
ml.t2.2xlarge instances	0
ml.t3.medium instances	2
ml.t3.large instances	0
ml.t3.xlarge instances	0
ml.t3.2xlarge instances	0
ml.m4.xlarge instances	0
ml.m4.2xlarge instances	0
ml.m4.4xlarge instances	0
ml.m4.10xlarge instances	0
ml.m4.16xlarge instances	0
ml.m5.xlarge instances	0
ml.m5.2xlarge instances	0
ml.m5.4xlarge instances	0
ml.m5.12xlarge instances	0
ml.m5.24xlarge instances	0
ml.c4.xlarge instances	0
ml.c4.2xlarge instances	0
ml.c4.4xlarge instances	0
ml.c4.8xlarge instances	0
ml.c5.xlarge instances	0
ml.c5.2xlarge instances	0
ml.c5.4xlarge instances	0

Resource	Default
ml.c5.9xlarge instances	0
ml.c5.18xlarge instances	0
ml.c5d.xlarge instances	0
ml.c5d.2xlarge instances	0
ml.c5d.4xlarge instances	0
ml.c5d.9xlarge instances	0
ml.c5d.18xlarge instances	0
ml.p2.xlarge instances	0
ml.p2.8xlarge instances	0
ml.p2.16xlarge instances	0
ml.p3.2xlarge instances	0
ml.p3.8xlarge instances	0
ml.p3.16xlarge instances	0
ml.g4dn.xlarge instances	2
ml.g4dn.2xlarge instances	2
ml.g4dn.4xlarge instances	2
ml.g4dn.8xlarge instances	2
ml.g4dn.12xlarge instances	2
ml.g4dn.16xlarge instances	2
ml.eia1.medium instances	0
ml.eia1.large instances	0
ml.eia1.xlarge instances	0
ml.eia2.medium instances	0
ml.eia2.large instances	0
ml.eia2.xlarge instances	0
Number of accelerators	0
Number of notebook instances	4
EBS volume size in GB for an instance	102400

SageMaker Ground Truth

Resource	Default
Total labeling jobs	1
Total streaming labeling jobs	0
Max dataset objects per labeling job	10,000
Number of workteams	25

SageMaker Projects

Resource	Default
Number of projects	500

SageMaker Pipelines

Resource	Default
Number of pipelines	5,000

SageMaker Pipeline Executions

Resource	Default
Maximum execution time	28 days
Concurrent pipeline executions per account	200
Concurrent pipeline executions per pipeline	200

Parameters

Resource	Default
Parameters per pipeline	50
Parameter name length	64 characters
Parameters name regular expression pattern	([A-Za-z0-9\\-_])*
Parameter description length	4,096 characters
Parameter enum values	16 distinct values

SageMaker Condition Steps

Resource	Default
Conditions per ConditionStep	200
Steps in If-List	20

Resource	Default
Steps in Else-List	20
Conditions in Or-List	200

Property Files

Resource	Default
PropertyFiles in a pipeline	10
JsonGet functions in a pipeline	200
Size of the property file	2 MB

SageMaker Metadata

Resource	Default
Maximum number of metadata	20 key-value pairs
Metadata key size	128 characters
Metadata key regular expression pattern	([A-Za-z0-9\\-_])*
Maximum metadata value size	1024 characters
Metadata value regular expression pattern	[\\p{M}\\p{L}\\p{S}\\p{S}\ \p{N}\\p{P}\\s

SageMaker Feature Store

Resource	Default
Number of feature groups	100
Concurrent feature group creation workflows	4

SageMaker Processing

Resource	Default
ml.c4.xlarge	4
ml.c4.2xlarge	4
ml.c4.4xlarge	4
ml.c4.8xlarge	4
ml.c5.xlarge	4
ml.c5.2xlarge	4
ml.c5.4xlarge	1

Resource	Default
ml.c5.9xlarge	1
ml.c5.18xlarge	1
ml.g4dn.xlarge	0
ml.g4dn.2xlarge	0
ml.g4dn.4xlarge	0
ml.g4dn.8xlarge	0
ml.g4dn.12xlarge	0
ml.g4dn.16xlarge	0
ml.m4.xlarge	4
ml.m4.2xlarge	4
ml.m4.4xlarge	2
ml.m4.10xlarge	1
ml.m4.16xlarge	1
ml.m5.large	4
ml.m5.xlarge	4
ml.m5.2xlarge	4
ml.m5.4xlarge	2
ml.m5.12xlarge	0
ml.m5.24xlarge	0
ml.p2.xlarge	0
ml.p2.8xlarge	0
ml.p2.16xlarge	0
ml.p3.2xlarge	0
ml.p3.8xlarge	0
ml.p3.16xlarge	0
ml.r5.large	4
ml.r5.xlarge	4
ml.r5.2xlarge	4
ml.r5.4xlarge	1
ml.r5.8xlarge	1
ml.r5.12xlarge	1

Resource	Default
ml.r5.16xlarge	1
ml.r5.24xlarge	0
ml.t3.medium	4
ml.t3.large	4
ml.t3.xlarge	2
ml.t3.2xlarge	0
Longest run time for a processing job	5 days
Number of instances across a single processing job	4
Total number of instances across all processing jobs	20
Size of EBS volume for an instance	1 TB

Note
In case of SageMaker training, on-demand and spot instance quotas are tracked and modified separately. For example, with the default quotas, you can run up to 20 training jobs with ml.m4.xlarge on-demand instances and up to 20 training jobs with ml.m4.xlarge spot instances simultaneously.

SageMaker Training

Resource	Default
ml.c4.xlarge instances	4
ml.c4.2xlarge instances	4
ml.c4.4xlarge instances	4
ml.c4.8xlarge instances	4
ml.c5.xlarge instances	4
ml.c5.2xlarge instances	4
ml.c5.4xlarge instances	1
ml.c5.9xlarge instances	1
ml.c5.18xlarge instances	0
ml.c5n.xlarge instances	0
ml.c5n.2xlarge instances	0
ml.c5n.4xlarge instances	0
ml.c5n.9xlarge instances	0
ml.c5n.18xlarge instances	0
ml.g4dn.xlarge instances	0

Resource	Default
ml.g4dn.2xlarge instances	0
ml.g4dn.4xlarge instances	0
ml.g4dn.8xlarge instances	0
ml.g4dn.12xlarge instances	0
ml.g4dn.16xlarge instances	0
ml.g5.xlarge instances	0
ml.g5.2xlarge instances	0
ml.g5.4xlarge instances	0
ml.g5.8xlarge instances	0
ml.g5.12xlarge instances	0
ml.g5.16xlarge instances	0
ml.g5.24xlarge instances	0
ml.g5.48xlarge instances	0
ml.m4.xlarge instances	4
ml.m4.2xlarge instances	4
ml.m4.4xlarge instances	2
ml.m4.10xlarge instances	0
ml.m4.16xlarge instances	0
ml.m5.large instances	4
ml.m5.xlarge instances	4
ml.m5.2xlarge instances	4
ml.m5.4xlarge instances	20
ml.m5.12xlarge instances	0
ml.m5.24xlarge instances	0
ml.p2.xlarge instances	0
ml.p2.8xlarge instances	0
ml.p2.16xlarge instances	0
ml.p3.2xlarge instances	0
ml.p3.8xlarge instances	0
ml.p3.16xlarge instances	0
ml.p3dn.24xlarge instances	0

Resource	Default
ml.p4d.24xlarge instances	0
The longest run time for a training job	5 days
Number of instances per single training job	4
Total number of instances across training jobs	20
Size of EBS volume for an instance	1 TB

SageMaker Managed Spot Training

Resource	Default
ml.c4.xlarge instances	4
ml.c4.2xlarge instances	4
ml.c4.4xlarge instances	4
ml.c4.8xlarge instances	4
ml.c5.xlarge instances	4
ml.c5.2xlarge instances	4
ml.c5.4xlarge instances	1
ml.c5.9xlarge instances	1
ml.c5.18xlarge instances	0
ml.c5n.xlarge instances	0
ml.c5n.2xlarge instances	0
ml.c5n.4xlarge instances	0
ml.c5n.9xlarge instances	0
ml.c5n.18xlarge instances	0
ml.g4dn.xlarge instances	0
ml.g4dn.2xlarge instances	0
ml.g4dn.4xlarge instances	0
ml.g4dn.8xlarge instances	0
ml.g4dn.12xlarge instances	0
ml.g4dn.16xlarge instances	0
ml.g5.xlarge instances	0
ml.g5.2xlarge instances	0
ml.g5.4xlarge instances	0

Resource	Default
ml.g5.8xlarge instances	0
ml.g5.12xlarge instances	0
ml.g5.16xlarge instances	0
ml.g5.24xlarge instances	0
ml.g5.48xlarge instances	0
ml.m4.xlarge instances	4
ml.m4.2xlarge instances	4
ml.m4.4xlarge instances	2
ml.m4.10xlarge instances	0
ml.m4.16xlarge instances	0
ml.m5.large instances	4
ml.m5.xlarge instances	4
ml.m5.2xlarge instances	4
ml.m5.4xlarge instances	2
ml.m5.12xlarge instances	0
ml.m5.24xlarge instances	0
ml.p2.xlarge instances	0
ml.p2.8xlarge instances	0
ml.p2.16xlarge instances	0
ml.p3.2xlarge instances	0
ml.p3.8xlarge instances	0
ml.p3.16xlarge instances	0
ml.p3dn.24xlarge instances	0
ml.p4d.24xlarge instances	0
Number of instances across training jobs	20
Number of instances per training job	4

SageMaker Autopilot

Resource	Regions	Default limits	Can be increased up to
Size of input dataset	All	100 GB	Hundreds of GBs
Size of a single Parquet file*	All	2 GB	Tens of GBs

Resource	Regions	Default limits	Can be increased up to
Target dataset size for subsampling**	All	5 GB	Hundreds of GBs
Number of concurrent SageMaker Autopilot jobs	us-east-1, us-east-2,us-west-2, ap-northeast-1, eu-west-1, eu-central-1	4	Hundreds
	ap-northeast-2, ap-southeast-2, eu-west-2, ap-southeast-1	2	Hundreds
	All other regions	1	Tens

Note
*This 2 GB size limit is for a single compressed Parquet file. You can provide a Parquet dataset that includes multiple compressed Parquet files. After the files are decompressed, they may each expand to a larger size.
**SageMaker Autopilot automatically subsamples input datasets that are larger than the target dataset size while accounting for class imbalance and preserving rare class labels.
The resource quotas documented in the following sections are valid for versions of Amazon SageMaker Studio 3.22.2 and higher. For information on updating your version of SageMaker Studio, see `Update SageMaker Studio and Studio Apps`
You can increase these limits by contacting AWS Support Center.For instructions on how to request increases, see `Update SageMaker Studio and Studio Apps`.

SageMaker Automatic Model Hyperparameter Tuning

Resource	Default
Number of concurrent hyperparameter tuning jobs	100
Number of parallel training jobs per hyperparameter tuning job	10
Number of training jobs per hyperparameter tuning job	500

SageMaker Experiments (Lineage Tracking / Experiment Tracking)

Resource	Default
Experiments	5,000
Trial components	20,000
Trial components in a single trial	50
Trials in a single experiment	300
Trials a single trial component can be associated with	500
Number of actions	3,000
Number of artifacts	6,000
Number of associations	6,000
Number of contexts	500

Note
Use AWS Support to request a service limit increase in order to use an instance with a default quota of 0.

SageMaker Hosting

Resource	Default
ml.c4.* instances	0
ml.c5.* instances	0
ml.c5d.* instances	0
ml.c5n.* instances	0
ml.c6i.* instances	0
ml.g4dn.* instances	0
ml.g5.* instances	0
ml.m4.xlarge instances	2
ml.m4.2xlarge instances	0
ml.m4.4xlarge instances	0
ml.m4.10xlarge instances	0
ml.m4.16xlarge instances	0
ml.m5.large instances	2
ml.m5.xlarge instances	0
ml.m5.2xlarge instances	0
ml.m5.4xlarge instances	0
ml.m5.8xlarge instances	0
ml.m5.12xlarge instances	0
ml.m5.16xlarge instances	0
ml.m5.24xlarge instances	0
ml.m5d.* instances	0
ml.m5dn.* instances	0
ml.m5n.* instances	0
ml.p2.* instances	0
ml.p3.* instances	0
ml.p4d.24xlarge instances	0
ml.r5.* instances	0
ml.r5d.* instances	0

Resource	Default
ml.r5dn.* instances	0
ml.r5n.* instances	0
ml.t2.medium instances	2
ml.t2.large instances	0
ml.t2.xlarge instances	0
ml.t2.2xlarge instances	0
ml.t3.medium instances	2
ml.t3.large instances	0
ml.t3.xlarge instances	0
ml.t3.2xlarge instances	0
Number of instances across endpoints	2
Number of instances per endpoint	0
Number of accelerators per endpoint	4
Total TPS for all endpoints	10,000
Maximum payload size for endpoint invocation	6 MB
Inference timeout for endpoint invocation	60 seconds
Maximum shared memory size	Up to half of memory on instance (subject to this Exclusion List)

SageMaker Batch Transform

Resource	Default
ml.c4.xlarge instances	4
ml.c4.2xlarge instances	4
ml.c4.4xlarge instances	4
ml.c4.8xlarge instances	4
ml.c5.xlarge instances	4
ml.c5.2xlarge instances	4
ml.c5.4xlarge instances	1
ml.c5.9xlarge instances	1
ml.c5.18xlarge instances	1
ml.g4dn.xlarge	0

Resource	Default
ml.g4dn.2xlarge	0
ml.g4dn.4xlarge	0
ml.g4dn.8xlarge	0
ml.g4dn.12xlarge	0
ml.g4dn.16xlarge	0
ml.m4.xlarge instances	4
ml.m4.2xlarge instances	4
ml.m4.4xlarge instances	2
ml.m4.10xlarge instances	1
ml.m4.16xlarge instances	1
ml.m5.large instances	4
ml.m5.xlarge instances	4
ml.m5.2xlarge instances	4
ml.m5.4xlarge instances	2
ml.m5.12xlarge instances	0
ml.m5.24xlarge instances	0
ml.p2.xlarge instances	0
ml.p2.8xlarge instances	0
ml.p2.16xlarge instances	0
ml.p3.2xlarge instances	0
ml.p3.8xlarge instances	0
ml.p3.16xlarge instances	0
Number of instances per transform job	4

SageMaker Human Task UI

Resource	Default
Number of human task UIs	100

SageMaker Serverless Inference

Resource	Default
Maximum concurrent invocations per endpoint	200

Resource	Default
Total concurrency for all serverless endpoints per Region in an account for the following Regions: US East (Ohio), US East (N. Virginia), US West (Oregon), Asia Pacific (Singapore), Asia Pacific (Sydney), Asia Pacific (Tokyo), Europe (Frankfurt), Europe (Ireland)	1000
Total concurrency for all serverless endpoints per Region in an account for the following Regions: US West (N. California), Africa (Cape Town), Asia Pacific (Hong Kong), Asia Pacific (Mumbai), Asia Pacific (Osaka), Asia Pacific (Seoul), Canada (Central), Europe (London), Europe (Milan), Europe (Paris), Europe (Stockholm), Middle East (Bahrain), South America (São Paulo)	500
Maximum number of serverless endpoints per Region in an account	50
Maximum memory size per endpoint	6144 MB

AWS Secrets Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	secretsmanager.us-east-2.amazonaws.com secretsmanager-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	secretsmanager.us-east-1.amazonaws.com secretsmanager-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	secretsmanager.us-west-1.amazonaws.com secretsmanager-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	secretsmanager.us-west-2.amazonaws.com secretsmanager-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	secretsmanager.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	secretsmanager.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	secretsmanager.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	secretsmanager.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	secretsmanager.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	secretsmanager.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	secretsmanager.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	secretsmanager.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	secretsmanager.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	secretsmanager.ca-central-1.amazonaws.com secretsmanager-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	secretsmanager.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	secretsmanager.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	secretsmanager.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	secretsmanager.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	secretsmanager.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	secretsmanager.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	secretsmanager.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	secretsmanager.me-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	secretsmanager.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	secretsmanager.us-gov-east-1.amazonaws.com secretsmanager-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	secretsmanager.us-gov-west-1.amazonaws.com secretsmanager-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Combined rate of DeleteResourcePolicy, GetResourcePolicy, PutResourcePolicy, and ValidateResourcePolicy API requests	Each supported Region: 50 per second	No	The maximum transactions per second for DeleteResourcePolicy, GetResourcePolicy, PutResourcePolicy, and ValidateResourcePolicy API requests combined.
Combined rate of DescribeSecret and GetSecretValue API requests	Each supported Region: 5,000 per second	No	The maximum transactions per second for DescribeSecret and GetSecretValue API requests combined.
Combined rate of ListSecrets and ListSecretVersionIds API requests	Each supported Region: 50 per second	No	The maximum transactions per second for ListSecrets and ListSecretVersionIds API requests combined.
Combined rate of PutSecretValue, RemoveRegionsFromReplication, ReplicateSecretToRegion, StopReplicationToReplica, UpdateSecret, and UpdateSecretVersionStage API requests	Each supported Region: 50 per second	No	The maximum transactions per second for PutSecretValue, RemoveRegionsFromReplication, ReplicateSecretToRegion, StopReplicationToReplica, UpdateSecret, and UpdateSecretVersionStage API requests combined.
Combined rate of RestoreSecret API requests	Each supported Region: 50 per second	No	The maximum transactions per second for RestoreSecret API requests.

Name	Default	Adjust	Description
Combined rate of RotateSecret and CancelRotateSecret API requests	Each supported Region: 50 per second	No	The maximum transactions per second for RotateSecret and CancelRotateSecret API requests combined.
Combined rate of TagResource and UntagResource API requests	Each supported Region: 50 per second	No	The maximum transactions per second for TagResource and UntagResource API requests combined.
Rate of CreateSecret API requests	Each supported Region: 50 per second	No	The maximum transactions per second for CreateSecret API requests.
Rate of DeleteSecret API requests	Each supported Region: 50 per second	No	The maximum transactions per second for DeleteSecret API requests.
Rate of GetRandomPassword API requests	Each supported Region: 50 per second	No	The maximum transactions per second for GetRandomPassword API requests.
Resource-based policy length	Each supported Region: 20,480	No	The maximum number of characters in a resource-based permissions policy attached to a secret.
Secret value size	Each supported Region: 65,536 Bytes	No	The maximum size of an encrypted secret value. If the secret value is a string, then this is the number of characters permitted in the secret value.
Secrets	Each supported Region: 500,000	No	The maximum number of secrets in each AWS Region of this AWS account.
Staging labels attached across all versions of a secret	Each supported Region: 20	No	The maximum number of staging labels attached across all versions of a secret.
Versions per secret	Each supported Region: 100	No	The maximum number of versions of a secret.

AWS Security Hub endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	securityhub.us-east-2.amazonaws.com securityhub-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	securityhub.us-east-1.amazonaws.com securityhub-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	securityhub.us-west-1.amazonaws.com securityhub-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	securityhub.us-west-2.amazonaws.com securityhub-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	securityhub.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	securityhub.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	securityhub.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	securityhub.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	securityhub.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	securityhub.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	securityhub.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	securityhub.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	securityhub.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	securityhub.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	securityhub.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	securityhub.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	securityhub.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	securityhub.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	securityhub.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	securityhub.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	securityhub.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	securityhub.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	securityhub.us-gov-east-1.amazonaws.com securityhub-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	securityhub.us-gov-west-1.amazonaws.com securityhub-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Number of Security Hub member accounts	Each supported Region: 5,000	No	The maximum number of Security Hub member accounts that can be added per AWS account (Security Hub administrator account) per Region.
Number of Security Hub outstanding invitations	Each supported Region: 1,000	No	The maximum number of outstanding Security Hub member account invitations that can be sent per AWS account (Security Hub

Name	Default	Adjust	Description
			administrator account) per Region.
Number of custom actions	Each supported Region: 50	No	The maximum number of custom actions that can be created per account per Region.
Number of custom insights	Each supported Region: 100	No	The maximum number of user-defined custom insights that can be created per AWS account per Region.
Number of insight results	Each supported Region: 100	No	The maximum number of aggregated results returned for the GetInsightsResults API operation.
Security Hub finding retention time	Each supported Region: 90	No	The maximum number of days a Security Hub finding is saved. This is 90 days after the most recent update or 90 days after the creation date if no update occurs.

For more information about Security Hub quotas, see Quotas in the *AWS Security Hub User Guide*.

AWS Security Token Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

By default, the AWS Security Token Service (AWS STS) is available as a global service, and all STS requests go to a single endpoint at `https://sts.amazonaws.com`. AWS recommends using Regional STS endpoints to reduce latency, build in redundancy, and increase session token validity. Most Regional endpoints are active by default, but you must manually enable endpoints for some Regions, such as Asia Pacific (Hong Kong). You can deactivate STS endpoints for any Regions that are enabled by default if you do not intend to use those Regions.

For more information, see Activating and Deactivating AWS STS in an AWS Region in the *IAM User Guide*.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sts.us-east-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
		sts-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	sts.us-east-1.amazonaws.com sts-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	sts.us-west-1.amazonaws.com sts-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	sts.us-west-2.amazonaws.com sts-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	sts.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	sts.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	sts.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sts.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	sts.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	sts.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sts.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sts.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sts.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	sts.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sts.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	sts.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	sts.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	sts.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	sts.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	sts.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	sts.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	sts.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	sts.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	sts.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	sts.us-gov-west-1.amazonaws.com	HTTPS	

AWS Server Migration Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sms.us-east-2.amazonaws.com sms-fips.us-east-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	sms.us-east-1.amazonaws.com sms-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	sms.us-west-1.amazonaws.com sms-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	sms.us-west-2.amazonaws.com sms-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	sms.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	sms.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sms.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	sms.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sms.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sms.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sms.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	sms.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sms.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	sms.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	sms.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	sms.eu-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	sms.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	sms.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	sms.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	sms.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	sms.us-gov-east-1.amazonaws.com sms-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	sms.us-gov-west-1.amazonaws.com sms-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent VM migrations	Each supported Region: 50	Yes	The maximum number of concurrent VM migrations (replication jobs) for this account in the current region.
Duration of service usage per VM in days	Each supported Region: 90	Yes	The maximum number of days of service usage per VM for this account in the current region.

Service Quotas endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	servicequotas.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	servicequotas.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	servicequotas.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	servicequotas.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	servicequotas.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	servicequotas.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	servicequotas.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	servicequotas.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	servicequotas.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	servicequotas.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	servicequotas.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	servicequotas.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	servicequotas.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	servicequotas.ca-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Frankfurt)	eu-central-1	servicequotas.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	servicequotas.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	servicequotas.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	servicequotas.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	servicequotas.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	servicequotas.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	servicequotas.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	servicequotas.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	servicequotas.us-gov-east-1.amazonaws.com servicequotas.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	servicequotas.us-gov-west-1.amazonaws.com servicequotas.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Active requests per account	Each supported Region: 20	No	The maximum number of active service quota increase requests allowed per account
Active requests per account per Region	Each supported Region: 2	No	The maximum number of active service quota increase requests allowed per account, in the current Region
Active requests per quota	Each supported Region: 1	No	The maximum number of active service quota increase requests per

Name	Default	Adjust	Description
			quota, in the current Region
Max requests per template	Each supported Region: 10	No	The maximum number of service quota increase requests allowed per template
Throttle Rate for AssociateServiceQuotaTemplate	Each supported Region: 1 per second	No	The maximum number of AssociateServiceQuotaTemplate requests allowed per second per account, in the current Region
Throttle rate for DeleteServiceQuotaIncreaseRequestFromTemplate	Each supported Region: 2 per second	No	The maximum number of DeleteServiceQuotaIncreaseRequestFromT requests allowed per second per account, in the current Region
Throttle rate for DisassociateServiceQuotaTemplate	Each supported Region: 1 per second	No	The maximum number of DisassociateServiceQuotaTemplate requests allowed per second per account, in the current Region
Throttle rate for GetAWSDefaultServiceQuota	Each supported Region: 5 per second	No	The maximum number of GetAWSDefaultServiceQuota requests allowed per second per account, in the current Region
Throttle rate for GetAssociationForServiceQuotaTemplate	Each supported Region: 2 per second	No	The maximum number of GetAssociationForServiceQuotaTemplate requests allowed per second per account, in the current Region
Throttle rate for GetRequestedServiceQuotaChange	Each supported Region: 5 per second	No	The maximum number of GetRequestedServiceQuotaChange requests allowed per second per account, in the current Region
Throttle rate for GetServiceQuota	Each supported Region: 5 per second	No	The maximum number of GetServiceQuota requests allowed per second per account, in the current Region
Throttle rate for GetServiceQuotaIncreaseRequestFromTemplate	Each supported Region: 2 per second	No	The maximum number of GetServiceQuotaIncreaseRequestFromTem requests allowed per second per account, in the current Region

Name	Default	Adjust	Description
Throttle rate for ListAWSDefaultServiceQuotas	Each supported Region: 10 per second	No	The maximum number of ListAWSDefaultServiceQuotas requests allowed per second per account, in the current Region
Throttle rate for ListRequestedServiceQuotaChangeHistory	Each supported Region: 5 per second	No	The maximum number of ListRequestedServiceQuotaChangeHistory requests allowed per second per account, in the current Region
Throttle rate for ListRequestedServiceQuotaChangeHistoryByQuota	Each supported Region: 5 per second	No	The maximum number of ListRequestedServiceQuotaChangeHistory requests allowed per second per account, in the current Region
Throttle rate for ListServiceQuotaIncreaseRequestsInTemplate	Each supported Region: 2 per second	No	The maximum number of ListServiceQuotaIncreaseRequestsInTempl requests allowed per second per account, in the current Region
Throttle rate for ListServiceQuotas	Each supported Region: 10 per second	No	The maximum number of ListServiceQuotas requests allowed per second per account, in the current Region
Throttle rate for ListServices	Each supported Region: 10 per second	No	The maximum number of ListServices requests allowed per second per account, in the current Region
Throttle rate for ListTagsForResource	Each supported Region: 10 per second	No	The maximum number of ListTagsForResource requests allowed per second per account, in the current Region
Throttle rate for PutServiceQuotaIncreaseRequestIntoTemplate	Each supported Region: 1 per second	No	The maximum number of PutServiceQuotaIncreaseRequestIntoTemp requests allowed per second per account, in the current Region
Throttle rate for RequestServiceQuotaIncrease	Each supported Region: 3 per second	No	The maximum number of RequestServiceQuotaIncrease requests allowed per second per account, in the current Region

Name	Default	Adjust	Description
Throttle rate for TagResource	Each supported Region: 10 per second	No	The maximum number of TagResource requests allowed per second per account, in the current Region
Throttle rate for UntagResource	Each supported Region: 10 per second	No	The maximum number of UntagResource requests allowed per second per account, in the current Region

AWS Serverless Application Repository endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	serverlessrepo.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	serverlessrepo.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	serverlessrepo.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	serverlessrepo.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	serverlessrepo.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	serverlessrepo.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	serverlessrepo.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	serverlessrepo.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	serverlessrepo.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	serverlessrepo.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	serverlessrepo.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	serverlessrepo.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	serverlessrepo.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	serverlessrepo.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	serverlessrepo.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	serverlessrepo.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	serverlessrepo.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	serverlessrepo.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	serverlessrepo.us-gov-east-1.amazonaws.com serverlessrepo.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	serverlessrepo.us-gov-west-1.amazonaws.com serverlessrepo.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Application policy length	Each supported Region: 6,144	No	The maximum application policy length (in characters).

Name	Default	Adjust	Description
Free Amazon S3 storage for code packages	Each supported Region: 5 Gigabytes	No	The maximum amount (in GB) of free Amazon S3 storage for code packages per AWS account per AWS region.
Public applications	Each supported Region: 100	Yes	The maximum number of public applications per AWS account per AWS region.

For more information, see AWS Serverless Application Repository Quotas in the *AWS Serverless Application Repository Developer Guide*.

AWS Service Catalog endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see Amazon service endpoints. Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see Amazon service quotas.

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	servicecatalog.us-east-2.amazonaws.com servicecatalog-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	servicecatalog.us-east-1.amazonaws.com servicecatalog-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	servicecatalog.us-west-1.amazonaws.com servicecatalog-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	servicecatalog.us-west-2.amazonaws.com servicecatalog-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	servicecatalog.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	servicecatalog.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Jakarta)	ap-southeast-3	servicecatalog.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	servicecatalog.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	servicecatalog.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	servicecatalog.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	servicecatalog.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	servicecatalog.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	servicecatalog.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	servicecatalog.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	servicecatalog.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	servicecatalog.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	servicecatalog.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	servicecatalog.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	servicecatalog.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	servicecatalog.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	servicecatalog.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	servicecatalog.sa-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	servicecatalog.us-gov-east-1.amazonaws.com servicecatalog-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	servicecatalog.us-gov-west-1.amazonaws.com servicecatalog-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Applications per attribute group	Each supported Region: 1,000	Yes	The maximum number of applications per attribute group
Applications per region	Each supported Region: 2,000	Yes	The maximum number of applications you can create per region
Attribute groups per application	Each supported Region: 1,000	Yes	The maximum number of attribute groups per application
Attribute groups per region	Each supported Region: 2,000	Yes	The maximum number of attribute groups you can create per region
Delegated administrators per organization	Each supported Region: 50	No	The maximum number of delegated administrators you can register per organization
Portfolios per region	Each supported Region: 100	Yes	The maximum number of portfolios you can create per region
Product versions per product	Each supported Region: 100	Yes	The maximum number of product versions you can create per product
Products per portfolio	Each supported Region: 150	Yes	The maximum number of products you can create per portfolio
Products per region	Each supported Region: 350	Yes	The maximum number of products you can create per region
Resources per application	Each supported Region: 1,000	Yes	The maximum number of resources per applications

Name	Default	Adjust	Description
Service action associations per provisioning artifact	Each supported Region: 25	No	The maximum number of service action associations you can create per provisioning artifact
Service actions per region	Each supported Region: 200	No	The maximum number of service actions you can create per region
Shared accounts per portfolio	Each supported Region: 5,000	No	The maximum number of shared accounts per portfolio
TagOptions per resource	Each supported Region: 25	No	The maximum number of TagOptions you can associate with a resource
Tags per portfolio	Each supported Region: 20	No	The maximum number of tags you can create per portfolio
Tags per product	Each supported Region: 20	No	The maximum number of tags you can create per product
Tags per provisioned product	Each supported Region: 50	No	The maximum number of tags you can create per provisioned product
Users, groups, and roles per portfolio	Each supported Region: 100	Yes	The maximum number of users, groups, and roles you can create per portfolio
Users, groups, and roles per product	Each supported Region: 200	Yes	The maximum number of users, groups, and roles you can create per portfolio
Values per TagOption	Each supported Region: 25	No	The maximum number of different values for each TagOption

For more information, see AWS Service Catalog default service quotas in the *AWS Service Catalog Administrator Guide*.

AWS Shield Advanced endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	shield.us-east-1.amazonaws.com	HTTPS	
		shield.us-east-1.amazonaws.com	HTTPS	
		shield-fips.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Stockholm)	eu-north-1	shield.us-east-1.amazonaws.com shield.us-east-1.amazonaws.com shield-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	shield.us-east-1.amazonaws.com shield.us-east-1.amazonaws.com shield-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
South America (São Paulo)	sa-east-1	shield.us-east-1.amazonaws.com shield.us-east-1.amazonaws.com shield-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS Global Accelerator accelerator protections	Each supported Region: 1,000	Yes	The maximum number of AWS Global Accelerator accelerators you can monitor and protect.
Amazon Route 53 hosted zone protections	Each supported Region: 1,000	Yes	The maximum number of Amazon Route 53 hosted zones you can monitor and protect.
CloudFront distribution protections	Each supported Region: 1,000	Yes	The maximum number of Amazon CloudFront distributions you can monitor and protect.
Elastic IP address protections	Each supported Region: 1,000	Yes	The maximum number of Elastic IP addresses you can monitor and protect.
Elastic Load Balancing load balancer protections	Each supported Region: 1,000	Yes	The maximum number of Elastic Load Balancing load balancers you can monitor and protect.

Amazon Simple Email Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services

offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

API Endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	email.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	email.us-east-1.amazonaws.com email-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	email.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	email.us-west-2.amazonaws.com email-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	email.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	email.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	email.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	email.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	email.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	email.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	email.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	email.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	email.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	email.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	email.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	email.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	email.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	email.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	email.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	email.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	email.us-gov-west-1.amazonaws.com email-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

SMTP Endpoints

Note
SMTP endpoints are not currently available in Africa (Cape Town), Europe (Milan), Middle East (Bahrain).

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	email-smtp.us-east-2.amazonaws.com	SMTP	
US East (N. Virginia)	us-east-1	email-smtp.us-east-1.amazonaws.com email-smtp-fips.us-east-1.amazonaws.com	SMTP	
US West (N. California)	us-west-1	email-smtp.us-west-1.amazonaws.com	SMTP	
US West (Oregon)	us-west-2	email-smtp.us-west-2.amazonaws.com email-smtp-fips.us-west-2.amazonaws.com	SMTP	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	email-smtp.ap-south-1.amazonaws.com	SMTP	
Asia Pacific (Osaka)	ap-northeast-3	email-smtp.ap-northeast-3.amazonaws.com	SMTP	
Asia Pacific (Seoul)	ap-northeast-2	email-smtp.ap-northeast-2.amazonaws.com	SMTP	
Asia Pacific (Singapore)	ap-southeast-1	email-smtp.ap-southeast-1.amazonaws.com	SMTP	
Asia Pacific (Sydney)	ap-southeast-2	email-smtp.ap-southeast-2.amazonaws.com	SMTP	
Asia Pacific (Tokyo)	ap-northeast-1	email-smtp.ap-northeast-1.amazonaws.com	SMTP	
Canada (Central)	ca-central-1	email-smtp.ca-central-1.amazonaws.com	SMTP	
Europe (Frankfurt)	eu-central-1	email-smtp.eu-central-1.amazonaws.com	SMTP	
Europe (Ireland)	eu-west-1	email-smtp.eu-west-1.amazonaws.com	SMTP	
Europe (London)	eu-west-2	email-smtp.eu-west-2.amazonaws.com	SMTP	
Europe (Paris)	eu-west-3	email-smtp.eu-west-3.amazonaws.com	SMTP	
Europe (Stockholm)	eu-north-1	email-smtp.eu-north-1.amazonaws.com	SMTP	
South America (São Paulo)	sa-east-1	email-smtp.sa-east-1.amazonaws.com	SMTP	
AWS GovCloud (US)	us-gov-west-1	email-smtp.us-gov-west-1.amazonaws.com email-smtp-fips.us-gov-west-1.amazonaws.com	SMTP	

DKIM Domains

Region Name	Region	AWS DKIM domain		
Africa (Cape Town)	af-south-1	dkim.af-south-1.amazonses.com		

Region Name	Region	AWS DKIM domain		
Asia Pacific (Osaka)	ap-northeast-3	dkim.ap-northeast-3.amazonses.com		
Europe (Milan)	eu-south-1	dkim.eu-south-1.amazonses.com		
All other regions		dkim.amazonses.com		

Email Receiving Endpoints

Amazon SES doesn't support email receiving in the following Regions: US East (Ohio), US West (N. California) Asia Pacific (Mumbai), Asia Pacific (Osaka), Asia Pacific (Seoul), Asia Pacific (Singapore), Asia Pacific (Sydney), Asia Pacific (Tokyo), Canada (Central), Europe (Frankfurt), Europe (London), Europe (Paris), Europe (Stockholm), Middle East (Bahrain), South America (São Paulo), and AWS GovCloud (US).

Region Name	Region	Receiving Endpoint		
US East (N. Virginia)	us-east-1	inbound-smtp.us-east-1.amazonaws.com		
US West (Oregon)	us-west-2	inbound-smtp.us-west-2.amazonaws.com		
Europe (Ireland)	eu-west-1	inbound-smtp.eu-west-1.amazonaws.com		

Service quotas

Name	Default	Adjust	Description
Sending quota	Each supported Region: 200	Yes	The maximum number of emails that you can send in a 24-hour period for this account in the current Region.
Sending rate	Each supported Region: 1	Yes	The maximum number of emails that Amazon SES can accept each second for this account in the current Region.

For more information, see Service quotas in Amazon SES in the *Amazon Simple Email Service Developer Guide*.

AWS Signer endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints with Lambda

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	signer.us-east-2.amazonaws.com signer-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	signer.us-east-1.amazonaws.com signer-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	signer.us-west-1.amazonaws.com signer-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	signer.us-west-2.amazonaws.com signer-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	signer.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	signer.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	signer.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	signer.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	signer.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	signer.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	signer.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	signer.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	signer.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	signer.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	signer.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	signer.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	signer.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	signer.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	signer.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	signer.sa-east-1.amazonaws.com	HTTPS	

Service endpoints with IoT

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	signer.us-east-2.amazonaws.com	HTTPS
US East (N. Virginia)	us-east-1	signer.us-east-1.amazonaws.com	HTTPS
US West (N. California)	us-west-1	signer.us-west-1.amazonaws.com	HTTPS
US West (Oregon)	us-west-2	signer.us-west-2.amazonaws.com	HTTPS
Africa (Cape Town)	af-south-1	signer.af-south-1.amazonaws.com	HTTPS
Asia Pacific (Hong Kong)	ap-east-1	signer.ap-east-1.amazonaws.com	HTTPS
Asia Pacific (Mumbai)	ap-south-1	signer.ap-south-1.amazonaws.com	HTTPS

Region Name	Region	Endpoint	Protocol
Asia Pacific (Seoul)	ap-northeast-2	signer.ap-northeast-2.amazonaws.com	HTTPS
Asia Pacific (Singapore)	ap-southeast-1	signer.ap-southeast-1.amazonaws.com	HTTPS
Asia Pacific (Sydney)	ap-southeast-2	signer.ap-southeast-2.amazonaws.com	HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	signer.ap-northeast-1.amazonaws.com	HTTPS
Canada (Central)	ca-central-1	signer.ca-central-1.amazonaws.com	HTTPS
China (Beijing)	cn-north-1	acm.cn-north-1.amazonaws.com.cn	HTTPS
China (Ningxia)	cn-northwest-1	acm.cn-northwest-1.amazonaws.com.cn	HTTPS
Europe (Frankfurt)	eu-central-1	signer.eu-central-1.amazonaws.com	HTTPS
Europe (Ireland)	eu-west-1	signer.eu-west-1.amazonaws.com	HTTPS
Europe (London)	eu-west-2	signer.eu-west-2.amazonaws.com	HTTPS
Europe (Milan)	eu-south-1	signer.eu-south-1.amazonaws.com	HTTPS
Europe (Paris)	eu-west-3	signer.eu-west-3.amazonaws.com	HTTPS
Europe (Stockholm)	eu-north-1	signer.eu-north-1.amazonaws.com	HTTPS
Middle East (Bahrain)	me-south-1	signer.me-south-1.amazonaws.com	HTTPS
South America (São Paulo)	sa-east-1	signer.sa-east-1.amazonaws.com	HTTPS

Service quotas

Name	Default	Adjust	Description
API calls per second	Each supported Region: 25	No	The maximum number of API calls across all APIs for this account in the current region.
Rate of AddProfilePermission requests	Each supported Region: 3	Yes	The maximum number of AddProfilePermission

Name	Default	Adjust	Description
			requests that you can make, per second, in this account in the current region.
Rate of CancelSigningProfile requests	Each supported Region: 3	Yes	The maximum number of CancelSigningProfile requests that you can make, per second, in this account in the current region.
Rate of DescribeSigningJob requests	Each supported Region: 6	Yes	The maximum number of DescribeSigningJob requests that you can make, per second, in this account in the current region.
Rate of GetSigningPlatform requests	Each supported Region: 3	Yes	The maximum number of GetSigningPlatform requests that you can make, per second, in this account in the current region.
Rate of GetSigningProfile requests	Each supported Region: 3	Yes	The maximum number of GetSigningProfile requests that you can make, per second, in this account in the current region.
Rate of ListProfilePermissions requests	Each supported Region: 6	Yes	The maximum number of ListProfilePermissions requests that you can make, per second, in this account in the current region.
Rate of ListSigningJobs requests	Each supported Region: 6	Yes	The maximum number of ListSigningJobs requests that you can make, per second, in this account in the current region.
Rate of ListSigningPlatforms requests	Each supported Region: 6	Yes	The maximum number of ListSigningPlatforms requests that you can make, per second, in this account in the current region.
Rate of ListSigningProfiles requests	Each supported Region: 6	Yes	The maximum number of ListSigningProfiles requests that you can make, per second, in this account in the current region.

Name	Default	Adjust	Description
Rate of ListTagsForResource requests	Each supported Region: 6	Yes	The maximum number of ListTagsForResource requests that you can make, per second, in this account in the current region.
Rate of PutSigningProfile requests	Each supported Region: 3	Yes	The maximum number of PutSigningProfile requests that you can make, per second, in this account in the current region.
Rate of RemoveProfilePermission requests	Each supported Region: 3	Yes	The maximum number of RemoveProfilePermission requests that you can make, per second, in this account in the current region.
Rate of RevokeSignature requests	Each supported Region: 3	Yes	The maximum number of RevokeSignature requests that you can make, per second, in this account in the current region.
Rate of RevokeSigningProfile requests	Each supported Region: 3	Yes	The maximum number of RevokeSigningProfile requests that you can make, per second, in this account in the current region.
Rate of StartSigningJob requests	Each supported Region: 3	Yes	The maximum number of StartSigningJob requests that you can make, per second, in this account in the current region.
Rate of TagResource requests	Each supported Region: 3	Yes	The maximum number of TagResource requests that you can make, per second, in this account in the current region.
Rate of UntagResource requests	Each supported Region: 3	Yes	The maximum number of UntagResource requests that you can make, per second, in this account in the current region.

AWS Sign-In endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	us-east-2.signin.aws.amazon.com	HTTPS	
US East (N. Virginia)	us-east-1	signin.aws.amazon.com	HTTPS	
US West (N. California)	us-west-1	us-west-1.signin.aws.amazon.com	HTTPS	
US West (Oregon)	us-west-2	us-west-2.signin.aws.amazon.com	HTTPS	
Africa (Cape Town)	af-south-1	af-south-1.signin.aws.amazon.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ap-east-1.signin.aws.amazon.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ap-southeast-3.signin.aws.amazon.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ap-south-1.signin.aws.amazon.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ap-northeast-3.signin.aws.amazon.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ap-northeast-2.signin.aws.amazon.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ap-southeast-1.signin.aws.amazon.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	ap-southeast-2.signin.aws.amazon.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ap-northeast-1.signin.aws.amazon.com	HTTPS	
Canada (Central)	ca-central-1	ca-central-1.signin.aws.amazon.com	HTTPS	
Europe (Frankfurt)	eu-central-1	eu-central-1.signin.aws.amazon.com	HTTPS	
Europe (Ireland)	eu-west-1	eu-west-1.signin.aws.amazon.com	HTTPS	
Europe (London)	eu-west-2	eu-west-2.signin.aws.amazon.com	HTTPS	
Europe (Milan)	eu-south-1	eu-south-1.signin.aws.amazon.com	HTTPS	
Europe (Paris)	eu-west-3	eu-west-3.signin.aws.amazon.com	HTTPS	
Europe (Stockholm)	eu-north-1	eu-north-1.signin.aws.amazon.com	HTTPS	
Middle East (Bahrain)	me-south-1	me-south-1.signin.aws.amazon.com	HTTPS	
Middle East (UAE)	me-central-1	me-central-1.signin.aws.amazon.com	HTTPS	
South America (São Paulo)	sa-east-1	sa-east-1.signin.aws.amazon.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	us-gov-east-1.signin.amazonaws-us-gov.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	signin.amazonaws-us-gov.com	HTTPS	

Service quotas

AWS Sign-In has no increasable quotas.

Amazon Simple Notification Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sns.us-east-2.amazonaws.com	HTTP and HTTPS	
US East (N. Virginia)	us-east-1	sns.us-east-1.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	sns.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	sns.us-west-2.amazonaws.com	HTTP and HTTPS	
Africa (Cape Town)	af-south-1	sns.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	sns.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	sns.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sns.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	sns.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	sns.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sns.ap-southeast-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	sns.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sns.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	sns.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	sns.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	sns.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	sns.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	sns.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	sns.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	sns.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	sns.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	sns.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	sns.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	sns.us-gov-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	sns.us-gov-west-1.amazonaws.com	HTTP and HTTPS	

FIFO topics

FIFO topics are supported on the following regions:

Region name	Region
US East (N. Virginia)	us-east-1
US East (Ohio)	us-east-2
US West (N. California)	us-west-1
US West (Oregon)	us-west-2
Europe (Frankfurt)	eu-central-1
Europe (Ireland)	eu-west-1
Europe (London)	eu-west-2
Europe (Stockholm)	eu-north-1
Europe (Milan)	eu-south-1
Asia Pacific (Mumbai)	ap-south-1
Asia Pacific (Singapore)	ap-southeast-1
Asia Pacific (Sydney)	ap-southeast-2
Asia Pacific (Osaka)	ap-northeast-3
Asia Pacific (Tokyo)	ap-northeast-1
Asia Pacific (Seoul)	ap-northeast-2
South America (São Paulo)	sa-east-1
Middle East (Bahrain)	me-south-1
Canada (Central)	ca-central-1
China (Beijing)	cn-north-1
China (Ningxia)	cn-northwest-1

Service quotas

The following quotas determine how many Amazon SNS resources you can create in your AWS account, and they determine the rate at which you can issue Amazon SNS API requests.

Amazon SNS resource

To request an increase, submit an SNS Quota Increase case.

Resource	Default
Topics	• Standard: 100,000 per account • FIFO: 1,000 per account
Subscriptions	• Standard: 12,500,000 per topic

Resource	Default
	For Kinesis Data Firehose delivery streams, 5 per topic, per subscription owner • FIFO: 100 per topic
Pending subscriptions	5,000 per account
Account spend threshold for SMS	1.00 USD per account
Delivery rate for promotional SMS messages	20 messages per second
Delivery rate for transactional SMS messages	20 messages per second
Delivery rate for email messages	10 messages per second
Maximum number of messages in PublishBatchRequest	10 PublishBatchRequestEntries
Subscription filter policies	200 per account

Amazon SNS API throttling

The following quotas throttle the rate at which you can issue Amazon SNS API requests.

Hard

The following quotas cannot be increased.

API	Transactions per second
AddPermission	10
CheckIfPhoneNumberIsOptedOut	50
CreateSMSSandboxPhoneNumber	1
DeleteSMSSandboxPhoneNumber	1
GetSMSAttributes	20
GetSMSSandboxAccountStatus	10
ListEndpointsByPlatformApplication	30
ListOriginationNumbers	1
ListPhoneNumbersOptedOut	10
ListPlatformApplications	15
ListSMSSandboxPhoneNumbers	1
ListSubscriptions	30
ListSubscriptionsByTopic	30
ListTagsForResource	10

API	Transactions per second
ListTopics	30
OptInPhoneNumber	20
RemovePermission	10
SetSMSAttributes	1
Subscribe	100
TagResource	10
Unsubscribe	100
UntagResource	10
VerifySMSSandboxPhoneNumber	1

Soft

The following quotas vary by AWS Region. The messages per second quota is based on the number of messages published to an Amazon SNS region, combining `Publish` and `PublishBatch` API requests.

For example, if your regional quota is 30,000 messages per second, there are a few ways this quota can be reached:

- Using the `Publish` action at a rate of 30,000 API requests per second to publish 30,000 messages (one message per API request).
- Using the `PublishBatch` action at a rate of 3,000 API requests per second to publish 30,000 messages (10 messages per batch API request).
- Using the `Publish` action at a rate of 10,000 API requests per second to publish 10,000 messages (one message per API request) and the `PublishBatch` action at a rate of 2,000 API requests per second to publish 20,000 messages (10 messages per batch API request) for a total of 30,000 messages published per second.

Publish API throttling

API	AWS Regions	Standard topics	FIFO topics
Publish and PublishBatch	US East (N. Virginia) Region	30,000 messages per second	300 messages per second or 10 MB per second, per topic, whichever comes first. This is a hard limit and can not be increased. For cross region delivery cases, FIFO topics support 100 messages per second or 3 MB per second, whichever comes first.
	US West (Oregon) Region Europe (Ireland) Region	9,000 messages per second	
	US East (Ohio) Region US West (N. California) Region Asia Pacific (Mumbai) Region	1,500 messages per second	

API	AWS Regions	Standard topics	FIFO topics
	Asia Pacific (Seoul) Region Asia Pacific (Singapore) Region Asia Pacific (Sydney) Region Asia Pacific (Tokyo) Region Europe (Frankfurt) Region		
	Africa (Cape Town) Region Asia Pacific (Hong Kong) Region Asia Pacific (Osaka) Region Canada (Central) Region China (Beijing) Region China (Ningxia) Region Europe (London) Region Europe (Milan) Region Europe (Paris) Region Europe (Stockholm) Region Middle East (Bahrain) Region South America (São Paulo) Region	300 messages per second	

Other API throttling

APIs	AWS Regions	Transactions per second
ConfirmSubscription	US East (N. Virginia) Region	3,000
CreatePlatformApplication CreatePlatformEndpoint	US West (Oregon) Region Europe (Ireland) Region	900
CreateTopic DeleteEndpoint	US East (Ohio) Region US West (N. California) Region	150

APIs	AWS Regions	Transactions per second
DeletePlatformApplication DeleteTopic GetEndpointAttributes GetDataProtectionPolicy GetPlatformApplicationAttributes GetSubscriptionAttributes	Asia Pacific (Mumbai) Region Asia Pacific (Seoul) Region Asia Pacific (Singapore) Region Asia Pacific (Sydney) Region Asia Pacific (Tokyo) Region Europe (Frankfurt) Region	
GetTopicAttributes SetEndpointAttributes SetPlatformApplicationAttributes SetSubscriptionAttributes SetTopicAttributes	Africa (Cape Town) Region Asia Pacific (Hong Kong) Region Asia Pacific (Osaka) Region Canada (Central) Region China (Beijing) Region China (Ningxia) Region Europe (London) Region Europe (Milan) Region Europe (Paris) Region Europe (Stockholm) Region Middle East (Bahrain) Region South America (São Paulo) Region	30
PutDataProtectionPolicy	All Commercial Regions	1

Amazon Simple Queue Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon SQS

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sqs.us-east-2.amazonaws.com sqs-fips.us-east-2.amazonaws.com	HTTP and HTTPS HTTPS	
US East (N. Virginia)	us-east-1	sqs.us-east-1.amazonaws.com sqs-fips.us-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (N. California)	us-west-1	sqs.us-west-1.amazonaws.com sqs-fips.us-west-1.amazonaws.com	HTTP and HTTPS HTTPS	
US West (Oregon)	us-west-2	sqs.us-west-2.amazonaws.com sqs-fips.us-west-2.amazonaws.com	HTTP and HTTPS HTTPS	
Africa (Cape Town)	af-south-1	sqs.af-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	sqs.ap-east-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	sqs.ap-southeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sqs.ap-south-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	sqs.ap-northeast-3.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	sqs.ap-northeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sqs.ap-southeast-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	sqs.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sqs.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Canada (Central)	ca-central-1	sqs.ca-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Frankfurt)	eu-central-1	sqs.eu-central-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	sqs.eu-west-1.amazonaws.com	HTTP and HTTPS	
Europe (London)	eu-west-2	sqs.eu-west-2.amazonaws.com	HTTP and HTTPS	
Europe (Milan)	eu-south-1	sqs.eu-south-1.amazonaws.com	HTTP and HTTPS	
Europe (Paris)	eu-west-3	sqs.eu-west-3.amazonaws.com	HTTP and HTTPS	
Europe (Stockholm)	eu-north-1	sqs.eu-north-1.amazonaws.com	HTTP and HTTPS	
Middle East (Bahrain)	me-south-1	sqs.me-south-1.amazonaws.com	HTTP and HTTPS	
Middle East (UAE)	me-central-1	sqs.me-central-1.amazonaws.com	HTTP and HTTPS	
South America (São Paulo)	sa-east-1	sqs.sa-east-1.amazonaws.com	HTTP and HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	sqs.us-gov-east-1.amazonaws.com sqs.us-gov-east-1.amazonaws.com	HTTP and HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	sqs.us-gov-west-1.amazonaws.com sqs.us-gov-west-1.amazonaws.com	HTTP and HTTPS HTTPS	

Legacy endpoints

If you use the AWS CLI or SDK for Python, you can use the following legacy endpoints.

Region Name	Region	Endpoint	Protocol
US East (Ohio)	us-east-2	us-east-2.queue.amazonaws.com	HTTP and HTTPS
US East (N. Virginia)	us-east-1	queue.amazonaws.com	HTTP and HTTPS
US West (N. California)	us-west-1	us-west-1.queue.amazonaws.com	HTTP and HTTPS
US West (Oregon)	us-west-2	us-west-2.queue.amazonaws.com	HTTP and HTTPS
Africa (Cape Town)	af-south-1	af-south-1.queue.amazonaws.com	HTTP
Asia Pacific (Mumbai)	ap-south-1	ap-south-1.queue.amazonaws.com	HTTP and HTTPS
Asia Pacific (Osaka)	ap-northeast-3	ap-northeast-3.queue.amazonaws.com	HTTP and HTTPS
Asia Pacific (Seoul)	ap-northeast-2	ap-northeast-2.queue.amazonaws.com	HTTP and HTTPS
Asia Pacific (Singapore)	ap-southeast-1	ap-southeast-1.queue.amazonaws.com	HTTP and HTTPS
Asia Pacific (Sydney)	ap-southeast-2	ap-southeast-2.queue.amazonaws.com	HTTP and HTTPS
Asia Pacific (Tokyo)	ap-northeast-1	ap-northeast-1.queue.amazonaws.com	HTTP and HTTPS
Canada (Central)	ca-central-1	ca-central-1.queue.amazonaws.com	HTTP and HTTPS
China (Beijing)	cn-north-1	cn-north-1.queue.amazonaws.com	HTTP and HTTPS
China (Ningxia)	cn-northwest-1	cn-northwest-1.queue.amazonaws.com	HTTP and HTTPS
Europe (Frankfurt)	eu-central-1	eu-central-1.queue.amazonaws.com	HTTP and HTTPS
Europe (Ireland)	eu-west-1	eu-west-1.queue.amazonaws.com	HTTP and HTTPS
Europe (London)	eu-west-2	eu-west-2.queue.amazonaws.com	HTTP and HTTPS
Europe (Paris)	eu-west-3	eu-west-3.queue.amazonaws.com	HTTP and HTTPS
Europe (Stockholm)	eu-north-1	eu-north-1.queue.amazonaws.com	HTTP and HTTPS
South America (São Paulo)	sa-east-1	sa-east-1.queue.amazonaws.com	HTTP and HTTPS

Service quotas

Name	Default	Adjust	Description
Actions per Queue Policy	Each supported Region: 7	No	The number of actions in a queue policy.
Attributes per Message	Each supported Region: 10	No	The number of attributes added to a message.
Batched Message ID Length	Each supported Region: 80	No	The length of a batched message ID.
Batched Message Throughput for FIFO Queues	Each supported Region: 3,000	Yes	The number of batched transactions per second (TPS) for FIFO queues.
Conditions per Queue Policy	Each supported Region: 10	No	The number of conditions in a queue policy.
In-Flight Messages per FIFO Queue	Each supported Region: 20,000	No	The number of in-flight messages in a FIFO queue.
In-Flight Messages per Standard Queue	Each supported Region: 120,000	No	The number of in-flight messages in a standard queue.
Message Invisibility Period	Each supported Region: 0 Seconds	No	The length of time, in seconds, for which a message consumed from a queue remains invisible to other consumers.
Message Retention Time	Each supported Region: 345,600 Seconds	No	The length of time, in seconds, for which Amazon SQS retains a message if it isnt deleted. The maximum is 14 days (1,209,600 seconds).
Message Size	Each supported Region: 256 Kilobytes	No	The size of a message, in kilobytes.
Message Size in S3 Bucket	Each supported Region: 2 Gigabytes	No	The size of a message, in gigabytes, in an Amazon S3 bucket.
Messages per Batch	Each supported Region: 10	No	The number of messages in a message batch.
Principals per Queue Policy	Each supported Region: 50	No	The number of principals in a queue policy.
Queue Delivery Delay	Each supported Region: 15	No	The length of time, in minutes, by which to delay the initial delivery of messages to a queue.

Name	Default	Adjust	Description
Queue Name Length	Each supported Region: 80	No	The queue name length.
Queue Policy Size	Each supported Region: 8,192 Bytes	No	The size, in bytes, of a queue policy.
Statements per Queue Policy	Each supported Region: 20	No	The number of statements in a queue policy.
Tags per Queue	Each supported Region: 50	No	The number of tags added to a queue.
UTF-8 Queue Tag Key Length	Each supported Region: 128	No	The length of a UTF-8 queue tag key.
UTF-8 Queue Tag Value Length	Each supported Region: 256	No	The length of a UTF-8 queue tag value.
Unbatched Message Throughput for FIFO Queues	Each supported Region: 300	No	The number of unbatched transactions per second (TPS) for FIFO queues.

For more information, see Amazon SQS quotas in the *Amazon Simple Queue Service Developer Guide* and the "Limits and Restrictions" section of the Amazon SQS FAQs.

Amazon Simple Storage Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon S3 endpoints

When you use the REST API to send requests to the endpoints shown in the table below, you can use the virtual-hosted style and path-style methods. For more information, see Virtual Hosting of Buckets.

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
US East (Ohio)	us-east-2	**Standard endpoints:** • s3.us-east-2.amazonaws.com • s3-fips.us-east-2.amazonaws.com	us-east-2	HTTP and HTTPS	Versions 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
		• s3.dualstack.us-east-2.amazonaws.com** • s3-fips.dualstack.us-east-2.amazonaws.com** • *account-id*.s3-control.us-east-2.amazonaws.com • *account-id*.s3-control-fips.us-east-2.amazonaws.com • *account-id*.s3-control.dualstack.us-east-2.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-east-2.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-east-2.amazonaws.com • s3-accesspoint-fips.us-east-2.amazonaws.com • s3-accesspoint.dualstack.us-east-2.amazonaws.com** • s3-accesspoint-fips.dualstack.us-east-2.amazonaws.com**			

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
US East (N. Virginia)	us-east-1	**Standard endpoints:** • s3.us-east-1.amazonaws.com • s3-fips.us-east-1.amazonaws.com • s3.amazonaws.com • s3.dualstack.us-east-1.amazonaws.com** • s3-fips.dualstack.us-east-1.amazonaws.com** • *account-id*.s3-control.us-east-1.amazonaws.com • *account-id*.s3-control-fips.us-east-1.amazonaws.com • *account-id*.s3-control.dualstack.us-east-1.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-east-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-east-1.amazonaws.com • s3-accesspoint-fips.us-east-1.amazonaws.com • s3-accesspoint.dualstack.us-east-1.amazonaws.com** • s3-accesspoint-fips.dualstack.us-east-1.amazonaws.com**	us-east-1	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
US West (N. California)	us-west-1	**Standard endpoints:** • s3.us-west-1.amazonaws.com • s3-fips.us-west-1.amazonaws.com • s3.dualstack.us-west-1.amazonaws.com** • s3-fips.dualstack.us-west-1.amazonaws.com** • *account-id*.s3-control.us-west-1.amazonaws.com • *account-id*.s3-control-fips.us-west-1.amazonaws.com • *account-id*.s3-control.dualstack.us-west-1.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-west-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-west-1.amazonaws.com • s3-accesspoint-fips.us-west-1.amazonaws.com • s3-accesspoint.dualstack.us-west-1.amazonaws.com** • s3-accesspoint-fips.dualstack.us-west-1.amazonaws.com**	us-west-1	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
US West (Oregon)	us-west-2	**Standard endpoints:** • s3.us-west-2.amazonaws.com • s3-fips.us-west-2.amazonaws.com • s3.dualstack.us-west-2.amazonaws.com** • s3-fips.dualstack.us-west-2.amazonaws.com** • *account-id*.s3-control.us-west-2.amazonaws.com • *account-id*.s3-control-fips.us-west-2.amazonaws.com • *account-id*.s3-control.dualstack.us-west-2.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-west-2.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-west-2.amazonaws.com • s3-accesspoint-fips.us-west-2.amazonaws.com • s3-accesspoint.dualstack.us-west-2.amazonaws.com** • s3-accesspoint-fips.dualstack.us-west-2.amazonaws.com**	us-west-2	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Africa (Cape Town)	af-south-1	**Standard endpoints:** • s3.af-south-1.amazonaws.com • s3.dualstack.af-south-1.amazonaws.com** • *account-id*.s3-control.af-south-1.amazonaws.com • *account-id*.s3-control.dualstack.af-south-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.af-south-1.amazonaws.com • s3-accesspoint.dualstack.af-south-1.amazonaws.com**	af-south-1	HTTP and HTTPS	Version 4 only
Asia Pacific (Hong Kong)***	ap-east-1	**Standard endpoints:** • s3.ap-east-1.amazonaws.com • s3.dualstack.ap-east-1.amazonaws.com** • *account-id*.s3-control.ap-east-1.amazonaws.com • *account-id*.s3-control.dualstack.ap-east-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-east-1.amazonaws.com • s3-accesspoint.dualstack.ap-east-1.amazonaws.com**	ap-east-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Asia Pacific (Jakarta)	ap-southeast-3	**Standard endpoints:** • s3.ap-southeast-3.amazonaws.com • s3.dualstack.ap-southeast-3.amazonaws.com** • *account-id*.s3-control.ap-southeast-3.amazonaws.com • *account-id*.s3-control.dualstack.ap-southeast-3.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-southeast-3.amazonaws.com • s3-accesspoint.dualstack.ap-southeast-3.amazonaws.com**	ap-southeast-3	HTTP and HTTPS	Version 4 only
Asia Pacific (Mumbai)	ap-south-1	**Standard endpoints:** • s3.ap-south-1.amazonaws.com • s3.dualstack.ap-south-1.amazonaws.com** • *account-id*.s3-control.ap-south-1.amazonaws.com • *account-id*.s3-control.dualstack.ap-south-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-south-1.amazonaws.com • s3-accesspoint.dualstack.ap-south-1.amazonaws.com**	ap-south-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Asia Pacific (Osaka)	ap-northeast-3	**Standard endpoints:** • s3.ap-northeast-3.amazonaws.com • s3.dualstack.ap-northeast-3.amazonaws.com** • *account-id*.s3-control.ap-northeast-3.amazonaws.com • *account-id*.s3-control.dualstack.ap-northeast-3.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-northeast-3.amazonaws.com • s3-accesspoint.dualstack.ap-northeast-3.amazonaws.com**	ap-northeast-3	HTTP and HTTPS	Version 4 only
Asia Pacific (Seoul)	ap-northeast-2	**Standard endpoints:** • s3.ap-northeast-2.amazonaws.com • s3.dualstack.ap-northeast-2.amazonaws.com** • *account-id*.s3-control.ap-northeast-2.amazonaws.com • *account-id*.s3-control.dualstack.ap-northeast-2.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-northeast-2.amazonaws.com • s3-accesspoint.dualstack.ap-northeast-2.amazonaws.com**	ap-northeast-2	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Asia Pacific (Singapore)	ap-southeast-1	**Standard endpoints:** • s3.ap-southeast-1.amazonaws.com • s3.dualstack.ap-southeast-1.amazonaws.com** • *account-id*.s3-control.ap-southeast-1.amazonaws.com • *account-id*.s3-control.dualstack.ap-southeast-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-southeast-1.amazonaws.com • s3-accesspoint.ap-southeast-1.amazonaws.com**	ap-southeast-1	HTTP and HTTPS	Versions 2 and 4
Asia Pacific (Sydney)	ap-southeast-2	**Standard endpoints:** • s3.ap-southeast-2.amazonaws.com • s3.dualstack.ap-southeast-2.amazonaws.com** • *account-id*.s3-control.ap-southeast-2.amazonaws.com • *account-id*.s3-control.dualstack.ap-southeast-2.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-southeast-2.amazonaws.com • s3-accesspoint.dualstack.ap-southeast-2.amazonaws.com**	ap-southeast-2	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Asia Pacific (Tokyo)	ap-northeast-1	**Standard endpoints:** • s3.ap-northeast-1.amazonaws.com • s3.dualstack.ap-northeast-1.amazonaws.com** • *account-id*.s3-control.ap-northeast-1.amazonaws.com • *account-id*.s3-control.dualstack.ap-northeast-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ap-northeast-1.amazonaws.com • s3-accesspoint.dualstack.ap-northeast-1.amazonaws.com**	ap-northeast-1	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Canada (Central)	ca-central-1	**Standard endpoints:** • s3.ca-central-1.amazonaws.com • s3-fips.ca-central-1.amazonaws.com • s3.dualstack.ca-central-1.amazonaws.com** • s3-fips.dualstack.ca-central-1.amazonaws.com** • *account-id*.s3-control.ca-central-1.amazonaws.com • *account-id*.s3-control-fips.ca-central-1.amazonaws.com • *account-id*.s3-control.dualstack.ca-central-1.amazonaws.com** • *account-id*.s3-control-fips.dualstack.ca-central-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.ca-central-1.amazonaws.com • s3-accesspoint-fips.ca-central-1.amazonaws.com • s3-accesspoint.dualstack.ca-central-1.amazonaws.com** • s3-accesspoint-fips.dualstack.ca-central-1.amazonaws.com**	ca-central-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
China (Beijing)	cn-north-1	Valid endpoint name for this Region: • s3.cn-north-1.amazonaws.com.cn • s3.dualstack.cn-north-1.amazonaws.com.cn • *account-id*.s3-control.cn-north-1.amazonaws.com.cn • *account-id*.s3-control.dualstack.cn-north-1.amazonaws.com.cn **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.cn-north-1.amazonaws.com • s3-accesspoint.dualstack.cn-north-1.amazonaws.com	cn-north-1	HTTP and HTTPS	Version 4 only
China (Ningxia)	cn-northwest-1	Valid endpoint name for this Region: • s3.cn-northwest-1.amazonaws.com.cn • s3.dualstack.cn-northwest-1.amazonaws.com.cn • *account-id*.s3-control.cn-northwest-1.amazonaws.com.cn • *account-id*.s3-control.dualstack.cn-northwest-1.amazonaws.com.cn **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.cn-northwest-1.amazonaws.com • s3-accesspoint.dualstack.cn-northwest-1.amazonaws.com	cn-northwest-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Europe (Frankfurt)	eu-central-1	**Standard endpoints:** • s3.eu-central-1.amazonaws.com • s3.dualstack.eu-central-1.amazonaws.com** • *account-id*.s3-control.eu-central-1.amazonaws.com • *account-id*.s3-control.dualstack.eu-central-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-central-1.amazonaws.com • s3-accesspoint.dualstack.eu-central-1.amazonaws.com**	eu-central-1	HTTP and HTTPS	Version 4 only
Europe (Ireland)	eu-west-1	**Standard endpoints:** • s3.eu-west-1.amazonaws.com • s3.dualstack.eu-west-1.amazonaws.com** • *account-id*.s3-control.eu-west-1.amazonaws.com • *account-id*.s3-control.dualstack.eu-west-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-west-1.amazonaws.com • s3-accesspoint.dualstack.eu-west-1.amazonaws.com**	EU or eu-west-1	HTTP and HTTPS	Versions 2 and 4

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Europe (London)	eu-west-2	**Standard endpoints:** • s3.eu-west-2.amazonaws.com • s3.dualstack.eu-west-2.amazonaws.com** • *account-id*.s3-control.eu-west-2.amazonaws.com • *account-id*.s3-control.dualstack.eu-west-2.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-west-2.amazonaws.com • s3-accesspoint.dualstack.eu-west-2.amazonaws.com**	eu-west-2	HTTP and HTTPS	Version 4 only
Europe (Milan)	eu-south-1	**Standard endpoints:** • s3.eu-south-1.amazonaws.com • s3.dualstack.eu-south-1.amazonaws.com** • *account-id*.s3-control.eu-south-1.amazonaws.com • *account-id*.s3-control.dualstack.eu-south-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-south-1.amazonaws.com • s3-accesspoint.dualstack.eu-south-1.amazonaws.com**	eu-south-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Europe (Paris)	eu-west-3	**Standard endpoints:** • s3.eu-west-3.amazonaws.com • s3.dualstack.eu-west-3.amazonaws.com • *account-id*.s3-control.eu-west-3.amazonaws.com • *account-id*.s3-control.dualstack.eu-west-3.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-west-3.amazonaws.com • s3-accesspoint.dualstack.eu-west-3.amazonaws.com**	eu-west-3	HTTP and HTTPS	Version 4 only
Europe (Stockholm)	eu-north-1	**Standard endpoints:** • s3.eu-north-1.amazonaws.com • s3.dualstack.eu-north-1.amazonaws.com • *account-id*.s3-control.eu-north-1.amazonaws.com • *account-id*.s3-control.dualstack.eu-north-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.eu-north-1.amazonaws.com • s3-accesspoint.dualstack.eu-north-1.amazonaws.com**	eu-north-1	HTTP and HTTPS	Version 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
South America (São Paulo)	sa-east-1	**Standard endpoints:** • s3.sa-east-1.amazonaws.com • s3.dualstack.sa-east-1.amazonaws.com** • *account-id*.s3-control.sa-east-1.amazonaws.com • *account-id*.s3-control.dualstack.sa-east-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.sa-east-1.amazonaws.com • s3-accesspoint.dualstack.sa-east-1.amazonaws.com**	sa-east-1	HTTP and HTTPS	Versions 2 and 4
Middle East (Bahrain)	me-south-1	**Standard endpoints:** • s3.me-south-1.amazonaws.com • s3.dualstack.me-south-1.amazonaws.com** • *account-id*.s3-control.me-south-1.amazonaws.com • *account-id*.s3-control.dualstack.me-south-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.me-south-1.amazonaws.com • s3-accesspoint.dualstack.me-south-1.amazonaws.com**	me-south-1	HTTP and HTTPS	Versions 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
Middle East (UAE)	me-central-1	**Standard endpoints:** • s3.me-central-1.amazonaws.com • s3.dualstack.me-central-1.amazonaws.com** • *account-id*.s3-control.me-central-1.amazonaws.com • *account-id*.s3-control.dualstack.me-central-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.me-central-1-amazonaws.com • s3-accesspoint.dualstack.me-central-1.amazonaws.com**	me-central-1	HTTP and HTTPS	Versions 4 only

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
AWS GovCloud (US-East)	us-gov-east-1	**Standard endpoints:** • s3.us-gov-east-1.amazonaws.com • s3-fips.us-gov-east-1.amazonaws.com • s3.dualstack.us-gov-east-1.amazonaws.com** • s3-fips.dualstack.us-gov-east-1.amazonaws.com** • *account-id*.s3-control.us-gov-east-1.amazonaws.com • *account-id*.s3-control-fips.us-gov-east-1.amazonaws.com • *account-id*.s3-control.dualstack.us-gov-east-1.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-gov-east-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-gov-east-1.amazonaws.com • s3-accesspoint-fips.us-gov-east-1.amazonaws.com • s3-accesspoint.dualstack.us-gov-east-1.amazonaws.com** • s3-accesspoint-fips.dualstack.us-gov-east-1.amazonaws.com**	us-gov-east-1	HTTP and HTTPS	

Region Name	Region	Endpoint	Location Constraint	Protocol	Signature Version(s) Support
AWS GovCloud (US-West)	us-gov-west-1	**Standard endpoints:** • s3.us-gov-west-1.amazonaws.com • s3-fips.us-gov-west-1.amazonaws.com • s3.dualstack.us-gov-west-1.amazonaws.com** • s3-fips.dualstack.us-gov-west-1.amazonaws.com** • *account-id*.s3-control.us-gov-west-1.amazonaws.com • *account-id*.s3-control-fips.us-gov-west-1.amazonaws.com • *account-id*.s3-control.dualstack.us-gov-west-1.amazonaws.com** • *account-id*.s3-control-fips.dualstack.us-gov-west-1.amazonaws.com** **Amazon S3 Access Points endpoints (HTTPS only):** • s3-accesspoint.us-gov-west-1.amazonaws.com • s3-accesspoint-fips.us-gov-west-1.amazonaws.com • s3-accesspoint.dualstack.us-gov-west-1.amazonaws.com** • s3-accesspoint-fips.dualstack.us-gov-west-1.amazonaws.com**	us-gov-west-1	HTTP and HTTPS	

**Amazon S3 dual-stack endpoints support requests to S3 buckets over IPv6 and IPv4. For more information, see Using Dual-Stack Endpoints.

***You must enable this Region before you can use it.

When using the preceding endpoints the following additional considerations apply:

- The s3-control endpoints are used with Amazon S3 account-level operations
- The s3-accesspoint endpoints are used only to make requests through Amazon S3 Access Points. For more information, see Working with Amazon S3 Access Points.
- Amazon S3 renamed the US Standard Region to the US East (N. Virginia) Region to be consistent with AWS Regional naming conventions. There is no change to the endpoint, and you do not need to make any changes to your application.

- If you use a Region other than the US East (N. Virginia) endpoint to create a bucket, you must set the LocationConstraint bucket parameter to the same Region. Both the AWS SDK for Java and AWS SDK for .NET use an enumeration for setting location constraints (Region for Java, S3Region for .NET). For more information, see PUT Bucket in the *Amazon Simple Storage Service API Reference*.

Amazon S3 website endpoints

When you configure your bucket as a website, the website is available using the following Region-specific website endpoints. Note that the website endpoints are different than the REST API endpoints listed in the preceding table. For more information about hosting websites on Amazon S3, see Hosting Websites on Amazon S3 in the *Amazon Simple Storage Service User Guide*. You need the hosted zone IDs when using the Amazon Route 53 API to add an alias record to your hosted zone.

> **Note**
> Amazon S3 website endpoints do not support HTTPS or Amazon S3 Access Points. If you want to use HTTPS, you can use Amazon CloudFront to serve a static website hosted on Amazon S3. For more information, see Configuring a static website using a custom domain registered with Route 53 and Improving the performance of your website using CloudFront in the *Amazon S3 User Guide*.

Region Name	Website Endpoint	Route 53 Hosted Zone ID
US East (Ohio)	s3-website.us-east-2.amazonaws.com	Z2O1EMRO9K5GLX
US East (N. Virginia)	s3-website-us-east-1.amazonaws.com	Z3AQBSTGFYJSTF
US West (N. California)	s3-website-us-west-1.amazonaws.com	Z2F56UZL2M1ACD
US West (Oregon)	s3-website-us-west-2.amazonaws.com	Z3BJ6K6RIION7M
Africa (Cape Town)	s3-website.af-south-1.amazonaws.com	Z83WF9RJE8B12
Asia Pacific (Hong Kong)	s3-website.ap-east-1.amazonaws.com	ZNB98KWMFR0R6
Asia Pacific (Mumbai)	s3-website.ap-south-1.amazonaws.com	Z11RGJOFQNVJUP
Asia Pacific (Osaka)	s3-website.ap-northeast-3.amazonaws.com	Z2YQB5RD63NC85
Asia Pacific (Seoul)	s3-website.ap-northeast-2.amazonaws.com	Z3W03O7B5YMIYP
Asia Pacific (Singapore)	s3-website-ap-southeast-1.amazonaws.com	Z3O0J2DXBE1FTB
Asia Pacific (Sydney)	s3-website-ap-southeast-2.amazonaws.com	Z1WCIGYICN2BYD
Asia Pacific (Tokyo)	s3-website-ap-northeast-1.amazonaws.com	Z2M4EHUR26P7ZW
Canada (Central)	s3-website.ca-central-1.amazonaws.com	Z1QDHH18159H29

Region Name	Website Endpoint	Route 53 Hosted Zone ID
China (Ningxia)	s3-website.cn-northwest-1.amazonaws.com.cn	Z282HJ1KT0DH03
Europe (Frankfurt)	s3-website.eu-central-1.amazonaws.com	Z21DNDUVLTQW6Q
Europe (Ireland)	s3-website-eu-west-1.amazonaws.com	Z1BKCTXD74EZPE
Europe (London)	s3-website.eu-west-2.amazonaws.com	Z3GKZC51ZF0DB4
Europe (Milan)	s3-website.eu-south-1.amazonaws.com	Z30OZKI7KPW7MI
Europe (Paris)	s3-website.eu-west-3.amazonaws.com	Z3R1K369G5AVDG
Europe (Stockholm)	s3-website.eu-north-1.amazonaws.com	Z3BAZG2TWCNX0D
Asia Pacific (Jakarta)	s3-website.ap-southeast-3.amazonaws.com	Z01613992JD795ZI93075
Middle East(Bahrain)	s3-website.me-south-1.amazonaws.com	Z1MPMWCPA7YB62
Middle East (UAE)	s3-website.me-central-1.amazonaws.com	Z06143092I8HRXZRUZROF
South America (São Paulo)	s3-website-sa-east-1.amazonaws.com	Z7KQH4QJS55SO
AWS GovCloud (US-East)	s3-website.us-gov-east-1.amazonaws.com	Z2NIFVYYW2VKV1
AWS GovCloud (US-West)	s3-website-us-gov-west-1.amazonaws.com	Z31GFT0UA1I2HV

Service quotas

Amazon S3

Name	Default	Adjust	Description
Access Points	Each supported Region: 10,000	Yes	The number of Amazon S3 Access Points that you can create per region in an account
Bucket policy	Each supported Region: 20 Kilobytes	No	The maximum size (in KB) of a bucket policy for an Amazon S3 bucket
Bucket tags	Each supported Region: 50	No	The maximum number of tags you can assign to an Amazon S3 bucket

Name	Default	Adjust	Description
Buckets	Each supported Region: 100	Yes	The number of Amazon S3 buckets that you can create in an account
CRR rules	Each supported Region: 1,000	No	The maximum number of rules you can specify in an Amazon S3 Cross Region Replication (CRR) configuration
Event notifications	Each supported Region: 100	No	The maximum number of event notifications per Amazon S3 bucket
Lifecycle rules	Each supported Region: 1,000	No	The maximum number of rules you can specify for an Amazon S3 lifecycle configuration
Maximum part size	Each supported Region: 5 Gigabytes	No	The maximum size (in GB) of an Amazon S3 object part in a Multipart upload using the API
Minimum part size	Each supported Region: 5 Megabytes	No	The minimum size (in MB) of an Amazon S3 object part in a Multipart upload using the API. The last part uploaded can be less than the stated minimum
Multi-Region Access Point Regions	Each supported Region: 20	No	Maximum Regions per Multi-Region Access Point.
Multi-Region Access Points	Each supported Region: 100	No	Multi-Region Access Points per Account.
Object size	Each supported Region: 5 Terabytes	No	The maximum size (in TB) of an Amazon S3 object
Object size (Console upload)	Each supported Region: 160 Gigabytes	No	The maximum size (in GB) of an Amazon S3 object that you can upload using the console
Object tags	Each supported Region: 10	No	The maximum number of tags you can assign to an Amazon S3 object
Parts	Each supported Region: 10,000	No	The maximum number of Amazon S3 object parts per Multipart upload

Name	Default	Adjust	Description
Replication transfer rate	Each supported Region: 1 Gigabits per second	Yes	The maximum Replication Time Control transfer rate that you can replicate from the source region in this account.
S3 Glacier: Number of random restore requests.	Each supported Region: 35	No	The number of random restore requests from S3 Glacier storage class per PiB stored per day.
S3 Glacier: Provisioned capacity units	Each supported Region: 2	No	The maximum number of S3 Glacier storage class provisioned capacity units available to purchase per account.

Amazon S3 on Outposts

Name	Default	Adjust	Description
Access Points	Each supported Region: 10	No	The maximum number of Amazon S3 on Outposts access points that you can create per S3 on Outposts bucket in the AWS account in the current Outpost.
Buckets	Each supported Region: 100	No	The maximum number of Amazon S3 on Outposts buckets that you can create per AWS account in the current Outpost.

Amazon Simple Workflow Service endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	swf.us-east-2.amazonaws.com swf-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	swf.us-east-1.amazonaws.com swf-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	swf.us-west-1.amazonaws.com swf-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	swf.us-west-2.amazonaws.com swf-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	swf.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	swf.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	swf.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	swf.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	swf.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	swf.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	swf.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	swf.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	swf.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	swf.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	swf.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	swf.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	swf.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	swf.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	swf.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	swf.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	swf.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	swf.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	swf.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	swf.us-gov-east-1.amazonaws.com swf.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	swf.us-gov-west-1.amazonaws.com swf.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
CountClosedWorkflowExecutions throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of CountClosedWorkflowExecutions calls you can burst without being throttled.
CountClosedWorkflowExecutions throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of CountClosedWorkflowExecutions calls you can make per

Name	Default	Adjust	Description
			second without being throttled.
CountOpenWorkflowExecutions throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of CountOpenWorkflowExecutions calls you can burst without being throttled.
CountOpenWorkflowExecutions throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of CountOpenWorkflowExecutions calls you can make per second without being throttled.
CountPendingActivityTasks throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of CountPendingActivityTasks calls you can burst without being throttled.
CountPendingActivityTasks throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of CountPendingActivityTasks calls you can make per second without being throttled.
CountPendingDecisionTasks throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of CountPendingDecisionTasks calls you can burst without being throttled.
CountPendingDecisionTasks throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of CountPendingDecisionTasks calls you can make per second without being throttled.
DeprecateActivityType throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of DeprecateActivityType calls you can burst without being throttled.
DeprecateActivityType throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DeprecateActivityType calls you can make per second without being throttled.
DeprecateDomain throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of DeprecateDomain calls you can burst without being throttled.
DeprecateDomain throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DeprecateDomain calls you can make per second without being throttled.

Name	Default	Adjust	Description
DeprecateWorkflowType throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of DeprecateWorkflowType calls you can burst without being throttled.
DeprecateWorkflowType throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DeprecateWorkflowType calls you can make per second without being throttled.
DescribeActivityType throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of DescribeActivityType calls you can burst without being throttled.
DescribeActivityType throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DescribeActivityType calls you can make per second without being throttled.
DescribeDomain throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of DescribeDomain calls you can burst without being throttled.
DescribeDomain throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DescribeDomain calls you can make per second without being throttled.
DescribeWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of DescribeWorkflowExecution calls you can burst without being throttled.
DescribeWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DescribeWorkflowExecution calls you can make per second without being throttled.
DescribeWorkflowType throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of DescribeWorkflowType calls you can burst without being throttled.
DescribeWorkflowType throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of DescribeWorkflowType calls you can make per second without being throttled.
Events in Workflow execution history	Each supported Region: 25,000	No	The maximum number of events for a given workflow execution.

Name	Default	Adjust	Description
GetWorkflowExecutionHistory throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of GetWorkflowExecutionHistory calls you can burst without being throttled.
GetWorkflowExecutionHistory throttle refill limit in transactions per second	Each supported Region: 60	Yes	The maximum number of GetWorkflowExecutionHistory calls you can make per second without being throttled.
Input / result data size	Each supported Region: 32,768	No	This limit affects activity or workflow execution result data, input data when scheduling activity tasks or workflow executions, and input sent with a workflow execution signal.
ListActivityTypes throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of ListActivityTypes calls you can burst without being throttled.
ListActivityTypes throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of ListActivityTypes calls you can make per second without being throttled.
ListClosedWorkflowExecutions throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of ListClosedWorkflowExecutions calls you can burst without being throttled.
ListClosedWorkflowExecutions throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of ListClosedWorkflowExecutions calls you can make per second without being throttled.
ListDomains throttle burst limit in transactions per second	Each supported Region: 100	Yes	The maximum number of ListDomains calls you can burst without being throttled.
ListDomains throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of ListDomains calls you can make per second without being throttled.
ListOpenWorkflowExecutions throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of ListOpenWorkflowExecutions calls you can burst without being throttled.

Name	Default	Adjust	Description
ListOpenWorkflowExecutions throttle refill limit in transactions per second	Each supported Region: 48	Yes	The maximum number of ListOpenWorkflowExecutions calls you can make per second without being throttled.
ListWorkflowTypes throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of ListWorkflowTypes calls you can burst without being throttled.
ListWorkflowTypes throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of ListWorkflowTypes calls you can make per second without being throttled.
Maximum workflow and activity types per domain	Each supported Region: 10,000	Yes	The maximum number of registered workflow and activity types per domain for this account in the current region.
Open activity tasks per workflow execution	Each supported Region: 1,000	No	This limit includes both activity tasks that have been scheduled and those being processed by workers.
Open child workflow executions	Each supported Region: 1,000	No	The maximum number of open child workflow executions per workflow execution.
Open timers per workflow execution	Each supported Region: 1,000	No	The maximum number of concurrently open timers per workflow execution.
Open workflow executions per domain	Each supported Region: 100,000	Yes	The maximum number of open workflow executions per domain for this account in the current region.
PollForActivityTask throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of PollForActivityTask calls you can burst without being throttled.
PollForActivityTask throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of PollForActivityTask calls you can make per second without being throttled.
PollForDecisionTask throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of PollForDecisionTask calls you can burst without being throttled.

Name	Default	Adjust	Description
PollForDecisionTask throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of PollForDecisionTask calls you can make per second without being throttled.
Pollers per task list	Each supported Region: 1,000	No	You can have a maximum of 1,000 pollers which simultaneously poll a particular task list.
RecordActivityTaskHeartbeat throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RecordActivityTaskHeartbeat calls you can burst without being throttled.
RecordActivityTaskHeartbeat throttle refill limit in transactions per second	Each supported Region: 160	Yes	The maximum number of RecordActivityTaskHeartbeat calls you can make per second without being throttled.
RegisterActivityType throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RegisterActivityType calls you can burst without being throttled.
RegisterActivityType throttle refill limit in transactions per second	Each supported Region: 60	Yes	The maximum number of RegisterActivityType calls you can make per second without being throttled.
RegisterDomain throttle burst limit in transactions per second	Each supported Region: 100	Yes	The maximum number of RegisterDomain calls you can burst without being throttled.
RegisterDomain throttle refill limit in transactions per second	Each supported Region: 6	Yes	The maximum number of RegisterDomain calls you can make per second without being throttled.
RegisterWorkflowType throttle burst limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RegisterWorkflowType calls you can burst without being throttled.
RegisterWorkflowType throttle refill limit in transactions per second	Each supported Region: 60	Yes	The maximum number of RegisterWorkflowType calls you can make per second without being throttled.
Registered domains	Each supported Region: 100	Yes	The maximum number of registered domains for this account in the current region.

Name	Default	Adjust	Description
Request size	Each supported Region: 1 Megabytes	No	The total data size in megabytes per Simple Workflow API request, including the request header and all other associated request data.
RequestCancelExternalWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 1,200	Yes	The maximum number of RequestCancelExternalWorkflowExecution calls you can burst without being throttled.
RequestCancelExternalWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 120	Yes	The maximum number of RequestCancelExternalWorkflowExecution calls you can make per second without being throttled.
RequestCancelWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RequestCancelWorkflowExecution calls you can burst without being throttled.
RequestCancelWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 30	Yes	The maximum number of RequestCancelWorkflowExecution calls you can make per second without being throttled.
RespondActivityTaskCanceled throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RespondActivityTaskCanceled calls you can burst without being throttled.
RespondActivityTaskCanceled throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RespondActivityTaskCanceled calls you can make per second without being throttled.
RespondActivityTaskCompleted throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RespondActivityTaskCompleted calls you can burst without being throttled.
RespondActivityTaskCompleted throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RespondActivityTaskCompleted calls you can make per second without being throttled.
RespondActivityTaskFailed throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RespondActivityTaskFailed calls you can burst without being throttled.

Name	Default	Adjust	Description
RespondActivityTaskFailed throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RespondActivityTaskFailed calls you can make per second without being throttled.
RespondDecisionTaskCompleted throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of RespondDecisionTaskCompleted calls you can burst without being throttled.
RespondDecisionTaskCompleted throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of RespondDecisionTaskCompleted calls you can make per second without being throttled.
SWF task in queue in year	Each supported Region: 1	No	The maximum time for a task to stay in queued state (constrained by workflow execution time limit).
ScheduleActivityTask throttle burst limit in transactions per second	Each supported Region: 1,000	Yes	The maximum number of ScheduleActivityTask calls you can burst without being throttled.
ScheduleActivityTask throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of ScheduleActivityTask calls you can make per second without being throttled.
SignalExternalWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 1,200	Yes	The maximum number of SignalExternalWorkflowExecution calls you can burst without being throttled.
SignalExternalWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 120	Yes	The maximum number of SignalExternalWorkflowExecution calls you can make per second without being throttled.
SignalWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of SignalWorkflowExecution calls you can burst without being throttled.
SignalWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 30	Yes	The maximum number of SignalWorkflowExecution calls you can make per second without being throttled.

Name	Default	Adjust	Description
StartChildWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 500	Yes	The maximum number of StartChildWorkflowExecution calls you can burst without being throttled.
StartChildWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 12	Yes	The maximum number of StartChildWorkflowExecution calls you can make per second without being throttled.
StartTimer throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of StartTimer calls you can burst without being throttled.
StartTimer throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of StartTimer calls you can make per second without being throttled.
StartWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of StartWorkflowExecution calls you can burst without being throttled.
StartWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 200	Yes	The maximum number of StartWorkflowExecution calls you can make per second without being throttled.
Task execution time in year	Each supported Region: 1	No	The maximum time for a task to stay in execution state (constrained by workflow execution time limit).
TerminateWorkflowExecution throttle burst limit in transactions per second	Each supported Region: 2,000	Yes	The maximum number of TerminateWorkflowExecution calls you can burst without being throttled.
TerminateWorkflowExecution throttle refill limit in transactions per second	Each supported Region: 60	Yes	The maximum number of TerminateWorkflowExecution calls you can make per second without being throttled.
Workflow execution idle time limit in years	Each supported Region: 1	Yes	The maximum time in years a workflow execution can be idle for (constrained by workflow execution time limit).

Name	Default	Adjust	Description
Workflow execution time in years	Each supported Region: 1	No	The maximum time in years a workflow execution can run for.
Workflow retention time in days	Each supported Region: 90	Yes	After this time, the workflow history can no longer be retrieved or viewed. There is no further limit to the number of closed workflow executions that are retained by Amazon SWF.

For more information, see Amazon SWF Quotas in the *Amazon Simple Workflow Service Developer Guide*.

Amazon SimpleDB endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	sdb.amazonaws.com	HTTP and HTTPS	
US West (N. California)	us-west-1	sdb.us-west-1.amazonaws.com	HTTP and HTTPS	
US West (Oregon)	us-west-2	sdb.us-west-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sdb.ap-southeast-1.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sdb.ap-southeast-2.amazonaws.com	HTTP and HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sdb.ap-northeast-1.amazonaws.com	HTTP and HTTPS	
Europe (Ireland)	eu-west-1	sdb.eu-west-1.amazonaws.com	HTTP and HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	sdb.sa-east-1.amazonaws.com	HTTP and HTTPS	

Service quotas

Resource	Default
Domains	250

For more information, see Amazon SimpleDB Quotas in the *Amazon SimpleDB Developer Guide*.

AWS IAM Identity Center (successor to AWS Single Sign-On) endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

IAM Identity Center

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sso.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	sso.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	sso.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	sso.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sso.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Osaka)	ap-northeast-3	sso.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	sso.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sso.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sso.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sso.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	sso.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sso.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	sso.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	sso.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	sso.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	sso.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	sso.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	sso.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	sso.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	sso.us-gov-east-1.amazonaws.com sso.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	sso.us-gov-west-1.amazonaws.com sso.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Identity Store

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	identitystore.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	identitystore.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	identitystore.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	identitystore.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	identitystore.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	identitystore.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	identitystore.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	identitystore.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	identitystore.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	identitystore.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	identitystore.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	identitystore.eu-west-2.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	identitystore.eu-north-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	identitystore.us-gov-east-1.amazonaws.com identitystore.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	identitystore.us-gov-west-1.amazonaws.com identitystore.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
File size of service provider SAML certificates (in PEM format)	Each supported Region: 2 Kilobytes	No	The maximum file size (in KB) of service provider SAML certificates (in PEM format).
Number of groups supported in IAM Identity Center	Each supported Region: 10,000	No	The maximum number of groups supported in IAM Identity Center.
Number of permission sets allowed in IAM Identity Center	Each supported Region: 500	Yes	The maximum number of permission sets allowed in IAM Identity Center.
Number of permission sets allowed per AWS account	Each supported Region: 50	Yes	The maximum number of permission sets allowed per AWS account.
Number of unique directory groups that can be assigned	Each supported Region: 2,500	Yes	The maximum number of unique directory groups that can be assigned for using accounts and applications. Users can belong to many directory groups, and a directory may contain many groups.
Number of unique groups that can be used to evaluate the permissions for a user	Each supported Region: 500	No	The maximum number of unique groups that can be used to evaluate the permissions for a user. Before displaying the user's available AWS accounts and application icons in the AWS access portal, IAM Identity Center evaluates the user's effective permissions by evaluating their group memberships.
Number of users supported in IAM Identity Center	Each supported Region: 50,000	No	The maximum number of users supported in IAM Identity Center.
Total number of AWS accounts or applications that can be configured	Each supported Region: 500	Yes	The maximum total number of AWS accounts or applications (total combined) that can be configured. For example, you might configure 275 accounts and 225 applications, resulting in a

Name	Default	Adjust	Description
			total of 500 accounts and applications.

For more information, see AWS IAM Identity Center (successor to AWS Single Sign-On) quotas in the *AWS IAM Identity Center (successor to AWS Single Sign-On) User Guide*.

AWS Snow Family endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Snow Family devices are available in the following AWS Regions.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	snowball.us-east-2.amazonaws.com snowball-fips.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	snowball.us-east-1.amazonaws.com snowball-fips.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	snowball.us-west-1.amazonaws.com snowball-fips.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	snowball.us-west-2.amazonaws.com snowball-fips.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	snowball.af-south-1.amazonaws.com		
Asia Pacific (Hong Kong)	ap-east-1	snowball.ap-east-1.amazonaws.com		
Asia Pacific (Jakarta)	ap-southeast-3	snowball.ap-southeast-3.amazonaws.com		
Asia Pacific (Mumbai)	ap-south-1	snowball.ap-south-1.amazonaws.com snowball-fips.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Osaka)	ap-northeast-3	snowball.ap-northeast-3.amazonaws.com snowball-fips.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	snowball.ap-northeast-2.amazonaws.com snowball-fips.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	snowball.ap-southeast-1.amazonaws.com snowball-fips.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	snowball.ap-southeast-2.amazonaws.com snowball-fips.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	snowball.ap-northeast-1.amazonaws.com snowball-fips.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	snowball.ca-central-1.amazonaws.com snowball-fips.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	snowball.eu-central-1.amazonaws.com snowball-fips.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	snowball.eu-west-1.amazonaws.com snowball-fips.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	snowball.eu-west-2.amazonaws.com snowball-fips.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	snowball.eu-south-1.amazonaws.com		
Europe (Paris)	eu-west-3	snowball.eu-west-3.amazonaws.com snowball-fips.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	snowball.eu-north-1.amazonaws.com		
South America (São Paulo)	sa-east-1	snowball.sa-east-1.amazonaws.com snowball-fips.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	snowball.us-gov-east-1.amazonaws.com snowball-fips.us-gov-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	snowball.us-gov-west-1.amazonaws.com snowball-fips.us-gov-west-1.amazonaws.com	HTTPS	

AWS Snowcone is available only in the following AWS Regions:

- US East (N. Virginia)
- US East (Ohio)
- US West (N. California)
- US West (Oregon)
- Canada (Central)
- South America (São Paulo)
- Europe (Ireland)
- Europe (Frankfurt)
- Europe (London)
- Europe (Paris)
- Asia Pacific (Mumbai)
- Asia Pacific (Sydney)
- Asia Pacific (Singapore)
- Asia Pacific (Tokyo)

Service quotas

Name	Default	Adjust	Description
Snowball Edge devices	Each supported Region: 1	Yes	The maximum number of Snowball Edge devices.
Snowcone devices	Each supported Region: 1	Yes	The maximum number of Snowcone devices.

AWS Step Functions endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	states.us-east-2.amazonaws.com	HTTPS	
		sync-states-fips.us-east-2.amazonaws.com	HTTPS	
		states-fips.us-east-2.amazonaws.com	HTTPS	
		sync-states.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	states.us-east-1.amazonaws.com	HTTPS	
		sync-states-fips.us-east-1.amazonaws.com	HTTPS	
		states-fips.us-east-1.amazonaws.com	HTTPS	
		sync-states.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	states.us-west-1.amazonaws.com	HTTPS	
		sync-states-fips.us-west-1.amazonaws.com	HTTPS	
		states-fips.us-west-1.amazonaws.com	HTTPS	
		sync-states.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	states.us-west-2.amazonaws.com	HTTPS	
		sync-states-fips.us-west-2.amazonaws.com	HTTPS	
		states-fips.us-west-2.amazonaws.com	HTTPS	
		sync-states.us-west-2.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	states.af-south-1.amazonaws.com	HTTPS	
		sync-states.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	states.ap-east-1.amazonaws.com	HTTPS	
		sync-states.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	states.ap-southeast-3.amazonaws.com	HTTPS	
		sync-states.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	states.ap-south-1.amazonaws.com	HTTPS	
		sync-states.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	states.ap-northeast-3.amazonaws.com	HTTPS	
		sync-states.ap-northeast-3.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	states.ap-northeast-2.amazonaws.com sync-states.ap-northeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	states.ap-southeast-1.amazonaws.com sync-states.ap-southeast-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	states.ap-southeast-2.amazonaws.com sync-states.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	states.ap-northeast-1.amazonaws.com sync-states.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	states.ca-central-1.amazonaws.com sync-states.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	states.eu-central-1.amazonaws.com sync-states.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	states.eu-west-1.amazonaws.com sync-states.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	states.eu-west-2.amazonaws.com sync-states.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	states.eu-south-1.amazonaws.com sync-states.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	states.eu-west-3.amazonaws.com sync-states.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	states.eu-north-1.amazonaws.com sync-states.eu-north-1.amazonaws.com	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	states.me-south-1.amazonaws.com sync-states.me-south-1.amazonaws.com	HTTPS HTTPS	
Middle East (UAE)	me-central-1	states.me-central-1.amazonaws.com sync-states.me-central-1.amazonaws.com	HTTPS HTTPS	
South America (São Paulo)	sa-east-1	states.sa-east-1.amazonaws.com sync-states.sa-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	states.us-gov-east-1.amazonaws.com sync-states-fips.us-gov-east-1.amazonaws.com states-fips.us-gov-east-1.amazonaws.com sync-states.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	states.us-gov-west-1.amazonaws.com sync-states.us-gov-west-1.amazonaws.com states.us-gov-west-1.amazonaws.com sync-states.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Activity pollers per ARN	Each supported Region: 1,000	No	The number of polls that can be waiting per activity resource ARN.
CreateActivity throttle token bucket size	Each supported Region: 100	Yes	The maximum number of CreateActivity calls you can make at one time.
CreateActivity throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of CreateActivity calls.
CreateStateMachine throttle token bucket size	Each supported Region: 100	Yes	The maximum number of CreateStateMachine calls you can make at one time.
CreateStateMachine throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of CreateActivity calls.
DeleteActivity throttle token bucket size	Each supported Region: 100	Yes	The maximum number of DeleteActivity calls you can make at one time.
DeleteActivity throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of DeleteActivity calls.
DeleteStateMachine throttle token bucket size	Each supported Region: 100	Yes	The maximum number of DeleteStateMachine calls you can make at one time.

Name	Default	Adjust	Description
DeleteStateMachine throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of DeleteStateMachine calls.
DescribeActivity throttle token bucket size	Each supported Region: 200	Yes	The maximum number of DescribeActivity calls you can make at one time.
DescribeActivity throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of DescribeActivity calls.
DescribeExecution throttle token bucket size	us-east-1: 300 us-west-2: 300 eu-west-1: 300 Each of the other supported Regions: 250	Yes	The maximum number of DescribeExecution calls you can make at one time.
DescribeExecution throttle token refill rate per second	us-east-1: 15 us-west-2: 15 eu-west-1: 15 Each of the other supported Regions: 10	Yes	The token refill rate per second of DescribeExecution calls.
DescribeStateMachine throttle token bucket size	Each supported Region: 200	Yes	The maximum number of DescribeStateMachine calls you can make at one time.
DescribeStateMachine throttle token refill rate per second	Each supported Region: 20	Yes	The token refill rate per second of DescribeStateMachine calls.
DescribeStateMachineForExecution throttle token bucket size	Each supported Region: 200	Yes	The maximum number of DescribeStateMachineForExecution calls you can make at one time.
DescribeStateMachineForExecution throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of DescribeStateMachineForExecution calls.
Events in execution history size	Each supported Region: 25,000	No	The maximum number of events for a given execution
Execution history retention time in days	Each supported Region: 90	No	The amount of time in days the execution information is stored after completion.

Name	Default	Adjust	Description
Execution idle time in years	Each supported Region: 1	No	The amount of time in years an execution can be idle for.
Execution time in years	Each supported Region: 1	No	The maximum time in years an execution can run for.
Executions displayed in Step Functions console	Each supported Region: 1,000	No	The maximum amount of executions displayed in the Step Functions dashboard.
GetActivityTask throttle token bucket size	us-east-1: 3,000 us-west-2: 3,000 eu-west-1: 3,000 Each of the other supported Regions: 1,500	Yes	The maximum number of GetActivityTask calls you can make at one time.
GetActivityTask throttle token refill rate per second	us-east-1: 500 us-west-2: 500 eu-west-1: 500 Each of the other supported Regions: 300	Yes	The token refill rate per second of GetActivityTask calls.
GetExecutionHistory throttle token bucket size	Each supported Region: 400	Yes	The maximum number of GetExecutionHistory calls you can make at one time.
GetExecutionHistory throttle token refill rate per second	Each supported Region: 20	Yes	The token refill rate per second of GetExecutionHistory calls.
Input or result data size in task state or execution	Each supported Region: 262,144 Bytes	No	The maximum input or result data size in bytes as a UTF-8 encoded string for a task, state, or execution.
ListActivities throttle token bucket size	Each supported Region: 100	Yes	The maximum number of ListActivities calls you can make at one time.
ListActivities throttle token refill rate per second	us-east-1: 10 us-west-2: 10 eu-west-1: 10 Each of the other supported Regions: 5	Yes	The token refill rate per second of ListActivities calls.

Name	Default	Adjust	Description
ListExecutions throttle token bucket size	us-east-1: 200 us-west-2: 200 eu-west-1: 200 Each of the other supported Regions: 100	Yes	The maximum number of ListExecutions calls you can make at one time.
ListExecutions throttle token refill rate per second	us-east-1: 5 us-west-2: 5 eu-west-1: 5 Each of the other supported Regions: 2	Yes	The token refill rate per second of ListExecutions calls.
ListStateMachines throttle token bucket size	Each supported Region: 100	Yes	The maximum number of ListStateMachines calls you can make at one time.
ListStateMachines throttle token refill rate per second	Each supported Region: 5	Yes	The token refill rate per second of ListStateMachines calls.
ListTagsForResource throttle token bucket size	Each supported Region: 100	Yes	The maximum number of ListTagsForResource calls you can make at one time.
ListTagsForResource throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of ListTagsForResource calls.
Open executions	Each supported Region: 1,000,000	Yes	The maximum number of open executions per account in the current region.
Registered activities	Each supported Region: 10,000	Yes	The maximum number of activities for this account in the current region.
Registered state machines	Each supported Region: 10,000	Yes	The maximum number of state machines for this account in the current region.
Resource name length	Each supported Region: 80	No	The maximum character length of state machine, execution, and activity resource types

Name	Default	Adjust	Description
SendTaskFailure throttle token bucket size	us-east-1: 3,000 us-west-2: 3,000 eu-west-1: 3,000 Each of the other supported Regions: 1,500	Yes	The maximum number of SendTaskFailure calls you can make at one time.
SendTaskFailure throttle token refill rate per second	us-east-1: 500 us-west-2: 500 eu-west-1: 500 Each of the other supported Regions: 300	Yes	The token refill rate per second of SendTaskFailure calls.
SendTaskHeartbeat throttle token bucket size	us-east-1: 3,000 us-west-2: 3,000 eu-west-1: 3,000 Each of the other supported Regions: 1,500	Yes	The maximum number of SendTaskHeartbeat calls you can make at one time.
SendTaskHeartbeat throttle token refill rate per second	us-east-1: 500 us-west-2: 500 eu-west-1: 500 Each of the other supported Regions: 300	Yes	The token refill rate per second of SendTaskHeartbeat calls.
SendTaskSuccess throttle token bucket size	us-east-1: 3,000 us-west-2: 3,000 eu-west-1: 3,000 Each of the other supported Regions: 1,500	Yes	The maximum number of SendTaskSuccess calls you can make at one time.
SendTaskSuccess throttle token refill rate per second	us-east-1: 500 us-west-2: 500 eu-west-1: 500 Each of the other supported Regions: 300	Yes	The token refill rate per second of SendTaskSuccess calls.

Name	Default	Adjust	Description
Size per API request	Each supported Region: 1 Megabytes	No	The total data size in megabytes per Step Functions API request, including the request header and all other associated request data.
StartExecution throttle token bucket size	us-east-1: 1,300 us-west-2: 1,300 eu-west-1: 1,300 Each of the other supported Regions: 800	Yes	The maximum number of StartExecution calls you can make at one time.
StartExecution throttle token refill rate per second	us-east-1: 300 us-west-2: 300 eu-west-1: 300 Each of the other supported Regions: 150	Yes	The token refill rate per second of StartExecution calls.
StateTransition throttle token bucket size	us-east-1: 5,000 us-west-2: 5,000 eu-west-1: 5,000 Each of the other supported Regions: 800	Yes	The maximum number of StateTransition calls you can make at one time.
StateTransition throttle token refill rate per second	us-east-1: 1,500 us-west-2: 1,500 eu-west-1: 1,500 Each of the other supported Regions: 500	Yes	The token refill rate per second of StateTransition calls.
Step Functions task in queue in year	Each supported Region: 1	No	The maximum time in years that Step Functions keeps a task in the queue.

Name	Default	Adjust	Description
StopExecution throttle token bucket size	us-east-1: 1,000 us-west-2: 1,000 eu-west-1: 1,000 Each of the other supported Regions: 500	Yes	The maximum number of StopExecution calls you can make at one time.
StopExecution throttle token refill rate per second	us-east-1: 200 us-west-2: 200 eu-west-1: 200 Each of the other supported Regions: 25	Yes	The token refill rate per second of StopExecution calls.
TagResource throttle token bucket size	Each supported Region: 200	Yes	The maximum number of TagResource calls you can make at one time.
TagResource throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of TagResource calls.
Task execution time in year	Each supported Region: 1	No	The maximum lifetime in years that a task can execute.
UntagResource throttle token bucket size	Each supported Region: 200	Yes	The maximum number of UntagResource calls you can make at one time.
UntagResource throttle token refill rate per second	Each supported Region: 1	Yes	The token refill rate per second of UntagResource calls.
UpdateStateMachine throttle token bucket size	Each supported Region: 100	Yes	The maximum number of UpdateStateMachine calls you can make at one time.
UpdateStateMachine throttle token refill rate per second	Each supported Region: 1	No	The token refill rate per second of UpdateStateMachine calls.

For more information, see Quotas in the *AWS Step Functions Developer Guide*.

AWS Storage Gateway endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also

referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Storage Gateway

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	storagegateway.us-east-2.amazonaws.com storagegateway-fips.us-east-2.amazonaws.com storagegateway-fips.us-east-2.amazonaws.com	HTTPS HTTPS HTTPS	
US East (N. Virginia)	us-east-1	storagegateway.us-east-1.amazonaws.com storagegateway-fips.us-east-1.amazonaws.com storagegateway-fips.us-east-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	storagegateway.us-west-1.amazonaws.com storagegateway-fips.us-west-1.amazonaws.com storagegateway-fips.us-west-1.amazonaws.com	HTTPS HTTPS HTTPS	
US West (Oregon)	us-west-2	storagegateway.us-west-2.amazonaws.com storagegateway-fips.us-west-2.amazonaws.com storagegateway-fips.us-west-2.amazonaws.com	HTTPS HTTPS HTTPS	
Africa (Cape Town)	af-south-1	storagegateway.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	storagegateway.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	storagegateway.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	storagegateway.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	storagegateway.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	storagegateway.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Singapore)	ap-southeast-1	storagegateway.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	storagegateway.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	storagegateway.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	storagegateway.ca-central-1.amazonaws.com storagegateway-fips.ca-central-1.amazonaws.com storagegateway-fips.ca-central-1.amazonaws.com	HTTPS HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	storagegateway.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	storagegateway.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	storagegateway.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	storagegateway.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	storagegateway.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	storagegateway.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	storagegateway.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	storagegateway.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	storagegateway.us-gov-east-1.amazonaws.com storagegateway-fips.us-gov-east-1.amazonaws.com storagegateway-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-West)	us-gov-west-1	storagegateway.us-gov-west-1.amazonaws.com storagegateway-fips.us-gov-west-1.amazonaws.com storagegateway-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS HTTPS	

For AWS Regions that the hardware appliance is supported in, see Storage Gateway hardware appliance regions (p. 916).

Storage Gateway hardware appliance regions

The Storage Gateway hardware appliance is available for shipping worldwide where it is legally allowed and permitted for exporting by the US government.

Storage Gateway hardware appliance is supported in the following AWS Regions.

- US East (Ohio)
- US East (N. Virginia)
- US West (N. California)
- US West (Oregon)
- Asia Pacific (Mumbai)
- Asia Pacific (Seoul)
- Asia Pacific (Singapore)
- Asia Pacific (Sydney)
- Asia Pacific (Tokyo)
- Canada (Central)
- Europe (Frankfurt)
- Europe (Ireland)
- Europe (London)
- Europe (Paris)
- Europe (Stockholm)
- South America (São Paulo)

Service quotas

Name	Default	Adjust	Description
Cached volume gateway Cache Maximum in TiB	Each supported Region: 16	No	Maximum cache size for Cached Volume Gateway
Cached volume gateway Cache Minimum in GiB	Each supported Region: 150	No	Minimum cache size for Cached Volume Gateway
Cached volume gateway Upload Buffer Maximum in TiB	Each supported Region: 2	No	Maximum upload buffer size for Cached Volume Gateway

Name	Default	Adjust	Description
Cached volume gateway Upload Buffer Minimum in GiB	Each supported Region: 150	No	Minimum upload buffer size for Cached Volume Gateway
Cached volume size in TiB	Each supported Region: 32	No	Maximum size of a cached volume
Cached volumes per gateway	Each supported Region: 32	No	Maximum number of cached volumes per gateway
File gateway Cache Maximum in TiB	Each supported Region: 16	No	Maximum cache size for File Gateway
File gateway Cache Minimum in GiB	Each supported Region: 150	No	Minimum cache size for File Gateway
File shares per S3 bucket	Each supported Region: 1	No	Maximum number of file shares per Amazon S3 bucket
File shares per gateway	Each supported Region: 10	No	Maximum number of file shares per gateway
File size	Each supported Region: 5 Terabytes	No	The maximum size of an individual file, which is the maximum size of an individual object in Amazon S3
Max size of a virtual tape in TiB	Each supported Region: 5	No	Maximum size of a virtual tape
Max virtual tapes in a VTL	Each supported Region: 1,500	No	Maximum number of virtual tapes for a virtual tape library (VTL)
Minimum size of a virtual tape in GiB	Each supported Region: 100	No	Minimum size of a virtual tape
Path length	Each supported Region: 1,024 Bytes	No	Maximum path length
Size of all cached volumes per gateway in TiB	Each supported Region: 1,024	No	Total size of all cached volumes for a gateway
Size of all stored volumes per gateway in TiB	Each supported Region: 512	No	Total size of all stored volumes for a gateway
Stored volume gateway Upload Buffer Maximum in TiB	Each supported Region: 2	No	Maximum upload buffer size for Stored Volume Gateway
Stored volume gateway Upload Buffer Minimum in GiB	Each supported Region: 150	No	Minimum upload buffer size for Stored Volume Gateway

Name	Default	Adjust	Description
Stored volume size in TiB	Each supported Region: 16	No	Maximum size of a stored volume
Stored volumes per gateway	Each supported Region: 32	No	Maximum number of stored volumes per gateway
Tape gateway Cache Maximum in TiB	Each supported Region: 16	No	Maximum cache size for Tape Gateway
Tape gateway Cache Minimum in GiB	Each supported Region: 150	No	Minimum cache size for Tape Gateway
Tape gateway Upload Buffer Maximum in TiB	Each supported Region: 2	No	Maximum upload buffer size for Tape Gateway
Tape gateway Upload Buffer Minimum in GiB	Each supported Region: 150	No	Minimum upload buffer size for Tape Gateway
Total size of tapes in a virtual tape library in PiB	Each supported Region: 1	No	Total size of all tapes in a virtual tape library (VTL)

For more information, see Storage Gateway quotas in the *AWS Storage Gateway User Guide*.

Amazon Sumerian endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	sumerian.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	sumerian.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	sumerian.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	sumerian.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	sumerian.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	sumerian.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	sumerian.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	sumerian.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	sumerian.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	sumerian.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	sumerian.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	sumerian.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	sumerian.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	sumerian.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	sumerian.eu-north-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	sumerian.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Model file size	Each supported Region: 50 Megabytes	No	The maximum model file size (in MB).
Projects	Each supported Region: 1,000	No	The maximum number of projects.
Scenes	Each supported Region: 10,000	No	The maximum number of scenes.

Name	Default	Adjust	Description
Script file size	Each supported Region: 1 Megabytes	No	The maximum script file size (in MB).
Sound file size	Each supported Region: 10 Megabytes	No	The maximum sound file size (in MB).
Texture file size	Each supported Region: 20 Megabytes	No	The maximum texture file size (in MB).
ZIP file size	Each supported Region: 200 Megabytes	No	The maximum ZIP file size (in MB).

AWS Support endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	support.us-east-1.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	support.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	support.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	support.us-east-1.amazonaws.com	HTTPS	
Africa (Cape Town)	af-south-1	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	support.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Mumbai)	ap-south-1	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	support.us-east-1.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	support.us-east-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	support.us-east-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	support.us-east-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	support.us-east-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	support.us-east-1.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	support.us-east-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	support.us-east-1.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	support.us-east-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	support.us-east-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	support.us-east-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	support.us-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
AWS GovCloud (US-East)	us-gov-east-1	support.us-gov-west-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	support.us-gov-west-1.amazonaws.com support.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
AWS Support API operations	Each supported Region: 5	No	The maximum number of AWS Support API operations that you can perform per second.
AWS Trusted Advisor API operations	Each supported Region: 100	No	The maximum number of AWS Trusted Advisor API operations that you can perform per second.
Number of AWS Support cases that you can create	Each supported Region: 10	No	The maximum number of AWS Support cases that you can create per hour.

For more information, see the AWS Support User Guide.

AWS Support App in Slack endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	supportapp.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	supportapp.us-west-2.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	supportapp.eu-west-1.amazonaws.com	HTTPS	

AWS Systems Manager endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ssm.us-east-2.amazonaws.com ssm-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ssm.us-east-1.amazonaws.com ssm-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	ssm.us-west-1.amazonaws.com ssm-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ssm.us-west-2.amazonaws.com ssm-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	ssm.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ssm.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ssm.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ssm.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ssm.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ssm.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ssm.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ssm.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ssm.ap-northeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Canada (Central)	ca-central-1	ssm.ca-central-1.amazonaws.com ssm-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	ssm.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ssm.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ssm.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	ssm.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ssm.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ssm.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	ssm.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	ssm.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ssm.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ssm.us-gov-east-1.amazonaws.com ssm.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ssm.us-gov-west-1.amazonaws.com ssm.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

In addition to the `ssm.*` endpoints, your managed instances must also allow HTTPS (port 443) outbound traffic to the following endpoints. For more information, see Reference: ec2messages, ssmmessages, and Other API Calls in the *AWS Systems Manager User Guide*.

- `ec2messages.*`
- `ssmmessages.*`

For information about AWS AppConfig endpoints and quotas, see AWS AppConfig endpoints and quotas (p. 36).

Service quotas

Capability	Resource	Default
Application Manager	Maximum number of applications in Application Manager	100 When you add an application in Application Manager, Systems Manager automatically creates a resource group to organize all of the resources for that application. The maximum number of applications is based on the underlying quota for AWS Resource Groups.
Application Manager	Maximum number of AWS resources you can assign to an application	For applications based on AWS CloudFormation stacks: 200 For applications based on AWS Resource Groups: Unlimited
Automation	Concurrently running automations	100 Each AWS account can run 100 automations simultaneously. This includes child automations (automations that are started by another automation), and rate control automations. If you attempt to run more automations than this, Systems Manager adds the additional automations to a queue and displays a status of `Pending`.
Automation	Automation queue	1000 If you attempt to run more automations than the concurrent automation limit, subsequent automations are added to a queue. Each AWS account can queue 1,000 automations. When an automation completes (or reaches a terminal state), the first automation in the queue is started.

Capability	Resource	Default
Automation	Concurrently running rate control automations	25 Each AWS account can run 25 rate control automations simultaneously. If you attempt to run more rate control automations than the concurrent rate control automation limit, Systems Manager adds the subsequent rate control automations to a queue and displays a status of `Pending`.
Automation	Rate control automation queue	1000 If you attempt to run more automations than the concurrent rate control automation limit, subsequent automations are added to a queue. Each AWS account can queue 1,000 rate control automations. When an automation completes (or reaches a terminal state), the first automation in the queue is started.
Automation	Number of levels of nested automation	5 A parent-level Automation runbook can start a child-level Automation runbook. This represents one level of nested automation. The child-level Automation runbook can start another Automation runbook, resulting in two levels of nested automation. This can continue up to a maximum of five (5) levels below the top-level parent Automation runbook.
Automation	Number of days an automation execution history is stored in the system	30
Automation	Additional automation executions that can be queued	1,000

Capability	Resource	Default
Automation	Maximum duration an automation execution can run when running in the context of a user	12 hours If you expect an automation to run longer than 12 hours, then you must run the automation by using a service role (or assume role).
Automation	`executeScript` action run time	10 minutes Each `executeScript` action can run up to a maximum duration of 10 minutes.
Automation	`executeScript` action maximum output	Up to 100KB.
Automation	`invokeLambdaFunction` action run time	5 minutes Each `invokeLambdaFunction` action can run up to a maximum duration of five (5) minutes.
Automation	`invokeLambdaFunction` action maximum output	Up to 200KB.
Automation	Number of Automation runbook attachments	5 Each runbook can have up to five (5) attachments.
Automation	Automation runbook attachment size	256 MB Each attachment can be up to 256 MB.
Compliance	Maximum size of any single `AWS:ComplianceItem` object	800 KB
Distributor	Maximum number of attachments in a Distributor package	20
Distributor	Maximum size per attachment in a Distributor package	1 GB
Distributor	Maximum number of files in a Distributor package	1000
Distributor	Maximum number of Distributor packages per AWS account, per Region	500
Distributor	Maximum number of package versions per Distributor package	25
Distributor	Maximum package size in Distributor	20 GB

Capability	Resource	Default
Distributor	Maximum package manifest size in Distributor	64 KB
Explorer	Maximum number of resource data syncs (per AWS account per Region)	5
Fleet Manager	Maximum Remote Desktop session limit	60 minutes
Fleet Manager	Maximum number of Remote Desktop sessions (per AWS account per Region) The maximum number of concurrent Remote Desktop sessions (per AWS account per Region). Service quota increase requests up to 25 are automatically approved. Service quota increases can take up to two and a half hours to take effect.	5
Inventory	Maximum number of resource data syncs (per AWS account per Region)	5
Inventory	Inventory data collected per instance per call	1 MB This maximum adequately supports most inventory collection scenarios. When this quota is reached, no new inventory data is collected for the instance. Inventory data previously collected is stored until the expiration.
Inventory	Inventory data collected per instance per day	5 MB When this quota is reached, no new inventory data is collected for the instance. Inventory data previously collected is stored until the expiration.
Inventory	Custom inventory types	20 You can add up to 20 custom inventory types.
Inventory	Custom inventory type size	200 KB This is the maximum size of the type, not the inventory collected.

Capability	Resource	Default
Inventory	Custom inventory type attributes	50 This is the maximum number of attributes within the custom inventory type.
Inventory	Inventory data expiration	30 days If you terminate an instance, inventory data for that instance is deleted immediately. For running instances, inventory data older than 30 days is deleted. If you need to store inventory data longer than 30 days, you can use AWS Config to record history or periodically query and upload the data to an Amazon S3 bucket. For more information, see, Recording Amazon EC2 managed instance inventory in the *AWS Config Developer Guide*.
Maintenance Windows	Maintenance windows per AWS account	50
Maintenance Windows	Tasks per maintenance window	20
Maintenance Windows	Targets per maintenance window	100
Maintenance Windows	Instance IDs per target	50
Maintenance Windows	Targets per task	10
Maintenance Windows	Concurrent executions of a single maintenance window	1
Maintenance Windows	Concurrent executions of maintenance windows	5
Maintenance Windows	Execution history retention	30 days

Capability	Resource	Default
Managed Instances - Hybrid Environment	Total number of registered on-premises servers and virtual machines (VMs) in a hybrid environment	Standard instances: 1,000 (per account per Region) Advanced instances: Advanced instances are available on a pay-per-use basis. Advanced instances also enable you to connect to your hybrid machines by using AWS Systems Manager Session Manager. For more information about activating on-premises instances for use in your hybrid environment, see Create a Managed-Instance Activation in the *AWS Systems Manager User Guide*. For more information about enabling advanced instances, see Using the Advanced-Instances Tier.
OpsCenter	Total number of OpsItems allowed per AWS account per Region (including Open *and* Resolved OpsItems)	500,000
OpsCenter	Maximum number of OpsItems per AWS account per month	10,000
OpsCenter	Maximum operational data value size	20 KB
OpsCenter	Maximum number of associated Automation runbooks per OpsItem	10
OpsCenter	Maximum number of Automation runbook executions stored in operational data under a single associated runbook	10
OpsCenter	Maximum number of related resources you can specify per OpsItem	100
OpsCenter	Maximum number of related OpsItems you can specify per OpsItem	10
OpsCenter	Maximum length of a deduplication string	64 characters
OpsCenter	Duration before an OpsItem is automatically archived by the system (regardless of status)	36 months

Capability	Resource	Default
Parameter Store	Total number of parameters allowed (per AWS account and Region)	Standard parameters: 10,000 Advanced parameters: 100,000 For more information about advanced parameters, see About Systems Manager Advanced Parameters in the *AWS Systems Manager User Guide*.
Parameter Store	Max size for parameter value	Standard parameter: 4 KB Advanced parameter: 8 KB
Parameter Store	Max number of parameter policies per advanced parameter	10
Parameter Store	Max throughput (transactions per second)	Default throughput: 40 (Shared by the following API actions: `GetParameter`, `GetParameters`, `GetParametersByPath`) Higher throughput: 100 (`GetParametersByPath`) Higher throughput: 3000 (Shared by the following API actions: `GetParameter` and `GetParameters`) For more information about Parameter Store throughput, see Increasing Parameter Store Throughput in the *AWS Systems Manager User Guide*.
Parameter Store	Max history for a parameter	100 past values
Patch Manager	Patch baselines per AWS account	50
Patch Manager	Patch groups per patch baseline	25
Patch Manager	Operation history retention	Most recent 150 operations

Capability	Resource	Default
Run Command	Execution history retention	30 days The history of each command is available for up to 30 days. In addition, you can store a copy of all log files in Amazon Simple Storage Service or have an audit trail of all API calls in AWS CloudTrail.
Session Manager	Maximum idle time before session termination	Default: 20 minutes Configurable to between 1 and 60 minutes.
SSM Documents	Total documents	500 Each AWS account can create a maximum of 500 documents per Region.
SSM Documents	Document versions	1000 A single SSM document can have a maximum of 1,000 versions.
SSM Documents	Privately shared Systems Manager document	1000 A single Systems Manager document can be shared with a maximum of 1000 AWS accounts.
SSM Documents	Publicly shared Systems Manager document	5 Each AWS account can publicly share a maximum of five documents.
State Manager	Concurrent State Manager associations	2,000 Each AWS account can have 2,000 associations per Region at one time.
State Manager	State Manager association versions	1,000 You can create a maximum of 1,000 versions of a State Manager association.

Amazon Textract endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	textract.us-east-2.amazonaws.com textract-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	textract.us-east-1.amazonaws.com textract-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	textract.us-west-1.amazonaws.com textract-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	textract.us-west-2.amazonaws.com textract-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	textract.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	textract.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	textract.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	textract.ap-southeast-2.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	textract.ca-central-1.amazonaws.com textract-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	textract.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	textract.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	textract.eu-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	textract.eu-west-3.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	textract.us-gov-east-1.amazonaws.com textract-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	textract.us-gov-west-1.amazonaws.com textract-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service Quotas

Resources		Regions					
Synchronous Operations	API	US East (N.Virginia)	US West (Oregon)	US East (Ohio)	Europe (Ireland)	Asia Pacific (Mumbai)	Other Regions
Transactions per second per account for synchronous operations	AnalyzeDocument	10	10	10	5	5	1
	DetectDocumentText	25	25	10	5	5	1
	AnalyzeExpense	5	5	1	1	1	1
	AnalyzeID	5	5	1	1	1	1
Asynchronous Operations	API	US East (N.Virginia)	US West (Oregon)	US East (Ohio)	Europe (Ireland)	Asia Pacific (Mumbai)	Other Regions
Transactions per second per account for all start (asynchronous) operations	StartDocumentAnalysis	10	10	10	5	5	2
	StartDocumentTextDetection	15	15	5	5	5	1
	StartExpenseAnalysis	5	5	1	1	1	1
Transactions per second per account for all get (asynchronous) operations	GetDocumentAnalysis	10	10	10	5	5	5
	GetDocumentTextDetection	25	25	10	5	5	5
	GetExpenseAnalysis	5	5	5	5	5	5
Maximum number of asynchronous jobs per account		600	600	100	100	100	100

Resources		Regions					
that can simultaneously exist							

For more information, see Amazon Textract Quotas in the *Amazon Textract Developer Guide*.

Amazon Timestream endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Use the following endpoints to acquire the endpoints for the write API.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ingest.timestream.us-east-2.amazonaws.com ingest.timestream-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	ingest.timestream.us-east-1.amazonaws.com ingest.timestream-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	ingest.timestream.us-west-2.amazonaws.com ingest.timestream-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ingest.timestream.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ingest.timestream.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	ingest.timestream.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ingest.timestream.eu-west-1.amazonaws.com	HTTPS	

Use the following endpoints to acquire the endpoints for the query API.

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	query.timestream.us-east-2.amazonaws.com query.timestream-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	query.timestream.us-east-1.amazonaws.com query.timestream-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	query.timestream.us-west-2.amazonaws.com query.timestream-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	query.timestream.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	query.timestream.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	query.timestream.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	query.timestream.eu-west-1.amazonaws.com	HTTPS	

For more information, see Using the API in the *Amazon Timestream Developer Guide*.

Service quotas

Name	Default	Adjust	Description
Data size for query result	Each supported Region: 5 Gigabytes	No	The maximum data size for a query result.
Database name length	Each supported Region: 256 Bytes	No	The maximum number of bytes for a database name.
Databases per account	Each supported Region: 500	No	The maximum number of databases you can create per AWS account.
Dimension name dimension value pair size per series	Each supported Region: 2 Kilobytes	No	The maximum size of dimension name and dimension value pair per series.
Dimension name length	Each supported Region: 60 Bytes	No	The maximum number of bytes for a dimension name.
Dimensions per table	Each supported Region: 128	No	The maximum number of dimensions per table.

Name	Default	Adjust	Description
Execution duration for queries in hours	Each supported Region: 1	No	The maximum execution duration (in hours) for a query. Queries that take longer will timeout.
Future ingestion period in minutes	Each supported Region: 30	No	The maximum lead time (in minutes) for your time series data compared to the current system time. For example, if the future ingestion period is 30 minutes, then Timestream will accept data that is up to 30 minutes ahead of the current system time.
Maximum count of active magnetic store partitions per database	Each supported Region: 250	No	Maximum number of active magnetic store partitions per database. A partition may remain active for up to 6 hours after receiving ingestion.
Maximum retention period for magnetic store in days	Each supported Region: 73,000	No	The maximum duration (in days) for which data can be retained in the magnetic store.
Maximum retention period for memory store in hours	Each supported Region: 8,766	No	The maximum duration (in hours) for which data can be retained in the memory store per table.
Measure name length	Each supported Region: 256 Bytes	No	The maximum number of bytes for a measure name.
Measure value size per multi-measure record	Each supported Region: 2,048 Bytes	No	The maximum size of measure values per multi-measure record.
Measures per multi-measure record	Each supported Region: 256	No	The maximum number of measures per multi-measure record.
Measures per table	Each supported Region: 8,192	No	The maximum number of measures per table.
Metadata size for query result	Each supported Region: 100 Kilobytes	No	The maximum metadata size for a query result.
Minimum retention period for magnetic store in days	Each supported Region: 1	No	The minimum duration (in days) for which data must be retained in the magnetic store per table.

Name	Default	Adjust	Description
Minimum retention period for memory store in hours	Each supported Region: 1	No	The minimum duration (in hours) for which data must be retained in the memory store per table.
QueryString length in KiB	Each supported Region: 256	No	The maximum length (in KiB) of a query string in UTF-8 encoded chars for a query.
Records per WriteRecords API request	Each supported Region: 100	No	The maximum number of records in a WriteRecords API request.
Scheduled queries per account	Each supported Region: 10,000	No	The maximum number of scheduled queries you can create per AWS account.
Table name length	Each supported Region: 256 Bytes	No	The maximum number of bytes for a table name.
Tables per account	Each supported Region: 50,000	No	The maximum number of tables you can create per AWS account.
Throttle rate for CRUD APIs	Each supported Region: 1	No	The maximum number of Create/Update/List/ Describe/Delete database/ table API requests allowed per second per account, in the current region.
Unique measures across multi-measure records per table	Each supported Region: 1,024	No	The unique measures in all the multi-measure records defined in a single table. A single multi-measure record can have MaximumMeasureAttributesPerRecord unique measures, and a table can have MaximumMeasureAttributesPerTable unique measures defined across multi-measure records.

For more information, see Quotas in the *Amazon Timestream Developer Guide*.

Amazon Transcribe endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Amazon Transcribe

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	transcribe.us-east-2.amazonaws.com fips.transcribe.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	transcribe.us-east-1.amazonaws.com fips.transcribe.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	transcribe.us-west-1.amazonaws.com fips.transcribe.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	transcribe.us-west-2.amazonaws.com fips.transcribe.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	transcribe.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	transcribe.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	transcribe.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	transcribe.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	transcribe.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	transcribe.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	transcribe.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	transcribe.ca-central-1.amazonaws.com fips.transcribe.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	transcribe.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	transcribe.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	transcribe.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	transcribe.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	transcribe.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	transcribe.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	transcribe.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	transcribe.us-gov-east-1.amazonaws.com fips.transcribe.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	transcribe.us-gov-west-1.amazonaws.com fips.transcribe.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Amazon Transcribe Streaming

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	transcribestreaming.us-east-2.amazonaws.com transcribestreaming-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	transcribestreaming.us-east-1.amazonaws.com transcribestreaming-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	transcribestreaming.us-west-2.amazonaws.com transcribestreaming-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	transcribestreaming.ap-northeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	transcribestreaming.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	transcribestreaming.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	transcribestreaming.ca-central-1.amazonaws.com transcribestreaming-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	transcribestreaming.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	transcribestreaming.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	transcribestreaming.eu-west-2.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	transcribestreaming.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	transcribestreaming.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	transcribestreaming.us-gov-west-1.amazonaws.com	HTTPS	

Amazon Transcribe Medical

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	transcribe-medical.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	transcribe-medical.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	transcribe-medical.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	transcribe-medical.us-west-2.amazonaws.com	HTTPS	
Asia Pacific	ap-east-1	transcribe-medical.ap-east-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
(Hong Kong)				
Asia Pacific (Mumbai)	ap-south-1	transcribe-medical.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	transcribe-medical.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	transcribe-medical.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	transcribe-medical.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	transcribe-medical.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	transcribe-medical.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	transcribe-medical.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	transcribe-medical.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	transcribe-medical.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	transcribe-medical.eu-west-3.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	transcribe-medical.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	transcribe-medical.sa-east-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Job queue bandwidth ratio	Each supported Region: 0.9	Yes	The ratio of jobs that can be queued in this account in the current Region

Name	Default	Adjust	Description
Maximum audio file length	Each supported Region: 14,400 Seconds	No	The maximum length of an audio file in seconds.
Maximum audio file length (Medical)	Each supported Region: 14,400 Seconds	No	The maximum audio file length in seconds (Medical).
Maximum audio file length for Call Analytics batch jobs	Each supported Region: 14,400 Seconds	No	The maximum audio file length (in seconds) for Call Analytics batch jobs.
Maximum audio file size	Each supported Region: 2 Gigabytes	No	The maximum size of an audio file in Gigabytes.
Maximum audio file size (Medical)	Each supported Region: 2 Gigabytes	No	The maximum audio file size (in GB) for medical transcription.
Maximum audio file size for Call Analytics batch jobs	Each supported Region: 500 Megabytes	No	The maximum audio file size (in MB) for Call Analytics batch jobs.
Maximum length of a custom vocabulary phrase	Each supported Region: 256	No	The maximum number of characters in a custom vocabulary phrase.
Maximum number of categories for Call Analytics batch jobs	Each supported Region: 200	Yes	The maximum number of categories per account for Call Analytics batch jobs.
Maximum number of rules per category for Call Analytics batch jobs	Each supported Region: 20	Yes	The maximum number of rules per category for Call Analytics batch jobs.
Maximum number of targets allowed per category for Call Analytics batch jobs	Each supported Region: 100	Yes	The maximum number of targets allowed per category for Call Analytics batch jobs
Maximum number of vocabulary filters	Each supported Region: 100	No	The maximum number of vocabulary filters from this account in the current Region.
Maximum size of a custom vocabulary	Each supported Region: 50 Kilobytes	No	The maximum size (in KB) of a custom vocabulary.
Maximum size of a vocabulary filter	Each supported Region: 50 Kilobytes	No	The maximum size (in KB) of a vocabulary filter.
Minimum audio file duration	Each supported Region: 500 Milliseconds	No	The minimum audio file duration (in ms).

Name	Default	Adjust	Description
Minimum audio file duration (Medical)	Each supported Region: 500 Milliseconds	No	The minimum audio file duration, in milliseconds (ms) for medical transcription.
Minimum audio file duration for Call Analytics batch jobs	Each supported Region: 500 Milliseconds	No	The minimum audio file duration, in milliseconds (ms), for Call Analytics batch jobs.
Number of StartMedicalStreamTranscription Websocket requests	Each supported Region: 25	Yes	The maximum number of StartMedicalStreamTranscription Websocket requests.
Number of StartStreamTranscription Websocket requests	Each supported Region: 25	Yes	The maximum number of StartStreamTranscription Websocket requests that you can make per second from this account in the current Region.
Number of channels for channel identification	Each supported Region: 2	Yes	The maximum number of channels that an audio file can contain for channel identification transcription jobs.
Number of channels for channel identification (Medical)	Each supported Region: 2	No	The maximum number of channels for channel identification (Medical).
Number of channels for channel identification for Call Analytics batch jobs	Each supported Region: 2	No	The maximum number of channels for channel identification for Call Analytics batch jobs.
Number of concurrent Call Analytics batch jobs	Each supported Region: 100	Yes	The maximum number of concurrent Call Analytics batch jobs.
Number of concurrent HTTP/2 streams for streaming transcription.	Each supported Region: 25	Yes	The maximum number of concurrent stream transcription jobs in this account in the current Region
Number of concurrent batch transcription jobs	Each supported Region: 250	Yes	The maximum number of concurrent transcription jobs in this account in the current Region
Number of concurrent medical batch transcription jobs	Each supported Region: 250	Yes	The maximum number of concurrent medical batch transcription jobs.

Name	Default	Adjust	Description
Number of concurrently training custom language models	Each supported Region: 3	Yes	The maximum number of custom language models that can be trained at one time in this account in the current Region.
Number of days that job records are retained	Each supported Region: 90	No	The number of days that job records are retained.
Number of days that job records are retained (Medical)	Each supported Region: 90	No	The maximum number of days that job records are retained (Medical).
Number of days that job records are retained for Call Analytics batch jobs	Each supported Region: 90	No	The number of days job records are retained for Call Analytics batch jobs.
Number of pending medical vocabularies	Each supported Region: 10	Yes	The maximum number of pending medical vocabularies.
Number of pending vocabularies	Each supported Region: 10	Yes	The maximum number of vocabularies that can be in the pending state at one time in this account in the current Region.
Total number of custom language models per account	Each supported Region: 10	Yes	The maximum number of custom language models in this account in the current Region.
Total number of medical vocabularies per account	Each supported Region: 100	Yes	The maximum total number of medical vocabularies per account.
Total number of vocabularies per account	Each supported Region: 100	Yes	The total number of vocabularies that you can create in this account in the current Region.
Transactions per second, CreateCallAnalyticsCategory operation	Each supported Region: 10	Yes	The maximum transactions per second for the CreateCallAnalyticsCategory operation.
Transactions per second, CreateVocabulary operation	Each supported Region: 10	Yes	The maximum number of CreateVocabulary requests that you can make per second from this account in the current Region.
Transactions per second, DeleteCallAnalyticsCategory operation	Each supported Region: 5	Yes	The maximum transactions per second for the DeleteCallAnalyticsCategory operation.

Name	Default	Adjust	Description
Transactions per second, DeleteCallAnalyticsJob operation	Each supported Region: 5	Yes	The maximum transactions per second for the DeleteCallAnalyticsJob operation.
Transactions per second, DeleteMedicalTranscriptionJob operation	Each supported Region: 5	Yes	The maximum transactions per second, DeleteMedicalTranscriptionJob operation.
Transactions per second, DeleteMedicalVocabulary operation	Each supported Region: 5	Yes	The maximum transactions per second for the DeleteMedicalVocabulary operation.
Transactions per second, DeleteTranscriptionJob operation	Each supported Region: 5	Yes	The maximum number of DeleteTranscriptionJob requests that you can make per second from this account in the current Region.
Transactions per second, DeleteVocabulary operation	Each supported Region: 5	Yes	The maximum number of DeleteVocabulary requests that you can make per second from this account in the current Region.
Transactions per second, GetCallAnalyticsCategory operation	Each supported Region: 20	Yes	The maximum transactions per second for the GetCallAnalyticsCategory operation.
Transactions per second, GetCallAnalyticsJob operation	Each supported Region: 20	Yes	The maximum transactions per second for the GetCallAnalyticsJob operation.
Transactions per second, GetMedicalTranscriptionJob operation	Each supported Region: 30	Yes	The maximum transactions per second for the GetMedicalTranscriptionJob operation.
Transactions per second, GetMedicalVocabulary operation	Each supported Region: 20	Yes	The maximum transactions per second for the GetMedicalVocabulary operation.
Transactions per second, GetTranscriptionJob operation	Each supported Region: 30	Yes	The maximum number of GetTranscriptionJob requests that you can make per second from this account in the current Region.

Name	Default	Adjust	Description
Transactions per second, GetVocabulary operation	Each supported Region: 20	Yes	The maximum number of GetVocabulary requests that you can make per second from this account in the current Region.
Transactions per second, ListCallAnalyticsCategories operation	Each supported Region: 5	Yes	The maximum transactions per second for the ListCallAnalyticsCategories operation.
Transactions per second, ListCallAnalyticsJobs operation	Each supported Region: 5	Yes	The maximum transactions per second for the ListCallAnalyticsJobs operation.
Transactions per second, ListMedicalTranscriptionJobs operation	Each supported Region: 5	Yes	The maximum transactions per second for the ListMedicalTranscriptionJobs operation.
Transactions per second, ListMedicalVocabularies operation	Each supported Region: 5	Yes	The maximum transactions per second for the ListMedicalVocabularies operation.
Transactions per second, ListTranscriptionJobs operation	Each supported Region: 5	Yes	The maximum number of ListTranscriptionJobs requests that you can make per second from this account in the current Region.
Transactions per second, ListVocabularies operation	Each supported Region: 5	Yes	The maximum number of ListVocabularies requests that you can make per second from this account in the current Region.
Transactions per second, StartCallAnalyticsJob operation	Each supported Region: 10	Yes	The maximum transactions per second for the StartCallAnalyticsJob operation.
Transactions per second, StartMedicalStreamTranscription operation	Each supported Region: 25	Yes	The maximum transactions per second for the StartMedicalStreamTranscription operation.
Transactions per second, StartMedicalTranscriptionJob operation	Each supported Region: 25	Yes	The maximum transactions per second for the StartMedicalTranscriptionJob operation.

Name	Default	Adjust	Description
Transactions per second, StartStreamTranscription operation	Each supported Region: 25	Yes	The maximum number of StartStreamTranscription requests that you can make per second from this account in the current Region.
Transactions per second, StartTranscriptionJob operation	Each supported Region: 25	Yes	The maximum number of StartTranscriptionJob requests that you can make per second from this account in the current Region.
Transactions per second, UpdateCallAnalyticsCategory operation	Each supported Region: 10	Yes	The maximum transactions per second for the UpdateCallAnalyticsCategory operation.
Transactions per second, UpdateMedicalVocabulary operation	Each supported Region: 10	Yes	The maximum transactions per second for the UpdateMedicalVocabulary operation.
Transactions per second, UpdateVocabulary operation	Each supported Region: 10	Yes	The maximum number of UpdateVocabulary requests that you can make per second from this account in the current Region.

For more information, see Guidelines and quotas in the *Amazon Transcribe Developer Guide*.

AWS Transfer Family endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	transfer.us-east-2.amazonaws.com transfer-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	transfer.us-east-1.amazonaws.com transfer-fips.us-east-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (N. California)	us-west-1	transfer.us-west-1.amazonaws.com transfer-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	transfer.us-west-2.amazonaws.com transfer-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	transfer.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	transfer.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	transfer.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	transfer.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	transfer.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	transfer.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	transfer.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	transfer.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	transfer.ca-central-1.amazonaws.com transfer-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	transfer.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	transfer.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	transfer.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	transfer.eu-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Paris)	eu-west-3	transfer.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	transfer.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	transfer.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	transfer.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	transfer.us-gov-east-1.amazonaws.com transfer-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	transfer.us-gov-west-1.amazonaws.com transfer-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent sessions per server	Each supported Region: 10,000	No	Maximum number of concurrent sessions per server
File size	Each supported Region: 5 Terabytes	No	Maximum size of an individual file, which is the maximum size of an individual object in Amazon S3
Idle connection timeout	Each supported Region: 1,800 Seconds	No	Inactivity timeout for SFTP/FTP(S) connections. If there is no activity after the period has passed the client may be disconnected
Maximum number of AD Groups for access	ca-central-1: 100 Each of the other supported Regions: 20	Yes	Number of Active Directory Groups allowed for mapping to access per server
Maximum number of new executions per workflow	Each supported Region: 100	No	Maximum number of new executions allowed per workflow at one time.

Name	Default	Adjust	Description
New executions refill rate per workflow per second	Each supported Region: 1	No	The new executions refill rate per workflow per second
Number of Service Managed users per server	Each supported Region: 10,000	Yes	Maximum number of Service Managed users per server
Number of authentication requests per user per second	Each supported Region: 2	No	If your identity provider type is AWS Directory Service, there is a limit of 2 authentications per user per second per directory
SSH keys per Service Managed user	Each supported Region: 50	Yes	Maximum number of SSH keys per Service Managed user
Servers per account	Each supported Region: 50	Yes	Maximum number of servers per account
VPC_ENDPOINT servers per account	Each supported Region: 10	No	Maximum number of VPC_ENDPOINT servers per account
Workflows per account	Each supported Region: 10	Yes	Maximum number of workflows per account

Amazon Translate endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	translate.us-east-2.amazonaws.com translate-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	translate.us-east-1.amazonaws.com translate-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	translate.us-west-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
US West (Oregon)	us-west-2	translate.us-west-2.amazonaws.com translate-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	translate.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	translate.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	translate.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	translate.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	translate.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	translate.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	translate.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	translate.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	translate.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	translate.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	translate.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	translate.eu-north-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	translate.us-gov-west-1.amazonaws.com translate-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Concurrent batch translation jobs	Each supported Region: 10	Yes	The maximum number of concurrent batch translation jobs in this account in the current Region.
Custom terminology files	Each supported Region: 100	Yes	The maximum number of custom terminology files you can store in this account in the current Region.
Parallel data resources	Each supported Region: 1,000	Yes	The maximum number of parallel data resources in this account in the current Region.

For more information, see Guidelines and Quotas in the *Amazon Translate Developer Guide*.

Amazon Virtual Private Cloud endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	ec2.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	ec2.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	ec2.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	ec2.us-west-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	ec2.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	ec2.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	ec2.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	ec2.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	ec2.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	ec2.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	ec2.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	ec2.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	ec2.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	ec2.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	ec2.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	ec2.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	ec2.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	ec2.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	ec2.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	ec2.eu-north-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (Bahrain)	me-south-1	ec2.me-south-1.amazonaws.com	HTTPS	
Middle East (UAE)	me-central-1	ec2.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	ec2.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	ec2.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	ec2.us-gov-west-1.amazonaws.com	HTTPS	

If you specify the general endpoint (ec2.amazonaws.com), Amazon VPC directs your request to the us-east-1 endpoint.

Service quotas

Name	Default	Adjust	Description
Active VPC peering connections per VPC	Each supported Region: 50	Yes	The maximum number of active VPC peering connections per VPC. This quota can be increased up to a maximum of 125.
Characters per VPC endpoint policy	Each supported Region: 20,480	No	The maximum number of characters in a VPC endpoint policy, including white space.
Egress-only internet gateways per Region	Each supported Region: 5	Yes	The maximum number of egress-only (outbound-only) internet gateways per Region. This quota is directly tied to the maximum number of VPCs per Region. To increase this quota, increase the number of VPCs per Region.
Gateway VPC endpoints per Region	Each supported Region: 20	Yes	The maximum number of gateway VPC endpoints per Region. The maximum is 255 gateway endpoints per VPC.

Name	Default	Adjust	Description
IPv4 CIDR blocks per VPC	Each supported Region: 5	Yes	The maximum number of IPv4 CIDR blocks per VPC. The primary CIDR block and all secondary CIDR blocks count toward this quota. This quota can be increased up to a maximum of 50.
IPv6 CIDR blocks per VPC	Each supported Region: 5	Yes	The maximum number of IPv6 CIDR blocks per VPC.
Inbound or outbound rules per security group	Each supported Region: 60	Yes	The maximum number of inbound or outbound rules per VPC security group (120 rules in total). This quota is enforced separately for IPv4 and IPv6 rules. A rule that references a security group or prefix list ID counts as one rule each for IPv4 and IPv6. This quota multiplied by the security groups per network interface quota cannot exceed 1000.
Interface VPC endpoints per VPC	Each supported Region: 50	Yes	The maximum number of interface VPC endpoints per VPC.
Internet gateways per Region	Each supported Region: 5	Yes	The maximum number of internet gateways per Region. This quota is directly tied to the maximum number of VPCs per Region. To increase this quota, increase the number of VPCs per Region.
NAT gateways per Availability Zone	Each supported Region: 5	Yes	The maximum number of NAT gateways per Availability Zone. This includes NAT gateways in the pending, active, or deleting state.
Network ACLs per VPC	Each supported Region: 200	Yes	The maximum number of network ACLs per VPC.
Network interfaces per Region	Each supported Region: 5,000	Yes	The maximum number of network interfaces per Region.

Name	Default	Adjust	Description
Outstanding VPC peering connection requests	Each supported Region: 25	Yes	The maximum number of outstanding VPC peering connection requests that youve requested.
Participant accounts per VPC	Each supported Region: 100	Yes	The maximum number of distinct participant accounts that subnets in a VPC can be shared with. This is a per VPC quota and applies across all the subnets shared in a VPC.
Route tables per VPC	Each supported Region: 200	Yes	The maximum number of route tables per VPC. The main route table counts toward this quota.
Routes per route table	Each supported Region: 50	Yes	The maximum number of non-propagated routes per route table. This quota can be increased up to a maximum of 1000; however, network performance might be impacted. This quota is enforced separately for IPv4 and IPv6 routes.
Rules per network ACL	Each supported Region: 20	Yes	The maximum number of inbound rules or outbound rules per network ACL (a total of 40 rules). This includes both IPv4 and IPv6 rules, and the default deny rules. This quota can be increased up to a maximum of 40; however, network performance might be impacted.
Security groups per network interface	Each supported Region: 5	Yes	The maximum number of security groups per network interface. The maximum is 16. This quota, multiplied by the quota for rules per security group, cannot exceed 1000.
Subnets per VPC	Each supported Region: 200	Yes	The maximum number of subnets per VPC.
Subnets that can be shared with an account	Each supported Region: 100	Yes	The maximum number of subnets that can be shared with an AWS account.

Name	Default	Adjust	Description
VPC peering connection request expiry hours	Each supported Region: 168	No	The maximum number of hours after which an unaccepted VPC peering connection request expires. The default value is 168 hours (one week).
VPC security groups per Region	Each supported Region: 2,500	Yes	The maximum number of VPC security groups per Region.
VPCs per Region	Each supported Region: 5	Yes	The maximum number of VPCs per Region. This quota is directly tied to the maximum number of internet gateways per Region.

For more information, see the following:

- Amazon VPC quotas
- AWS Transit Gateway quotas
- AWS Network Manager quotas
- Traffic Mirroring quotas
- VPC Reachability Analyzer quotas
- Network Access Analyzer quotas
- AWS Client VPN quotas
- Site-to-Site VPN quotas

AWS WAF endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Note
This page provides information related the latest version of AWS WAF, released in November 2019. The names of the entities that you use to access AWS WAF, like endpoints and namespaces, all have the versioning information added, like `V2` or `v2`, to distinguish from the prior version.

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	wafv2.us-east-2.amazonaws.com wafv2-fips.us-east-2.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	wafv2.us-east-1.amazonaws.com wafv2-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	wafv2.us-west-1.amazonaws.com wafv2-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	wafv2.us-west-2.amazonaws.com wafv2-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	wafv2.af-south-1.amazonaws.com wafv2-fips.af-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	wafv2.ap-east-1.amazonaws.com wafv2-fips.ap-east-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	wafv2.ap-southeast-3.amazonaws.com wafv2-fips.ap-southeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	wafv2.ap-south-1.amazonaws.com wafv2-fips.ap-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	wafv2.ap-northeast-3.amazonaws.com wafv2-fips.ap-northeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	wafv2.ap-northeast-2.amazonaws.com wafv2-fips.ap-northeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	wafv2.ap-southeast-1.amazonaws.com wafv2-fips.ap-southeast-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	wafv2.ap-southeast-2.amazonaws.com wafv2-fips.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	wafv2.ap-northeast-1.amazonaws.com wafv2-fips.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	wafv2.ca-central-1.amazonaws.com wafv2-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	wafv2.eu-central-1.amazonaws.com wafv2-fips.eu-central-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	wafv2.eu-west-1.amazonaws.com wafv2-fips.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	wafv2.eu-west-2.amazonaws.com wafv2-fips.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	wafv2.eu-south-1.amazonaws.com wafv2-fips.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	wafv2.eu-west-3.amazonaws.com wafv2-fips.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	wafv2.eu-north-1.amazonaws.com wafv2-fips.eu-north-1.amazonaws.com	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	wafv2.me-south-1.amazonaws.com wafv2-fips.me-south-1.amazonaws.com	HTTPS HTTPS	
South America (São Paulo)	sa-east-1	wafv2.sa-east-1.amazonaws.com wafv2-fips.sa-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	wafv2.us-gov-east-1.amazonaws.com wafv2-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	wafv2.us-gov-west-1.amazonaws.com wafv2-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Maximum IP sets per account in WAF for CloudFront	Each supported Region: 100	No	The maximum number of IP sets you can create in your account for CloudFront.
Maximum IP sets per account in WAF for regional	Each supported Region: 100	No	The maximum number of IP sets you can create in your account for regional.
Maximum number of IP addresses in an IP set in WAF for CloudFront	Each supported Region: 10,000	No	The maximum number of IP addresses allowed in an IP set for CloudFront.

Name	Default	Adjust	Description
Maximum number of IP addresses in an IP set in WAF for regional	Each supported Region: 10,000	No	The maximum number of IP addresses allowed in an IP set for regional.
Maximum number of bytes in a string match (byte match) string in WAF for CloudFront	Each supported Region: 200	No	The maximum number of bytes you can create in a string match (byte match) string for CloudFront.
Maximum number of bytes in a string match (byte match) string in WAF for regional	Each supported Region: 200	No	The maximum number of bytes you can create in a string match (byte match) string for regional.
Maximum number of characters allowed in a regex pattern per account in WAF for Cloudfront	Each supported Region: 200	No	The maximum number of characters allowed in a regex pattern in your account for CloudFront.
Maximum number of characters allowed in a regex pattern per account in WAF for regional	Each supported Region: 200	No	The maximum number of characters allowed in a regex pattern in your account for regional.
Maximum number of log destination configs per web ACL in WAF for Cloudfront	Each supported Region: 1	No	The maximum number of log destination configs allowed in a web ACL for CloudFront.
Maximum number of log destination configs per web ACL in WAF for regional	Each supported Region: 1	No	The maximum number of log destination configs allowed in a web ACL for regional.
Maximum number of patterns in a regex pattern set per account in WAF for Cloudfront	Each supported Region: 10	No	The maximum number of patterns in a regex pattern set you can create in your account for CloudFront.
Maximum number of patterns in a regex pattern set per account in WAF for regional	Each supported Region: 10	No	The maximum number of patterns in a regex pattern set you can create in your account for regional.
Maximum number of rate-based statements per web ACL in WAF for Cloudfront	Each supported Region: 10	Yes	The maximum number of rate-based statements allowed in a web ACL for regional.
Maximum number of rate-based statements per web ACL in WAF for Cloudfront	Each supported Region: 10	No	The maximum number of rate-based statements allowed in a web ACL for CloudFront.

Name	Default	Adjust	Description
Maximum number of referenced statements per rule group or web ACL in WAF for Cloudfront	Each supported Region: 50	No	The maximum number of referenced statements allowed within a rule group or web ACL for CloudFront.
Maximum number of referenced statements per rule group or web ACL in WAF for regional	Each supported Region: 50	No	The maximum number of referenced statements allowed within a rule group or web ACL for regional.
Maximum number of web ACL capacity units in a rule group in WAF for CloudFront	Each supported Region: 1,500	Yes	The maximum number of web ACL capacity units allowed in a rule group for CloudFront.
Maximum number of web ACL capacity units in a rule group in WAF for regional	Each supported Region: 1,500	Yes	The maximum number of web ACL capacity units allowed in a rule group for regional.
Maximum number of web ACL capacity units in a web ACL in WAF for CloudFront	Each supported Region: 1,500	Yes	The maximum number of web ACL capacity units allowed in a web ACL for CloudFront.
Maximum number of web ACL capacity units in a web ACL in WAF for regional	Each supported Region: 1,500	Yes	The maximum number of web ACL capacity units allowed in a web ACL for regional.
Maximum regex pattern sets per account in WAF for CloudFront	Each supported Region: 10	No	The maximum number of regex pattern sets you can create in your account for CloudFront.
Maximum regex pattern sets per account in WAF for regional	Each supported Region: 10	No	The maximum number of regex pattern sets you can create in your account for regional.
Maximum rule groups per account in WAF for CloudFront	Each supported Region: 100	Yes	The maximum number of rule groups you can create in your account for CloudFront.
Maximum rule groups per account in WAF for regional	Each supported Region: 100	Yes	The maximum number of rule groups you can create in your account for regional.
Maximum web ACLs per account in WAF for CloudFront	Each supported Region: 100	Yes	The maximum number of web ACLs you can create in your account for CloudFront.

Name	Default	Adjust	Description
Maximum web ACLs per account in WAF for regional	Each supported Region: 100	Yes	The maximum number of web ACLs you can create in your account for regional.
Number of CloudWatch Logs log streams per web ACL for CloudFront	Each supported Region: 35	Yes	The number of CloudWatch Logs log streams per web ACL for CloudFront.
Number of CloudWatch Logs log streams per web ACL for regional	Each supported Region: 35	Yes	The number of CloudWatch Logs log streams per web ACL for regional.

For more information, see AWS WAF quotas in the *AWS WAF Developer Guide*.

AWS WAF Classic endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Note
This page provides information related to **AWS WAF Classic**. If you created AWS WAF resources, like rules and web ACLs, in AWS WAF prior to November 2019, and you have not migrated your web ACLs over yet, you must use AWS WAF Classic to access those resources. Otherwise, do not use this version.
For information related to the latest version of AWS WAF, see AWS WAF endpoints and quotas (p. 958).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	waf.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	waf.amazonaws.com waf-fips.amazonaws.com waf-fips.amazonaws.com	HTTPS HTTPS HTTPS	
US West (N. California)	us-west-1	waf.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	waf.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Africa (Cape Town)	af-south-1	waf.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	waf.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	waf.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	waf.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	waf.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	waf.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	waf.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	waf.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	waf.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	waf.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	waf.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	waf.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	waf.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	waf.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	waf.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
South America (São Paulo)	sa-east-1	waf.amazonaws.com	HTTPS	

AWS WAF Classic for Application Load Balancers and API Gateway APIs has the following endpoints:

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	waf-regional.us-east-2.amazonaws.com waf-regional-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	waf-regional.us-east-1.amazonaws.com waf-regional-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	waf-regional.us-west-1.amazonaws.com waf-regional-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	waf-regional.us-west-2.amazonaws.com waf-regional-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	waf-regional.af-south-1.amazonaws.com waf-regional-fips.af-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	waf-regional.ap-east-1.amazonaws.com waf-regional-fips.ap-east-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	waf-regional.ap-southeast-3.amazonaws.com waf-regional-fips.ap-southeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Mumbai)	ap-south-1	waf-regional.ap-south-1.amazonaws.com waf-regional-fips.ap-south-1.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	waf-regional.ap-northeast-3.amazonaws.com waf-regional-fips.ap-northeast-3.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	waf-regional.ap-northeast-2.amazonaws.com waf-regional-fips.ap-northeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	waf-regional.ap-southeast-1.amazonaws.com waf-regional-fips.ap-southeast-1.amazonaws.com	HTTPS HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	waf-regional.ap-southeast-2.amazonaws.com waf-regional-fips.ap-southeast-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	waf-regional.ap-northeast-1.amazonaws.com waf-regional-fips.ap-northeast-1.amazonaws.com	HTTPS HTTPS	
Canada (Central)	ca-central-1	waf-regional.ca-central-1.amazonaws.com waf-regional-fips.ca-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Frankfurt)	eu-central-1	waf-regional.eu-central-1.amazonaws.com waf-regional-fips.eu-central-1.amazonaws.com	HTTPS HTTPS	
Europe (Ireland)	eu-west-1	waf-regional.eu-west-1.amazonaws.com waf-regional-fips.eu-west-1.amazonaws.com	HTTPS HTTPS	
Europe (London)	eu-west-2	waf-regional.eu-west-2.amazonaws.com waf-regional-fips.eu-west-2.amazonaws.com	HTTPS HTTPS	
Europe (Milan)	eu-south-1	waf-regional.eu-south-1.amazonaws.com waf-regional-fips.eu-south-1.amazonaws.com	HTTPS HTTPS	
Europe (Paris)	eu-west-3	waf-regional.eu-west-3.amazonaws.com waf-regional-fips.eu-west-3.amazonaws.com	HTTPS HTTPS	
Europe (Stockholm)	eu-north-1	waf-regional.eu-north-1.amazonaws.com waf-regional-fips.eu-north-1.amazonaws.com	HTTPS HTTPS	
Middle East (Bahrain)	me-south-1	waf-regional.me-south-1.amazonaws.com waf-regional-fips.me-south-1.amazonaws.com	HTTPS HTTPS	
South America (São Paulo)	sa-east-1	waf-regional.sa-east-1.amazonaws.com waf-regional-fips.sa-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	waf-regional.us-gov-east-1.amazonaws.com waf-regional-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	waf-regional.us-gov-west-1.amazonaws.com waf-regional-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Conditions per rule	Each supported Region: 10	No	The maximum number of conditions you can add to a rule.
Filters per SQL injection match condition	Each supported Region: 10	No	The maximum number of filters you can add to a SQL injection match condition.
Filters per cross-site scripting match condition	Each supported Region: 10	No	The maximum number of filters you can add to a cross-site scripting match condition.
Filters per size constraint condition	Each supported Region: 10	No	The maximum number of filters you can add to a size constraint condition.
Filters per string match condition	Each supported Region: 10	No	The maximum number of filters you can add to a string match condition.
GeoMatchSets	Each supported Region: 50	No	The maximum number of GeoMatchSets you can add to your account.
HTTP header name length	Each supported Region: 40	No	The length, in bytes, that you want AWS WAF to inspect the HTTP header for in a size constraint condition.
IP address ranges per IP set match condition	Each supported Region: 10,000	No	The maximum number of IP address ranges (in CIDR notation) you can add to an IP Set match condition.
IP addresses blocked per rate-based rule	Each supported Region: 10,000	No	The maximum number of IP addresses blocked per rate-based rule.
Locations per GeoMatchSet	Each supported Region: 50	No	The maximum number of locations you can add to a GeoMatchSet.
Logging destination configurations per web ACL	Each supported Region: 1	No	The maximum number of logging destination configurations you can add to a web ACL.
Pattern sets per regex match condition	Each supported Region: 1	No	The maximum number of pattern sets you can add to regex match condition.

Name	Default	Adjust	Description
Patterns per pattern set	Each supported Region: 10	No	The maximum number of patterns you can add to a pattern set in a regex match condition.
Rate of requests	Each supported Region: 10,000	Yes	The maximum number of requests per second on an Application Load Balancer. This limit applies only to AWS WAF on an Application Load Balancer. This limit can be increased using the AWS console.
Rate-based rule rate	Each supported Region: 2,000	No	The maximum number of requests from a single IP address allowed in a five-minute period.
Rate-based rules	Each supported Region: 5	Yes	The maximum number of rate-based rules you can create in your account.
Regex pattern length	Each supported Region: 70	No	The number of characters that you want AWS WAF to search for in the pattern in a regex match condition.
Regex pattern sets	Each supported Region: 5	No	The maximum number of regex pattern sets you can add to your account.
Rules	Each supported Region: 100	Yes	The maximum number of rules you can create in your account.
Rules per web ACL	Each supported Region: 10	No	The maximum number of rules you can add to a web ACL.
Search length	Each supported Region: 50	No	The length, in bytes, that you want AWS WAF to watch for in a size constraint condition.
Web ACLs	Each supported Region: 50	Yes	The maximum number of Web ACLs you can create in your account.

For more information, see AWS WAF Classic quotas in the *AWS WAF Developer Guide*.

AWS Well-Architected Tool endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	wellarchitected.us-east-2.amazonaws.com	HTTPS	
US East (N. Virginia)	us-east-1	wellarchitected.us-east-1.amazonaws.com	HTTPS	
US West (N. California)	us-west-1	wellarchitected.us-west-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	wellarchitected.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Hong Kong)	ap-east-1	wellarchitected.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	wellarchitected.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	wellarchitected.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	wellarchitected.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	wellarchitected.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	wellarchitected.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	wellarchitected.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	wellarchitected.eu-central-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Europe (Ireland)	eu-west-1	wellarchitected.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	wellarchitected.eu-west-2.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	wellarchitected.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	wellarchitected.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	wellarchitected.me-south-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	wellarchitected.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	wellarchitected.us-gov-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	wellarchitected.us-gov-west-1.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjust	Description
Choices per question	Each supported Region: 15	No	The maximum number of choices that can be created for a question.
Lens size	Each supported Region: 500 Kilobytes	No	The maximum lens size, in KB.
Lenses per account per Region	Each supported Region: 15	No	The maximum number of lenses that can be created per account in a Region.
Lenses per workload	Each supported Region: 20	No	The maximum number of lenses that can be associated with a workload.
Milestones per workload	Each supported Region: 100	No	The maximum number of milestones that can be created for a workload.

Name	Default	Adjust	Description
Pillars per lens	Each supported Region: 10	No	The maximum number of pillars that can be created for a lens.
Questions per pillar	Each supported Region: 20	No	The maximum number of questions that can be created for a pillar.
Shares per lens	Each supported Region: 300	No	The maximum number of shares that can be created for a lens.
Shares per workload	Each supported Region: 20	No	The maximum number of shares that can be created for a workload.
Versions per lens	Each supported Region: 100	No	The maximum number of versions that can be created for a lens.
Workloads per account per Region	Each supported Region: 1,000	No	The maximum number of workloads that can be created per account in a Region.

Amazon WorkDocs endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	workdocs.us-east-1.amazonaws.com workdocs-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	workdocs.us-west-2.amazonaws.com workdocs-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	workdocs.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	workdocs.ap-southeast-2.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Tokyo)	ap-northeast-1	workdocs.ap-northeast-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	workdocs.eu-west-1.amazonaws.com	HTTPS	

Amazon WorkMail endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Service	Endpoint
US East (N. Virginia)	us-east-1	Amazon WorkMail SDK	https://workmail.us-east-1.amazonaws.com
US East (N. Virginia)	us-east-1	Autodiscover	autodiscover-service.mail.us-east-1.awsapps.com
US East (N. Virginia)	us-east-1	Exchange web services	ews.mail.us-east-1.awsapps.com
US East (N. Virginia)	us-east-1	Exchange ActiveSync	mobile.mail.us-east-1.awsapps.com
US East (N. Virginia)	us-east-1	MAPI Proxy	outlook.mail.us-east-1.awsapps.com
US East (N. Virginia)	us-east-1	IMAPS	imap.mail.us-east-1.awsapps.com
US East (N. Virginia)	us-east-1	SMTP via TLS (port 465)	smtp.mail.us-east-1.awsapps.com
US West (Oregon)	us-west-2	Amazon WorkMail SDK	https://workmail.us-west-2.amazonaws.com
US West (Oregon)	us-west-2	Autodiscover	autodiscover-service.mail.us-west-2.awsapps.com
US West (Oregon)	us-west-2	Exchange web services	ews.mail.us-west-2.awsapps.com
US West (Oregon)	us-west-2	Exchange ActiveSync	mobile.mail.us-west-2.awsapps.com
US West (Oregon)	us-west-2	MAPI Proxy	outlook.mail.us-west-2.awsapps.com
US West (Oregon)	us-west-2	IMAPS	imap.mail.us-west-2.awsapps.com
US West (Oregon)	us-west-2	SMTP via TLS (port 465)	smtp.mail.us-west-2.awsapps.com

Region Name	Region	Service	Endpoint
Europe (Ireland)	eu-west-1	Amazon WorkMail SDK	https://workmail.eu-west-1.amazonaws.com
Europe (Ireland)	eu-west-1	Autodiscover	autodiscover-service.mail.eu-west-1.awsapps.com
Europe (Ireland)	eu-west-1	Exchange web services	ews.mail.eu-west-1.awsapps.com
Europe (Ireland)	eu-west-1	Exchange ActiveSync	mobile.mail.eu-west-1.awsapps.com
Europe (Ireland)	eu-west-1	MAPI Proxy	outlook.mail.eu-west-1.awsapps.com
Europe (Ireland)	eu-west-1	IMAPS	imap.mail.eu-west-1.awsapps.com
Europe (Ireland)	eu-west-1	SMTP via TLS (port 465)	smtp.mail.eu-west-1.awsapps.com

Service quotas

For more information, see Amazon WorkMail Quotas.

WorkSpaces endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	workspaces.us-east-1.amazonaws.com workspaces-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	workspaces.us-west-2.amazonaws.com workspaces-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	workspaces.af-south-1.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	workspaces.ap-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Seoul)	ap-northeast-2	workspaces.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	workspaces.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	workspaces.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	workspaces.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	workspaces.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	workspaces.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	workspaces.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	workspaces.eu-west-2.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	workspaces.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	workspaces.us-gov-west-1.amazonaws.com workspaces-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Resource	Default	Description	Adjustable
WorkSpaces	1	The maximum number of WorkSpaces in this account in the current Region.	Yes
Graphics WorkSpaces	0	The maximum number of Graphics WorkSpaces in this account in the current Region.	Yes
GraphicsPro WorkSpaces	0	The maximum number of GraphicsPro WorkSpaces in this	Yes

Resource	Default	Description	Adjustable
		account in the current Region.	
Images	40	The maximum number of images in this account in the current Region.	Yes
Bundles	50	The maximum number of bundles in this account in the current Region. This quota applies only to custom bundles, not to public bundles.	No
Connection aliases	20	The maximum number of connection aliases in this account in the current Region.	No
Directories	50	The maximum number of directories that can be registered for use with Amazon WorkSpaces in this account in the current Region.	No
IP access control groups	100	The maximum number of IP access control groups in this account in the current Region.	No
Rules per IP access control group	10	The maximum number of rules per IP access control group in this account in the current Region.	No
IP access control groups per directory	25	The maximum number of IP access control groups per directory in this account in the current Region.	No

The following quotas are for Amazon WorkSpaces Application Manager. For more information, see Amazon WorkSpaces Application Manager quotas in the *Amazon WAM Administration Guide*.

Name	Default	Adjust	Description
Application assignments per user	Each supported Region: 50	Yes	The maximum number of application assignments per user, in this account in the current Region.

Name	Default	Adjust	Description
Application size	Each supported Region: 5 Gigabytes	No	The maximum application size (in GB) that can be packaged in this account in the current Region. Applications that are larger than 5 GB cannot be packaged using Amazon WorkSpaces Application Manager (Amazon WAM).
Total package size without storage fees	Each supported Region: 100 Gigabytes	No	The maximum total size (in GB) of all your packages without storage fees, in this account in the current Region. There is no quota for the number of applications you can package, but storage fees will be applied if your packages exceed 100 GB.
User/WorkSpace or group assignments per application	Each supported Region: 200	Yes	The maximum number of user/WorkSpace or group assignments per application, in this account in the current Region.

Amazon WorkSpaces Web endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (N. Virginia)	us-east-1	workspaces-web.us-east-1.amazonaws.com	HTTPS	
US West (Oregon)	us-west-2	workspaces-web.us-west-2.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	workspaces-web.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	workspaces-web.ap-southeast-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Sydney)	ap-southeast-2	workspaces-web.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	workspaces-web.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	workspaces-web.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	workspaces-web.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	workspaces-web.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	workspaces-web.eu-west-2.amazonaws.com	HTTPS	

Service quotas

Name	Default	Adjustable	Description
Number of maximum concurrent sessions per web portal	Each supported Region: 25	Yes	The maximum number of concurrent sessions for a Amazon WorkSpaces Web portal in this account in the current Region.
Number of web portals	Each supported Region: 1	Yes	The maximum number of Amazon WorkSpaces Web portals in this account in the current Region.
Number of browser settings	Each supported Region: 3	Yes	The maximum number of Amazon WorkSpaces Web browser settings in this account in the current Region.
Number of certificates per trust store	Each supported Region: 100	Yes	The maximum number of certificates in an Amazon WorkSpaces Web trust store in this account in the current Region.
Number of identity providers per web portal	Each supported Region: 1	Yes	The maximum number of identity providers for an Amazon WorkSpaces Web portal in this

Name	Default	Adjustable	Description
			account in the current Region.
Number of network settings	Each supported Region: 3	Yes	The maximum number of Amazon WorkSpaces Web network settings in this account in the current Region.
Number of trust stores	Each supported Region: 3	Yes	The maximum number of Amazon WorkSpaces Web trust stores in this account in the current Region.
Number of user settings	Each supported Region: 3	Yes	The maximum number of Amazon WorkSpaces Web user settings in this account in the current Region.

AWS X-Ray endpoints and quotas

The following are the service endpoints and service quotas for this service. To connect programmatically to an AWS service, you use an endpoint. In addition to the standard AWS endpoints, some AWS services offer FIPS endpoints in selected Regions. For more information, see AWS service endpoints (p. 982). Service quotas, also referred to as limits, are the maximum number of service resources or operations for your AWS account. For more information, see AWS service quotas (p. 986).

Service endpoints

Region Name	Region	Endpoint	Protocol	
US East (Ohio)	us-east-2	xray.us-east-2.amazonaws.com xray-fips.us-east-2.amazonaws.com	HTTPS HTTPS	
US East (N. Virginia)	us-east-1	xray.us-east-1.amazonaws.com xray-fips.us-east-1.amazonaws.com	HTTPS HTTPS	
US West (N. California)	us-west-1	xray.us-west-1.amazonaws.com xray-fips.us-west-1.amazonaws.com	HTTPS HTTPS	
US West (Oregon)	us-west-2	xray.us-west-2.amazonaws.com xray-fips.us-west-2.amazonaws.com	HTTPS HTTPS	
Africa (Cape Town)	af-south-1	xray.af-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Asia Pacific (Hong Kong)	ap-east-1	xray.ap-east-1.amazonaws.com	HTTPS	
Asia Pacific (Jakarta)	ap-southeast-3	xray.ap-southeast-3.amazonaws.com	HTTPS	
Asia Pacific (Mumbai)	ap-south-1	xray.ap-south-1.amazonaws.com	HTTPS	
Asia Pacific (Osaka)	ap-northeast-3	xray.ap-northeast-3.amazonaws.com	HTTPS	
Asia Pacific (Seoul)	ap-northeast-2	xray.ap-northeast-2.amazonaws.com	HTTPS	
Asia Pacific (Singapore)	ap-southeast-1	xray.ap-southeast-1.amazonaws.com	HTTPS	
Asia Pacific (Sydney)	ap-southeast-2	xray.ap-southeast-2.amazonaws.com	HTTPS	
Asia Pacific (Tokyo)	ap-northeast-1	xray.ap-northeast-1.amazonaws.com	HTTPS	
Canada (Central)	ca-central-1	xray.ca-central-1.amazonaws.com	HTTPS	
Europe (Frankfurt)	eu-central-1	xray.eu-central-1.amazonaws.com	HTTPS	
Europe (Ireland)	eu-west-1	xray.eu-west-1.amazonaws.com	HTTPS	
Europe (London)	eu-west-2	xray.eu-west-2.amazonaws.com	HTTPS	
Europe (Milan)	eu-south-1	xray.eu-south-1.amazonaws.com	HTTPS	
Europe (Paris)	eu-west-3	xray.eu-west-3.amazonaws.com	HTTPS	
Europe (Stockholm)	eu-north-1	xray.eu-north-1.amazonaws.com	HTTPS	
Middle East (Bahrain)	me-south-1	xray.me-south-1.amazonaws.com	HTTPS	

Region Name	Region	Endpoint	Protocol	
Middle East (UAE)	me-central-1	xray.me-central-1.amazonaws.com	HTTPS	
South America (São Paulo)	sa-east-1	xray.sa-east-1.amazonaws.com	HTTPS	
AWS GovCloud (US-East)	us-gov-east-1	xray.us-gov-east-1.amazonaws.com xray-fips.us-gov-east-1.amazonaws.com	HTTPS HTTPS	
AWS GovCloud (US-West)	us-gov-west-1	xray.us-gov-west-1.amazonaws.com xray-fips.us-gov-west-1.amazonaws.com	HTTPS HTTPS	

Service quotas

Name	Default	Adjust	Description
Custom sampling rules per region	Each supported Region: 25	Yes	The maximum number of custom sampling rules per region.
Groups in an account	Each supported Region: 25	No	The maximum number of groups per account.
Indexed annotations per trace	Each supported Region: 50	No	The maximum number of annotations that can be added to a single trace.
Segment document size	Each supported Region: 64 Kilobytes	No	The maximum size for segment documents.
Tags per custom sampling rule	Each supported Region: 50	No	The maximum number of tags per custom sampling rule.
Tags per group	Each supported Region: 50	No	The maximum number of tags per group.
Trace and service graph retention in days	Each supported Region: 30	No	The number of days to retain trace and service map data.
Trace data modification period in days	Each supported Region: 7	No	The number of days to update recorded data at no additional cost.
Trace document size (dynamic upper limit)	Each supported Region: 500 Kilobytes	No	The maximum size of a trace document.

Name	Default	Adjust	Description
Trace document size (lower limit)	Each supported Region: 100 Kilobytes	No	The maximum size of a trace document.

AWS resources

The following pages provide information that helps you work with AWS resources.

Contents

- AWS service endpoints (p. 982)
- Managing AWS Regions (p. 984)
- AWS service quotas (p. 986)
- Tagging AWS resources (p. 987)
- Amazon Resource Names (ARNs) (p. 991)

AWS service endpoints

To connect programmatically to an AWS service, you use an endpoint. An *endpoint* is the URL of the entry point for an AWS web service. The AWS SDKs and the AWS Command Line Interface (AWS CLI) automatically use the default endpoint for each service in an AWS Region. But you can specify an alternate endpoint for your API requests.

If a service supports Regions, the resources in each Region are independent of similar resources in other Regions. For example, you can create an Amazon EC2 instance or an Amazon SQS queue in one Region. When you do, the instance or queue is independent of instances or queues in all other Regions.

Contents

- Regional endpoints (p. 982)
- View the service endpoints (p. 983)
- FIPS endpoints (p. 984)
- Learn more (p. 984)

Regional endpoints

Most Amazon Web Services offer a Regional endpoint that you can use to make your requests. The general syntax of a Regional endpoint is as follows.

```
protocol://service-code.region-code.amazonaws.com
```

For example, `https://dynamodb.us-west-2.amazonaws.com` is the endpoint for the Amazon DynamoDB service in the US West (Oregon) Region.

The following table lists the name and code of each Region.

Name	Code
US East (Ohio)	`us-east-2`
US East (N. Virginia)	`us-east-1`
US West (N. California)	`us-west-1`
US West (Oregon)	`us-west-2`

Name	Code
Africa (Cape Town)	af-south-1
Asia Pacific (Hong Kong)	ap-east-1
Asia Pacific (Jakarta)	ap-southeast-3
Asia Pacific (Mumbai)	ap-south-1
Asia Pacific (Osaka)	ap-northeast-3
Asia Pacific (Seoul)	ap-northeast-2
Asia Pacific (Singapore)	ap-southeast-1
Asia Pacific (Sydney)	ap-southeast-2
Asia Pacific (Tokyo)	ap-northeast-1
Canada (Central)	ca-central-1
Europe (Frankfurt)	eu-central-1
Europe (Ireland)	eu-west-1
Europe (London)	eu-west-2
Europe (Milan)	eu-south-1
Europe (Paris)	eu-west-3
Europe (Stockholm)	eu-north-1
Middle East (Bahrain)	me-south-1
Middle East (UAE)	me-central-1
South America (São Paulo)	sa-east-1
AWS GovCloud (US-East)	us-gov-east-1
AWS GovCloud (US-West)	us-gov-west-1

Some services, such as IAM, do not support Regions. The endpoints for these services do not include a Region. Other services, such as Amazon EC2, support Regions but let you specify an endpoint that does not include a Region, such as `https://ec2.amazonaws.com`. When you use an endpoint with no Region, AWS routes the Amazon EC2 request to US East (N. Virginia) (us-east-1), which is the default Region for API calls.

View the service endpoints

You can view the AWS service endpoints using the following options:

- Open Service endpoints and quotas (p. 18), search for the service name, and click the link to open the page for that service. To view the supported endpoints for all AWS services in the documentation without switching pages, view the information in the Service Endpoints and Quotas page in the PDF instead.
- To programmatically check for service availability using the SDK for Java, see Checking for Service Availability in an AWS Region in the *AWS SDK for Java Developer Guide*.

- To programmatically view Region and service information using Systems Manager, see Calling AWS Service, Region, and Endpoint Public Parameters in the *AWS Systems Manager User Guide*. For information about how to use public parameters, see Query for AWS Regions, Endpoints, and More Using AWS Systems Manager Parameter Store.
- To see the supported AWS services in each Region (without endpoints), see the Region Table.

FIPS endpoints

Some AWS services offer FIPS endpoints in selected Regions. Unlike standard AWS endpoints, FIPS endpoints use a TLS software library that complies with Federal Information Processing Standard (FIPS) 140-2. These endpoints might be required by enterprises that interact with the United States government. For more information, see Federal Information Processing Standard (FIPS) 140-2 on the AWS Compliance site.

To use a FIPS endpoint with an AWS operation, use the mechanism provided by the AWS SDK or tool to specify a custom endpoint. For example, the AWS SDKs provide an `AWS_USE_FIPS_ENDPOINT` environment variable. The AWS Command Line Interface provides the `--endpoint-url` option. The following example uses the FIPS endpoint for the US West (Oregon) Region with an operation for AWS Key Management Service (AWS KMS).

```
aws kms create-key --endpoint-url https://kms-fips.us-west-2.amazonaws.com
```

Minimum TLS version for FIPS endpoints

With FIPS endpoints, the minimum requirement is TLS 1.2. AWS revoked the ability to use TLS 1.0 and TLS 1.1 on all FIPS endpoints in all Regions as of March 31, 2021. For information about how to determine whether your applications were impacted by this change, see this AWS Security Blog post from May 3, 2021.

Learn more

You can find endpoint information from the following sources:

- To learn about enabling Regions that are disabled by default, see Managing AWS Regions (p. 984).
- For information about the AWS services and endpoints available in the China Regions, see China (Beijing) Region Endpoints and China (Ningxia) Region Endpoints.

Managing AWS Regions

An *AWS Region* is a collection of AWS resources in a geographic area. Each AWS Region is isolated and independent of the other Regions. Regions provide fault tolerance, stability, and resilience, and can also reduce latency. They enable you to create redundant resources that remain available and unaffected by a Regional outage.

The resources that you create in one Region do not exist in any other Region unless you explicitly use a replication feature offered by an AWS service. For example, Amazon S3 and Amazon EC2 support cross-Region replication. Some services, such as AWS Identity and Access Management (IAM), do not have Regional resources.

You can use policy conditions to control access to AWS services in an AWS Region.

Resources

- For a list of Region names and codes, see this table (p. 982).

- For a map of available and upcoming Regions, see Regions and Availability Zones.
- For a list of AWS services supported in each Region (without endpoints), see the AWS Regional Services List.

Enabling a Region

Regions introduced before March 20, 2019 are enabled by default. You can begin creating and managing resources in these Regions immediately. You cannot enable or disable a Region that is enabled by default.

If a Region is disabled by default, you must enable it before you can create and manage resources. The following Regions are disabled by default:

- Africa (Cape Town)
- Asia Pacific (Hong Kong)
- Asia Pacific (Jakarta)
- Europe (Milan)
- Middle East (Bahrain)
- Middle East (UAE)

When you enable a Region, AWS performs actions to prepare your account in that Region, such as distributing your IAM resources to the Region. This process takes a few minutes for most accounts, but this can take several hours. You cannot use the Region until this process is complete.

Requirements

To enable a Region that is disabled, you must have permission to enable Regions. To view an example IAM policy, see Allow enabling and disabling AWS Regions in the *IAM User Guide*.

To enable a Region

1. Sign in to the AWS Management Console.
2. In the upper right corner of the console, choose your account name or number and then choose **Account**.
3. Under **AWS Regions**, in the **Action** column for the Region to enable, choose **Enable**.

   Tip
   If the **Status** column says **Enabled by default**, then you do not need to enable the Region.
4. In the dialog box, review the informational text and then choose **Enable Region**.
5. Wait until the Region is ready to use.

Disabling a Region

If you enabled one of the following Regions, which are disabled by default, then you can disable it as needed:

- Africa (Cape Town)
- Asia Pacific (Hong Kong)
- Asia Pacific (Jakarta)
- Europe (Milan)
- Middle East (Bahrain)
- Middle East (UAE)

After you disable a Region, the resources in this Region become unavailable based on eventual consistency. However, they are not deleted. You can enable this Region again as needed.

Requirements

- You cannot disable a Region that is enabled by default.
- To disable a Region, you must have permission to disable Regions. To view an example IAM policy, see Allow enabling and disabling AWS Regions in the *IAM User Guide*.
- Before you disable a Region, we recommend that you remove all resources from that Region. After you disable a Region, you can no longer view or manage resources in the Region from that account through the AWS Management console or AWS APIs with IAM principals. However, resources in that Region can continue to incur charges. For more information, see Enabling and disabling Regions in the *AWS Billing and Cost Management User Guide*.

To disable a Region

1. Sign in to the AWS Management Console.
2. In the upper right corner of the console, choose your account name or number and then choose **Account**.
3. Under **AWS Regions**, in the **Action** column for the Region to disable, choose **Disable**.
4. In the dialog box, review the informational text and then choose **Disable Region**.

Describing your Regions using the AWS CLI

Use the describe-regions command to describe the Regions available for your account, whether they are enabled or disabled.

```
aws ec2 describe-regions --all-regions
```

If the Region is enabled by default, the output includes the following:

```
"OptInStatus": "opt-in-not-required"
```

If the Region is not enabled, the output includes the following:

```
"OptInStatus": "not-opted-in"
```

After an opt-in Region is enabled, the output includes the following:

```
"OptInStatus": "opted-in"
```

AWS service quotas

Your AWS account has default quotas, formerly referred to as limits, for each AWS service. Unless otherwise noted, each quota is Region-specific. You can request increases for some quotas, and other quotas cannot be increased.

Service Quotas is an AWS service that helps you manage your quotas for many AWS services, from one location. Along with looking up the quota values, you can also request a quota increase from the Service Quotas console.

AWS Support might approve, deny, or partially approve your requests.

To view service quotas

You can view service quotas using the following options:

- Open the Service endpoints and quotas (p. 18) page in the documentation, search for the service name, and click the link to go to the page for that service. To view the service quotas for all AWS services in the documentation without switching pages, view the information in the Service Endpoints and Quotas page in the PDF instead.
- Open the Service Quotas console. In the navigation pane, choose **AWS services** and select a service.
- Use the list-service-quotas and list-aws-default-service-quotas AWS CLI commands.

To request a quota increase

You can request a quota increase using Service Quotas and AWS Support Center. If a service is not yet available in Service Quotas, use AWS Support Center instead. Increases are not granted immediately. It might take a couple of days for your increase to become effective.

- **(Recommended)** Open the Service Quotas console. In the navigation pane, choose **AWS services**. Select a service, select a quota, and follow the directions to request a quota increase. For more information, see Requesting a Quota Increase in the *Service Quotas User Guide*.
- Use the request-service-quota-increase AWS CLI command.
- Open the AWS Support Center page, sign in if necessary, and choose **Create case**. Choose **Service limit increase**. Complete and submit the form.

Tagging AWS resources

You can assign metadata to your AWS resources in the form of *tags*. Each tag is a label consisting of a user-defined key and value. Tags can help you manage, identify, organize, search for, and filter resources. You can create tags to categorize resources by purpose, owner, environment, or other criteria.

Each tag has two parts:

- A *tag key* (for example, `CostCenter`, `Environment`, or `Project`). Tag keys are case sensitive.
- A *tag value* (for example, `111122223333` or `Production`). Like tag keys, tag values are case sensitive.

You can use tags to categorize resources by purpose, owner, environment, or other criteria.

You can tag resources for all cost-accruing services in AWS. For the following services, AWS recommends newer alternative AWS services that support tagging to better meet customer use cases.

- Amazon Cloud Directory
- Amazon CloudSearch
- Amazon Cognito Sync
- AWS Data Pipeline
- AWS DeepLens
- Amazon Elastic Transcoder
- Amazon Machine Learning
- AWS OpsWorks Stacks
- Amazon S3 Glacier Direct
- Amazon SimpleDB

- Amazon WorkSpaces Application Manager (Amazon WAM)

Best practices

As you create a tagging strategy for AWS resources, follow best practices:

- Do not add personally identifiable information (PII) or other confidential or sensitive information in tags. Tags are accessible to many AWS services, including billing. Tags are not intended to be used for private or sensitive data.
- Use a standardized, case-sensitive format for tags, and apply it consistently across all resource types.
- Consider tag guidelines that support multiple purposes, like managing resource access control, cost tracking, automation, and organization.
- Use automated tools to help manage resource tags. AWS Resource Groups and the Resource Groups Tagging API enable programmatic control of tags, making it easier to automatically manage, search, and filter tags and resources.
- Use too many tags rather than too few tags.
- Remember that it is easy to change tags to accommodate changing business requirements, but consider the consequences of future changes. For example, changing access control tags means you must also update the policies that reference those tags and control access to your resources.
- You can automatically enforce the tagging standards that your organization chooses to adopt by creating and deploying tag policies using AWS Organizations. Tag policies let you specify tagging rules that define valid key names and the values that are valid for each key. You can choose to only monitor, giving you an opportunity to evaluate and clean up your existing tags. Once your tags are in compliance with your chosen standards, you can then turn on enforcement in the tag policies to prevent non-compliant tags from being created. For more information, see Tag policies in the *AWS Organizations User Guide*.

Tagging categories

Companies that are most effective in their use of tags typically create business-relevant tag groupings to organize their resources along technical, business, and security dimensions. Companies that use automated processes to manage their infrastructure also include additional, automation-specific tags.

Technical tags	Tags for automation	Business tags	Security tags
• **Name –** Identify individual resources • **Application ID –** Identify resources that are related to a specific application • **Application Role –** Describe the function of a particular resource (such as web server, message broker, database) • **Cluster –** Identify resource farms that share a common configuration and	• **Date/Time –** Identify the date or time a resource should be started, stopped, deleted, or rotated • **Opt in/Opt out –** Indicate whether a resource should be included in an automated activity such as starting, stopping, or resizing instances • **Security –** Determine requirements, such as encryption or enabling of Amazon	• **Project –** Identify projects that the resource supports • **Owner –** Identify who is responsible for the resource • **Cost Center/Business Unit –** Identify the cost center or business unit associated with a resource, typically for cost allocation and tracking • **Customer –** Identify a specific client that	• **Confidentiality –** An identifier for the specific data confidentiality level a resource supports • **Compliance –** An identifier for workloads that must adhere to specific compliance requirements

Technical tags	Tags for automation	Business tags	Security tags
perform a specific function for an application • **Environment –** Distinguish between development, test, and production resources • **Version –** Help distinguish between versions of resources or applications	VPC flow logs; identify route tables or security groups that need extra scrutiny	a particular group of resources serves	

Tag naming limits and requirements

The following basic naming and usage requirements apply to tags:

- Each resource can have a maximum of 50 user created tags.
- System created tags that begin with `aws:` are reserved for AWS use, and do not count against this limit. You can't edit or delete a tag that begins with the `aws:` prefix.
- For each resource, each tag key must be unique, and each tag key can have only one value.
- The tag key must be a minimum of 1 and a maximum of 128 Unicode characters in UTF-8.
- The tag value must be a minimum of 0 and a maximum of 256 Unicode characters in UTF-8.
- Allowed characters can vary by AWS service. For information about what characters you can use to tag resources in a particular AWS service, see its documentation. In general, the allowed characters are letters, numbers, spaces representable in UTF-8, and the following characters: _ . : / = + - @.
- Tag keys and values are case sensitive. As a best practice, decide on a strategy for capitalizing tags, and consistently implement that strategy across all resource types. For example, decide whether to use `Costcenter`, `costcenter`, or `CostCenter`, and use the same convention for all tags. Avoid using similar tags with inconsistent case treatment.

Common tagging strategies

Use the following tagging strategies to help identify and manage AWS resources.

Contents

- Tags for resource organization (p. 989)
- Tags for cost allocation (p. 990)
- Tags for automation (p. 990)
- Tags for access control (p. 990)

Tags for resource organization

Tags are a good way to organize AWS resources in the AWS Management Console. You can configure tags to be displayed with resources, and can search and filter by tag. With the AWS Resource Groups service, you can create groups of AWS resources based on one or more tags or portions of tags. You can also create groups based on their occurrence in an AWS CloudFormation stack. Using Resource Groups and

Tag Editor, you can consolidate and view data for applications that consist of multiple services, resources, and Regions in one place.

Tags for cost allocation

AWS Cost Explorer and detailed billing reports let you break down AWS costs by tag. Typically, you use business tags such as *cost center/business unit*, *customer*, or *project* to associate AWS costs with traditional cost-allocation dimensions. But a cost allocation report can include any tag. This lets you associate costs with technical or security dimensions, such as specific applications, environments, or compliance programs. The following is an example of a partial cost allocation report.

Total Cost	user:Owner	user:Stack	user:Cost Center	user:Application
0.95	DbAdmin	Test	80432	Widget2
0.01	DbAdmin	Test	80432	Widget2
3.84	DbAdmin	Prod	80432	Widget2
6.00	DbAdmin	Test	78925	Widget1
234.63	SysEng	Prod	78925	Widget1
0.73	DbAdmin	Test	78925	Widget1
0.00	DbAdmin	Prod	80432	Portal
2.47	DbAdmin	Prod	78925	Portal

For some services, you can use an AWS-generated `createdBy` tag for cost allocation purposes, to help account for resources that might otherwise go uncategorized. The `createdBy` tag is available only for supported AWS services and resources. Its value contains data associated with specific API or console events. For more information, see AWS-Generated Cost Allocation Tags in the *AWS Billing and Cost Management User Guide*.

Tags for automation

Resource or service-specific tags are often used to filter resources during automation activities. Automation tags are used to opt in or opt out of automated tasks or to identify specific versions of resources to archive, update, or delete. For example, you can run automated `start` or `stop` scripts that turn off development environments during nonbusiness hours to reduce costs. In this scenario, Amazon Elastic Compute Cloud (Amazon EC2) instance tags are a simple way to identify instances to opt out of this action. For scripts that find and delete stale, out-of-date, or rolling Amazon EBS snapshots, snapshot tags can add an extra dimension of search criteria.

Tags for access control

IAM policies support tag-based conditions, letting you constrain IAM permissions based on specific tags or tag values. For example, IAM user or role permissions can include conditions to limit EC2 API calls to specific environments (such as development, test, or production) based on their tags. The same strategy can be used to limit API calls to specific Amazon Virtual Private Cloud (Amazon VPC) networks. Support for tag-based, resource-level IAM permissions is service specific. When you use tag-based conditions for access control, be sure to define and restrict who can modify the tags. For more information about using tags to control API access to AWS resources, see AWS services that work with IAM in the *IAM User Guide*.

Tagging governance

An effective tagging strategy uses standardized tags and applies them consistently and programmatically across AWS resources. You can use both reactive and proactive approaches for governing tags in your AWS environment.

- **Reactive governance** is for finding resources that are not properly tagged using tools such as the Resource Groups Tagging API, AWS Config Rules, and custom scripts. To find resources manually, you can use Tag Editor and detailed billing reports.
- **Proactive governance** uses tools such as AWS CloudFormation, AWS Service Catalog, tag policies in AWS Organizations, or IAM resource-level permissions to ensure standardized tags are consistently applied at resource creation.

  For example, you can use the AWS CloudFormation `Resource Tags` property to apply tags to resource types. In AWS Service Catalog, you can add portfolio and product tags that are combined and applied to a product automatically when it is launched. More rigorous forms of proactive governance include automated tasks. For example, you can use the Resource Groups Tagging API to search an AWS environment's tags, or run scripts to quarantine or delete improperly tagged resources.

Learn more

This page provides general information on tagging AWS resources. For more information about tagging resources in a particular AWS service, see its documentation. The following are also good sources of information about tagging:

- For information about the AWS Resource Groups Tagging API, see the *Resource Groups Tagging API Reference Guide*.
- For information about Tag Editor, see Working with Tag Editor in the *AWS Resource Groups User Guide*.
- For information about using tags to control access to AWS resources, see Control Access Using IAM Tags in the *IAM User Guide*.

Amazon Resource Names (ARNs)

Amazon Resource Names (ARNs) uniquely identify AWS resources. We require an ARN when you need to specify a resource unambiguously across all of AWS, such as in IAM policies, Amazon Relational Database Service (Amazon RDS) tags, and API calls.

The Service Authorization Reference lists the ARNs that you can use in IAM policies.

ARN format

The following are the general formats for ARNs. The specific formats depend on the resource. To use an ARN, replace the *`italicized`* text with the resource-specific information. Be aware that the ARNs for some resources omit the Region, the account ID, or both the Region and the account ID.

```
arn:partition:service:region:account-id:resource-id
arn:partition:service:region:account-id:resource-type/resource-id
arn:partition:service:region:account-id:resource-type:resource-id
```

`partition`

The partition in which the resource is located. A *partition* is a group of AWS Regions. Each AWS account is scoped to one partition.

The following are the supported partitions:

- `aws` - AWS Regions
- `aws-cn` - China Regions
- `aws-us-gov` - AWS GovCloud (US) Regions

service

The service namespace that identifies the AWS product. For example, `s3` for Amazon S3. To find a service namespace, open the Service Authorization Reference, open the page for the service, and find the phrase "service prefix" in the first sentence. For example, the following text appears in the first sentence on the page for Amazon S3:

```
(service prefix: s3)
```

region

The Region code. For example, `us-east-2` for US East (Ohio). For the list of Region codes, see Regional endpoints (p. 982).

account-id

The ID of the AWS account that owns the resource, without the hyphens. For example, `123456789012`.

resource-id

The resource identifier. This part of the ARN can be the name or ID of the resource or a resource path (p. 992). For example, `user/Bob` for an IAM user or `instance/i-1234567890abcdef0` for an EC2 instance. Some resource identifiers include a parent resource (sub-resource-type/parent-resource/sub-resource) or a qualifier such as a version (resource-type:resource-name:qualifier).

Paths in ARNs

Resource ARNs can include a path. For example, in Amazon S3, the resource identifier is an object name that can include slashes (`/`) to form a path. Similarly, IAM user names and group names can include paths.

Paths can include a wildcard character, namely an asterisk (`*`). For example, if you are writing an IAM policy, you can specify all IAM users that have the path `product_1234` using a wildcard as follows:

```
arn:aws:iam::123456789012:user/Development/product_1234/*
```

Similarly, you can specify `user/*` to mean all users or `group/*` to mean all groups, as in the following examples:

```
"Resource":"arn:aws:iam::123456789012:user/*"
"Resource":"arn:aws:iam::123456789012:group/*"
```

The following example shows ARNs for an Amazon S3 bucket in which the resource name includes a path:

```
arn:aws:s3:::my_corporate_bucket/*
arn:aws:s3:::my_corporate_bucket/Development/*
```

Incorrect wildcard usage

You cannot use a wildcard in the portion of the ARN that specifies the resource type, such as the term `user` in an IAM ARN. For example, the following is not allowed.

```
arn:aws:iam::123456789012:u*   <== not allowed
```

AWS IP address ranges

Amazon Web Services (AWS) publishes its current IP address ranges in JSON format. To view the current ranges, download the `.json` file. To maintain history, save successive versions of the `.json` file on your system. To determine whether there have been changes since the last time that you saved the file, check the publication time in the current file and compare it to the publication time in the last file that you saved.

The IP address ranges that you bring to AWS through bring your own IP addresses (BYOIP) are not included in the `.json` file.

Contents

- Download (p. 993)
- Syntax (p. 993)
- Filtering the JSON file (p. 995)
- Implementing egress control (p. 998)
- AWS IP address ranges notifications (p. 999)
- Release notes (p. 1001)
- Learn more (p. 1001)

Download

Download ip-ranges.json.

If you access this file programmatically, it is your responsibility to ensure that the application downloads the file only after successfully verifying the TLS certificate presented by the server.

Syntax

The syntax of `ip-ranges.json` is as follows.

```
{
  "syncToken": "0123456789",
  "createDate": "yyyy-mm-dd-hh-mm-ss",
  "prefixes": [
    {
      "ip_prefix": "cidr",
      "region": "region",
      "network_border_group": "network_border_group",
      "service": "subset"
    }
  ],
  "ipv6_prefixes": [
    {
      "ipv6_prefix": "cidr",
      "region": "region",
      "network_border_group": "network_border_group",
      "service": "subset"
    }
  ]
```

```
}
```

syncToken

The publication time, in Unix epoch time format.

Type: String

Example: `"syncToken": "1416435608"`

createDate

The publication date and time, in UTC YY-MM-DD-hh-mm-ss format.

Type: String

Example: `"createDate": "2014-11-19-23-29-02"`

prefixes

The IP prefixes for the IPv4 address ranges.

Type: Array

ipv6_prefixes

The IP prefixes for the IPv6 address ranges.

Type: Array

ip_prefix

The public IPv4 address range, in CIDR notation. Note that AWS may advertise a prefix in more specific ranges. For example, prefix 96.127.0.0/17 in the file may be advertised as 96.127.0.0/21, 96.127.8.0/21, 96.127.32.0/19, and 96.127.64.0/18.

Type: String

Example: `"ip_prefix": "198.51.100.2/24"`

ipv6_prefix

The public IPv6 address range, in CIDR notation. Note that AWS may advertise a prefix in more specific ranges.

Type: String

Example: `"ipv6_prefix": "2001:db8:1234::/64"`

network_border_group

The name of the network border group, which is a unique set of Availability Zones or Local Zones from where AWS advertises IP addresses.

Type: String

Example: `"network_border_group": "us-west-2-lax-1"`

region

The AWS Region or `GLOBAL` for edge locations. The `CLOUDFRONT` and `ROUTE53` ranges are `GLOBAL`.

Type: String

Valid values: `ap-east-1` | `ap-northeast-1` | `ap-northeast-2` | `ap-northeast-3` | `ap-south-1` | `ap-southeast-1` | `ap-southeast-2` | `ca-central-1` | `cn-north-1` | `cn-northwest-1` | `eu-`

`central-1` | `eu-north-1` | `eu-west-1` | `eu-west-2` | `eu-west-3` | `me-central-1` | `me-south-1` | `sa-east-1` | `us-east-1` | `us-east-2` | `us-gov-east-1` | `us-gov-west-1` | `us-west-1` | `us-west-2` | `GLOBAL`

Example: `"region": "us-east-1"`

service

The subset of IP address ranges. The addresses listed for `API_GATEWAY` are egress only. Specify `AMAZON` to get all IP address ranges (meaning that every subset is also in the `AMAZON` subset). However, some IP address ranges are only in the `AMAZON` subset (meaning that they are not also available in another subset).

Type: String

Valid values: `AMAZON` | `AMAZON_APPFLOW` | `AMAZON_CONNECT` | `API_GATEWAY` | `CHIME_MEETINGS` | `CHIME_VOICECONNECTOR` | `CLOUD9` | `CLOUDFRONT` | `CLOUDFRONT_ORIGIN_FACING` | `CODEBUILD` | `DYNAMODB` | `EBS` | `EC2` | `EC2_INSTANCE_CONNECT` | `GLOBALACCELERATOR` | `KINESIS_VIDEO_STREAMS` | `ROUTE53` | `ROUTE53_HEALTHCHECKS` | `ROUTE53_HEALTHCHECKS_PUBLISHING` | `ROUTE53_RESOLVER` | `S3` | `WORKSPACES_GATEWAYS`

Example: `"service": "AMAZON"`

Filtering the JSON file

You can download a command line tool to help you filter the information to just what you are looking for.

Windows

The AWS Tools for Windows PowerShell includes a cmdlet, `Get-AWSPublicIpAddressRange`, to parse this JSON file. The following examples demonstrate its use. For more information, see Querying the Public IP Address Ranges for AWS and Get-AWSPublicIpAddressRange.

Example 1. Get the creation date

```
PS C:\> Get-AWSPublicIpAddressRange -OutputPublicationDate

Wednesday, August 22, 2018 9:22:35 PM
```

Example 2. Get the information for a specific Region

```
PS C:\> Get-AWSPublicIpAddressRange -Region us-east-1

IpPrefix        Region      NetworkBorderGroup         Service
--------        ------       -------                   -------
23.20.0.0/14    us-east-1    us-east-1                 AMAZON
50.16.0.0/15    us-east-1    us-east-1                 AMAZON
50.19.0.0/16    us-east-1    us-east-1                 AMAZON
...
```

Example 3. Get all IP addresses

```
PS C:\> (Get-AWSPublicIpAddressRange).IpPrefix
23.20.0.0/14
27.0.0.0/22
```

```
43.250.192.0/24
...
2406:da00:ff00::/64
2600:1fff:6000::/40
2a01:578:3::/64
2600:9000::/28
```

Example 4. Get all IPv4 addresses

```
PS C:\> Get-AWSPublicIpAddressRange | where {$_.IpAddressFormat -eq "Ipv4"} | select
 IpPrefix

IpPrefix
--------
23.20.0.0/14
27.0.0.0/22
43.250.192.0/24
...
```

Example 5. Get all IPv6 addresses

```
PS C:\> Get-AWSPublicIpAddressRange | where {$_.IpAddressFormat -eq "Ipv6"} | select
 IpPrefix

IpPrefix
--------
2a05:d07c:2000::/40
2a05:d000:8000::/40
2406:dafe:2000::/40
...
```

Example 6. Get all IP addresses for a specific service

```
PS C:\> Get-AWSPublicIpAddressRange -ServiceKey CODEBUILD | select IpPrefix

IpPrefix
--------
52.47.73.72/29
13.55.255.216/29
52.15.247.208/29
...
```

Linux

The following example commands use the jq tool to parse a local copy of the JSON file.

Example 1. Get the creation date

```
$ jq .createDate < ip-ranges.json

"2016-02-18-17-22-15"
```

Example 2. Get the information for a specific Region

```
$ jq '.prefixes[] | select(.region=="us-east-1")' < ip-ranges.json

{
```

```
  "ip_prefix": "23.20.0.0/14",
  "region": "us-east-1",
  "network_border_group": "us-east-1",
  "service": "AMAZON"
},
{
  "ip_prefix": "50.16.0.0/15",
  "region": "us-east-1",
  "network_border_group": "us-east-1",
  "service": "AMAZON"
},
{
  "ip_prefix": "50.19.0.0/16",
  "region": "us-east-1",
  "network_border_group": "us-east-1",
  "service": "AMAZON"
},
...
```

Example 3. Get all IPv4 addresses

```
$ jq -r '.prefixes | .[].ip_prefix' < ip-ranges.json

23.20.0.0/14
27.0.0.0/22
43.250.192.0/24
...
```

Example 4. Get all IPv6 addresses

```
$ jq -r '.ipv6_prefixes | .[].ipv6_prefix' < ip-ranges.json

2a05:d07c:2000::/40
2a05:d000:8000::/40
2406:dafe:2000::/40
...
```

Example 5. Get all IPv4 addresses for a specific service

```
$ jq -r '.prefixes[] | select(.service=="CODEBUILD") | .ip_prefix' < ip-ranges.json

52.47.73.72/29
13.55.255.216/29
52.15.247.208/29
...
```

Example 6. Get all IPv4 addresses for a specific service in a specific Region

```
$ jq -r '.prefixes[] | select(.region=="us-east-1") | select(.service=="CODEBUILD")
 | .ip_prefix' < ip-ranges.json

34.228.4.208/28
```

Example 7. Get information for a certain network border group

```
$ jq -r '.prefixes[] | select(.region=="us-west-2") | select(.network_border_group=="us-
west-2-lax-1") | .ip_prefix' < ip-ranges.json
70.224.192.0/18
52.95.230.0/24
```

```
15.253.0.0/16
...
```

Implementing egress control

To allow an instance to access only AWS services, create a security group with rules that allow outbound traffic to the CIDR blocks in the `AMAZON` list, minus the CIDR blocks that are also in the `EC2` list. IP addresses in the `EC2` list can be assigned to EC2 instances.

Windows PowerShell

The following PowerShell example shows you how to get the IP addresses that are in the `AMAZON` list but not the `EC2` list. Copy the script and save it in a file named `Select_address.ps1`.

```
$amazon_addresses = Get-AWSPublicIpAddressRange -ServiceKey amazon
$ec2_addresses = Get-AWSPublicIpAddressRange -ServiceKey ec2

ForEach ($address in $amazon_addresses)
{
    if( $ec2_addresses.IpPrefix -notcontains $address.IpPrefix)
    {
       ($address).IpPrefix
    }
}
```

You can run this script as follows:

```
PS C:\> .\Select_address.ps1
13.32.0.0/15
13.35.0.0/16
13.248.0.0/20
13.248.16.0/21
13.248.24.0/22
13.248.28.0/22
27.0.0.0/22
43.250.192.0/24
43.250.193.0/24
...
```

jq

The following example shows you how to get the IP addresses that are in the `AMAZON` list but not the `EC2` list, for all Regions:

```
jq -r '[.prefixes[] | select(.service=="AMAZON").ip_prefix] - [.prefixes[] |
 select(.service=="EC2").ip_prefix] | .[]' < ip-ranges.json

52.94.22.0/24
52.94.17.0/24
52.95.154.0/23
52.95.212.0/22
54.239.0.240/28
54.239.54.0/23
52.119.224.0/21
...
```

The following example shows you how to filter the results to one Region:

```
jq -r '[.prefixes[] | select(.region=="us-east-1" and .service=="AMAZON").ip_prefix] -
 [.prefixes[] | select(.region=="us-east-1" and .service=="EC2").ip_prefix] | .[]' < ip-
ranges.json
```

Python

The following python script shows you how to get the IP addresses that are in the `AMAZON` list but not the `EC2` list. Copy the script and save it in a file named `get_ips.py`.

```
#!/usr/bin/env python
import requests

ip_ranges = requests.get('https://ip-ranges.amazonaws.com/ip-ranges.json').json()
['prefixes']
amazon_ips = [item['ip_prefix'] for item in ip_ranges if item["service"] == "AMAZON"]
ec2_ips = [item['ip_prefix'] for item in ip_ranges if item["service"] == "EC2"]

amazon_ips_less_ec2=[]

for ip in amazon_ips:
    if ip not in ec2_ips:
        amazon_ips_less_ec2.append(ip)

for ip in amazon_ips_less_ec2: print(str(ip))
```

You can run this script as follows:

```
$ python ./get_ips.py
13.32.0.0/15
13.35.0.0/16
13.248.0.0/20
13.248.16.0/21
13.248.24.0/22
13.248.28.0/22
27.0.0.0/22
43.250.192.0/24
43.250.193.0/24
...
```

AWS IP address ranges notifications

Whenever there is a change to the AWS IP address ranges, we send notifications to subscribers of the `AmazonIpSpaceChanged` topic. The payload contains information in the following format:

```
{
  "create-time":"yyyy-mm-ddThh:mm:ss+00:00",
  "synctoken":"0123456789",
  "md5":"6a45316e8bc9463c9e926d5d37836d33",
  "url":"https://ip-ranges.amazonaws.com/ip-ranges.json"
}
```

create-time

The creation date and time.

Notifications could be delivered out of order. Therefore, we recommend that you check the timestamps to ensure the correct order.

synctoken

The publication time, in Unix epoch time format.

md5

The cryptographic hash value of the `ip-ranges.json` file. You can use this value to check whether the downloaded file is corrupted.

url

The location of the `ip-ranges.json` file.

If you want to be notified whenever there is a change to the AWS IP address ranges, you can subscribe as follows to receive notifications using Amazon SNS.

To subscribe to AWS IP address range notifications

1. Open the Amazon SNS console at https://console.aws.amazon.com/sns/v3/home.
2. In the navigation bar, change the Region to **US East (N. Virginia)**, if necessary. You must select this Region because the SNS notifications that you are subscribing to were created in this Region.
3. In the navigation pane, choose **Subscriptions**.
4. Choose **Create subscription**.
5. In the **Create subscription** dialog box, do the following:
   a. For **Topic ARN**, copy the following Amazon Resource Name (ARN):

      ```
      arn:aws:sns:us-east-1:806199016981:AmazonIpSpaceChanged
      ```

   b. For **Protocol**, choose the protocol to use (for example, `Email`).
   c. For **Endpoint**, type the endpoint to receive the notification (for example, your email address).
   d. Choose **Create subscription**.
6. You'll be contacted on the endpoint that you specified and asked to confirm your subscription. For example, if you specified an email address, you'll receive an email message with the subject line `AWS Notification - Subscription Confirmation`. Follow the directions to confirm your subscription.

Notifications are subject to the availability of the endpoint. Therefore, you might want to check the JSON file periodically to ensure that you've got the latest ranges. For more information about Amazon SNS reliability, see https://aws.amazon.com/sns/faqs/#Reliability.

If you no longer want to receive these notifications, use the following procedure to unsubscribe.

To unsubscribe from AWS IP address ranges notifications

1. Open the Amazon SNS console at https://console.aws.amazon.com/sns/v3/home.
2. In the navigation pane, choose **Subscriptions**.
3. Select the check box for the subscription.
4. Choose **Actions**, **Delete subscriptions**.
5. When prompted for confirmation, choose **Delete**.

For more information about Amazon SNS, see the *Amazon Simple Notification Service Developer Guide*.

Release notes

The following table describes updates to the AWS IP address ranges. We also add new Region codes with each Region launch.

Description	Release date
Added the `CLOUDFRONT_ORIGIN_FACING` service code.	October 12, 2021
Added the `ROUTE53_RESOLVER` service code.	June 24, 2021
Added the `EBS` service code.	May 12, 2021
Added the `KINESIS_VIDEO_STREAMS` service code.	November 19, 2020
Added the `CHIME_MEETINGS` and `CHIME_VOICECONNECTOR` service codes.	June 19, 2020
Added the `AMAZON_APPFLOW` service code.	June 9, 2020
Add support for the network border group.	April 7, 2020
Added the `WORKSPACES_GATEWAYS` service code.	March 30, 2020
Added the `ROUTE53_HEALTHCHECK_PUBLISHING` service code.	January 30, 2020
Added the `API_GATEWAY` service code.	September 26, 2019
Added the `EC2_INSTANCE_CONNECT` service code.	June 26, 2019
Added the `DYNAMODB` service code.	April 25, 2019
Added the `GLOBALACCELERATOR` service code.	December 20, 2018
Added the `AMAZON_CONNECT` service code.	June 20, 2018
Added the `CLOUD9` service code.	June 20, 2018
Added the `CODEBUILD` service code.	April 19, 2018
Added the `S3` service code.	February 28, 2017
Added support for IPv6 address ranges.	August 22, 2016
Initial release	November 19, 2014

Learn more

- `AMAZON_APPFLOW` – IP address ranges
- `AMAZON_CONNECT` – Set up your network
- `CLOUDFRONT` – Locations and IP address ranges of CloudFront edge servers
- `DYNAMODB` – IP address ranges

- `EC2` – Public IPV4 addresses
- `EC2_INSTANCE_CONNECT` – Set up EC2 Instance Connect
- `GLOBALACCELERATOR` – Location and IP address ranges of Global Accelerator edge servers
- `ROUTE53` – IP address ranges of Amazon Route 53 servers
- `ROUTE53_HEALTHCHECKS` – IP address ranges of Amazon Route 53 servers
- `ROUTE53_HEALTHCHECKS_PUBLISHING` – IP address ranges of Amazon Route 53 servers
- `WORKSPACES_GATEWAYS` – PCoIP gateway servers

AWS services that support IPv6

Computers and smart devices use IP addresses to communicate with each other over the internet and other networks. As the internet continues to grow, so does the need for IP addresses. The most common format for IP addresses is IPv4. The new format for IP addresses is IPv6, which provides a larger address space than IPv4.

AWS services support for IPv6 includes support for dual stack configuration (IPv4 and IPv6) or IPv6 only configurations. For example, a virtual private cloud (VPC) is a logically isolated section of the AWS Cloud where you can launch AWS resources. Within a VPC, you can create subnets that are IPv4 only, dual stack, or IPv6 only.

AWS services support access through public endpoints. Some AWS services also support access using private endpoints powered by AWS PrivateLink. AWS services can support IPv6 through their private endpoints even if they do not support IPv6 through their public endpoints. Endpoints that support IPv6 can respond to DNS queries with AAAA records.

Services that support IPv6

The following table lists the AWS services that provide dual stack support, IPv6 only support, and endpoints that support IPv6. We will update this table as we release additional support for IPv6.

Service name	Dual stack support	IPv6 only support	Public endpoints support IPv6	Private endpoints support IPv6
App Mesh	Yes	Yes	Yes	No
Amazon CloudFront	Yes	No	No	No
AWS Cloud Map	Yes	Yes	Yes	No
Amazon EC2	Yes	Yes	Yes	No
Amazon ECS	Yes	No	No	No
Amazon EKS	Yes	Yes	No	No
Elastic Load Balancing	Yes	Yes	No	No
AWS Fargate	Yes	No	No	No
AWS Global Accelerator	Yes	No	No	No
AWS IoT	Yes	Yes	No	No
AWS Lambda	No	No	Yes	No
Amazon Lightsail	Yes	No	No	No

Service name	Dual stack support	IPv6 only support	Public endpoints support IPv6	Private endpoints support IPv6
Amazon RDS	Yes	No	Yes	No
Amazon Route 53	Yes	Yes	No	No
Amazon S3	Yes	No	Yes	No
AWS Secrets Manager	Yes	No	Yes	No
AWS Site-to-Site VPN	Yes	No	Yes	No
Amazon VPC	Yes	Yes	Yes	No
Amazon WorkSpaces	Yes	No	No	No

Additional IPv6 support

- AWS CloudTrail records include source IPv6 information.
- Amazon EC2 provides IPv6 endpoints for Instance Metadata Service (IMDS) and Amazon Time Sync Service.
- AWS Global Accelerator provides two IPv6 static addresses for dual-stack accelerators, in addition to two IPv4 static addresses.
- AWS Identity and Access Management (IAM) supports IPv6 addresses in IAM policies.
- Amazon Macie supports IPv6 addresses in personally identifiable information (PII).
- AWS PrivateLink supports IPv6 for endpoint services and interface endpoints.
- Amazon Route 53 supports DNS records for IPv6.
- AWS Shield supports threat protection based on IPv6 addresses.
- AWS WAF supports allowing or blocking requests based on IPv6 addresses.

Learn more

- IPv6 on AWS
- Dual Stack and IPv6-only Amazon VPC Reference Architectures (PDF)

AWS APIs

The following pages provide information that is useful when using an AWS API.

Contents

- Error retries and exponential backoff in AWS (p. 1005)
- Signing AWS API requests (p. 1006)
- AWS SDK support for Amazon S3 client-side encryption (p. 1042)

Error retries and exponential backoff in AWS

Numerous components on a network, such as DNS servers, switches, load balancers, and others can generate errors anywhere in the life of a given request. The usual technique for dealing with these error responses in a networked environment is to implement retries in the client application. This technique increases the reliability of the application and reduces operational costs for the developer.

Each AWS SDK implements automatic retry logic. The AWS SDK for Java automatically retries requests, and you can configure the retry settings using the `ClientConfiguration` class. For example, you might want to turn off the retry logic for a web page that makes a request with minimal latency and no retries. Use the `ClientConfiguration` class and provide a `maxErrorRetry` value of `0` to turn off the retries.

If you're not using an AWS SDK, you should retry original requests that receive server (5xx) or throttling errors. However, client errors (4xx) indicate that you need to revise the request to correct the problem before trying again.

In addition to simple retries, each AWS SDK implements exponential backoff algorithm for better flow control. The idea behind exponential backoff is to use progressively longer waits between retries for consecutive error responses. You should implement a maximum delay interval, as well as a maximum number of retries. The maximum delay interval and maximum number of retries are not necessarily fixed values, and should be set based on the operation being performed, as well as other local factors, such as network latency.

Most exponential backoff algorithms use jitter (randomized delay) to prevent successive collisions. Because you aren't trying to avoid such collisions in these cases, you don't need to use this random number. However, if you use concurrent clients, jitter can help your requests succeed faster. For more information, see the blog post for Exponential Backoff and Jitter.

The following pseudo code shows one way to poll for status using an increasing delay.

```
Do some asynchronous operation.

retries = 0

DO
    wait for (2^retries * 100) milliseconds

    status = Get the result of the asynchronous operation.

    IF status = SUCCESS
        retry = false
    ELSE IF status = NOT_READY
        retry = true
    ELSE IF status = THROTTLED
```

```
        retry = true
    ELSE
        Some other error occurred, so stop calling the API.
        retry = false
    END IF

    retries = retries + 1

WHILE (retry AND (retries < MAX_RETRIES))
```

Signing AWS API requests

Important
The AWS SDKs, AWS Command Line Interface (AWS CLI), and other AWS tools sign API requests for you using the access key that you specify when you configure the tool. **When you use these tools, you don't need to learn how to sign API requests. The following documentation explains how to sign API requests, but is *only* useful if you're writing your own code to send and sign AWS API requests.** We recommend that you use the AWS SDKs or other AWS tools to send API requests, instead of writing your own code.

When you send API requests to AWS, you sign the requests so that AWS can identify who sent them. You sign requests with your AWS access key, which consists of an access key ID and secret access key. Some requests don't need to be signed, including anonymous requests to Amazon Simple Storage Service (Amazon S3) and some API operations in AWS Security Token Service (AWS STS) such as `AssumeRoleWithWebIdentity`.

When to sign requests

When you write custom code to send API requests to AWS, you need to include code to sign the requests. You might do this for the following reasons:

- You are working with a programming language for which there is no AWS SDK.
- You want complete control over how a request is sent to AWS.

You *don't* need to sign requests when you use the AWS CLI or one of the AWS SDKs. These tools calculate the signature for you, and also manage the connection details, handle request retries, and provide error handling. In most cases, they also contain sample code, tutorials, and other resources to help you get started writing applications that interact with AWS.

Why requests are signed

The signing process helps secure requests in the following ways:

- **Verify the identity of the requester**

  Signing makes sure that the request has been sent by someone with a valid access key. For more information, see Understanding and getting your AWS credentials (p. 3).
- **Protect data in transit**

  To prevent tampering with a request while it's in transit, some of the request elements are used to calculate a hash (digest) of the request, and the resulting hash value is included as part of the request. When an AWS service receives the request, it uses the same information to calculate a hash and matches it against the hash value in your request. If the values don't match, AWS denies the request.
- **Protect against potential replay attacks**

In most cases, a request must reach AWS within five minutes of the time stamp in the request. Otherwise, AWS denies the request.

Signing requests

To sign a request, you first calculate a hash (digest) of the request. Then you use the hash value, some other information from the request, and your secret access key to calculate another hash known as the *signature*. Then you add the signature to the request in one of the following ways:

- Using the HTTP `Authorization` header.
- Adding a query string value to the request. Because the signature is part of the URL in this case, this type of URL is called a *presigned URL*.

Signature versions

AWS supports Signature Version 4 (SigV4) and Signature Version 2 (SigV2). All AWS services in all AWS Regions support SigV4, except Amazon SimpleDB which requires SigV2. The AWS SDKs, including the AWS CLI, automatically use SigV4 for all services that support it. If you manually sign API requests, you should do the same.

AWS is rolling out an extension to SigV4 called *Signature Version 4A (SigV4A)*. This extension enables signatures that are valid in more than one AWS Region. This is required for signing multi-Region API requests, for example with Amazon S3 Multi-Region Access Points. The AWS SDKs and AWS CLI support SigV4A and use it automatically when it's needed.

Note
To use SigV4A with temporary security credentials—for example, when using IAM roles—make sure that you request the temporary credentials from a regional endpoint in AWS Security Token Service (AWS STS). Don't use the global endpoint for AWS STS (`sts.amazonaws.com`), because by default temporary credentials from the global endpoint don't work with SigV4A. You can use any of the regional endpoints for AWS STS.

Signature Version 4 signing process

Important
The AWS SDKs, AWS Command Line Interface (AWS CLI), and other AWS tools sign API requests for you using the access key that you specify when you configure the tool. **When you use these tools, you don't need to learn how to sign API requests. The following documentation explains how to sign API requests, but is *only* useful if you're writing your own code to send and sign AWS API requests.** We recommend that you use the AWS SDKs or other AWS tools to send API requests, instead of writing your own code.

Signature Version 4 (SigV4) is the process to add authentication information to AWS API requests sent by HTTP. For security, most requests to AWS must be signed with an access key. The access key consists of an access key ID and secret access key, which are commonly referred to as your security credentials. For details on how to obtain credentials for your account, see Understanding and getting your AWS credentials (p. 3).

How Signature Version 4 works

1. Create a canonical request.
2. Use the canonical request and additional metadata to create a string for signing.
3. Derive a signing key from your AWS secret access key. Then use the signing key, and the string from the previous step, to create a signature.

4. Add the resulting signature to the HTTP request in a header or as a query string parameter.

When an AWS service receives the request, it performs the same steps that you did to calculate the signature you sent in your request. AWS then compares its calculated signature to the one you sent with the request. If the signatures match, the request is processed. If the signatures don't match, the request is denied.

For more information, see the following resources:

- To get started with the signing process, see Signing AWS requests with Signature Version 4 (p. 1010).
- For sample signed requests, see Examples of the complete Signature Version 4 signing process (Python) (p. 1025).
- If you have questions about Signature Version 4, post your question in the AWS Identity and Access Management forum.

Changes in Signature Version 4

Signature Version 4 is the current AWS signing protocol. It includes several changes from the previous Signature Version 2:

- To sign your message, you use a *signing key* that is derived from your secret access key rather than using the secret access key itself. For more information about deriving keys, see Task 3: Calculate the signature for AWS Signature Version 4 (p. 1018).
- You derive your signing key from the *credential scope*, which means that you don't need to include the key itself in the request. Credential scope is represented by a slash-separated string of dimensions in the following order:
  1. Date information as an eight-digit string representing the year (YYYY), month (MM), and day (DD) of the request (for example, `20150830`). For more information about handling dates, see Handling dates in Signature Version 4 (p. 1022).
  2. Region information as a lowercase alphanumeric string. Use the Region name that is part of the service's endpoint. For services with a globally unique endpoint such as IAM, use `us-east-1`.
  3. Service name information as a lowercase alphanumeric string (for example, `iam`). Use the service name that is part of the service's endpoint. For example, the IAM endpoint is https://iam.amazonaws.com, so you use the string `iam` as part of the `Credential` parameter.
  4. A special termination string: `aws4_request`.
- You use the credential scope in each signing task:
  - If you add signing information to the query string, include the credential scope as part of the `X-Amz-Credential` parameter when you create the canonical request in Task 1: Create a canonical request for Signature Version 4 (p. 1012).
  - You must include the credential scope as part of your string to sign in Task 2: Create a string to sign for Signature Version 4 (p. 1017).
  - Finally, you use the date, Region, and service name components of the credential scope to derive your signing key in Task 3: Calculate the signature for AWS Signature Version 4 (p. 1018).

Elements of an AWS Signature Version 4 request

Each HTTP/HTTPS request that uses version 4 signing must contain these elements.

- Endpoint Specification
- Action
- Required and Optional Parameters

- Date
- Authentication Parameters

Endpoint specification

This is specified as the `Host` header in HTTP/1.1 requests. This header specifies the DNS name of the computer to which you send the request, like `dynamodb.us-east-1.amazonaws.com`.

You must include the `Host` header with HTTP/1.1 requests. For HTTP/2 requests, you can use the `:authority` header or the `Host` header. Use only the `:authority` header for compliance with the HTTP/2 specification. Not all services support HTTP/2 requests, so check the service documentation for details.

The endpoint usually contains the service name and Region, both of which you must use as part of the `Credential` authentication parameter. For example, the Amazon DynamoDB endpoint for the eu-west-1 Region is `dynamodb.eu-west-1.amazonaws.com`. If you don't specify a Region, a web service uses the default Region, `us-east-1`. If you use a service like IAM that uses a globally unique endpoint, use the default Region (`us-east-1`), as part of the `Credential` authentication parameter (described later in this topic).

For a complete list of endpoints supported by AWS, see Regions and Endpoints.

Action

This element specifies the action that you want a web service to perform, such as the DynamoDB `CreateTable` action or the Amazon EC2 `DescribeInstances` action. The specified action determines the parameters used in the request. For query APIs, the action is an API name. For non-query APIs (such as RESTful APIs), see the service documentation for the appropriate actions.

Required and optional parameters

This element specifies the parameters to the request action. Each action in a web service has a set of required and optional parameters that define an API call. The API version is usually a required parameter. See the service documentation for the details of required and optional parameters.

Date

This is the date and time at which you make the request. Including the date in the request helps prevent third parties from intercepting your request and resubmitting it later. The date is specified using the ISO8601 Basic format via the `x-amz-date` header in the `YYYYMMDD'T'HHMMSS'Z'` format.

Authentication parameters

Each request that you send must include the following set of parameters that AWS uses to ensure the validity and authenticity of the request.

- *Algorithm*. The hash algorithm that you're using as part of the signing process. For example, if you use SHA-256 to create hashes, use the value `AWS4-HMAC-SHA256`.
- *Credential scope*. A string separated by slashes ("/") that is formed by concatenating your access key ID and your credential scope components. Credential scope includes the date in YYYYMMDD format, the AWS Region, the service name, and a special termination string (`aws4_request`). For example, the following string represents the `Credential` parameter for an IAM request in the us-east-1 Region.

  ```
  AKIAIOSFODNN7EXAMPLE/20111015/us-east-1/iam/aws4_request
  ```

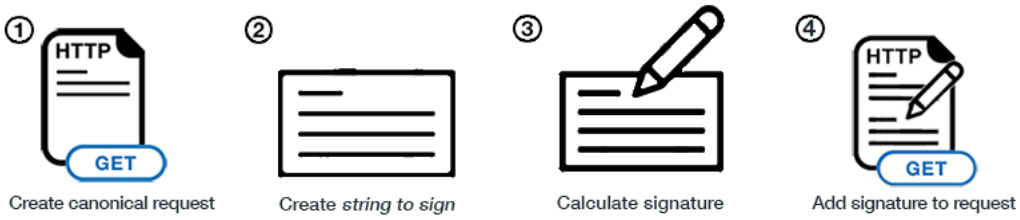
  Important
  You must use lowercase characters for the Region, service name, and special termination string.

- *SignedHeaders* A list delimited by semicolons (";") of HTTP/HTTPS headers to include in the signature.
- *Signature* A hexadecimal-encoded string that represents the output of the signature operation described in Task 3: Calculate the signature for AWS Signature Version 4 (p. 1018). You must calculate the signature using the algorithm that you specified in the `Algorithm` parameter.

To view sample signed requests, see Examples of the complete Signature Version 4 signing process (Python) (p. 1025).

Signing AWS requests with Signature Version 4

This section explains how to create a signature and add it to an HTTP request to AWS.



Summary of signing steps

To create a signed request, complete the following:

- Task 1: Create a canonical request for Signature Version 4 (p. 1012)

  Arrange the contents of your request (host, action, headers, etc.) into a standard (*canonical*) format. The canonical request is one of the inputs used to create a string to sign.
- Task 2: Create a string to sign for Signature Version 4 (p. 1017)

  Create a *string to sign* with the canonical request and extra information such as the algorithm, request date, credential scope, and the digest (hash) of the canonical request.
- Task 3: Calculate the signature for AWS Signature Version 4 (p. 1018)

  Derive a signing key by performing a succession of keyed hash operations (HMAC operations) on the request date, Region, and service, with your AWS secret access key as the key for the initial hashing operation. After you derive the signing key, you then calculate the signature by performing a keyed hash operation on the string to sign. Use the derived signing key as the hash key for this operation.
- Task 4: Add the signature to the HTTP request (p. 1020)

  After you calculate the signature, add it to an HTTP header or to the query string of the request.

> **Important**
> The AWS SDKs handle the signature calculation process for you, so you do not have to manually complete the signing process. For more information, see Tools for Amazon Web Services.

Additional resources

The following resources illustrate aspects of the signing process:

- Examples of how to derive a signing key for Signature Version 4 (p. 1022). This page shows how to derive a signing key using Java, C#, Python, Ruby, and JavaScript.
- Examples of the complete Signature Version 4 signing process (Python) (p. 1025). This set of programs in Python provide complete examples of the signing process. The examples show signing with a `POST` request, with a `GET` request that has signing information in a request header, and with a `GET` request that has signing information in the query string.

What signing looks like in a request

The following example shows what an HTTPS request might look like as it is sent from your client to AWS, without any signing information.

```
GET https://iam.amazonaws.com/?Action=ListUsers&Version=2010-05-08 HTTP/1.1
Content-Type: application/x-www-form-urlencoded; charset=utf-8
Host: iam.amazonaws.com
X-Amz-Date: 20150830T123600Z
```

After you complete the signing tasks, you add the authentication information to the request. You can add the authentication information in two ways:

Authorization header

You can add the authentication information to the request with an `Authorization` header. Although the HTTP header is named `Authorization`, the signing information is actually used for authentication to establish who the request came from.

The `Authorization` header includes the following information:

- Algorithm you used for signing (AWS4-HMAC-SHA256)
- Credential scope (with your access key ID)
- List of signed headers
- Calculated signature. The signature is based on your request information, and you use your AWS secret access key to produce the signature. The signature confirms your identity to AWS.

The following example shows what the preceding request might look like after you've created the signing information and added it to the request in the `Authorization` header.

Note that in the actual request, the `Authorization` header would appear as a continuous line of text. The version below has been formatted for readability.

```
GET https://iam.amazonaws.com/?Action=ListUsers&Version=2010-05-08 HTTP/1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIDEXAMPLE/20150830/us-east-1/iam/aws4_request,
 SignedHeaders=content-type;host;x-amz-date,
 Signature=5d672d79c15b13162d9279b0855cfba6789a8edb4c82c400e06b5924a6f2b5d7
content-type: application/x-www-form-urlencoded; charset=utf-8
host: iam.amazonaws.com
x-amz-date: 20150830T123600Z
```

Query string

As an alternative to adding authentication information with an HTTP request header, you can include it in the query string. The query string contains everything that is part of the request, including the name and parameters for the action, the date, and the authentication information.

The following example shows how you might construct a GET request with the action and authentication information in the query string.

(In the actual request, the query string would appear as a continuous line of text. The version below has been formatted with line breaks for readability.)

```
GET https://iam.amazonaws.com?Action=ListUsers&Version=2010-05-08
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=AKIDEXAMPLE%2F20150830%2Fus-east-1%2Fiam%2Faws4_request
&X-Amz-Date=20150830T123600Z
&X-Amz-Expires=60
```

```
&X-Amz-SignedHeaders=content-type%3Bhost
&X-Amz-Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02 HTTP/1.1
content-type: application/x-www-form-urlencoded; charset=utf-8
host: iam.amazonaws.com
```

GET and POST requests in the Query API

The query API that many AWS services support lets you make requests using either HTTP `GET` or `POST`. (In the query API, you can use `GET` even if you're making requests that change state; that is, the query API is not inherently RESTful.) Because `GET` requests pass parameters on the query string, they are limited to the maximum length of a URL. If a request includes a large payload (for example, you might upload a large IAM policy or send many parameters in JSON format for a DynamoDB request), you generally use a `POST` request.

The signing process is the same for both types of requests.

Task 1: Create a canonical request for Signature Version 4

To begin the signing process, create a string that includes information from your request in a standardized (canonical) format. This ensures that when AWS receives the request, it can calculate the same signature that you calculated.

Follow the steps here to create a canonical version of the request. Otherwise, your version and the version calculated by AWS won't match, and the request will be denied.

The following example shows the pseudocode to create a canonical request.

Example Canonical request pseudocode

```
CanonicalRequest =
  HTTPRequestMethod + '\n' +
  CanonicalURI + '\n' +
  CanonicalQueryString + '\n' +
  CanonicalHeaders + '\n' +
  SignedHeaders + '\n' +
  HexEncode(Hash(RequestPayload))
```

In this pseudocode, `Hash` represents a function that produces a message digest, typically SHA-256. (Later in the process, you specify which hashing algorithm you're using.) `HexEncode` represents a function that returns the base-16 encoding of the digest in lowercase characters. For example, `HexEncode("m")` returns the value `6d` rather than `6D`. Each input byte must be represented as exactly two hexadecimal characters.

Signature Version 4 does not require that you use a particular character encoding to encode the canonical request. However, some AWS services might require a specific encoding. For more information, consult the documentation for that service.

The following examples show how to construct the canonical form of a request to IAM. The original request might look like this as it is sent from the client to AWS, except that this example does not include the signing information yet.

Example Request

```
GET https://iam.amazonaws.com/?Action=ListUsers&Version=2010-05-08 HTTP/1.1
Host: iam.amazonaws.com
Content-Type: application/x-www-form-urlencoded; charset=utf-8
X-Amz-Date: 20150830T123600Z
```

The preceding example request is a GET request (method) that makes a `ListUsers` API (action) call to AWS Identity and Access Management (host). This action takes the `Version` parameter.

To create a canonical request, concatenate the following components from each step into a single string:

1. Start with the HTTP request method (`GET`, `PUT`, `POST`, etc.), followed by a newline character.

   Example Request method

   ```
   GET
   ```

2. Add the canonical URI parameter, followed by a newline character. The canonical URI is the URI-encoded version of the absolute path component of the URI, which is everything in the URI from the HTTP host to the question mark character ("?") that begins the query string parameters (if any).

   Normalize URI paths according to RFC 3986. Remove redundant and relative path components. Each path segment must be URI-encoded ***twice*** (except for Amazon S3 which only gets URI-encoded once).

   Example Canonical URI with encoding

   ```
   /documents%2520and%2520settings/
   ```

   > **Note**
   > In exception to this, you do not normalize URI paths for requests to Amazon S3. For example, if you have a bucket with an object named `my-object//example//photo.user`, use that path. Normalizing the path to `my-object/example/photo.user` will cause the request to fail. For more information, see Task 1: Create a Canonical Request in the *Amazon Simple Storage Service API Reference*.

   If the absolute path is empty, use a forward slash (/). In the example IAM request, nothing follows the host in the URI, so the absolute path is empty.

   Example Canonical URI

   ```
   /
   ```

3. Add the canonical query string, followed by a newline character. If the request does not include a query string, use an empty string (essentially, a blank line). The example request has the following query string.

   Example Canonical query string

   ```
   Action=ListUsers&Version=2010-05-08
   ```

   To construct the canonical query string, complete the following steps:

   a. Sort the parameter names by character code point in ascending order. Parameters with duplicate names should be sorted by value. For example, a parameter name that begins with the uppercase letter F precedes a parameter name that begins with a lowercase letter b.

   b. URI-encode each parameter name and value according to the following rules:

      - Do not URI-encode any of the unreserved characters that RFC 3986 defines: A-Z, a-z, 0-9, hyphen (-), underscore (_), period (.), and tilde (~).
      - Percent-encode all other characters with %XY, where X and Y are hexadecimal characters (0-9 and uppercase A-F). For example, the space character must be encoded as %20 (not using '+', as some encoding schemes do) and extended UTF-8 characters must be in the form `%XY%ZA%BC`.

- Double-encode any equals (=) characters in parameter values.

c. Build the canonical query string by starting with the first parameter name in the sorted list.

d. For each parameter, append the URI-encoded parameter name, followed by the equals sign character (=), followed by the URI-encoded parameter value. Use an empty string for parameters that have no value.

e. Append the ampersand character (&) after each parameter value, except for the last value in the list.

One option for the query API is to put all request parameters in the query string. For example, you can do this for Amazon S3 to create a presigned URL. In that case, the canonical query string must include not only parameters for the request, but also the parameters used as part of the signing process—the hashing algorithm, credential scope, date, and signed headers parameters.

The following example shows a query string that includes authentication information. The example is formatted with line breaks for readability, but the canonical query string must be one continuous line of text in your code.

Example Authentication parameters in a query string

```
Action=ListUsers&
Version=2010-05-08&
X-Amz-Algorithm=AWS4-HMAC-SHA256&
X-Amz-Credential=AKIDEXAMPLE%2F20150830%2Fus-east-1%2Fiam%2Faws4_request&
X-Amz-Date=20150830T123600Z&
X-Amz-SignedHeaders=content-type%3Bhost%3Bx-amz-date
```

For more information about authentication parameters, see Task 2: Create a string to sign for Signature Version 4 (p. 1017).

Note
You can use temporary security credentials provided by the AWS Security Token Service (AWS STS) to sign a request. The process is the same as using long-term credentials, but when you add signing information to the query string you must add an additional query parameter for the security token. The parameter name is `X-Amz-Security-Token`, and the parameter's value is the URI-encoded session token (the string you received from AWS STS when you obtained temporary security credentials).
For some services, you must include the `X-Amz-Security-Token` query parameter in the canonical (signed) query string. For other services, you add the `X-Amz-Security-Token` parameter at the end, after you calculate the signature. For details, see the API reference documentation for that service.

4. Add the canonical headers, followed by a newline character. The canonical headers consist of a list of all the HTTP headers that you are including with the signed request.

For HTTP/1.1 requests, you must include the `host` header at a minimum. Standard headers like `content-type` are optional. For HTTP/2 requests, you must include the `:authority` header instead of the `host` header. Different services might require other headers.

Example Canonical headers

```
content-type:application/x-www-form-urlencoded; charset=utf-8\n
host:iam.amazonaws.com\n
x-amz-date:20150830T123600Z\n
```

To create the canonical headers list, convert all header names to lowercase and remove leading spaces and trailing spaces. Convert sequential spaces in the header value to a single space.

The following pseudocode describes how to construct the canonical list of headers:

```
CanonicalHeaders =
CanonicalHeadersEntry0 + CanonicalHeadersEntry1 + ... + CanonicalHeadersEntryN
CanonicalHeadersEntry =
Lowercase(HeaderName) + ':' + Trimall(HeaderValue) + '\n'
```

`Lowercase` represents a function that converts all characters to lowercase. The `Trimall` function removes excess white space before and after values, and converts sequential spaces to a single space.

Build the canonical headers list by sorting the (lowercase) headers by character code and then iterating through the header names. Construct each header according to the following rules:

- Append the lowercase header name followed by a colon.
- Append a comma-separated list of values for that header. Do not sort the values in headers that have multiple values.
- Append a new line ('`\n`').

The following examples compare a more complex set of headers with their canonical form:

Example Original headers

```
Host:iam.amazonaws.com\n
Content-Type:application/x-www-form-urlencoded; charset=utf-8\n
My-header1:    a   b   c  \n
X-Amz-Date:20150830T123600Z\n
My-Header2:    "a   b   c"  \n
```

Example Canonical form

```
content-type:application/x-www-form-urlencoded; charset=utf-8\n
host:iam.amazonaws.com\n
my-header1:a b c\n
my-header2:"a b c"\n
x-amz-date:20150830T123600Z\n
```

> **Note**
> Each header is followed by a newline character, meaning the complete list ends with a newline character.

In the canonical form, the following changes were made:

- The header names were converted to lowercase characters.
- The headers were sorted by character code.
- Leading and trailing spaces were removed from the `my-header1` and `my-header2` values.
- Sequential spaces in `a  b  c` were converted to a single space for the `my-header1` and `my-header2` values.

> **Note**
> You can use temporary security credentials provided by the AWS Security Token Service (AWS STS) to sign a request. The process is the same as using long-term credentials, but when you include signing information in the `Authorization` header you must add an

additional HTTP header for the security token. The header name is `X-Amz-Security-Token`, and the header's value is the session token (the string you received from AWS STS when you obtained temporary security credentials).

5. Add the signed headers, followed by a newline character. This value is the list of headers that you included in the canonical headers. By adding this list of headers, you tell AWS which headers in the request are part of the signing process and which ones AWS can ignore (for example, any additional headers added by a proxy) for purposes of validating the request.

   For HTTP/1.1 requests, the `host` header must be included as a signed header. For HTTP/2 requests that include the `:authority` header instead of the `host` header, you must include the `:authority` header as a signed header. If you include a date or `x-amz-date` header, you must also include that header in the list of signed headers.

   To create the signed headers list, convert all header names to lowercase, sort them by character code, and use a semicolon to separate the header names. The following pseudocode describes how to construct a list of signed headers. `Lowercase` represents a function that converts all characters to lowercase.

   ```
   SignedHeaders =
   Lowercase(HeaderName0) + ';' + Lowercase(HeaderName1) + ";" + ... +
    Lowercase(HeaderNameN)
   ```

   Build the signed headers list by iterating through the collection of header names, sorted by lowercase character code. For each header name except the last, append a semicolon (';') to the header name to separate it from the following header name.

   Example Signed headers

   ```
   content-type;host;x-amz-date\n
   ```

6. Use a hash (digest) function like SHA256 to create a hashed value from the payload in the body of the HTTP or HTTPS request. Signature Version 4 does not require that you use a particular character encoding to encode text in the payload. However, some AWS services might require a specific encoding. For more information, consult the documentation for that service.

   Example Structure of payload

   ```
   HashedPayload = Lowercase(HexEncode(Hash(requestPayload)))
   ```

   When you create the string to sign, you specify the signing algorithm that you used to hash the payload. For example, if you used SHA256, you will specify AWS4-HMAC-SHA256 as the signing algorithm. The hashed payload must be represented as a lowercase hexadecimal string.

   If the payload is empty, use an empty string as the input to the hash function. In the IAM example, the payload is empty.

   Example Hashed payload (empty string)

   ```
   e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
   ```

7. To construct the finished canonical request, combine all the components from each step as a single string. As noted, each component ends with a newline character. If you follow the canonical request pseudocode explained earlier, the resulting canonical request is shown in the following example.

Example Canonical request

```
GET
/
Action=ListUsers&Version=2010-05-08
content-type:application/x-www-form-urlencoded; charset=utf-8
host:iam.amazonaws.com
x-amz-date:20150830T123600Z

content-type;host;x-amz-date
e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
```

8. Create a digest (hash) of the canonical request with the same algorithm that you used to hash the payload.

   Note
   Signature Version 4 does not require that you use a particular character encoding to encode the canonical request before calculating the digest. However, some AWS services might require a specific encoding. For more information, consult the documentation for that service.

   The hashed canonical request must be represented as a string of lowercase hexadecimal characters. The following example shows the result of using SHA-256 to hash the example canonical request.

   Example Hashed canonical request

   ```
   f536975d06c0309214f805bb90ccff089219ecd68b2577efef23edd43b7e1a59
   ```

   You include the hashed canonical request as part of the string to sign in Task 2: Create a string to sign for Signature Version 4 (p. 1017).

Task 2: Create a string to sign for Signature Version 4

The *string to sign* includes meta information about your request and about the canonical request that you created in Task 1: Create a canonical request for Signature Version 4 (p. 1012). You will use the string to sign and a derived signing key that you create later as inputs to calculate the request signature in Task 3: Calculate the signature for AWS Signature Version 4 (p. 1018).

To create the string to sign, concatenate the algorithm, date and time, credential scope, and digest of the canonical request, as shown in the following pseudocode:

Structure of string to sign

```
StringToSign =
    Algorithm + \n +
    RequestDateTime + \n +
    CredentialScope + \n +
    HashedCanonicalRequest
```

The following example shows how to construct the string to sign with the same request from Task 1: Create A Canonical Request (p. 1012).

Example HTTPS request

```
GET https://iam.amazonaws.com/?Action=ListUsers&Version=2010-05-08 HTTP/1.1
Host: iam.amazonaws.com
Content-Type: application/x-www-form-urlencoded; charset=utf-8
```

```
X-Amz-Date: 20150830T123600Z
```

To create the string to sign

1. Start with the algorithm designation, followed by a newline character. This value is the hashing algorithm that you use to calculate the digests in the canonical request. For SHA256, `AWS4-HMAC-SHA256` is the algorithm.

   ```
   AWS4-HMAC-SHA256\n
   ```

2. Append the request date value, followed by a newline character. The date is specified with ISO8601 basic format in the `x-amz-date` header in the format YYYYMMDD'T'HHMMSS'Z'. This value must match the value you used in any previous steps.

   ```
   20150830T123600Z\n
   ```

3. Append the credential scope value, followed by a newline character. This value is a string that includes the date, the Region you are targeting, the service you are requesting, and a termination string ("`aws4_request`") in lowercase characters. The Region and service name strings must be UTF-8 encoded.

   ```
   20150830/us-east-1/iam/aws4_request\n
   ```

   - The date must be in the `YYYYMMDD` format. Note that the date does not include a time value.
   - Verify that the Region you specify is the Region that you are sending the request to.

4. Append the hash of the canonical request that you created in Task 1: Create a canonical request for Signature Version 4 (p. 1012). This value is not followed by a newline character. The hashed canonical request must be lowercase base-16 encoded, as defined by Section 8 of RFC 4648.

   ```
   f536975d06c0309214f805bb90ccff089219ecd68b2577efef23edd43b7e1a59
   ```

The following string to sign is a request to IAM on August 30, 2015.

Example string to sign

```
AWS4-HMAC-SHA256
20150830T123600Z
20150830/us-east-1/iam/aws4_request
f536975d06c0309214f805bb90ccff089219ecd68b2577efef23edd43b7e1a59
```

Task 3: Calculate the signature for AWS Signature Version 4

Before you calculate a signature, you derive a signing key from your AWS secret access key. Because the derived signing key is specific to the date, service, and Region, it offers a greater degree of protection. You don't just use your secret access key to sign the request. You then use the signing key and the string to sign that you created in Task 2: Create a string to sign for Signature Version 4 (p. 1017) as the inputs to a keyed hash function. The hex-encoded result from the keyed hash function is the signature.

Signature Version 4 does not require that you use a particular character encoding to encode the string to sign. However, some AWS services might require a specific encoding. For more information, consult the documentation for that service.

To calculate a signature

1. Derive your signing key. To do this, use your secret access key to create a series of hash-based message authentication codes (HMACs). This is shown in the following pseudocode, where `HMAC(key, data)` represents an HMAC-SHA256 function that returns output in binary format. The result of each hash function becomes input for the next one.

   Pseudocode for deriving a signing key

   ```
   kSecret = your secret access key
   kDate = HMAC("AWS4" + kSecret, Date)
   kRegion = HMAC(kDate, Region)
   kService = HMAC(kRegion, Service)
   kSigning = HMAC(kService, "aws4_request")
   ```

   Note that the date used in the hashing process is in the format `YYYYMMDD` (for example, `20150830`), and does not include the time.

   Make sure you specify the HMAC parameters in the correct order for the programming language you are using. This example shows the key as the first parameter and the data (message) as the second parameter, but the function that you use might specify the key and data in a different order.

   Use the digest (binary format) for the key derivation. Most languages have functions to compute either a binary format hash, commonly called a digest, or a hex-encoded hash, called a hexdigest. The key derivation requires that you use a binary-formatted digest.

   The following example show the inputs to derive a signing key and the resulting output, where kSecret = `wJalrXUtnFEMI/K7MDENG+bPxRfiCYEXAMPLEKEY`.

   The example uses the same parameters from the request in Task 1 and Task 2 (a request to IAM in the `us-east-1` Region on August 30, 2015).

   Example inputs

   ```
   HMAC(HMAC(HMAC(HMAC("AWS4" + kSecret,"20150830"),"us-east-1"),"iam"),"aws4_request")
   ```

   The following example shows the derived signing key that results from this sequence of HMAC hash operations. This shows the hexadecimal representation of each byte in the binary signing key.

   Example signing key

   ```
   c4afb1cc5771d871763a393e44b703571b55cc28424d1a5e86da6ed3c154a4b9
   ```

   For more information about how to derive a signing key in different programming languages, see Examples of how to derive a signing key for Signature Version 4 (p. 1022).

2. Calculate the signature. To do this, use the signing key that you derived and the string to sign as inputs to the keyed hash function. After you calculate the signature, convert the binary value to a hexadecimal representation.

   The following pseudocode shows how to calculate the signature.

   ```
   signature = HexEncode(HMAC(derived signing key, string to sign))
   ```

   Note
   Make sure you specify the HMAC parameters in the correct order for the programming language you are using. This example shows the key as the first parameter and the data

(message) as the second parameter, but the function that you use might specify the key and data in a different order.

The following example shows the resulting signature if you use the same signing key and the string to sign from Task 2:

Example signature

```
5d672d79c15b13162d9279b0855cfba6789a8edb4c82c400e06b5924a6f2b5d7
```

Task 4: Add the signature to the HTTP request

After you calculate the signature, add it to the request. You can add the signature to a request in one of two ways:

- An HTTP header named `Authorization`
- The query string

You cannot pass signing information in both the `Authorization` header and the query string.

Note
You can use temporary security credentials provided by the AWS Security Token Service (AWS STS) to sign a request. The process is the same as using long-term credentials, but requires an additional HTTP header or query string parameter for the security token. The name of the header or query string parameter is `X-Amz-Security-Token`, and the value is the session token (the string you received from AWS STS when you obtained temporary security credentials).
When you add the `X-Amz-Security-Token` parameter to the query string, some services require that you include this parameter in the canonical (signed) request. For other services, you add this parameter at the end, after you calculate the signature. For details, see the API reference documentation for that service.

Adding signing information to the authorization header

You can include signing information by adding it to an HTTP header named `Authorization`. The contents of the header are created after you calculate the signature as described in the preceding steps, so the `Authorization` header is not included in the list of signed headers. Although the header is named `Authorization`, the signing information is actually used for authentication.

The following pseudocode shows the construction of the `Authorization` header.

```
Authorization: algorithm Credential=access key ID/credential scope,
 SignedHeaders=SignedHeaders, Signature=signature
```

The following example shows a finished `Authorization` header.

Note that in the actual request, the authorization header would appear as a continuous line of text. The version below has been formatted for readability.

```
Authorization: AWS4-HMAC-SHA256
Credential=AKIDEXAMPLE/20150830/us-east-1/iam/aws4_request,
SignedHeaders=content-type;host;x-amz-date,
Signature=5d672d79c15b13162d9279b0855cfba6789a8edb4c82c400e06b5924a6f2b5d7
```

Note the following:

- There is no comma between the algorithm and `Credential`. However, the `SignedHeaders` and `Signature` are separated from the preceding values with a comma.
- The `Credential` value starts with the access key ID, which is followed by a forward slash (`/`), which is followed by the credential scope that you calculated in Task 2: Create a string to sign for Signature Version 4 (p. 1017). The secret access key is used to derive the signing key for the signature, but is not included in the signing information sent in the request.

Adding signing information to the Query string

You can make requests and pass all request values in the query string, including signing information. This is sometimes referred to as a *presigned URL*, because it produces a single URL with everything required in order to make a successful call to AWS. It's commonly used in Amazon S3. For more information, see Authenticating Requests by Using Query Parameters (AWS Signature Version 4) in the *Amazon Simple Storage Service API Reference*.

> **Important**
> If you make a request in which all parameters are included in the query string, the resulting URL represents an AWS action that is already authenticated. Therefore, treat the resulting URL with as much caution as you would treat your actual credentials. We recommend you specify a short expiration time for the request with the `X-Amz-Expires` parameter.

When you use this approach, all the query string values (except the signature) are included in the canonical query string that is part of the canonical query that you construct in the first part of the signing process (p. 1012).

The following pseudocode shows the construction of a query string that contains all request parameters.

```
querystring = Action=action
querystring += &X-Amz-Algorithm=algorithm
querystring += &X-Amz-Credential= urlencode(access_key_ID + '/' + credential_scope)
querystring += &X-Amz-Date=date
querystring += &X-Amz-Expires=timeout interval
querystring += &X-Amz-SignedHeaders=signed_headers
```

After the signature is calculated (which uses the other query string values as part of the calculation), you add the signature to the query string as the `X-Amz-Signature` parameter:

```
querystring += &X-Amz-Signature=signature
```

The following example shows what a request might look like when all the request parameters and the signing information are included in query string parameters.

Note that in the actual request, the authorization header would appear as a continuous line of text. The version below has been formatted for readability.

```
https://iam.amazonaws.com?Action=ListUsers&Version=2010-05-08
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=AKIDEXAMPLE%2F20150830%2Fus-east-1%2Fiam%2Faws4_request
&X-Amz-Date=20150830T123600Z
&X-Amz-Expires=60
&X-Amz-SignedHeaders=content-type%3Bhost
&X-Amz-Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02
```

Note the following:

- For the signature calculation, query string parameters must be sorted in code point order from low to high, and their values must be URI-encoded. See the step about creating a canonical query string in Task 1: Create a canonical request for Signature Version 4 (p. 1012).

- Set the timeout interval (`X-Amz-Expires`) to the minimal viable time for the operation you're requesting.

Handling dates in Signature Version 4

The date that you use as part of your credential scope must match the date of your request. You can include the date as part of your request in several ways. You can use a `date` header, an `x-amz-date` header or include `x-amz-date` as a query parameter. For example requests, see Examples of the complete Signature Version 4 signing process (Python) (p. 1025).

The time stamp must be in UTC and in the following ISO 8601 format: YYYYMMDD'T'HHMMSS'Z'. For example, `20150830T123600Z` is a valid time stamp. Do not include milliseconds in the time stamp.

AWS first checks the `x-amz-date` header or parameter for a time stamp. If AWS can't find a value for `x-amz-date`, it looks for the `date` header. AWS then checks the credential scope for an eight-digit string representing the year (YYYY), month (MM), and day (DD) of the request. For example, if the `x-amz-date` header value is `20111015T080000Z` and the date component of the credential scope is `20111015`, AWS allows the authentication process to proceed.

If the dates don't match, AWS rejects the request, even if the time stamp is only seconds away from the date in the credential scope. For example, AWS will reject a request that has an `x-amz-date` header value of `20151014T235959Z` and a credential scope that has the date `20151015`.

Examples of how to derive a signing key for Signature Version 4

This page shows examples in several programming languages for how to derive a signing key for Signature Version 4. The examples on this page show only how to derive a signing key, which is just one part of signing AWS requests. For examples that show the complete process, see Examples of the complete Signature Version 4 signing process (Python) (p. 1025).

> **Important**
> If you are using one of the AWS SDKs (including the SDK for Java, .NET, Python, Ruby, or JavaScript), you do not have to manually perform the steps of deriving a signing key and adding authentication information to a request. The SDKs perform this work for you. You need to manually sign requests only if you are directly making HTTP or HTTPS requests.

Examples

- Deriving a signing key using Java (p. 1022)
- Deriving a signing key using .NET (C#) (p. 1023)
- Deriving a signing key using Python (p. 1023)
- Deriving a signing key using Ruby (p. 1023)
- Deriving a signing key using JavaScript (Node.js) (p. 1023)
- Deriving a signing key using other languages (p. 1024)
- Common coding errors (p. 1024)

Deriving a signing key using Java

```
static byte[] HmacSHA256(String data, byte[] key) throws Exception {
    String algorithm="HmacSHA256";
    Mac mac = Mac.getInstance(algorithm);
    mac.init(new SecretKeySpec(key, algorithm));
    return mac.doFinal(data.getBytes("UTF-8"));
}
```

```
static byte[] getSignatureKey(String key, String dateStamp, String regionName, String
 serviceName) throws Exception {
    byte[] kSecret = ("AWS4" + key).getBytes("UTF-8");
    byte[] kDate = HmacSHA256(dateStamp, kSecret);
    byte[] kRegion = HmacSHA256(regionName, kDate);
    byte[] kService = HmacSHA256(serviceName, kRegion);
    byte[] kSigning = HmacSHA256("aws4_request", kService);
    return kSigning;
}
```

Deriving a signing key using .NET (C#)

```
static byte[] HmacSHA256(String data, byte[] key)
{
    String algorithm = "HmacSHA256";
    KeyedHashAlgorithm kha = KeyedHashAlgorithm.Create(algorithm);
    kha.Key = key;

    return kha.ComputeHash(Encoding.UTF8.GetBytes(data));
}

static byte[] getSignatureKey(String key, String dateStamp, String regionName, String
 serviceName)
{
    byte[] kSecret = Encoding.UTF8.GetBytes(("AWS4" + key).ToCharArray());
    byte[] kDate = HmacSHA256(dateStamp, kSecret);
    byte[] kRegion = HmacSHA256(regionName, kDate);
    byte[] kService = HmacSHA256(serviceName, kRegion);
    byte[] kSigning = HmacSHA256("aws4_request", kService);

    return kSigning;
}
```

Deriving a signing key using Python

```
def sign(key, msg):
    return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()

def getSignatureKey(key, dateStamp, regionName, serviceName):
    kDate = sign(("AWS4" + key).encode("utf-8"), dateStamp)
    kRegion = sign(kDate, regionName)
    kService = sign(kRegion, serviceName)
    kSigning = sign(kService, "aws4_request")
    return kSigning
```

Deriving a signing key using Ruby

```
def getSignatureKey key, dateStamp, regionName, serviceName
    kDate = OpenSSL::HMAC.digest('sha256', "AWS4" + key, dateStamp)
    kRegion = OpenSSL::HMAC.digest('sha256', kDate, regionName)
    kService = OpenSSL::HMAC.digest('sha256', kRegion, serviceName)
    kSigning = OpenSSL::HMAC.digest('sha256', kService, "aws4_request")

    kSigning
end
```

Deriving a signing key using JavaScript (Node.js)

The following example uses the crypto-js library. For more information, see https://www.npmjs.com/package/crypto-js and https://code.google.com/archive/p/crypto-js/.

```
var crypto = require("crypto-js");

function getSignatureKey(key, dateStamp, regionName, serviceName) {
    var kDate = crypto.HmacSHA256(dateStamp, "AWS4" + key);
    var kRegion = crypto.HmacSHA256(regionName, kDate);
    var kService = crypto.HmacSHA256(serviceName, kRegion);
    var kSigning = crypto.HmacSHA256("aws4_request", kService);
    return kSigning;
}
```

Deriving a signing key using other languages

If you need to implement this logic in a different programming language, we recommend testing the intermediary steps of the key derivation algorithm against the values in this section. The following example in Ruby prints the results using the `hexEncode` function after each step in the algorithm.

```
def hexEncode bindata
    result=""
    data=bindata.unpack("C*")
    data.each {|b| result+= "%02x" % b}
    result
end
```

Given the following test input:

```
key = 'wJalrXUtnFEMI/K7MDENG+bPxRfiCYEXAMPLEKEY'
dateStamp = '20120215'
regionName = 'us-east-1'
serviceName = 'iam'
```

Your program should generate the following values for the values in `getSignatureKey`. Note that these are hex-encoded representations of the binary data; the key itself and the intermediate values should be in binary format.

```
kSecret  =
 '41575334774a616c725855746e46454d492f4b374d44454e472b6250785266694359455841d504c454b4559'
kDate    = '969fbb94feb542b71ede6f87fe4d5fa29c789342b0f407474670f0c2489e0a0d'
kRegion  = '69daa0209cd9c5ff5c8ced464a696fd4252e981430b10e3d3fd8e2f197d7a70c'
kService = 'f72cfd46f26bc4643f06a11eabb6c0ba18780c19a8da0c31ace671265e3c87fa'
kSigning = 'f4780e2d9f65fa895f9c67b32ce1baf0b0d8a43505a000a1a9e090d414db404d'
```

Common coding errors

To simplify your task, avoid the following common coding errors.

> **Tip**
> Examine the HTTP request that you're sending to AWS with a tool that shows you what your raw HTTP requests look like. This can help you spot issues that aren't evident from your code.

- Don't include an extra newline character, or forget one where it's required.
- Don't format the date incorrectly in the credential scope, such as using a time stamp instead of YYYYMMDD format.
- Make sure the headers in the canonical headers and the signed headers are the same.
- Don't inadvertently swap the key and the data (message) when calculating intermediary keys. The result of the previous step's computation is the key, not the data. Check the documentation for your cryptographic primitives carefully to ensure that you place the parameters in the proper order.

- Don't forget to add the string "AWS4" in front of the key for the first step. If you implement the key derivation using a `for` loop or iterator, don't forget to special-case the first iteration so that it includes the "AWS4" string.

For more information about possible errors, see Troubleshooting AWS Signature Version 4 errors (p. 1032).

Examples of the complete Signature Version 4 signing process (Python)

This section shows example programs written in Python that illustrate how to work with Signature Version 4 in AWS. We deliberately wrote these example programs to be simple (to use few Python-specific features) to make it easier to understand the overall process of signing AWS requests.

> **Note**
> If you are using one of the AWS SDKs (including the SDK for C++, SDK for Go, SDK for Java, AWS SDK for JavaScript, AWS SDK for .NET, SDK for PHP, SDK for Python (Boto3), or SDK for Ruby), you do not have to manually perform the steps of deriving a signing key and adding authentication information to a request. The SDKs perform this work for you. You need to manually sign requests only if you are directly making HTTP or HTTPS requests.

In order to work with these example programs, you need the following:

- Python 2.x installed on your computer, which you can get from the Python site. These programs were tested using Python 2.7 and 3.6.
- The Python **requests** library, which is used in the example script to make web requests. A convenient way to install Python packages is to use `pip`, which gets packages from the Python package index site. You can then install `requests` by running `pip install requests` at the command line.
- An access key (access key ID and secret access key) in environment variables named `AWS_ACCESS_KEY_ID` and `AWS_SECRET_ACCESS_KEY`. Alternatively, you can keep these values in a credentials file and read them from that file. As a best practice, we recommend that you do ***not*** embed credentials in code. For more information, see Best Practices for Managing AWS Access Keys in the *Amazon Web Services General Reference*.

The following examples use UTF-8 to encode the canonical request and string to sign, but Signature Version 4 does not require that you use a particular character encoding. However, some AWS services might require a specific encoding. For more information, consult the documentation for that service.

Examples

- Using GET with an authorization header (Python) (p. 1025)
- Using POST (Python) (p. 1028)
- Using GET with authentication information in the Query string (Python) (p. 1030)

Using GET with an authorization header (Python)

The following example shows how to make a request using the Amazon EC2 query API without SDK for Python (Boto3). The request makes a GET request and passes authentication information to AWS using the `Authorization` header.

```
# Copyright Amazon.com, Inc. or its affiliates. All Rights Reserved.
# SPDX-License-Identifier: Apache-2.0

"""
Important
```

```
The AWS SDKs sign API requests for you using the access key that you specify when you
configure the SDK. When you use an SDK, you don't need to learn how to sign API requests.
We recommend that you use the AWS SDKs to send API requests, instead of writing your own
 code.

The following example is a reference to help you get started if you have a need to write
your own code to send and sign requests. The example is for reference only and is not
maintained as functional code.
"""

# AWS Version 4 signing example

# EC2 API (DescribeRegions)

# See: http://docs.aws.amazon.com/general/latest/gr/sigv4_signing.html
# This version makes a GET request and passes the signature
# in the Authorization header.
import sys, os, base64, datetime, hashlib, hmac
import requests # pip install requests

# ************* REQUEST VALUES *************
method = 'GET'
service = 'ec2'
host = 'ec2.amazonaws.com'
region = 'us-east-1'
endpoint = 'https://ec2.amazonaws.com'
request_parameters = 'Action=DescribeRegions&Version=2013-10-15'

# Key derivation functions. See:
# http://docs.aws.amazon.com/general/latest/gr/signature-v4-examples.html#signature-v4-
examples-python
def sign(key, msg):
    return hmac.new(key, msg.encode('utf-8'), hashlib.sha256).digest()

def getSignatureKey(key, dateStamp, regionName, serviceName):
    kDate = sign(('AWS4' + key).encode('utf-8'), dateStamp)
    kRegion = sign(kDate, regionName)
    kService = sign(kRegion, serviceName)
    kSigning = sign(kService, 'aws4_request')
    return kSigning

# Read AWS access key from env. variables or configuration file. Best practice is NOT
# to embed credentials in code.
access_key = os.environ.get('AWS_ACCESS_KEY_ID')
secret_key = os.environ.get('AWS_SECRET_ACCESS_KEY')
if access_key is None or secret_key is None:
    print('No access key is available.')
    sys.exit()

# Create a date for headers and the credential string
t = datetime.datetime.utcnow()
amzdate = t.strftime('%Y%m%dT%H%M%SZ')
datestamp = t.strftime('%Y%m%d') # Date w/o time, used in credential scope


# ************* TASK 1: CREATE A CANONICAL REQUEST *************
# http://docs.aws.amazon.com/general/latest/gr/sigv4-create-canonical-request.html

# Step 1 is to define the verb (GET, POST, etc.)--already done.

# Step 2: Create canonical URI--the part of the URI from domain to query
# string (use '/' if no path)
canonical_uri = '/'

# Step 3: Create the canonical query string. In this example (a GET request),
# request parameters are in the query string. Query string values must
```

```
# be URL-encoded (space=%20). The parameters must be sorted by name.
# For this example, the query string is pre-formatted in the request_parameters variable.
canonical_querystring = request_parameters

# Step 4: Create the canonical headers and signed headers. Header names
# must be trimmed and lowercase, and sorted in code point order from
# low to high. Note that there is a trailing \n.
canonical_headers = 'host:' + host + '\n' + 'x-amz-date:' + amzdate + '\n'

# Step 5: Create the list of signed headers. This lists the headers
# in the canonical_headers list, delimited with ";" and in alpha order.
# Note: The request can include any headers; canonical_headers and
# signed_headers lists those that you want to be included in the
# hash of the request. "Host" and "x-amz-date" are always required.
signed_headers = 'host;x-amz-date'

# Step 6: Create payload hash (hash of the request body content). For GET
# requests, the payload is an empty string ("").
payload_hash = hashlib.sha256(('').encode('utf-8')).hexdigest()

# Step 7: Combine elements to create canonical request
canonical_request = method + '\n' + canonical_uri + '\n' + canonical_querystring + '\n' +
 canonical_headers + '\n' + signed_headers + '\n' + payload_hash


# ************* TASK 2: CREATE THE STRING TO SIGN*************
# Match the algorithm to the hashing algorithm you use, either SHA-1 or
# SHA-256 (recommended)
algorithm = 'AWS4-HMAC-SHA256'
credential_scope = datestamp + '/' + region + '/' + service + '/' + 'aws4_request'
string_to_sign = algorithm + '\n' +  amzdate + '\n' +  credential_scope + '\n' +
 hashlib.sha256(canonical_request.encode('utf-8')).hexdigest()

# ************* TASK 3: CALCULATE THE SIGNATURE *************
# Create the signing key using the function defined above.
signing_key = getSignatureKey(secret_key, datestamp, region, service)

# Sign the string_to_sign using the signing_key
signature = hmac.new(signing_key, (string_to_sign).encode('utf-8'),
 hashlib.sha256).hexdigest()


# ************* TASK 4: ADD SIGNING INFORMATION TO THE REQUEST *************
# The signing information can be either in a query string value or in
# a header named Authorization. This code shows how to use a header.
# Create authorization header and add to request headers
authorization_header = algorithm + ' ' + 'Credential=' + access_key + '/' +
 credential_scope + ', ' +  'SignedHeaders=' + signed_headers + ', ' + 'Signature=' +
 signature

# The request can include any headers, but MUST include "host", "x-amz-date",
# and (for this scenario) "Authorization". "host" and "x-amz-date" must
# be included in the canonical_headers and signed_headers, as noted
# earlier. Order here is not significant.
# Python note: The 'host' header is added automatically by the Python 'requests' library.
headers = {'x-amz-date':amzdate, 'Authorization':authorization_header}


# ************* SEND THE REQUEST *************
request_url = endpoint + '?' + canonical_querystring

print('\nBEGIN REQUEST++++++++++++++++++++++++++++++++++++')
print('Request URL = ' + request_url)
r = requests.get(request_url, headers=headers)

print('\nRESPONSE++++++++++++++++++++++++++++++++++++')
```

```
print('Response code: %d\n' % r.status_code)
print(r.text)
```

Using POST (Python)

The following example shows how to make a request using the Amazon DynamoDB query API without SDK for Python (Boto3). The request makes a POST request and passes values to AWS in the body of the request. Authentication information is passed using the `Authorization` request header.

```
# Copyright Amazon.com, Inc. or its affiliates. All Rights Reserved.
# SPDX-License-Identifier: Apache-2.0

"""
Important

The AWS SDKs sign API requests for you using the access key that you specify when you
configure the SDK. When you use an SDK, you don't need to learn how to sign API requests.
We recommend that you use the AWS SDKs to send API requests, instead of writing your own
 code.

The following example is a reference to help you get started if you have a need to write
your own code to send and sign requests. The example is for reference only and is not
maintained as functional code.
"""

# AWS Version 4 signing example

# DynamoDB API (CreateTable)

# See: http://docs.aws.amazon.com/general/latest/gr/sigv4_signing.html
# This version makes a POST request and passes request parameters
# in the body (payload) of the request. Auth information is passed in
# an Authorization header.
import sys, os, base64, datetime, hashlib, hmac
import requests # pip install requests

# ************* REQUEST VALUES *************
method = 'POST'
service = 'dynamodb'
host = 'dynamodb.us-west-2.amazonaws.com'
region = 'us-west-2'
endpoint = 'https://dynamodb.us-west-2.amazonaws.com/'
# POST requests use a content type header. For DynamoDB,
# the content is JSON.
content_type = 'application/x-amz-json-1.0'
# DynamoDB requires an x-amz-target header that has this format:
#     DynamoDB_<API version>.<operationName>
amz_target = 'DynamoDB_20120810.CreateTable'

# Request parameters for CreateTable--passed in a JSON block.
request_parameters =  '{'
request_parameters +=  '"KeySchema": [{"KeyType": "HASH","AttributeName": "Id"}],'
request_parameters +=  '"TableName": "TestTable","AttributeDefinitions": [{"AttributeName":
 "Id","AttributeType": "S"}],'
request_parameters +=  '"ProvisionedThroughput": {"WriteCapacityUnits":
 5,"ReadCapacityUnits": 5}'
request_parameters +=  '}'

# Key derivation functions. See:
# http://docs.aws.amazon.com/general/latest/gr/signature-v4-examples.html#signature-v4-
examples-python
def sign(key, msg):
    return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
```

```
def getSignatureKey(key, date_stamp, regionName, serviceName):
    kDate = sign(('AWS4' + key).encode('utf-8'), date_stamp)
    kRegion = sign(kDate, regionName)
    kService = sign(kRegion, serviceName)
    kSigning = sign(kService, 'aws4_request')
    return kSigning

# Read AWS access key from env. variables or configuration file. Best practice is NOT
# to embed credentials in code.
access_key = os.environ.get('AWS_ACCESS_KEY_ID')
secret_key = os.environ.get('AWS_SECRET_ACCESS_KEY')
if access_key is None or secret_key is None:
    print('No access key is available.')
    sys.exit()

# Create a date for headers and the credential string
t = datetime.datetime.utcnow()
amz_date = t.strftime('%Y%m%dT%H%M%SZ')
date_stamp = t.strftime('%Y%m%d') # Date w/o time, used in credential scope


# ************* TASK 1: CREATE A CANONICAL REQUEST *************
# http://docs.aws.amazon.com/general/latest/gr/sigv4-create-canonical-request.html

# Step 1 is to define the verb (GET, POST, etc.)--already done.

# Step 2: Create canonical URI--the part of the URI from domain to query
# string (use '/' if no path)
canonical_uri = '/'

## Step 3: Create the canonical query string. In this example, request
# parameters are passed in the body of the request and the query string
# is blank.
canonical_querystring = ''

# Step 4: Create the canonical headers. Header names must be trimmed
# and lowercase, and sorted in code point order from low to high.
# Note that there is a trailing \n.
canonical_headers = 'content-type:' + content_type + '\n' + 'host:' + host + '\n' + 'x-amz-
date:' + amz_date + '\n' + 'x-amz-target:' + amz_target + '\n'

# Step 5: Create the list of signed headers. This lists the headers
# in the canonical_headers list, delimited with ";" and in alpha order.
# Note: The request can include any headers; canonical_headers and
# signed_headers include those that you want to be included in the
# hash of the request. "Host" and "x-amz-date" are always required.
# For DynamoDB, content-type and x-amz-target are also required.
signed_headers = 'content-type;host;x-amz-date;x-amz-target'

# Step 6: Create payload hash. In this example, the payload (body of
# the request) contains the request parameters.
payload_hash = hashlib.sha256(request_parameters.encode('utf-8')).hexdigest()

# Step 7: Combine elements to create canonical request
canonical_request = method + '\n' + canonical_uri + '\n' + canonical_querystring + '\n' +
 canonical_headers + '\n' + signed_headers + '\n' + payload_hash


# ************* TASK 2: CREATE THE STRING TO SIGN*************
# Match the algorithm to the hashing algorithm you use, either SHA-1 or
# SHA-256 (recommended)
algorithm = 'AWS4-HMAC-SHA256'
credential_scope = date_stamp + '/' + region + '/' + service + '/' + 'aws4_request'
string_to_sign = algorithm + '\n' +  amz_date + '\n' +  credential_scope + '\n' +
 hashlib.sha256(canonical_request.encode('utf-8')).hexdigest()
```

```
# ************* TASK 3: CALCULATE THE SIGNATURE *************
# Create the signing key using the function defined above.
signing_key = getSignatureKey(secret_key, date_stamp, region, service)

# Sign the string_to_sign using the signing_key
signature = hmac.new(signing_key, (string_to_sign).encode('utf-8'),
 hashlib.sha256).hexdigest()


# ************* TASK 4: ADD SIGNING INFORMATION TO THE REQUEST *************
# Put the signature information in a header named Authorization.
authorization_header = algorithm + ' ' + 'Credential=' + access_key + '/' +
 credential_scope + ', ' +  'SignedHeaders=' + signed_headers + ', ' + 'Signature=' +
 signature

# For DynamoDB, the request can include any headers, but MUST include "host", "x-amz-date",
# "x-amz-target", "content-type", and "Authorization". Except for the authorization
# header, the headers must be included in the canonical_headers and signed_headers values,
 as
# noted earlier. Order here is not significant.
# # Python note: The 'host' header is added automatically by the Python 'requests' library.
headers = {'Content-Type':content_type,
           'X-Amz-Date':amz_date,
           'X-Amz-Target':amz_target,
           'Authorization':authorization_header}


# ************* SEND THE REQUEST *************
print('\nBEGIN REQUEST++++++++++++++++++++++++++++++++++++')
print('Request URL = ' + endpoint)

r = requests.post(endpoint, data=request_parameters, headers=headers)

print('\nRESPONSE++++++++++++++++++++++++++++++++++++')
print('Response code: %d\n' % r.status_code)
print(r.text)
```

Using GET with authentication information in the Query string (Python)

The following example shows how to make a request using the IAM query API without SDK for Python (Boto3). The request makes a GET request and passes parameters and signing information using the query string.

```
# Copyright Amazon.com, Inc. or its affiliates. All Rights Reserved.
# SPDX-License-Identifier: Apache-2.0

"""
Important

The AWS SDKs sign API requests for you using the access key that you specify when you
configure the SDK. When you use an SDK, you don't need to learn how to sign API requests.
We recommend that you use the AWS SDKs to send API requests, instead of writing your own
 code.

The following example is a reference to help you get started if you have a need to write
your own code to send and sign requests. The example is for reference only and is not
maintained as functional code.
"""

# AWS Version 4 signing example

# IAM API (CreateUser)

# See: http://docs.aws.amazon.com/general/latest/gr/sigv4_signing.html
```

```
# This version makes a GET request and passes request parameters
# and authorization information in the query string
import sys, os, datetime, hashlib, hmac, urllib.parse
import requests # pip install requests

# ************* REQUEST VALUES *************
method = 'GET'
service = 'iam'
host = 'iam.amazonaws.com'
region = 'us-east-1'
endpoint = 'https://iam.amazonaws.com'

# Key derivation functions. See:
# http://docs.aws.amazon.com/general/latest/gr/signature-v4-examples.html#signature-v4-
examples-python
def sign(key, msg):
    return hmac.new(key, msg.encode('utf-8'), hashlib.sha256).digest()

def getSignatureKey(key, dateStamp, regionName, serviceName):
    kDate = sign(('AWS4' + key).encode('utf-8'), dateStamp)
    kRegion = sign(kDate, regionName)
    kService = sign(kRegion, serviceName)
    kSigning = sign(kService, 'aws4_request')
    return kSigning

# Read AWS access key from env. variables or configuration file. Best practice is NOT
# to embed credentials in code.
access_key = os.environ.get('AWS_ACCESS_KEY_ID')
secret_key = os.environ.get('AWS_SECRET_ACCESS_KEY')
if access_key is None or secret_key is None:
    print('No access key is available.')
    sys.exit()

# Create a date for headers and the credential string
t = datetime.datetime.utcnow()
amz_date = t.strftime('%Y%m%dT%H%M%SZ') # Format date as YYYYMMDD'T'HHMMSS'Z'
datestamp = t.strftime('%Y%m%d') # Date w/o time, used in credential scope


# ************* TASK 1: CREATE A CANONICAL REQUEST *************
# http://docs.aws.amazon.com/general/latest/gr/sigv4-create-canonical-request.html

# Because almost all information is being passed in the query string,
# the order of these steps is slightly different than examples that
# use an authorization header.

# Step 1: Define the verb (GET, POST, etc.)--already done.

# Step 2: Create canonical URI--the part of the URI from domain to query
# string (use '/' if no path)
canonical_uri = '/'

# Step 3: Create the canonical headers and signed headers. Header names
# must be trimmed and lowercase, and sorted in code point order from
# low to high. Note trailing \n in canonical_headers.
# signed_headers is the list of headers that are being included
# as part of the signing process. For requests that use query strings,
# only "host" is included in the signed headers.
canonical_headers = 'host:' + host + '\n'
signed_headers = 'host'

# Match the algorithm to the hashing algorithm you use, either SHA-1 or
# SHA-256 (recommended)
algorithm = 'AWS4-HMAC-SHA256'
credential_scope = datestamp + '/' + region + '/' + service + '/' + 'aws4_request'
```

```
# Step 4: Create the canonical query string. In this example, request
# parameters are in the query string. Query string values must
# be URL-encoded (space=%20). The parameters must be sorted by name.
canonical_querystring = 'Action=CreateUser&UserName=NewUser&Version=2010-05-08'
canonical_querystring += '&X-Amz-Algorithm=AWS4-HMAC-SHA256'
canonical_querystring += '&X-Amz-Credential=' + urllib.parse.quote_plus(access_key + '/' +
 credential_scope)
canonical_querystring += '&X-Amz-Date=' + amz_date
canonical_querystring += '&X-Amz-Expires=30'
canonical_querystring += '&X-Amz-SignedHeaders=' + signed_headers

# Step 5: Create payload hash. For GET requests, the payload is an
# empty string ("").
payload_hash = hashlib.sha256(('').encode('utf-8')).hexdigest()

# Step 6: Combine elements to create canonical request
canonical_request = method + '\n' + canonical_uri + '\n' + canonical_querystring + '\n' +
 canonical_headers + '\n' + signed_headers + '\n' + payload_hash


# ************* TASK 2: CREATE THE STRING TO SIGN*************
string_to_sign = algorithm + '\n' +  amz_date + '\n' +  credential_scope + '\n' +
 hashlib.sha256(canonical_request.encode('utf-8')).hexdigest()

# ************* TASK 3: CALCULATE THE SIGNATURE *************
# Create the signing key
signing_key = getSignatureKey(secret_key, datestamp, region, service)

# Sign the string_to_sign using the signing_key
signature = hmac.new(signing_key, (string_to_sign).encode("utf-8"),
 hashlib.sha256).hexdigest()


# ************* TASK 4: ADD SIGNING INFORMATION TO THE REQUEST *************
# The auth information can be either in a query string
# value or in a header named Authorization. This code shows how to put
# everything into a query string.
canonical_querystring += '&X-Amz-Signature=' + signature


# ************* SEND THE REQUEST *************
# The 'host' header is added automatically by the Python 'request' lib. But it
# must exist as a header in the request.
request_url = endpoint + "?" + canonical_querystring

print('\nBEGIN REQUEST++++++++++++++++++++++++++++++++++++')
print('Request URL = ' + request_url)
r = requests.get(request_url)

print('\nRESPONSE++++++++++++++++++++++++++++++++++++')
print('Response code: %d\n' % r.status_code)
print(r.text)
```

Troubleshooting AWS Signature Version 4 errors

When you develop code that implements Signature Version 4, you might receive errors from AWS products that you test against. The errors typically come from an error in the canonicalization of the request, the incorrect derivation or use of the signing key, or a validation failure of signature-specific parameters sent along with the request.

Errors

- Troubleshooting canonicalization errors (p. 1033)
- Troubleshooting credential scope errors (p. 1033)

- Troubleshooting key signing errors (p. 1035)

Troubleshooting canonicalization errors

Consider the following request:

```
https://iam.amazonaws.com/?MaxItems=100
&Action=ListGroupsForUser
&UserName=Test
&Version=2010-05-08
&X-Amz-Date=20120223T063000Z
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=AKIAIOSFODNN7EXAMPLE/20120223/us-east-1/iam/aws4_request
&X-Amz-SignedHeaders=host
&X-Amz-Signature=<calculated value>
```

If you incorrectly calculate the canonical request or the string to sign, the signature verification step performed by the service fails. The following example is a typical error response, which includes the canonical string and the string to sign as computed by the service. You can troubleshoot your calculation error by comparing the returned strings with the canonical string and your calculated string to sign.

```
<ErrorResponse xmlns="https://iam.amazonaws.com/doc/2010-05-08/">
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>The request signature we calculated does not match the signature you provided.
 Check your AWS Secret Access Key and signing method. Consult the service documentation for
 details.

The canonical string for this request should have been 'GET /
 Action=ListGroupsForUser&MaxItems=100&UserName=Test&Version=2010-05-08&X-Amz-
Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential
=AKIAIOSFODNN7EXAMPLE%2F20120223%2Fus-east-1%2Fiam%2Faws4_request&X-Amz-
Date=20120223T063000Z&X-Amz-SignedHeaders=host
host:iam.amazonaws.com

host
<hashed-value>'

The String-to-Sign should have been
'AWS4-HMAC-SHA256
20120223T063000Z
20120223/us-east-1/iam/aws4_request
<hashed-value>'
</Message>
  </Error>
  <RequestId>4ced6e96-5de8-11e1-aa78-a56908bdf8eb</RequestId>
</ErrorResponse>
```

Troubleshooting credential scope errors

AWS products validate credentials for proper scope; the credential parameter must specify the correct service, Region, and date. For example, the following credential references the Amazon RDS service:

```
Credential=AKIAIOSFODNN7EXAMPLE/20120224/us-east-1/rds/aws4_request
```

If you use the same credentials to submit a request to IAM, you'll receive the following error response:

```
<ErrorResponse xmlns="https://iam.amazonaws.com/doc/2010-05-08/">
```

```
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>Credential should be scoped to correct service: 'iam'. </Message>
  </Error>
  <RequestId>aa0da9de-5f2b-11e1-a2c0-c1dc98b6c575</RequestId>
```

The credential must also specify the correct Region. For example, the following credential for an IAM request incorrectly specifies the US West (N. California) Region.

```
Credential=AKIAIOSFODNN7EXAMPLE/20120224/us-west-1/iam/aws4_request
```

If you use the credential to submit a request to IAM, which accepts only the `us-east-1` Region specification, you'll receive the following response:

```
comma-separated<ErrorResponse xmlns="https://iam.amazonaws.com/doc/2010-05-08/">
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>Credential should be scoped to a valid Region, not 'us-west-1'. </Message>
  </Error>
  <RequestId>8e229682-5f27-11e1-88f2-4b1b00f424ae</RequestId>
</ErrorResponse>
```

You'll receive the same type of invalid Region response from AWS products that are available in multiple Regions if you submit requests to a Region that differs from the Region specified in your credential scope.

The credential must also specify the correct Region for the service and action in your request.

The date that you use as part of the credential must match the date value in the `x-amz-date` header. For example, the following `x-amz-date` header value does not match the date value used in the `Credential` parameter that follows it.

```
x-amz-date:"20120224T213559Z"
Credential=AKIAIOSFODNN7EXAMPLE/20120225/us-east-1/iam/aws4_request
```

If you use this pairing of `x-amz-date` header and credential, you'll receive the following error response:

```
<ErrorResponse xmlns="https://iam.amazonaws.com/doc/2010-05-08/">
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>Date in Credential scope does not match YYYYMMDD from ISO-8601 version of date
 from HTTP: '20120225' != '20120224', from '20120 224T213559Z'.</Message>
  </Error>
  <RequestId>9d6ddd2b-5f2f-11e1-b901-a702cd369eb8</RequestId>
</ErrorResponse>
```

An expired signature can also generate an error response. For example, the following error response was generated due to an expired signature.

```
<ErrorResponse xmlns="https://iam.amazonaws.com/doc/2010-05-08/">
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>Signature expired: 20120306T074514Z is now earlier than 20120306T074556Z
 (20120306T080056Z - 15 min.)</Message>
```

```
  </Error>
  <RequestId>fcc88440-5dec-11e1-b901-a702cd369eb8</RequestId>
</ErrorResponse>
```

Troubleshooting key signing errors

Errors that are caused by an incorrect derivation of the signing key or improper use of cryptography are more difficult to troubleshoot. The error response will tell you that the signature does not match. If you verified that the canonical string and the string to sign are correct, the cause of the signature mismatch is most likely one of the two following issues:

- The secret access key does not match the access key ID that you specified in the `Credential` parameter.
- There is a problem with your key derivation code.

To check whether the secret key matches the access key ID, you can use your secret key and access key ID with a known working implementation. One way is to use one of the AWS SDKs to write a program that makes a simple request to AWS using the access key ID and secret access key that you want to use.

To check whether your key derivation code is correct, you can compare it to our example derivation code. For more information, see Examples of how to derive a signing key for Signature Version 4 (p. 1022).

Service-specific reference for Signature Version 4

To learn more about making and signing HTTP requests in the context of specific AWS services, see the documentation for the following services:

- Amazon CloudSearch
- Amazon CloudWatch
- AWS Data Pipeline
- Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon Elastic Transcoder
- Amazon S3 Glacier
- Amazon Mobile Analytics
- Amazon Relational Database Service (Amazon RDS)
- Amazon Simple Queue Service (Amazon SQS)
- Amazon Simple Storage Service (Amazon S3)
- Amazon Simple Workflow Service (Amazon SWF)
- AWS WAF

Signature Version 2 signing process

Important
The AWS SDKs, AWS Command Line Interface (AWS CLI), and other AWS tools sign API requests for you using the access key that you specify when you configure the tool. **When you use these tools, you don't need to learn how to sign API requests. The following documentation explains how to sign API requests, but is *only* useful if you're writing your own code to send and sign AWS API requests.** We recommend that you use the AWS SDKs or other AWS tools to send API requests, instead of writing your own code.
If you must write your own code to sign AWS API requests, use Signature Version 4 (SigV4) (p. 1007).

Supported Regions and services

You can use Signature Version 2 to sign API requests for some AWS services in some AWS Regions. Otherwise, you must use Signature Version 4 to sign API requests.

Regions that support Signature Version 2

- US East (N. Virginia) Region
- US West (N. California) Region
- US West (Oregon) Region
- Europe (Ireland) Region
- Asia Pacific (Tokyo) Region
- Asia Pacific (Singapore) Region
- Asia Pacific (Sydney) Region
- South America (São Paulo) Region

Services that support Signature Version 2

- Amazon EC2 Auto Scaling
- AWS CloudFormation
- Amazon CloudWatch
- AWS Elastic Beanstalk
- Amazon Elastic Compute Cloud (Amazon EC2)
- Elastic Load Balancing
- Amazon EMR
- Amazon ElastiCache
- AWS Identity and Access Management (IAM)
- AWS Import/Export
- Amazon Relational Database Service (Amazon RDS)
- Amazon Simple Notification Service (Amazon SNS)
- Amazon Simple Queue Service (Amazon SQS)
- Amazon SimpleDB

Services deprecating Signature Version 2

- Amazon Simple Storage Service (Amazon S3) - Amazon S3 Update - SigV2 Deprecation
- Amazon Simple Email Service (Amazon SES)

Components of a query request for Signature Version 2

AWS requires that each HTTP or HTTPS Query request formatted for Signature Version 2 contains the following:

Endpoint

Also known as the host part of an HTTP request. This is the DNS name of the computer where you send the Query request. This is different for each AWS Region.

Action

The action you want a web service to perform. This value determines the parameters used in the request.

AWSAccessKeyId

A value distributed by AWS when you sign up for an AWS account.

SignatureMethod

The hash-based protocol used to calculate the signature. This can be either HMAC-SHA1 or HMAC-SHA256 for Signature Version 2.

SignatureVersion

The version of the AWS signature protocol.

Timestamp

The time at which you make the request. Include this in the Query request to help prevent third parties from intercepting your request.

Required and optional parameters

Each action has a set of required and optional parameters that define the API call.

Signature

The calculated value that ensures the signature is valid and has not been tampered.

The following is an example Amazon EMR Query request formatted as an HTTPS GET request.

- The endpoint, `elasticmapreduce.amazonaws.com`, is the default endpoint and maps to the Region us-east-1.
- The action is `DescribeJobFlows`, which requests information about one or more job flows.

Note
In the actual Query request, there are no spaces or newline characters. The request is a continuous line of text. The version below is formatted for human readability.

```
https://elasticmapreduce.amazonaws.com?
&AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&Action=DescribeJobFlows
&SignatureMethod=HmacSHA256
&SignatureVersion=2
&Timestamp=2011-10-03T15%3A19%3A30
&Version=2009-03-31
&Signature=calculated value
```

How to generate a signature for a Query request

Web service requests are sent across the Internet and are vulnerable to tampering. To check that the request has not been altered, AWS calculates the signature to determine if any of the parameters or parameter values were changed en route. AWS requires a signature as part of every request.

Be sure to URI encode the request. For example, blank spaces in your request should be encoded as %20. Although an unencoded space is normally allowed by the HTTP protocol specification, unencoded

characters create an invalid signature in your Query request. Do *not* encode spaces as a plus sign (+) as this will cause errors.

The following topics describe the steps needed to calculate a signature using AWS Signature Version 2.

Task 1: Format the Query request

Before you can sign the Query request, format the request in a standardized (canonical) format. This is needed because the different ways to format a Query request will result in different HMAC signatures. Format the request in a canonical format before signing. This ensures your application and AWS will calculate the same signature for a request.

To create the string to sign, you concatenate the Query request components. The following example generates the string to sign for the following call to the Amazon EMR API.

```
https://elasticmapreduce.amazonaws.com?
Action=DescribeJobFlows
&Version=2009-03-31
&AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
&SignatureVersion=2
&SignatureMethod=HmacSHA256
&Timestamp=2011-10-03T15:19:30
```

Note
In the preceding request, the last four parameters (AWSAccessKeyID through Timestamp) are called authentication parameters. They're required in every Signature Version 2 request. AWS uses them to identify who is sending the request and whether to grant the requested access.

To create the string to sign

1. Start with the request method (either GET or POST), followed by a newline character. For human readability, the newline character is represented as `\n`.

   ```
   GET\n
   ```

2. Add the HTTP host header (endpoint) in lowercase, followed by a newline character. The port information is omitted if it is the standard port for the protocol (port 80 for HTTP and port 443 for HTTPS), but included if it is a nonstandard port.

   ```
   elasticmapreduce.amazonaws.com\n
   ```

3. Add the URL-encoded version of each path segment of the URI, which is everything between the HTTP host header to the question mark character (`?`) that begins the query string parameters, followed by a newline character. Don't encode the forward slash (`/`) that delimits each path segment.

   In this example, if the absolute path is empty, use a forward slash (`/`).

   ```
   /\n
   ```

4. a. Add the query string components, as UTF-8 characters which are URL encoded (hexadecimal characters must be uppercase). You do not encode the initial question mark character (?) in the request. For more information, see RFC 3986.

   b. Sort the query string components by byte order. Byte ordering is case sensitive. AWS sorts these components based on the raw bytes.

      For example, this is the original order for the query string components.

```
Action=DescribeJobFlows
Version=2009-03-31
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
SignatureVersion=2
SignatureMethod=HmacSHA256
Timestamp=2011-10-03T15%3A19%3A30
```

The query string components would be reorganized as the following:

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE
Action=DescribeJobFlows
SignatureMethod=HmacSHA256
SignatureVersion=2
Timestamp=2011-10-03T15%3A19%3A30
Version=2009-03-31
```

c. Separate parameter names from their values with the equal sign character (=), even if the value is empty. Separate parameter and value pairs with the ampersand character (&). Concatenate the parameters and their values to make one long string with no spaces. Spaces within a parameter value are allowed, but must be URL encoded as %20. In the concatenated string, period characters (.) are not escaped. RFC 3986 considers the period character an unreserved character, so it is not URL encoded.

Note
RFC 3986 does not specify what happens with ASCII control characters, extended UTF-8 characters, and other characters reserved by RFC 1738. Since any values may be passed into a string value, these other characters should be percent encoded as %XY where X and Y are uppercase hex characters. Extended UTF-8 characters take the form %XY%ZA... (this handles multibytes).

The following example shows the query string components, with the parameters concatenated with the ampersand character (&), and sorted by byte order.

```
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE&Action=DescribeJobFlows&SignatureMethod=HmacSHA256&SignatureVer
```

5. To construct the finished canonical request, combine all the components from each step. As shown, each component ends with a newline character.

```
GET\n
elasticmapreduce.amazonaws.com\n
/\n
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE&Action=DescribeJobFlows&SignatureMethod=HmacSHA256&SignatureVer
```

Task 2: Calculate the signature

After you've created the canonical string as described in Task 1: Format the Query request (p. 1038), calculate the signature by creating a hash-based message authentication code (HMAC) that uses either the HMAC-SHA1 or HMAC-SHA256 protocols. The HMAC-SHA256 is preferred.

In this example, the signature is calculated with the following canonical string and secret key as inputs to a keyed hash function:

- Canonical query string:

```
GET\n
```

```
elasticmapreduce.amazonaws.com\n
/\n
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE&Action=DescribeJobFlows&SignatureMethod=HmacSHA256&SignatureVersi
```

- Sample secret key:

```
wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
```

The resulting signature must be base-64 encoded.

```
i91nKc4PWAt0JJIdXwz9HxZCJDdiy6cf%2FMj6vPxyYIs%3D
```

Add the resulting value to the query request as a `Signature` parameter. When you add this parameter to the request, you must URI encode it just like any other parameter. You can use the signed request in an HTTP or HTTPS call.

```
https://elasticmapreduce.amazonaws.com?
AWSAccessKeyId=AKIAIOSFODNN7EXAMPLE&Action=DescribeJobFlows&SignatureMethod=HmacSHA256&SignatureVersion
%2FMj6vPxyYIs%3D
```

Note
You can use temporary security credentials provided by AWS Security Token Service (AWS STS) to sign a request. The process is the same as using long-term credentials, but requests require an additional parameter for the security token.

The following request uses a temporary access key ID and the `SecurityToken` parameter.

Example Example request with temporary security credentials

```
https://sdb.amazonaws.com/
?Action=GetAttributes
&AWSAccessKeyId=access-key-from-AWS Security Token Service
&DomainName=MyDomain
&ItemName=MyItem
&SignatureVersion=2
&SignatureMethod=HmacSHA256
&Timestamp=2010-01-25T15%3A03%3A07-07%3A00
&Version=2009-04-15
&Signature=signature-calculated-using-the-temporary-access-key
&SecurityToken=session-token
```

For more information, see the following resources:

- The Amazon EMR Developer Guide has information about Amazon EMR API calls.
- The API documentation for each service has information about requirements and specific parameters for an action.
- The AWS SDKs offer functions to generate Query request signatures. To see an example using the AWS SDK for Java, see Using the Java SDK to sign a Query request (p. 1041).

Troubleshooting request signatures

This section describes some error codes you might see when you are initially developing code to generate the signature to sign Query requests.

SignatureDoesNotMatch signing error in a web service

The following error response is returned when a web service attempts to validate the request signature by recalculating the signature value and generates a value that does not match the signature you appended to the request. This can occur because the request was altered between the time you sent it and the time it reached a web service endpoint (which is what the signature is designed to detect) or because the signature was calculated improperly. A common cause of the following error message is not properly creating the string to sign, such as forgetting to URL-encode characters such as the colon (:) and the forward slash (/) in Amazon S3 bucket names.

```
<ErrorResponse xmlns="http://elasticmapreduce.amazonaws.com/doc/2009-03-31">
  <Error>
    <Type>Sender</Type>
    <Code>SignatureDoesNotMatch</Code>
    <Message>The request signature we calculated does not match the signature you
 provided.
    Check your AWS Secret Access Key and signing method.
    Consult the service documentation for details.</Message>
  </Error>
  <RequestId>7589637b-e4b0-11e0-95d9-639f87241c66</RequestId>
</ErrorResponse>
```

IncompleteSignature signing error in a web service

The following error indicates that signature is missing information or has been improperly formed.

```
<ErrorResponse xmlns="http://elasticmapreduce.amazonaws.com/doc/2009-03-31">
  <Error>
    <Type>Sender</Type>
    <Code>IncompleteSignature</Code>
    <Message>Request must contain a signature that conforms to AWS standards</Message>
  </Error>
  <RequestId>7146d0dd-e48e-11e0-a276-bd10ea0cbb74</RequestId>
</ErrorResponse>
```

Using the Java SDK to sign a Query request

The following example uses the amazon.webservices.common package of the AWS SDK for Java to generate an AWS Signature Version 2 Query request signature. To do so, it creates an RFC 2104-compliant HMAC signature. For more information about HMAC, see HMAC: Keyed-Hashing for Message Authentication.

> **Note**
> Java is used as an example implementation. You can use the programming language of your choice to implement the HMAC algorithm to sign Query requests.

```
import java.security.SignatureException;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import com.amazonaws.util.*;

/**
* This class defines common routines for generating
* authentication signatures for AWS Platform requests.
*/
public class Signature {
    private static final String HMAC_SHA256_ALGORITHM = "HmacSHA256";
```

```
    /**
     * Computes RFC 2104-compliant HMAC signature.
     * * @param data
     * The signed data.
     * @param key
     * The signing key.
     * @return
     * The Base64-encoded RFC 2104-compliant HMAC signature.
     * @throws
     * java.security.SignatureException when signature generation fails
     */
    public static String calculateRFC2104HMAC(String data, String key)
    throws java.security.SignatureException
    {
        String result;
        try {

            // Get an hmac_sha256 key from the raw key bytes.
            SecretKeySpec signingKey = new SecretKeySpec(key.getBytes("UTF-8"),
 HMAC_SHA256_ALGORITHM);

            // Get an hmac_sha256 Mac instance and initialize with the signing key.
            Mac mac = Mac.getInstance(HMAC_SHA256_ALGORITHM);
            mac.init(signingKey);

            // Compute the hmac on input data bytes.
            byte[] rawHmac = mac.doFinal(data.getBytes("UTF-8"));

            // Base64-encode the hmac by using the utility in the SDK
            result = BinaryUtils.toBase64(rawHmac);


        } catch (Exception e) {
            throw new SignatureException("Failed to generate HMAC : " + e.getMessage());
        }
        return result;
    }
}
```

AWS SDK support for Amazon S3 client-side encryption

The following tables list the cryptographic algorithms and features that are supported by the language–specific AWS SDKs. For information about how to use the features for a particular SDK, see the developer guide for that SDK.

If you are new to cryptography, see the AWS Cryptographic Services and Tools Guide to learn the terms and concepts.

> **Note**
> The AWS Encryption SDK is a client-side encryption library that is independent of the AWS SDKs. You can use this encryption library to more easily implement encryption best practices. Unlike the Amazon S3 encryption clients in the language–specific AWS SDKs, the AWS Encryption SDK returns a portable ciphertext that is not tied to Amazon S3, does not require an AWS account, and can be used to encrypt or decrypt any unformatted data.
> The AWS Encryption SDK and the Amazon S3 encryption clients are not compatible because they produce ciphertexts with different data formats. For more information about the AWS Encryption SDK, see the AWS Encryption SDK Developer Guide.

AWS SDK features for Amazon S3 client-side encryption

To use the Amazon S3 client-side encryption library to encrypt data before uploading to Amazon S3, you must provide a root key to the Amazon S3 encryption client. You can provide a client-side root key or use an AWS KMS key from AWS Key Management Service (AWS KMS) . The AWS KMS keys make it easier to create and manage cryptographic keys securely. For more information about these features, choose the links provided in the **Feature** column.

For details about how to use the features for a particular SDK, see the SDK's developer guide.

In the following table, each column indicates whether the AWS Command Line Interface or SDK for a specific language supports the features used in client-side encryption.

Feature	Java	.NET	Ruby v2	AWS CLI	Boto3	PHP v3	JavaScrip	Go	C++
Amazon S3 client-side encryption	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes
AWS KMS keys	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes

For information about the v2 Amazon S3 encryption clients that support client-side encryption, see our blog post about Updates to the Amazon S3 Encryption Client.

For more details about the *legacy v1* Amazon S3 encryption client, see the following blog posts.

- Client-Side Data Encryption for Amazon S3 Using the AWS SDK for Java
- Client Side Data Encryption with AWS SDK for .NET and Amazon S3
- Using Client-Side Encryption for Amazon S3 in the AWS SDK for Ruby
- Using the AWS SDK for Go Encryption Client
- Amazon S3 Encryption Client Now Available for C++ Developers

Amazon S3 encryption client cryptographic algorithms

The following table lists the algorithms that each language–specific AWS SDK supports for encrypting keys and data when using the Amazon S3 encryption client.

Algorithm	Java	.NET	Ruby v2	AWS CLI	Boto3	PHP v3	JavaScrip	Go	C++
Key Wrap: RSA-OAEP-SHA1	Yes	Yes	Yes	No	No	No	No	No	No

Algorithm	Java	.NET	Ruby v2	AWS CLI	Boto3	PHP v3	JavaScript	Go	C++
Key Wrap: AES/GCM	Yes	Yes	Yes	No	No	No	No	No	Yes
Key Wrap: KMS +context	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes
Key Wrap: AES/ECB	Deprecated	Deprecated	Deprecated	No	No	No	No	No	No
Key Wrap: AESWrap	Deprecated	Deprecated	Deprecated	No	No	No	No	No	Deprecated
Key Wrap: RSA	Deprecated	No	Deprecated	No	No	No	No	No	No
Key Wrap: KMS	Deprecated	Deprecated	Deprecated	No	No	Deprecated	No	Deprecated	Deprecated
Content Encryption: AES/GCM	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes
Content Encryption: AES/CBC	Deprecated	No	Deprecated	No	No	No	No	Deprecated	Deprecated

For more information about *authenticated* and *encryption-only* modes, see the Amazon S3 Client-Side Authenticated Encryption blog post.

Document conventions

The following are the common typographical conventions for AWS technical publications.

Inline code (for example, commands, operations, parameters, constants, XML elements, and regular expressions)

Formatting: Text in a monospace font

Example: `java -version`

Example blocks (for example, sample code and scripts)

Formatting: Text in a monospace font inside a shaded block

Example:

```
# ls -l /var/www/html/index.html
-rw-rw-r--  1 root root 1872 Jun 21 09:33 /var/www/html/index.html
# date
Wed Jun 21 09:33:42 EDT 2006
```

Mutually exclusive options

Formatting: Text separated by vertical bars

Example: `(start | stride | edge)`

Optional parameters

Formatting: Text enclosed in square brackets

Example: `[-n, -quiet]`

Definitions

Formatting: Text in italics

Example: *Amazon Machine Image* (AMI)

Technical publications

Formatting: Text in italics

Example: *Amazon Simple Storage Service User Guide*

Elements in the user interface

Formatting: Text in bold

Example: Choose **File**, **Properties**.

User input (text that a user types)

Formatting: Text in a monospace font

Example: For the name, type **`my-new-resource`**.

Placeholder text for a required value

Formatting: Text in *`italics`*

Example:

```
aws ec2 register-image --image-location my-s3-bucket/image.manifest.xml
```

AWS glossary

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

Numbers and symbols

100-continue — A method that gives a client the ability to see whether a server can accept a request before actually sending it. For large PUT requests, this method can save both time and bandwidth charges.

A

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

AAD — See additional authenticated data.

Access Analyzer — A feature of AWS Identity and Access Management (IAM) (p. 1060) that you can use to identify the resources in your organization and accounts that are shared with an external entity. Example resources include Amazon S3 buckets or IAM roles.
See Also https://aws.amazon.com/about-aws/whats-new/2019/12/introducing-aws-identity-and-access-management-access-analyzer/.

access control list (ACL) — A document that defines who can access a particular bucket (p. 1065) or object. Each bucket (p. 1065) and object in Amazon S3 (p. 1055) has an ACL. This document defines what each type of user can do, such as write and read permissions.

access identifiers — See credentials.

access key — The combination of an access key ID (p. 1047) (for example, `AKIAIOSFODNN7EXAMPLE`) and a secret access key (p. 1096) (for example, `wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY`). You use access keys to sign API requests that you make to AWS.

access key ID — A unique identifier that's associated with a secret access key (p. 1096); the access key ID and secret access key are used together to sign programmatic AWS requests cryptographically.

access key rotation	A method to increase security by changing the AWS access key ID. You can use this method to retire an old key at your discretion.
access policy language	A language for writing documents (specifically, *policies* (p. 1089)) that specify who can access a particular AWS resource (p. 1094) and under what conditions.
account	A formal relationship with AWS that's associated with all of the following: • The owner email address and password • The control of resources created under its umbrella • Payment for the AWS activity related to those resources The AWS account has permission to do anything and everything with all the AWS account resources. This is in contrast to a user (p. 1103), which is an entity contained within the account.
account activity	A webpage showing your month-to-date AWS usage and costs. The account activity page is located at https://aws.amazon.com/account-activity/.
ACL	See access control list (ACL).
ACM	See the section called “ACM”.
ACM PCA	See the section called “ACM Private CA”.
ACM Private CA	See the section called “ACM Private CA”.
action	An API function. Also called *operation* or *call*. The activity the principal (p. 1090) has permission to perform. The action is B in the statement "A has permission to do B to C where D applies." For example, Jane sends a request to Amazon SQS (p. 1055) with `Action=ReceiveMessage`. Amazon CloudWatch (p. 1049): The response initiated by the change in an alarm's state (for example, from `OK` to `ALARM`). The state change might be caused by a metric reaching the alarm threshold, or by a `SetAlarmState` request. Each alarm can have one or more actions assigned to each state. Actions are performed once each time the alarm changes to a state that has an action assigned. Example actions include an Amazon Simple Notification Service (p. 1054) notification, running an Amazon EC2 Auto Scaling (p. 1051) policy (p. 1089), and an Amazon EC2 (p. 1050) instance (p. 1080) stop/terminate action.
active trusted key groups	A list that shows each of the trusted key groups (p. 1103), and the IDs of the public keys in each key group, that are active for a distribution in Amazon CloudFront. CloudFront can use the public keys in these key groups to verify the signatures of CloudFront signed URLs and signed cookies.
active trusted signers	See active trusted key groups (p. 1048).
additional authenticated data	Information that's checked for integrity but not encrypted, such as headers or other contextual metadata.
administrative suspension	Amazon EC2 Auto Scaling (p. 1051) might suspend processes for Auto Scaling group (p. 1057) that repeatedly fail to launch instances. Auto Scaling groups that most commonly experience administrative suspension have zero running instances, have been trying to launch instances for more than 24 hours, and have not succeeded in that time.
alarm	An item that watches a single metric over a specified time period and starts an Amazon SNS (p. 1054) topic (p. 1102) or an Amazon EC2 Auto Scaling (p. 1051)

	policy (p. 1089). These actions are started if the value of the metric crosses a threshold value over a predetermined number of time periods.
allow	One of two possible outcomes (the other is deny (p. 1072)) when an IAM (p. 1060) access policy (p. 1089) is evaluated. When a user makes a request to AWS, AWS evaluates the request based on all permissions that apply to the user and then returns either allow or deny.
Amazon API Gateway	A fully managed service that developers can use to create, publish, maintain, monitor, and secure APIs at any scale. See Also https://aws.amazon.com/api-gateway.
Amazon AppStream 2.0	A fully managed, secure service for streaming desktop applications to users without rewriting those applications. See Also https://aws.amazon.com/appstream/.
Amazon Athena	An interactive query service that you can use to analyze data in Amazon S3 using ANSI SQL. Athena is serverless, so there's no infrastructure to manage. Athena scales automatically and is simple to use, so you can start analyzing your datasets within seconds. See Also https://aws.amazon.com/athena/.
Amazon Aurora	A fully managed MySQL-compatible relational database engine that combines the speed and availability of commercial databases with the simplicity and cost-effectiveness of open-source databases. See Also https://aws.amazon.com/rds/aurora/.
Amazon Chime	A secure, real-time, unified communications service that transforms meetings by making them more efficient and easier to conduct. See Also https://aws.amazon.com/chime/.
Amazon Cloud Directory (Cloud Directory)	A service that provides a highly scalable directory store for your application's multihierarchical data. See Also https://aws.amazon.com/cloud-directory/.
Amazon CloudFront	An AWS content delivery service that helps you improve the performance, reliability, and availability of your websites and applications. See Also https://aws.amazon.com/cloudfront.
Amazon CloudSearch	A fully managed service in the AWS Cloud that you can use to set up, manage, and scale a search solution for your website or application.
Amazon CloudWatch	A web service that you can use to monitor and manage various metrics, and configure alarm actions based on data from those metrics. See Also https://aws.amazon.com/cloudwatch.
Amazon CloudWatch Events	A web service that you can use to deliver a timely stream of system events that describe changes in AWS resources (p. 1094) to AWS Lambda (p. 1061) functions, streams in Amazon Kinesis Data Streams (p. 1052), Amazon Simple Notification Service (p. 1054) topics, or built-in targets. See Also https://aws.amazon.com/cloudwatch.
Amazon CloudWatch Logs	A web service for monitoring and troubleshooting your systems and applications from your existing system, application, and custom log files. You can send your existing log files to CloudWatch Logs and monitor these logs in near-real time. See Also https://aws.amazon.com/cloudwatch.
Amazon Cognito	A web service that you can use to save mobile user data in the AWS Cloud without writing any backend code or managing any infrastructure. Examples of mobile

	user data that you can save include app preferences and game states. Amazon Cognito offers mobile identity management and data synchronization across devices. See Also https://aws.amazon.com/cognito/.
Amazon Comprehend	A natural language processing (NLP) service that uses machine learning to find insights and relationships in text. See Also https://aws.amazon.com/comprehend/.
Amazon Comprehend Medical	A HIPAA-eligible natural language processing (NLP) service that uses machine learning to extract health data from medical text. See Also https://aws.amazon.com/comprehend/medical/.
Amazon Connect	A service solution that offers self-service configuration and provides dynamic, personal, and natural customer engagement at any scale. See Also https://aws.amazon.com/connect/.
Amazon Corretto	A no-cost, multiplatform, production-ready distribution of the Open Java Development Kit (OpenJDK). See Also https://aws.amazon.com/corretto/.
Amazon Detective	A service that collects log data from your AWS resources to analyze and identify the root cause of security findings or suspicious activities. The Detective behavior graph provides visualizations to help you to determine the nature and extent of possible security issues and conduct an efficient investigation. See Also https://aws.amazon.com/detective/.
Amazon DocumentDB (with MongoDB compatibility)	A managed database service that you can use to set up, operate, and scale MongoDB-compatible databases in the cloud. See Also https://aws.amazon.com/documentdb/.
Amazon DynamoDB	A fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. See Also https://aws.amazon.com/dynamodb/.
Amazon DynamoDB Encryption Client	A software library that helps you protect your table data before you send it to Amazon DynamoDB (p. 1050).
Amazon DynamoDB Storage Backend for Titan	A storage backend for the Titan graph database implemented on top of Amazon DynamoDB. Titan is a scalable graph database optimized for storing and querying graphs. See Also https://aws.amazon.com/dynamodb/.
Amazon DynamoDB Streams	An AWS service that captures a time-ordered sequence of item-level modifications in any Amazon DynamoDB table. This service also stores this information in a log for up to 24 hours. Applications can access this log and view the data items as they appeared before and after they were modified, in near-real time. See Also https://aws.amazon.com/dynamodb/.
Amazon EBS-backed AMI	A type of Amazon Machine Image (AMI) (p. 1053) whose instances use an Amazon EBS (p. 1051) volume (p. 1105) as their root device. Compare this with instances launched from instance backeds (p. 1080), which use the instance store (p. 1080) as the root device.
Amazon EC2	A web service for launching and managing Linux/UNIX and Windows Server instances (p. 1080) in Amazon data centers. See Also Amazon Elastic Compute Cloud (Amazon EC2), https://aws.amazon.com/ec2.

Amazon EC2 Auto Scaling	A web service that launches or terminates instances automatically based on user-defined policies (p. 1089), schedules, and health checks (p. 1078). See Also https://aws.amazon.com/ec2/autoscaling.
Amazon Elastic Block Store (Amazon EBS)	A service that provides block level storage volumes (p. 1105) or use with EC2 instances (p. 1073). See Also https://aws.amazon.com/ebs.
Amazon Elastic Compute Cloud (Amazon EC2)	A web service that you can use to launch and manage Linux/UNIX and Windows Server instances (p. 1080) in Amazon data centers. See Also https://aws.amazon.com/ec2.
Amazon Elastic Container Registry (Amazon ECR)	A fully managed Docker container registry that you can use to store, manage, and deploy Docker container images. Amazon ECR is integrated with Amazon Elastic Container Service (Amazon ECS) (p. 1051) and AWS Identity and Access Management (IAM) (p. 1060). See Also https://aws.amazon.com/ecr.
Amazon Elastic Container Service (Amazon ECS)	A highly scalable, fast, container (p. 1068) management service that you can use to run, stop, and manage Docker containers on a cluster (p. 1067) of EC2 instances. See Also https://aws.amazon.com/ecs.
Amazon Elastic File System (Amazon EFS)	A file storage service for EC2 (p. 1050) instances (p. 1080). Amazon EFS provides an interface that you can use to create and configure file systems. Amazon EFS storage capacity grows and shrinks automatically as you add and remove files. See Also https://aws.amazon.com/efs/.
Amazon Elastic Kubernetes Service (Amazon EKS)	A managed service that you can use to run Kubernetes on AWS without needing to stand up or maintain your own Kubernetes control plane. See Also https://aws.amazon.com/eks/.
Amazon Elastic Transcoder	A cloud-based media transcoding service. Elastic Transcoder is a highly scalable tool for converting (or *transcoding*) media files from their source format into versions that play on devices such as smartphones, tablets, and PCs. See Also https://aws.amazon.com/elastictranscoder/.
Amazon ElastiCache	A web service that simplifies deploying, operating, and scaling an in-memory cache in the cloud. The service improves the performance of web applications by providing information retrieval from fast, managed, in-memory caches, instead of relying entirely on slower disk-based databases. See Also https://aws.amazon.com/elasticache/.
Amazon OpenSearch Service (OpenSearch Service)	An AWS managed service for deploying, operating, and scaling OpenSearch, an open-source search and analytics engine, in the AWS Cloud. Amazon OpenSearch Service (OpenSearch Service) also offers security options, high availability, data durability, and direct access to the OpenSearch API. See Also https://aws.amazon.com/elasticsearch-service.
Amazon EMR	A web service that you can use to process large amounts of data efficiently. Amazon EMR uses Hadoop (p. 1078) processing combined with several AWS products to do such tasks as web indexing, data mining, log file analysis, machine learning, scientific simulation, and data warehousing. See Also https://aws.amazon.com/elasticmapreduce.
Amazon EventBridge	A serverless event bus service that you can use to connect your applications with data from a variety of sources and routes that data to targets such as AWS Lambda. You can set up routing rules to determine where to send your data to build application architectures that react in real time to all of your data sources. See Also https://aws.amazon.com/eventbridge/.

Amazon Forecast	A fully managed service that uses statistical and machine learning algorithms to produce highly accurate time-series forecasts. See Also https://aws.amazon.com/forecast/.
Amazon GameLift	A managed service for deploying, operating, and scaling session-based multiplayer games. See Also https://aws.amazon.com/gamelift/.
Amazon GuardDuty	A continuous security monitoring service. Amazon GuardDuty can help to identify unexpected and potentially unauthorized or malicious activity in your AWS environment. See Also https://aws.amazon.com/guardduty/.
Amazon Inspector	An automated security assessment service that helps improve the security and compliance of applications deployed on AWS. Amazon Inspector automatically assesses applications for vulnerabilities or deviations from best practices. After performing an assessment, Amazon Inspector produces a detailed report with prioritized steps for remediation. See Also https://aws.amazon.com/inspector.
Amazon Kinesis	A platform for streaming data on AWS. Kinesis offers services that simplify the loading and analysis of streaming data. See Also https://aws.amazon.com/kinesis/.
Amazon Kinesis Data Firehose	A fully managed service for loading streaming data into AWS. Kinesis Data Firehose can capture and automatically load streaming data into Amazon S3 (p. 1055) and Amazon Redshift (p. 1054), enabling near real-time analytics with existing business intelligence tools and dashboards. Kinesis Data Firehose automatically scales to match the throughput of your data and requires no ongoing administration. It can also batch, compress, and encrypt the data before loading it. See Also https://aws.amazon.com/kinesis/firehose/.
Amazon Kinesis Data Streams	A web service for building custom applications that process or analyze streaming data for specialized needs. Amazon Kinesis Data Streams can continuously capture and store terabytes of data per hour from hundreds of thousands of sources. See Also https://aws.amazon.com/kinesis/streams/.
Amazon Lightsail	You can use Lightsail to launch and manage a virtual private server with AWS. Lightsail offers bundled plans that include everything you need to deploy a virtual private server, for a low monthly rate. See Also https://aws.amazon.com/lightsail/.
Amazon Lookout for Equipment	A machine learning service that uses data from sensors mounted on factory equipment to detect abnormal behavior so you can take action before machine failures occur. See Also https://aws.amazon.com/lookout-for-equipment/.
Amazon Lookout for Vision	A machine learning service that uses computer vision (CV) to find defects in industrial products. Amazon Lookout for Vision can identify missing components in an industrial product, damage to vehicles or structures, irregularities in production lines, and even minuscule defects in silicon wafers—or any other physical item where quality is important. See Also https://aws.amazon.com/lookout-for-vision/.
Amazon Lumberyard	A cross-platform, 3D game engine for creating high-quality games. You can connect games to the compute and storage of the AWS Cloud and engage fans on Twitch.

	See Also https://aws.amazon.com/lumberyard/.
Amazon Machine Image (AMI)	An encrypted machine image stored in Amazon Elastic Block Store (Amazon EBS) (p. 1051) or Amazon Simple Storage Service (p. 1055). AMIs function similar to a template of a computer's root drive. They contain the operating system and can also include software and layers of your application, such as database servers, middleware, and web servers.
Amazon Machine Learning	A cloud-based service that creates machine learning (ML) models by finding patterns in your data, and uses these models to process new data and generate predictions. See Also http://aws.amazon.com/machine-learning/.
Amazon Macie	A security service that uses machine learning to automatically discover, classify, and protect sensitive data in AWS. See Also http://aws.amazon.com/macie/.
Amazon Managed Blockchain	A fully managed service for creating and managing scalable blockchain networks using popular open source frameworks. See Also http://aws.amazon.com/managed-blockchain/.
Amazon Managed Grafana	A fully managed and secure data visualization service that you can use to instantly query, correlate, and visualize operational metrics, logs, and traces from multiple data sources. See Also https://aws.amazon.com/grafana/.
Amazon Managed Service for Prometheus	A service that provides highly available, secure, and managed monitoring for your containers. See Also https://aws.amazon.com/prometheus/.
Amazon ML	See Amazon Machine Learning.
Amazon Mobile Analytics (Mobile Analytics)	A service for collecting, visualizing, understanding, and extracting mobile app usage data at scale. See Also https://aws.amazon.com/mobileanalytics.
Amazon Monitron	An end-to-end system that uses machine learning (ML) to detect abnormal behavior in industrial machinery. Use Amazon Monitron to implement predictive maintenance and reduce unplanned downtime. See Also https://aws.amazon.com/monitron/.
Amazon MQ	A managed message broker service for Apache ActiveMQ that you can use to set up and operate message brokers in the cloud. See Also https://aws.amazon.com/amazon-mq/.
Amazon Neptune	A managed graph database service that you can use to build and run applications that work with highly connected datasets. Neptune supports the popular graph query languages Apache TinkerPop Gremlin and W3C's SPARQL, enabling you to build queries that efficiently navigate highly connected datasets. See Also https://aws.amazon.com/neptune/.
Amazon Personalize	An artificial intelligence service for creating individualized product and content recommendations. See Also https://aws.amazon.com/personalize/.
Amazon Polly	A text-to-speech (TTS) service that turns text into natural-sounding human speech. Amazon Polly provides dozens of lifelike voices across a broad set of languages so that you can build speech-enabled applications that work in many different countries.

	See Also https://aws.amazon.com/polly/.
Amazon QuickSight	A fast, cloud-powered business analytics service that you can use to build visualizations, perform analysis, and quickly get business insights from your data. See Also https://aws.amazon.com/quicksight/.
Amazon Rekognition	A machine learning service that identifies objects, people, text, scenes, and activities, including inappropriate content, in either image or video files. With Amazon Rekognition Custom Labels, you can create a customized ML model that detects objects and scenes specific to your business in images. See Also https://aws.amazon.com/rekognition/.
Amazon Redshift	A fully managed, petabyte-scale data warehouse service in the cloud. With Amazon Redshift, you can analyze your data using your existing business intelligence tools. See Also https://aws.amazon.com/redshift/.
Amazon Relational Database Service (Amazon RDS)	A web service that makes it easier to set up, operate, and scale a relational database in the cloud. It provides cost-efficient, resizable capacity for an industry-standard relational database and manages common database administration tasks. See Also https://aws.amazon.com/rds.
Amazon Resource Name (ARN)	A standardized way to refer to an AWS resource (p. 1094) (for example, arn:aws:iam::123456789012:user/division_abc/subdivision_xyz/Bob).
Amazon Route 53	A web service that you can use to create a new DNS service or to migrate your existing DNS service to the cloud. See Also https://aws.amazon.com/route53.
Amazon S3	Storage for the internet. You can use it to store and retrieve any amount of data at any time, from anywhere on the web. See Also Amazon Simple Storage Service (Amazon S3), https://aws.amazon.com/s3.
Amazon S3-Backed AMI	See instance store-backed AMI.
Amazon S3 Glacier	A secure, durable, and low-cost storage service for data archiving and long-term backup. You can reliably store large or small amounts of data for significantly less than on-premises solutions. S3 Glacier is optimized for infrequently accessed data, where a retrieval time of several hours is suitable. See Also https://aws.amazon.com/glacier/.
AWS Security Hub	A service that provides a comprehensive view of the security state of your AWS resources. Security Hub collects security data from AWS accounts and services and helps you analyze your security trends to identify and prioritize the security issues across your AWS environment. See Also https://aws.amazon.com/security-hub/.
Amazon Silk	A next-generation web browser that's available only on Fire OS tablets and phones. Built on a split architecture that divides processing between the client and the AWS Cloud, Amazon Silk creates a faster, more responsive mobile browsing experience.
Amazon Simple Email Service (Amazon SES)	An simple and cost-effective email solution for applications. See Also https://aws.amazon.com/ses.
Amazon Simple Notification Service (Amazon SNS)	A web service that applications, users, and devices can use to instantly send and receive notifications from the cloud. See Also https://aws.amazon.com/sns.

Amazon Simple Queue Service (Amazon SQS)	Reliable and scalable hosted queues for storing messages as they travel between computers. See Also https://aws.amazon.com/sqs.
Amazon Simple Storage Service (Amazon S3)	Storage for the internet. You can use it to store and retrieve any amount of data at any time, from anywhere on the web. See Also https://aws.amazon.com/s3.
Amazon Simple Workflow Service (Amazon SWF)	A fully managed service that helps developers build, run, and scale background jobs that have parallel or sequential steps. Amazon SWF functions similar to a state tracker and task coordinator in the AWS Cloud. See Also https://aws.amazon.com/swf/.
Amazon Sumerian	A set of tools for creating and running high-quality 3D, augmented reality (AR), and virtual reality (VR) applications on the web. See Also https://aws.amazon.com/sumerian/.
Amazon Textract	A service that automatically extracts text and data from scanned documents. Amazon Textract goes beyond simple optical character recognition (OCR) to also identify the contents of fields in forms and information stored in tables. See Also https://aws.amazon.com/textract/.
Amazon Transcribe	A machine learning service that uses automatic speech recognition (ASR) to quickly and accurately convert speech to text. See Also https://aws.amazon.com/transcribe/.
Amazon Transcribe Medical	An automatic speech recognition (ASR) service for adding medical speech-to-text capabilities to voice-enabled clinical documentation applications. See Also https://aws.amazon.com/transcribe/medical/.
Amazon Translate	A neural machine translation service that delivers fast, high-quality, and affordable language translation. See Also https://aws.amazon.com/translate/.
Amazon Virtual Private Cloud (Amazon VPC)	A web service for provisioning a logically isolated section of the AWS Cloud virtual network that you define. You control your virtual networking environment by selecting your own IP address range, creating subnets (p. 1100) and configuring route tables (p. 1095) and network gateways. See Also https://aws.amazon.com/vpc.
Amazon VPC	See Amazon Virtual Private Cloud (Amazon VPC).
Amazon Web Services (AWS)	An infrastructure web services platform in the cloud for companies of all sizes. See Also https://aws.amazon.com/what-is-cloud-computing/.
Amazon WorkDocs	A managed, secure enterprise document storage and sharing service with administrative controls and feedback capabilities. See Also https://aws.amazon.com/workdocs/.
Amazon WorkLink	A cloud-based service that provides secure access to internal websites and web apps from mobile devices. See Also https://aws.amazon.com/worklink/.
Amazon WorkMail	A managed, secure business email and calendar service with support for existing desktop and mobile email clients. See Also https://aws.amazon.com/workmail/.
Amazon WorkSpaces	A managed, secure desktop computing service for provisioning cloud-based desktops and providing users access to documents, applications, and resources (p. 1094) from supported devices.

	See Also https://aws.amazon.com/workspaces/.
Amazon WorkSpaces Application Manager (Amazon WAM)	A web service for deploying and managing applications for WorkSpaces. Amazon WAM accelerates software deployment, upgrades, patching, and retirement by packaging Windows desktop applications into virtualized application containers. See Also https://aws.amazon.com/workspaces/applicationmanager.
AMI	See Amazon Machine Image (AMI).
analysis scheme	Amazon CloudSearch (p. 1049): Language-specific text analysis options that are applied to a text field to control stemming and configure stopwords and synonyms.
application	AWS Elastic Beanstalk (p. 1059): A logical collection of components, including environments, versions, and environment configurations. An application is conceptually similar to a folder. AWS CodeDeploy (p. 1058): A name that uniquely identifies the application to be deployed. AWS CodeDeploy uses this name to ensure the correct combination of revision, deployment configuration, and deployment group are referenced during a deployment.
Application Auto Scaling	A web service that you can use to configure automatic scaling for AWS resources beyond Amazon EC2, such as Amazon ECS services, Amazon EMR clusters, and DynamoDB tables. See Also https://aws.amazon.com/autoscaling/.
Application Billing	The location where your customers manage the Amazon DevPay products they've purchased. The web address is http://www.amazon.com/dp-applications.
application revision	AWS CodeDeploy (p. 1058): An archive file containing source content—such as source code, webpages, executable files, and deployment scripts—along with an application specification file (p. 1056). Revisions are stored in Amazon S3 (p. 1055) buckets (p. 1065) or GitHub (p. 1077) repositories. For Amazon S3, a revision is uniquely identified by its Amazon S3 object key and its ETag, version, or both. For GitHub, a revision is uniquely identified by its commit ID.
application specification file	AWS CodeDeploy (p. 1058): A YAML-formatted file used to map the source files in an application revision to destinations on the instance. The file is also used to specify custom permissions for deployed files and specify scripts to be run on each instance at various stages of the deployment process.
application version	AWS Elastic Beanstalk (p. 1059): A specific, labeled iteration of an application that represents a functionally consistent set of deployable application code. A version points to an Amazon S3 (p. 1055) object (a JAVA WAR file) that contains the application code.
AppSpec file	See application specification file.
ARN	See Amazon Resource Name (ARN).
artifact	AWS CodePipeline (p. 1058): A copy of the files or changes that are worked on by the pipeline.
asymmetric encryption	Encryption (p. 1074) that uses both a public key and a private key.
asynchronous bounce	A type of bounce (p. 1065) that occurs when a receiver (p. 1092) initially accepts an email message for delivery and then subsequently fails to deliver it.
atomic counter	DynamoDB: A method of incrementing or decrementing the value of an existing attribute without interfering with other write requests.

attribute	A fundamental data element, something that doesn't need to be broken down any further. In DynamoDB, attributes are similar in many ways to fields or columns in other database systems. Amazon Machine Learning: A unique, named property within an observation in a dataset. In tabular data, such as spreadsheets or comma-separated values (.csv) files, the column headings represent the attributes, and the rows contain values for each attribute.
AUC	Area Under a Curve. An industry-standard metric to evaluate the quality of a binary classification machine learning model. AUC measures the ability of the model to predict a higher score for positive examples, those that are "correct," than for negative examples, those that are "incorrect." The AUC metric returns a decimal value from 0 to 1. AUC values near 1 indicate an ML model that's highly accurate.
Aurora	See the section called "Amazon Aurora".
authenticated encryption	Encryption (p. 1074) that provides confidentiality, data integrity, and authenticity assurances of the encrypted data.
authentication	The process of proving your identity to a system.
Auto Scaling group	A representation of multiple EC2 instances (p. 1073) that share similar characteristics, and that are treated as a logical grouping for the purposes of instance scaling and management.
Availability Zone	A distinct location within a Region (p. 1093) that's insulated from failures in other Availability Zones, and provides inexpensive, low-latency network connectivity to other Availability Zones in the same Region.
AWS	See Amazon Web Services (AWS).
AWS Application Discovery Service	A web service that helps you plan to migrate to AWS by identifying IT assets in a data center—including servers, virtual machines, applications, application dependencies, and network infrastructure. See Also https://aws.amazon.com/about-aws/whats-new/2016/04/aws-application-discovery-service/.
AWS AppSync	An enterprise level, fully managed GraphQL service with real-time data synchronization and offline programming features. See Also https://aws.amazon.com/appsync/.
AWS Auto Scaling	A fully managed service that you can use to quickly discover the scalable AWS resources that are part of your application and configure dynamic scaling. See Also https://aws.amazon.com/autoscaling/.
AWS Backup	A managed backup service that you can use to centralize and automate the backup of data across AWS services in the cloud and on premises. See Also https://aws.amazon.com/backup/.
AWS Billing and Cost Management	The AWS Cloud computing model where you pay for services on demand and use as much or as little as you need. While resources (p. 1094) are active under your account, you pay for the cost of allocating those resources. You also pay for any incidental usage associated with those resources, such as data transfer or allocated storage. See Also https://aws.amazon.com/billing/new-user-faqs/.
AWS Blockchain Templates	A service for creating and deploying open-source blockchain frameworks on AWS, such as Ethereum and Hyperledger Fabric.

	See Also https://aws.amazon.com/blockchain/templates/.
AWS Certificate Manager (ACM)	A web service for provisioning, managing, and deploying Secure Sockets Layer/Transport Layer Security (p. 1103) (SSL/TLS) certificates for use with AWS services. See Also https://aws.amazon.com/certificate-manager/.
AWS Certificate Manager Private Certificate Authority (ACM PCA)	A hosted private certificate authority service for issuing and revoking private digital certificates (p. 1066). See Also https://aws.amazon.com/certificate-manager/private-certificate-authority/.
AWS Cloud Development Kit (AWS CDK)	An open-source software development framework for defining your cloud infrastructure in code and provisioning it through AWS CloudFormation. See Also https://aws.amazon.com/cdk/.
AWS Cloud Map	A service that you use to create and maintain a map of the backend services and resources that your applications depend on. With AWS Cloud Map, you can name and discover your AWS Cloud resources. See Also https://aws.amazon.com/cloud-map.
AWS Cloud9	A cloud-based integrated development environment (IDE) that you use to write, run, and debug code. See Also https://aws.amazon.com/cloud9/.
AWS CloudFormation	A service for writing or changing templates that create and delete related AWS resources (p. 1094) together as a unit. See Also https://aws.amazon.com/cloudformation.
AWS CloudHSM	A web service that helps you meet corporate, contractual, and regulatory compliance requirements for data security by using dedicated hardware security module (HSM) appliances within the AWS Cloud. See Also https://aws.amazon.com/cloudhsm/.
AWS CloudTrail	A web service that records AWS API calls for your account and delivers log files to you. The recorded information includes the identity of the API caller, the time of the API call, the source IP address of the API caller, the request parameters, and the response elements returned by the AWS service. See Also https://aws.amazon.com/cloudtrail/.
AWS CodeBuild	A fully managed continuous integration service that compiles source code, runs tests, and produces software packages that are ready to deploy. See Also https://aws.amazon.com/codebuild.
AWS CodeCommit	A fully managed source control service that companies can use to host secure and highly scalable private Git repositories. See Also https://aws.amazon.com/codecommit.
AWS CodeDeploy	A service that automates code deployments to any instance, including EC2 instances (p. 1073) and instances (p. 1080) running on-premises. See Also https://aws.amazon.com/codedeploy.
AWS CodeDeploy agent	A software package that, when installed and configured on an instance, enables that instance to be used in CodeDeploy deployments.
AWS CodePipeline	A continuous delivery service for fast and reliable application updates. See Also https://aws.amazon.com/codepipeline.
AWS Command Line Interface (AWS CLI)	A unified downloadable and configurable tool for managing AWS services. Control multiple AWS services from the command line and automate them through scripts.

	See Also https://aws.amazon.com/cli/.
AWS Config	A fully managed service that provides an AWS resource (p. 1094) inventory, configuration history, and configuration change notifications for better security and governance. You can create rules that automatically check the configuration of AWS resources that AWS Config records. See Also https://aws.amazon.com/config/.
AWS Database Migration Service	A web service that can help you migrate data to and from many widely used commercial and open-source databases. See Also https://aws.amazon.com/dms.
AWS Data Pipeline	A web service for processing and moving data between different AWS compute and storage services, as well as on-premises data sources, at specified intervals. See Also https://aws.amazon.com/datapipeline.
AWS Device Farm (Device Farm)	An app testing service that allows developers to test Android, iOS, and Fire OS devices on real, physical phones and tablets that are hosted by AWS. See Also https://aws.amazon.com/device-farm.
AWS Direct Connect	A web service that simplifies establishing a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your data center, office, or colocation environment. See Also https://aws.amazon.com/directconnect.
AWS Directory Service	A managed service for connecting your AWS resources (p. 1094) to an existing on-premises Microsoft Active Directory or to set up and operate a new, standalone directory in the AWS Cloud. See Also https://aws.amazon.com/directoryservice.
AWS Elastic Beanstalk	A web service for deploying and managing applications in the AWS Cloud without worrying about the infrastructure that runs those applications. See Also https://aws.amazon.com/elasticbeanstalk.
AWS Elemental MediaConnect	A service that broadcasters and other premium video providers can reliably use to ingest live video into the AWS Cloud and distribute it to multiple destinations inside or outside the AWS Cloud. See Also https://aws.amazon.com/mediaconnect.
AWS Elemental MediaConvert	A file-based video conversion service that transforms media into formats required for traditional broadcast and for internet streaming to multi-screen devices. See Also https://aws.amazon.com/mediaconvert.
AWS Elemental MediaLive	A video service that you can use to create live outputs for broadcast and streaming delivery. See Also https://aws.amazon.com/medialive.
AWS Elemental MediaPackage	A just-in-time packaging and origination service that you can use to format highly secure and reliable live outputs for a variety of devices. See Also https://aws.amazon.com/mediapackage.
AWS Elemental MediaStore	A storage service optimized for media that provides the performance, consistency, and low latency required to deliver live and on-demand video content at scale. See Also https://aws.amazon.com/mediastore.
AWS Elemental MediaTailor	A video service that you can use to serve targeted ads to viewers while maintaining broadcast quality in over-the-top (OTT) video applications. See Also https://aws.amazon.com/mediatailor.

AWS Encryption SDK	A client-side encryption library that you can use to encrypt and decrypt data using industry standards and best practices. See Also https://aws.amazon.com/blogs/security/tag/aws-encryption-sdk/.
AWS Firewall Manager	A service that you use with AWS WAF to simplify your AWS WAF administration and maintenance tasks across multiple accounts and resources. With AWS Firewall Manager, you set up your firewall rules only once. The service automatically applies your rules across your accounts and resources, even as you add new resources. See Also https://aws.amazon.com/firewall-manager.
AWS Global Accelerator	A network layer service that you use to create accelerators that direct traffic to optimal endpoints over the AWS global network. This improves the availability and performance of your internet applications that are used by a global audience. See Also https://aws.amazon.com/global-accelerator.
AWS Glue	A fully managed extract, transform, and load (ETL) (p. 1076) service that you can use to catalog data and load it for analytics. With AWS Glue, you can discover your data, develop scripts to transform sources into targets, and schedule and run ETL jobs in a serverless environment. See Also https://aws.amazon.com/glue.
AWS GovCloud (US)	An isolated AWS Region that hosts sensitive workloads in the cloud, ensuring that this work meets the US government's regulatory and compliance requirements. The AWS GovCloud (US) Region adheres to United States International Traffic in Arms Regulations (ITAR), Federal Risk and Authorization Management Program (FedRAMP) requirements, Department of Defense (DOD) Cloud Security Requirements Guide (SRG) Levels 2 and 4, and Criminal Justice Information Services (CJIS) Security Policy requirements. See Also https://aws.amazon.com/govcloud-us/.
AWS IAM Identity Center (successor to AWS Single Sign-On)	A cloud-based service that brings together adminstration of users and their access to AWS accounts and cloud applications. You can control single sign-on access and user permissions across all your AWS accounts in AWS Organizations. See Also https://aws.amazon.com/single-sign-on/.
AWS Identity and Access Management (IAM)	A web service that Amazon Web Services (AWS) (p. 1055) customers can use to manage users and user permissions within AWS. See Also https://aws.amazon.com/iam.
AWS Import/Export	A service for transferring large amounts of data between AWS and portable storage devices. See Also https://aws.amazon.com/importexport.
AWS IoT Core	A managed cloud platform that lets connected devices easily and securely interact with cloud applications and other devices. See Also https://aws.amazon.com/iot.
AWS IoT 1-Click	A service that simple devices can use to launch AWS Lambda functions. See Also https://aws.amazon.com/iot-1-click.
AWS IoT Analytics	A fully managed service used to run sophisticated analytics on massive volumes of IoT data. See Also https://aws.amazon.com/iot-analytics.
AWS IoT Device Defender	An AWS IoT security service that you can use to audit the configuration of your devices, monitor your connected devices to detect abnormal behavior, and to mitigate security risks. See Also https://aws.amazon.com/iot-device-defender.

AWS IoT Device Management	A service used to securely onboard, organize, monitor, and remotely manage IoT devices at scale. See Also https://aws.amazon.com/iot-device-management.
AWS IoT Events	A fully managed AWS IoT service that you can use to detect and respond to events from IoT sensors and applications. See Also https://aws.amazon.com/iot-events.
AWS IoT Greengrass	Software that you can use to run local compute, messaging, data caching, sync, and ML inference capabilities for connected devices in a secure way. See Also https://aws.amazon.com/greengrass.
AWS IoT SiteWise	A managed service that you can use to collect, organize, and analyze data from industrial equipment at scale. See Also https://aws.amazon.com/iot-sitewise.
AWS IoT Things Graph	A service that you can use to visually connect different devices and web services to build IoT applications. See Also https://aws.amazon.com/iot-things-graph.
AWS Key Management Service (AWS KMS)	A managed service that simplifies the creation and control of encryption (p. 1074) keys that are used to encrypt data. See Also https://aws.amazon.com/kms.
AWS Lambda	A web service that you can use to run code without provisioning or managing servers. You can run code for virtually any type of application or backend service with zero administration. You can set up your code to automatically start from other AWS services or call it directly from any web or mobile app. See Also https://aws.amazon.com/lambda/.
AWS managed key	One type of KMS key in AWS Key Management Service (AWS KMS) (p. 1061).
AWS managed policy	An IAM (p. 1060) managed policy (p. 1084) that's created and managed by AWS.
AWS Management Console	A graphical interface to manage compute, storage, and other cloud resources (p. 1094). See Also https://aws.amazon.com/console.
AWS Management Portal for vCenter	A web service for managing your AWS resources (p. 1094) using VMware vCenter. You install the portal as a vCenter plugin within your existing vCenter environment. After it's installed, you can migrate VMware VMs to Amazon EC2 (p. 1050) and manage AWS resources from within vCenter. See Also https://aws.amazon.com/ec2/vcenter-portal/.
AWS Marketplace	A web portal where qualified partners market and sell their software to AWS customers. AWS Marketplace is an online software store that helps customers find, buy, and immediately start using the software and services that run on AWS. See Also https://aws.amazon.com/partners/aws-marketplace/.
AWS Migration Hub	A service that provides a single location to track migration tasks across multiple AWS tools and partner solutions. See Also https://aws.amazon.com/migration-hub/.
AWS Mobile Hub (Mobile Hub)	An integrated console for building, testing, and monitoring mobile apps. See Also https://aws.amazon.com/mobile.
AWS Mobile SDK	A software development kit whose libraries, code examples, and documentation help you build high-quality mobile apps for the iOS, Android, Fire OS, Unity, and Xamarin platforms.

	See Also https://aws.amazon.com/mobile/sdk.
AWS OpsWorks	A configuration management service that helps you use Chef to configure and operate groups of instances and applications. You can define the application's architecture and the specification of each component including package installation, software configuration, and resources (p. 1094) such as storage. You can automate tasks based on time, load, or lifecycle events. See Also https://aws.amazon.com/opsworks/.
AWS Organizations	An account management service that you can use to consolidate multiple AWS accounts into an organization that you create and centrally manage. See Also https://aws.amazon.com/organizations/.
AWS Resource Access Manager	A service that you can use to share your resources with any AWS account or organization in AWS Organizations. See Also https://aws.amazon.com/ram/.
AWS ParallelCluster	An AWS supported open source cluster management tool that helps you to deploy and manage high performance computing (HPC) clusters in the AWS Cloud.
AWS SDK for C++	A software development kit for that provides C++ APIs for many AWS services including Amazon S3 (p. 1055), Amazon EC2 (p. 1050), Amazon DynamoDB (p. 1050), and more. The single, downloadable package includes the AWS C++ library, code examples, and documentation. See Also https://aws.amazon.com/sdk-for-cpp/.
AWS SDK for Go	A software development kit for integrating your Go application with the full suite of AWS services. See Also https://aws.amazon.com/sdk-for-go/.
AWS SDK for Java	A software development kit that provides Java API operations for many AWS services including Amazon S3 (p. 1055), Amazon EC2 (p. 1050), Amazon DynamoDB (p. 1050), and more. The single, downloadable package includes the AWS Java library, code examples, and documentation. See Also https://aws.amazon.com/sdk-for-java/.
AWS SDK for JavaScript in the Browser	A software development kit for accessing AWS services from JavaScript code running in the browser. Authenticate users through Facebook, Google, or Login with Amazon using web identity federation. Store application data in Amazon DynamoDB (p. 1050), and save user files to Amazon S3 (p. 1055). See Also https://docs.aws.amazon.com/sdk-for-javascript/v2/developer-guide/.
AWS SDK for JavaScript in Node.js	A software development kit for accessing AWS services from JavaScript in Node.js. The SDK provides JavaScript objects for AWS services, including Amazon S3 (p. 1055), Amazon EC2 (p. 1050), Amazon DynamoDB (p. 1050), and Amazon Simple Workflow Service (Amazon SWF) (p. 1055). The single, downloadable package includes the AWS JavaScript library and documentation. See Also https://docs.aws.amazon.com/sdk-for-javascript/v2/developer-guide/.
AWS SDK for .NET	A software development kit that provides .NET API operations for AWS services including Amazon S3 (p. 1055), Amazon EC2 (p. 1050), IAM (p. 1060), and more. You can download the SDK as multiple service-specific packages on NuGet. See Also https://aws.amazon.com/sdk-for-net/.
AWS SDK for PHP	A software development kit and open-source PHP library for integrating your PHP application with AWS services such as Amazon S3 (p. 1055), Amazon S3 Glacier (p. 1054), and Amazon DynamoDB (p. 1050). See Also https://aws.amazon.com/sdk-for-php/.

AWS SDK for Python (Boto)	A software development kit for using Python to access AWS services such as Amazon EC2 (p. 1050), Amazon EMR (p. 1051), Amazon EC2 Auto Scaling (p. 1051), Amazon Kinesis (p. 1052), or AWS Lambda (p. 1061). See Also http://boto.readthedocs.org/en/latest/.
AWS SDK for Ruby	A software development kit for accessing AWS services from Ruby. The SDK provides Ruby classes for many AWS services including Amazon S3 (p. 1055), Amazon EC2 (p. 1050), Amazon DynamoDB (p. 1050) and more. The single, downloadable package includes the AWS Ruby Library and documentation. See Also https://aws.amazon.com/sdk-for-ruby/.
AWS Secrets Manager	A service for securely encrypting, storing, and rotating credentials for databases and other services. See Also https://aws.amazon.com/secrets-manager/.
AWS Security Token Service (AWS STS)	A web service for requesting temporary, limited-privilege credentials for AWS Identity and Access Management (IAM) (p. 1060) users or for users that you authenticate (federated users (p. 1076)). See Also https://aws.amazon.com/iam/.
AWS Service Catalog	A web service that helps organizations create and manage catalogs of IT services that are approved for use on AWS. These IT services can include everything from virtual machine images, servers, software, and databases to complete multitier application architectures. See Also https://aws.amazon.com/servicecatalog/.
AWS Shield	A service that helps to protect your resources—such as Amazon EC2 instances, Elastic Load Balancing load balancers, Amazon CloudFront distributions, and Route 53 hosted zones—against DDoS attacks. AWS Shield is automatically included at no extra cost beyond what you already pay for AWS WAF and your other AWS services. For added protection against DDoS attacks, AWS offers AWS Shield Advanced. See Also https://aws.amazon.com/shield.
AWS Step Functions	A web service that coordinates the components of distributed applications as a series of steps in a visual workflow. See Also https://aws.amazon.com/step-functions/.
AWS Snowball	A petabyte-scale data transport solution that uses devices that are secure to transfer large amounts of data into and out of the AWS Cloud. See Also https://aws.amazon.com/snowball.
Storage Gateway	A web service that connects an on-premises software appliance with cloud-based storage. Storage Gateway provides seamless and secure integration between an organization's on-premises IT environment and AWS storage infrastructure. See Also https://aws.amazon.com/storagegateway/.
AWS Toolkit for Eclipse	An open-source plugin for the Eclipse Java integrated development environment (IDE) that makes it easier to develop, debug, and deploy Java applications using Amazon Web Services. See Also https://aws.amazon.com/eclipse/.
AWS Toolkit for JetBrains	An open-source plugin for the integrated development environments (IDEs) from JetBrains that makes it easier to develop, debug, and deploy serverless applications using Amazon Web Services. See Also https://aws.amazon.com/intellij/, https://aws.amazon.com/pycharm/.
AWS Toolkit for Visual Studio	An extension for Visual Studio that helps in developing, debugging, and deploying .NET applications using Amazon Web Services. See Also https://aws.amazon.com/visualstudio/.

AWS Toolkit for Visual Studio Code	An open-source plugin for the Visual Studio Code (VS Code) editor that makes it easier to develop, debug, and deploy applications using Amazon Web Services. See Also https://aws.amazon.com/visualstudiocode/.
AWS Tools for PowerShell	A set of PowerShell cmdlets to help developers and administrators manage their AWS services from the PowerShell scripting environment. See Also https://aws.amazon.com/powershell/.
AWS Toolkit for Microsoft Azure DevOps	Provides tasks you can use in build and release definitions in VSTS to interact with AWS services. See Also https://aws.amazon.com/vsts/.
AWS Trusted Advisor	A web service that inspects your AWS environment and makes recommendations for saving money, improving system availability and performance, and helping to close security gaps. See Also https://aws.amazon.com/premiumsupport/trustedadvisor/.
AWS VPN CloudHub	Enables secure communication between branch offices using a simple hub-and-spoke model, with or without a VPC (p. 1105).
AWS WAF	A web application firewall service that controls access to content by allowing or blocking web requests based on criteria that you specify. For example, you can filter access based on the header values or the IP addresses that the requests originate from. AWS WAF helps protect web applications from common web exploits that could affect application availability, compromise security, or consume excessive resources. See Also https://aws.amazon.com/waf/.
AWS X-Ray	A web service that collects data about requests that your application serves. X-Ray provides tools that you can use to view, filter, and gain insights into that data to identify issues and opportunities for optimization. See Also https://aws.amazon.com/xray/.

B

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

basic monitoring	Monitoring of AWS provided metrics derived at a 5-minute frequency.
batch	See document batch.
BGP ASN	Border Gateway Protocol Autonomous System Number. A unique identifier for a network, for use in BGP routing. Amazon EC2 (p. 1050) supports all 2-byte ASN numbers in the range of 1 – 65335, with the exception of 7224, which is reserved.
batch prediction	Amazon Machine Learning: An operation that processes multiple input data observations at one time (asynchronously). Unlike real-time predictions, batch predictions aren't available until all predictions have been processed. See Also real-time predictions.
billing	See the section called “Billing and Cost Management”.
binary attribute	Amazon Machine Learning: An attribute for which one of two possible values is possible. Valid positive values are 1, y, yes, t, and true answers. Valid negative values are 0, n, no, f, and false. Amazon Machine Learning outputs 1 for positive values and 0 for negative values.

	See Also attribute.
binary classification model	Amazon Machine Learning: A machine learning model that predicts the answer to questions where the answer can be expressed as a binary variable. For example, questions with answers of "1" or "0", "yes" or "no", "will click" or "will not click" are questions that have binary answers. The result for a binary classification model is always either a "1" (for a "true" or affirmative answers) or a "0" (for a "false" or negative answers).
block	A dataset. Amazon EMR (p. 1051) breaks large amounts of data into subsets. Each subset is called a data block. Amazon EMR assigns an ID to each block and uses a hash table to keep track of block processing.
block device	A storage device that supports reading and (optionally) writing data in fixed-size blocks, sectors, or clusters.
block device mapping	A mapping structure for every AMI (p. 1053) and instance (p. 1080) that specifies the block devices attached to the instance.
blue/green deployment	CodeDeploy: A deployment method where the instances in a deployment group (the original environment) are replaced by a different set of instances (the replacement environment).
bootstrap action	A user-specified default or custom action that runs a script or an application on all nodes of a job flow before Hadoop (p. 1078) starts.
Border Gateway Protocol Autonomous System Number	See BGP ASN.
bounce	A failed email delivery attempt.
breach	Amazon EC2 Auto Scaling (p. 1051): The condition where a user-set threshold (upper or lower boundary) is passed. If the duration of the breach is significant, as set by a breach duration parameter, it can possibly start a scaling activity (p. 1095).
bucket	Amazon Simple Storage Service (Amazon S3) (p. 1055): A container for stored objects. Every object is contained in a bucket. For example, if the object named `photos/puppy.jpg` is stored in the *`DOC-EXAMPLE-BUCKET`* bucket, then authorized users can access the object with the URL `https://`*`s3-bucket-endpoint`*`/`*`DOC-EXAMPLE-BUCKET`*`/photos/puppy.jpg`.
bucket owner	The person or organization that owns a bucket (p. 1065) in Amazon S3 (p. 1055). In the same way that Amazon is the only owner of the domain name Amazon.com, only one person or organization can own a bucket.
bundling	A commonly used term for creating an Amazon Machine Image (AMI) (p. 1053). It specifically refers to creating instance store-backed AMIs (p. 1080).

C

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

cache cluster	A logical cache distributed over multiple cache nodes (p. 1066). A cache cluster can be set up with a specific number of cache nodes.

cache cluster identifier	Customer-supplied identifier for the cache cluster that must be unique for that customer in an AWS Region (p. 1093).
cache engine version	The version of the Memcached service that's running on the cache node.
cache node	A fixed-size chunk of secure, network-attached RAM. Each cache node runs an instance of the Memcached service, and has its own DNS name and port. Multiple types of cache nodes are supported, each with varying amounts of associated memory.
cache node type	An EC2 instance (p. 1073) type used to run the cache node.
cache parameter group	A container for cache engine parameter values that can be applied to one or more cache clusters.
cache security group	A group maintained by ElastiCache that combines inbound authorizations to cache nodes for hosts belonging to Amazon EC2 (p. 1050) security groups (p. 1096) that are specified through the console or the API or command line tools.
campaign	Amazon Personalize (p. 1053): A deployed solution version (trained model) with provisioned dedicated transaction capacity for creating real-time recommendations for your application users. After you create a campaign, you use the `getRecommendations` or `getPersonalizedRanking` personalization operations to get recommendations. See Also recommendations, solution version.
canned access policy	A standard access control policy that you can apply to a bucket (p. 1065) or object. Options include: private, public-read, public-read-write, and authenticated-read.
canonicalization	The process of converting data into a standard format that a service such as Amazon S3 (p. 1055) can recognize.
capacity	The amount of available compute size at a given time. Each Auto Scaling group (p. 1057) is defined with a minimum and maximum compute size. A scaling activity (p. 1095) increases or decreases the capacity within the defined minimum and maximum values.
Cartesian product processor	A processor that calculates a Cartesian product. Also known as a *Cartesian data processor*.
Cartesian product	A mathematical operation that returns a product from multiple sets.
CDN	See content delivery network (CDN).
certificate	A credential that some AWS products use to authenticate AWS accounts (p. 1048) and users. Also known as an X.509 certificate (p. 1105). The certificate is paired with a private key.
chargeable resources	Features or services whose use incurs fees. Although some AWS products are free, others include charges. For example, in an AWS CloudFormation (p. 1058) stack (p. 1099), AWS resources (p. 1094) that have been created incur charges. The amount charged depends on the usage load. Use the Amazon Web Services Simple Monthly Calculator to estimate your cost prior to creating instances, stacks, or other resources.
CIDR block	Classless Inter-Domain Routing. An internet protocol address allocation and route aggregation methodology. See Also Classless Inter-Domain Routing on Wikipedia.

ciphertext	Information that has been encrypted (p. 1074), as opposed to plaintext (p. 1089), which is information that has not.
classification	In machine learning, a type of problem that seeks to place (classify) a data sample into a single category or “class.” Often, classification problems are modeled to choose one category (class) out of two. These are binary classification problems. Problems with more than two available categories (classes) are called "multiclass classification" problems. See Also binary classification model, multiclass classification model.
CLI	See AWS Command Line Interface (AWS CLI).
Cloud Directory	See the section called “Cloud Directory”.
cloud service provider (CSP)	A company that provides subscribers with access to internet-hosted computing, storage, and software services.
CloudHub	See AWS VPN CloudHub.
cluster	A logical grouping of container instances (p. 1068) that you can place tasks (p. 1101) on. Amazon OpenSearch Service (OpenSearch Service) (p. 1051): A logical grouping of one or more data nodes, optional dedicated master nodes, and storage required to run Amazon OpenSearch Service (OpenSearch Service) and operate your OpenSearch Service domain. See Also data node, dedicated master node, node.
cluster compute instance	A type of instance (p. 1080) that provides a great amount of CPU power coupled with increased networking performance, making it well suited for High Performance Compute (HPC) applications and other demanding network-bound applications.
cluster placement group	A logical cluster compute instance (p. 1067) grouping to provide lower latency and high-bandwidth connectivity between the instances (p. 1080).
cluster status	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): An indicator of the health of a cluster. A status can be green, yellow, or red. At the shard level, green means that all shards are allocated to nodes in a cluster, yellow means that the primary shard is allocated but the replica shards aren't, and red means that the primary and replica shards of at least one index aren't allocated. The shard status determines the index status, and the index status determines the cluster status.
CNAME	Canonical Name Record. A type of resource record (p. 1094) in the Domain Name System (DNS) that specifies that the domain name is an alias of another, canonical domain name. Specifically, it's an entry in a DNS table that you can use to alias one fully qualified domain name to another.
Code Signing for AWS IoT	A service for signing code that you create for any IoT device that's supported by Amazon Web Services (AWS).
complaint	The event where a recipient (p. 1092) who doesn't want to receive an email message chooses "Mark as Spam" within the email client, and the internet service provider (ISP) (p. 1080) sends a notification to Amazon SES (p. 1054).
compound query	Amazon CloudSearch (p. 1049): A search request that specifies multiple search criteria using the Amazon CloudSearch structured search syntax.
condition	IAM (p. 1060): Any restriction or detail about a permission. The condition is *D* in the statement "A has permission to do B to C where D applies."

	AWS WAF (p. 1064): A set of attributes that AWS WAF searches for in web requests to AWS resources (p. 1094) such as Amazon CloudFront (p. 1049) distributions. Conditions can include values such as the IP addresses that web requests originate from or values in request headers. Based on the specified conditions, you can configure AWS WAF to allow or block web requests to AWS resources.
conditional parameter	See mapping.
configuration API	Amazon CloudSearch (p. 1049): The API call that you use to create, configure, and manage search domains.
configuration template	A series of key–value pairs that define parameters for various AWS products so that AWS Elastic Beanstalk (p. 1059) can provision them for an environment.
consistency model	The method a service uses to achieve high availability. For example, it could involve replicating data across multiple servers in a data center. See Also eventual consistency.
console	See AWS Management Console.
consolidated billing	A feature of the AWS Organizations service for consolidating payment for multiple AWS accounts. You create an organization that contains your AWS accounts, and you use the management account of your organization to pay for all member accounts. You can see a combined view of AWS costs that are incurred by all accounts in your organization, and you can get detailed cost reports for individual accounts.
container	A container is a standard unit of software that contains application code and all relevant dependencies.
container definition	A container definition specifies the details that are associated with running a container (p. 1068) on Amazon ECS. More specifically, a container definition specifies details such as the container image to use and how much CPU and memory the container is allocated. The container definition is included as part of an Amazon ECS task definition (p. 1102).
container instance	A container instance is a self-managed EC2 instance (p. 1073) or an on-premises server or virtual machine (VM) that's running the Amazon Elastic Container Service (Amazon ECS) container agent and has been registered into a cluster (p. 1067). A container instance serves as the infrastructure that your Amazon ECS workloads are run on.
container registry	A container registry is a collection of repositories that store container images. One example is Amazon Elastic Container Registry (Amazon ECR).
content delivery network (CDN)	A web service that speeds up distribution of your static and dynamic web content —such as .html, .css, .js, media files, and image files—to your users by using a worldwide network of data centers. When a user requests your content, the request is routed to the data center that provides the lowest latency (time delay). If the content is already in the location with the lowest latency, the CDN delivers it immediately. If not, the CDN retrieves it from an origin that you specify (for example, a web server or an Amazon S3 bucket). With some CDNs, you can help secure your content by configuring an HTTPS connection between users and data centers, and between data centers and your origin. Amazon CloudFront is an example of a CDN.
contextual metadata	Amazon Personalize (p. 1053): Interactions data that you collect about a user's browsing context (such as device used or location) when an event (such as a click)

	occurs. Contextual metadata can improve recommendation relevance for new and existing users. See Also Interactions dataset, event.
continuous delivery	A software development practice where code changes are automatically built, tested, and prepared for a release to production. See Also https://aws.amazon.com/devops/continuous-delivery/.
continuous integration	A software development practice where developers regularly merge code changes into a central repository, after which automated builds and tests are run. See Also https://aws.amazon.com/devops/continuous-integration/.
cooldown period	Amount of time that Amazon EC2 Auto Scaling (p. 1051) doesn't allow the desired size of the Auto Scaling group (p. 1057) to be changed by any other notification from an Amazon CloudWatch (p. 1049) alarm (p. 1048).
core node	An EC2 instance (p. 1073) that runs Hadoop (p. 1078) map and reduce tasks and stores data using the Hadoop Distributed File System (HDFS). Core nodes are managed by the master node (p. 1084), which assigns Hadoop tasks to nodes and monitors their status. The EC2 instances you assign as core nodes are capacity that must be allotted for the entire job flow run. Because core nodes store data, you can't remove them from a job flow. However, you can add more core nodes to a running job flow. Core nodes run both the DataNodes and TaskTracker Hadoop daemons.
corpus	Amazon CloudSearch (p. 1049): A collection of data that you want to search.
coverage	Amazon Personalize (p. 1053): An evaluation metric that tells you the proportion of unique items that Amazon Personalize might recommend using your model out of the total number of unique items in Interactions and Items datasets. To make sure Amazon Personalize recommends more of your items, use a model with a higher coverage score. Recipes that feature item exploration, such as user-personalization, have higher coverage than those that don't, such as popularity-count. See Also metrics, Items dataset, Interactions dataset, item exploration, user-personalization recipe, popularity-count recipe.
credential helper	AWS CodeCommit (p. 1058): A program that stores credentials for repositories and supplies them to Git when making connections to those repositories. The AWS CLI (p. 1058) includes a credential helper that you can use with Git when connecting to CodeCommit repositories.
credentials	Also called *access credentials* or *security credentials*. In authentication and authorization, a system uses credentials to identify who is making a call and whether to allow the requested access. In AWS, these credentials are typically the access key ID (p. 1047) and the secret access key (p. 1096).
cross-account access	The process of permitting limited, controlled use of resources (p. 1094) in one AWS account (p. 1048) by a user in another AWS account. For example, in AWS CodeCommit (p. 1058) and AWS CodeDeploy (p. 1058) you can configure cross-account access so that a user in AWS account A can access an CodeCommit repository created by account B. Or a pipeline in AWS CodePipeline (p. 1058) created by account A can use CodeDeploy resources created by account B. In IAM (p. 1060) you use a role (p. 1094) to delegate (p. 1071) temporary access to a user (p. 1103) in one account to resources in another.
cross-Region replication	A solution for replicating data across different AWS Regions (p. 1093), in near-real time.

customer gateway — A router or software application on your side of a VPN tunnel that's managed by Amazon VPC (p. 1055). The internal interfaces of the customer gateway are attached to one or more devices in your home network. The external interface is attached to the virtual private gateway (VGW) (p. 1104) across the VPN tunnel.

customer managed policy — An IAM (p. 1060) managed policy (p. 1084) that you create and manage in your AWS account (p. 1048).

customer master key (CMK) — We no longer use customer master key or CMK. These terms are replaced by AWS KMS key (first mention) and KMS key (subsequent mention). For more information, see KMS key (p. 1082).

D

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dashboard — See service health dashboard.

data consistency — A concept that describes when data is written or updated successfully and all copies of the data are updated in all AWS Regions (p. 1093). However, it takes time for the data to propagate to all storage locations. To support varied application requirements, Amazon DynamoDB (p. 1050) supports both eventually consistent and strongly consistent reads.
See Also eventual consistency, eventually consistent read, strongly consistent read.

data node — Amazon OpenSearch Service (OpenSearch Service) (p. 1051): An OpenSearch instance that holds data and responds to data upload requests.
See Also dedicated master node, node.

data schema — See schema.

data source — The database, file, or repository that provides information required by an application or database. For example, in AWS OpsWorks (p. 1062), valid data sources include an instance (p. 1080) for a stack's MySQL layer or a stack's Amazon RDS (p. 1054) service layer. In Amazon Redshift (p. 1054), valid data sources include text files in an Amazon S3 (p. 1055) bucket (p. 1065), in an Amazon EMR (p. 1051) cluster, or on a remote host that a cluster can access through an SSH connection.
See Also datasource.

database engine — The database software and version running on the DB instance (p. 1071).

database name — The name of a database hosted in a DB instance (p. 1071). A DB instance can host multiple databases, but databases hosted by the same DB instance must each have a unique name within that instance.

dataset — Amazon Personalize (p. 1053): A container for the data used by Amazon Personalize. There are three types of Amazon Personalize datasets: Users, Items, and Interactions.
See Also Interactions dataset, Users dataset, Items dataset.

dataset group — Amazon Personalize (p. 1053): A container for Amazon Personalize components, including datasets, event trackers, solutions, filters, campaigns, and batch inference jobs. A dataset group organizes your resources into independent

	collections, so resources from one dataset group can't influence resources in any other dataset group. See Also dataset, event tracker, solution, campaign.
datasource	Amazon Machine Learning (p. 1053): An object that contains metadata about the input data. Amazon ML reads the input data, computes descriptive statistics on its attributes, and stores the statistics—along with a schema and other information —as part of the datasource object. Amazon ML uses datasources to train and evaluate a machine learning model and generate batch predictions. See Also data source.
DB compute class	The size of the database compute platform used to run the instance.
DB instance	An isolated database environment running in the cloud. A DB instance can contain multiple user-created databases.
DB instance identifier	User-supplied identifier for the DB instance. The identifier must be unique for that user in an AWS Region (p. 1093).
DB parameter group	A container for database engine parameter values that apply to one or more DB instances (p. 1071).
DB security group	A method that controls access to the DB instance (p. 1071). By default, network access is turned off to DB instances. After inbound traffic is configured for a security group (p. 1096), the same rules apply to all DB instances associated with that group.
DB snapshot	A user-initiated point backup of a DB instance (p. 1071).
Dedicated Host	A physical server with EC2 instance (p. 1073) capacity fully dedicated to a user.
Dedicated Instance	An instance (p. 1080) that's physically isolated at the host hardware level and launched within a VPC (p. 1105).
dedicated master node	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): An OpenSearch instance that performs cluster management tasks, but doesn't hold data or respond to data upload requests. Amazon OpenSearch Service (OpenSearch Service) uses dedicated master nodes to increase cluster stability. See Also data node, node.
Dedicated Reserved Instance	An option that you purchase to guarantee that sufficient capacity will be available to launch Dedicated Instances (p. 1071) into a VPC (p. 1105).
delegation	Within a single AWS account (p. 1048): Giving AWS users (p. 1103) access to resources (p. 1094) your AWS account. Between two AWS accounts: Setting up a trust between the account that owns the resource (the trusting account), and the account that contains the users that need to access the resource (the trusted account). See Also trust policy.
delete marker	An object with a key and version ID, but without content. Amazon S3 (p. 1055) inserts delete markers automatically into versioned buckets (p. 1065) when an object is deleted.
deliverability	The likelihood that an email message arrives at its intended destination.
deliveries	The number of email messages, sent through Amazon SES (p. 1054), that were accepted by an internet service provider (ISP) (p. 1080) for delivery to recipients (p. 1092) over a period of time.

deny	The result of a policy (p. 1089) statement that includes deny as the effect, so that a specific action or actions are expressly forbidden for a user, group, or role. Explicit deny take precedence over explicit allow (p. 1049).
deployment configuration	AWS CodeDeploy (p. 1058): A set of deployment rules and success and failure conditions used by the service during a deployment.
deployment group	AWS CodeDeploy (p. 1058): A set of individually tagged instances (p. 1080) or EC2 instances (p. 1073) in Auo Scaling groups (p. 1057), or both.
detailed monitoring	Monitoring of AWS provided metrics derived at a 1-minute frequency.
Description property	A property added to parameters, resources (p. 1094) , resource properties, mappings, and outputs to help you to document AWS CloudFormation (p. 1058) template elements.
dimension	A name–value pair (for example, InstanceType=m1.small, or EngineName=mysql), that contains additional information to identify a metric.
discussion forums	A place where AWS users can post technical questions and feedback to help accelerate their development efforts and to engage with the AWS community. For more information, see the Amazon Web Services Discussion Forums.
distribution	A link between an origin server (such as an Amazon S3 (p. 1055) bucket (p. 1065)) and a domain name, which CloudFront (p. 1049) automatically assigns. Through this link, CloudFront identifies the object you have stored in your origin server (p. 1088).
DKIM	DomainKeys Identified Mail. A standard that email senders use to sign their messages. ISPs use those signatures to verify that messages are legitimate. For more information, see https://tools.ietf.org/html/rfc6376.
DNS	See Domain Name System.
Docker image	A layered file system template that's the basis of a Docker container (p. 1068). Docker images can comprise specific operating systems or applications.
document	Amazon CloudSearch (p. 1049): An item that can be returned as a search result. Each document has a collection of fields that contain the data that can be searched or returned. The value of a field can be either a string or a number. Each document must have a unique ID and at least one field.
document batch	Amazon CloudSearch (p. 1049): A collection of add and delete document operations. You use the document service API to submit batches to update the data in your search domain.
document service API	Amazon CloudSearch (p. 1049): The API call that you use to submit document batches to update the data in a search domain.
document service endpoint	Amazon CloudSearch (p. 1049): The URL that you connect to when sending document updates to an Amazon CloudSearch domain. Each search domain has a unique document service endpoint that remains the same for the life of the domain.
domain	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): The hardware, software, and data exposed by Amazon OpenSearch Service (OpenSearch Service) endpoints. An OpenSearch Service domain is a service wrapper around an OpenSearch cluster. An OpenSearch Service domain encapsulates the engine instances that process OpenSearch Service requests, the indexed data that you want to search, snapshots of the domain, access policies, and metadata.

	See Also cluster, Elasticsearch.
Domain Name System	A service that routes internet traffic to websites by translating human-readable domain names (for example, `www.example.com`) into the numeric IP addresses, such as 192.0.2.1, which computers use to connect to each other.
Donation button	An HTML-coded button to provide a simple and secure way for US-based, IRS-certified 501(c)(3) nonprofit organizations to solicit donations.
DynamoDB stream	An ordered flow of information about changes to items in anAmazon DynamoDB (p. 1050) table. When you enable a stream on a table, DynamoDB captures information about every modification to data items in the table. See Also Amazon DynamoDB Streams.

E

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EBS	See Amazon Elastic Block Store (Amazon EBS).
EC2	See Amazon EC2.
EC2 instance	A compute instance (p. 1080) in the Amazon EC2 (p. 1050) service. Other AWS services use the term *EC2 instance* to distinguish these instances from other types of instances they support.
ECR	See the section called “Amazon ECR”.
ECS	See Amazon Elastic Container Service (Amazon ECS).
edge location	A data center that an AWS service uses to perform service-specific operations. For example, CloudFront (p. 1049) uses edge locations to cache copies of your content, so the content is closer to your users and can be delivered faster regardless of their location. Route 53 (p. 1054) uses edge locations to speed up the response to public DNS queries.
EFS	See Amazon Elastic File System (Amazon EFS).
Elastic	A company that provides open-source solutions—including OpenSearch, Logstash, Kibana, and Beats—that take data from any source and search, analyze, and visualize it in real time. Amazon OpenSearch Service (OpenSearch Service) is an AWS managed service for deploying, operating, and scaling OpenSearch in the AWS Cloud. See Also Amazon OpenSearch Service (OpenSearch Service), Elasticsearch.
Elastic Block Store	See Amazon Elastic Block Store (Amazon EBS).
Elastic IP address	A fixed (static) IP address that you have allocated in Amazon EC2 (p. 1050) or Amazon VPC (p. 1055) and then attached to an instance (p. 1080). Elastic IP addresses are associated with your account, not a specific instance. They are *elastic* because you can easily allocate, attach, detach, and free them as your needs change. Unlike traditional static IP addresses, Elastic IP addresses allow you to mask instance or Availability Zone (p. 1057) failures by rapidly remapping your public IP addresses to another instance.

Elastic Load Balancing	A web service that improves an application's availability by distributing incoming traffic between two or more EC2 instances (p. 1073). See Also https://aws.amazon.com/elasticloadbalancing.
elastic network interface	An additional network interface that can be attached to an instance (p. 1080). Elastic network interfaces include a primary private IP address, one or more secondary private IP addresses, an Elastic IP Address (optional), a MAC address, membership in specified security groups (p. 1096), a description, and a source/destination check flag. You can create an elastic network interface, attach it to an instance, detach it from an instance, and attach it to another instance.
Elasticsearch	An open-source, real-time distributed search and analytics engine used for full-text search, structured search, and analytics. OpenSearch was developed by the Elastic company. Amazon OpenSearch Service (OpenSearch Service) is an AWS managed service for deploying, operating, and scaling OpenSearch in the AWS Cloud. See Also Amazon OpenSearch Service (OpenSearch Service), Elastic.
EMR	See Amazon EMR.
encrypt	To use a mathematical algorithm to make data unintelligible to unauthorized users (p. 1103). Encryption also gives authorized users a method (such as a key or password) to convert the altered data back to its original state.
encryption context	A set of key–value pairs that contains additional information associated with AWS Key Management Service (AWS KMS) (p. 1061)–encrypted information.
endpoint	A URL that identifies a host and port as the entry point for a web service. Every web service request contains an endpoint. Most AWS products provide endpoints for a Region to enable faster connectivity. Amazon ElastiCache (p. 1051): The DNS name of a cache node (p. 1066). Amazon RDS (p. 1054): The DNS name of a DB instance (p. 1071). AWS CloudFormation (p. 1058): The DNS name or IP address of the server that receives an HTTP request.
endpoint port	Amazon ElastiCache (p. 1051): The port number used by a cache node (p. 1066). Amazon RDS (p. 1054): The port number used by a DB instance (p. 1071).
envelope encryption	The use of a master key and a data key to algorithmically protect data. The master key is used to encrypt and decrypt the data key and the data key is used to encrypt and decrypt the data itself.
environment	AWS Elastic Beanstalk (p. 1059): A specific running instance of an application (p. 1056). The application has a CNAME and includes an application version and a customizable configuration (which is inherited from the default container type). AWS CodeDeploy (p. 1058): Instances in a deployment group in a blue/green deployment. At the start of a blue/green deployment, the deployment group is made up of instances in the original environment. At the end of the deployment, the deployment group is made up of instances in the replacement environment.
environment configuration	A collection of parameters and settings that define how an environment and its associated resources behave.

ephemeral store	See instance store.
epoch	The date from which time is measured. For most Unix environments, the epoch is January 1, 1970.
ETL	See extract, transform, and load (ETL).
evaluation	Amazon Machine Learning: The process of measuring the predictive performance of a machine learning (ML) model. Also a machine learning object that stores the details and result of an ML model evaluation.
evaluation datasource	The data that Amazon Machine Learning uses to evaluate the predictive accuracy of a machine learning model.
event	Amazon Personalize (p. 1053): A user activity—such as a click, a purchase, or a video viewing—that you record and upload to an Amazon Personalize Interactions dataset. You record events individually in real time or record and upload events in bulk. See Also dataset, Interactions dataset.
event tracker	Amazon Personalize (p. 1053): Specifies a destination dataset group for event data that you record in real time. When you record events in real time, you provide the ID of the event tracker so that Amazon Personalize knows where to add the data. See Also dataset group, event.
eventual consistency	The method that AWS services use to achieve high availability. This involves replicating data across multiple servers in Amazon data centers. When data is written or updated and `Success` is returned, all copies of the data are updated. However, it takes time for the data to propagate to all storage locations. The data will eventually be consistent, but an immediate read might not show the change. Consistency is usually reached within seconds. See Also data consistency, eventually consistent read, strongly consistent read.
eventually consistent read	A read process that returns data from only one Region and might not show the most recent write information. However, if you repeat your read request after a short time, the response should eventually return the latest data. See Also data consistency, eventual consistency, strongly consistent read.
eviction	The deletion by CloudFront (p. 1049) of an object from an edge location (p. 1073) before its expiration time. If an object in an edge location isn't frequently requested, CloudFront might evict the object (remove the object before its expiration date) to make room for objects that are more popular.
exbibyte (EiB)	A contraction of exa binary byte. An exbibyte (EiB) is 2^60 or 1,152,921,504,606,846,976 bytes. An exabyte (EB) is 10^18 or 1,000,000,000,000,000,000 bytes. 1,024 EiB is a zebibyte (ZiB) (p. 1106).
expiration	For CloudFront (p. 1049) caching, the time when CloudFront stops responding to user requests with an object. If you don't use headers or CloudFront distribution (p. 1072) settings to specify how long you want objects to stay in an edge location (p. 1073), the objects expire after 24 hours. The next time a user requests an object that has expired, CloudFront forwards the request to the origin (p. 1088).
explicit impressions	Amazon Personalize (p. 1053): A list of items that you manually add to an Amazon Personalize Interactions dataset to influence future recommendations.

	Unlike *implicit impressions*, where Amazon Personalize automatically derives the impressions data, you choose what to include in explicit impressions. See Also recommendations, Interactions dataset, impressions data, implicit impressions.
explicit launch permission	An Amazon Machine Image (AMI) (p. 1053) launch permission granted to a specific AWS account (p. 1048).
exponential backoff	A strategy that incrementally increases the wait between retry attempts in order to reduce the load on the system and increase the likelihood that repeated requests will succeed. For example, client applications might wait up to 400 milliseconds before attempting the first retry, up to 1600 milliseconds before the second, and up to 6400 milliseconds (6.4 seconds) before the third.
expression	Amazon CloudSearch (p. 1049): A numeric expression that you can use to control how search hits are sorted. You can construct Amazon CloudSearch expressions using numeric fields, other rank expressions, a document's default relevance score, and standard numeric operators and functions. When you use the `sort` option to specify an expression in a search request, the expression is evaluated for each search hit and the hits are listed according to their expression values.
extract, transform, and load (ETL)	A process that's used to integrate data from multiple sources. Data is collected from sources (extract), converted to an appropriate format (transform), and written to a target data store (load) for purposes of analysis and querying. ETL tools combine these three functions to consolidate and move data from one environment to another. AWS Glue (p. 1060) is a fully managed ETL service for discovering and organizing data, transforming it, and making it available for search and analytics.

F

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facet	Amazon CloudSearch (p. 1049): An index field that represents a category that you want to use to refine and filter search results.
facet enabled	Amazon CloudSearch (p. 1049): An index field option that enables facet information to be calculated for the field.
FBL	See feedback loop (FBL).
feature transformation	Amazon Machine Learning: The machine learning process of constructing more predictive input representations or “features” from the raw input variables to optimize a machine learning model’s ability to learn and generalize. Also known as *data transformation* or *feature engineering*.
federated identity management (FIM)	Allows individuals to sign in to different networks or services, using the same group or personal credentials to access data across all networks. With identity federation in AWS, external identities (federated users) are granted secure access to resources (p. 1094) in an AWS account (p. 1048) without having to create IAM users (p. 1103). These external identities can come from a corporate identity store (such as LDAP or Windows Active Directory) or from a third party (such as Login with Amazon, Facebook, or Google). AWS federation also supports SAML 2.0.

federated user	See federated identity management (FIM).
federation	See federated identity management (FIM).
feedback loop (FBL)	The mechanism by which a mailbox provider (for example, an internet service provider (ISP) (p. 1080)) forwards a recipient (p. 1092)'s complaint (p. 1067) back to the sender (p. 1096).
field weight	The relative importance of a text field in a search index. Field weights control how much matches in particular text fields affect a document's relevance score.
filter	A criterion that you specify to limit the results when you list or describe your Amazon EC2 (p. 1050) resources (p. 1094).
filter query	A way to filter search results without affecting how the results are scored and sorted. Specified with the Amazon CloudSearch (p. 1049) `fq` parameter.
FIM	See federated identity management (FIM).
Firehose	See Amazon Kinesis Data Firehose.
format version	See template format version.
forums	See discussion forums.
function	See intrinsic function.
fuzzy search	A simple search query that uses approximate string matching (fuzzy matching) to correct for typographical errors and misspellings.

G

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geospatial search	A search query that uses locations specified as a latitude and longitude to determine matches and sort the results.
gibibyte (GiB)	A contraction of giga binary byte, a gibibyte is 2^30 or 1,073,741,824 bytes. A gigabyte (GB) is 10^9 or 1,000,000,000 bytes. 1,024 GiB is a tebibyte (TiB) (p. 1102).
GitHub	A web-based repository that uses Git for version control.
global secondary index	An index with a partition key and a sort key that can be different from those on the table. A global secondary index is considered global because queries on the index can span all of the data in a table, across all partitions. See Also local secondary index.
grant	AWS Key Management Service (AWS KMS) (p. 1061): A mechanism for giving AWS principals (p. 1090) long-term permissions to use KMS keys.
grant token	A type of identifier that allows the permissions in a grant (p. 1077) to take effect immediately.
ground truth	The observations used in the machine learning (ML) model training process that include the correct value for the target attribute. To train an ML model to

	predict house sales prices, the input observations would typically include prices of previous house sales in the area. The sale prices of these houses constitute the ground truth.
group	A collection of IAM (p. 1060) users (p. 1103). You can use IAM groups to simplify specifying and managing permissions for multiple users.

H

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Hadoop	Software that enables distributed processing for big data by using clusters and simple programming models. For more information, see http://hadoop.apache.org.
hard bounce	A persistent email delivery failure such as "mailbox does not exist."
hardware VPN	A hardware-based IPsec VPN connection over the internet.
health check	A system call to check on the health status of each instance in an Amazon EC2 Auto Scaling (p. 1051) group.
high-quality email	Email that recipients find valuable and want to receive. Value means different things to different recipients and can come in such forms as offers, order confirmations, receipts, or newsletters.
highlights	Amazon CloudSearch (p. 1049): Excerpts returned with search results that show where the search terms appear within the text of the matching documents.
highlight enabled	Amazon CloudSearch (p. 1049): An index field option that enables matches within the field to be highlighted.
hit	A document that matches the criteria specified in a search request. Also referred to as a *search result*.
HMAC	Hash-based Message Authentication Code. A specific construction for calculating a message authentication code (MAC) involving a cryptographic hash function in combination with a secret key. You can use it to verify both the data integrity and the authenticity of a message at the same time. AWS calculates the HMAC using a standard, cryptographic hash algorithm, such as SHA-256.
hosted zone	A collection of resource record (p. 1094) sets that Amazon Route 53 (p. 1054) hosts. Similar to a traditional DNS zone file, a hosted zone represents a collection of records that are managed together under a single domain name.
HRNN	Amazon Personalize (p. 1053): A hierarchical recurrent neural network machine learning algorithm that models changes in user behavior and predicts the items that a user might interact with in personal recommendation applications.
HTTP-Query	See Query.
HVM virtualization	Hardware Virtual Machine virtualization. Allows the guest VM to run as though it's on a native hardware platform, except that it still uses paravirtual (PV) network and storage drivers for improved performance. See Also PV virtualization.

I

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IAM	See AWS Identity and Access Management (IAM).
IAM Identity Center	See AWS IAM Identity Center (successor to AWS Single Sign-On).
IAM group	See group.
IAM policy simulator	See policy simulator.
IAM role	See role.
IAM user	See user.
Identity and Access Management	See AWS Identity and Access Management (IAM).
identity provider (IdP)	An IAM (p. 1060) entity that holds metadata about external identity providers.
IdP	See identity provider (IdP) .
image	See Amazon Machine Image (AMI).
import/export station	A machine that uploads or downloads your data to or from Amazon S3 (p. 1055).
import log	A report that contains details about how AWS Import/Export (p. 1060) processed your data.
implicit impressions	Amazon Personalize (p. 1053): The recommendations that your application shows a user. Unlike *explicit impressions*, where you manually record each impression, Amazon Personalize automatically derives implicit impressions from your recommendation data. See Also recommendations, impressions data, explicit impressions.
impressions data	Amazon Personalize (p. 1053): The list of items that you presented to a user when they interacted with a particular item such as by clicking it, watching it, or purchasing it. Amazon Personalize uses impressions data to calculate the relevance of new items for a user based on how frequently users have selected or ignored the same item. See Also explicit impressions, implicit impressions.
in-place deployment	CodeDeploy: A deployment method where the application on each instance in the deployment group is stopped, the latest application revision is installed, and the new version of the application is started and validated. You can choose to use a load balancer so each instance is deregistered during its deployment and then restored to service after the deployment is complete.
index	See search index.
index field	A name–value pair that's included in an Amazon CloudSearch (p. 1049) domain's index. An index field can contain text or numeric data, dates, or a location.
indexing options	Configuration settings that define an Amazon CloudSearch (p. 1049) domain's index fields, how document data is mapped to those index fields, and how the index fields can be used.

inline policy	An IAM (p. 1060) policy (p. 1089) that's embedded in a single IAM user (p. 1103), group (p. 1078), or role (p. 1094).
input data	Amazon Machine Learning: The observations that you provide to Amazon Machine Learning to train and evaluate a machine learning model and generate predictions.
instance	A copy of an Amazon Machine Image (AMI) (p. 1053) running as a virtual server in the AWS Cloud.
instance family	A general instance type (p. 1080) grouping using either storage or CPU capacity.
instance group	A Hadoop (p. 1078) cluster contains one master instance group that contains one master node (p. 1084), a core instance group that contains one or more core node (p. 1069) and an optional task node (p. 1102) instance group, which can contain any number of task nodes.
instance profile	A container that passes IAM (p. 1060) role (p. 1094) information to an EC2 instance (p. 1073) at launch.
instance store	Disk storage that's physically attached to the host computer for an EC2 instance (p. 1073), and therefore has the same lifespan as the instance. When the instance is terminated, you lose any data in the instance store.
instance store-backed AMI	A type of Amazon Machine Image (AMI) (p. 1053) whose instances (p. 1080) use an instance store (p. 1080) volume (p. 1105) as the root device. Compare this with instances launched from Amazon EBS (p. 1051)-backed AMIs, which use an Amazon EBS volume as the root device.
instance type	A specification that defines the memory, CPU, storage capacity, and usage cost for an instance (p. 1080). Some instance types are for standard applications, whereas others are for CPU-intensive, memory-intensive applications.
Interactions dataset	Amazon Personalize (p. 1053): A container for historical and real-time data collected from interactions between users and items (called events). Interactions data can include impressions data and contextual metadata. See Also dataset, event, impressions data, contextual metadata.
internet gateway	Connects a network to the internet. You can route traffic for IP addresses outside your VPC (p. 1105) to the internet gateway.
internet service provider (ISP)	A company that provides subscribers with access to the internet. Many ISPs are also mailbox providers (p. 1083). Mailbox providers are sometimes referred to as ISPs, even if they only provide mailbox services.
intrinsic function	A special action in a AWS CloudFormation (p. 1058) template that assigns values to properties not available until runtime. These functions follow the format *Fn::Attribute*, such as `Fn::GetAtt`. Arguments for intrinsic functions can be parameters, pseudo parameters, or the output of other intrinsic functions.
IP address	A numerical address (for example, 192.0.2.44) that networked devices use to communicate with one another using the Internet Protocol (IP). Each EC2 instance (p. 1073) is assigned two IP addresses at launch, which are directly mapped to each other through network address translation (NAT (p. 1086)): a private IP address (following RFC 1918) and a public IP address. Instances launched in a VPC (p. 1055) are assigned only a private IP address. Instances launched in your default VPC are assigned both a private IP address and a public IP address.
IP match condition	AWS WAF (p. 1064): An attribute that specifies the IP addresses or IP address ranges that web requests originate from. Based on the specified IP

	addresses, you can configure AWS WAF to allow or block web requests to AWS resources (p. 1094) such as Amazon CloudFront (p. 1049) distributions.
ISP	See internet service provider (ISP).
issuer	The person who writes a policy (p. 1089) to grant permissions to a resource (p. 1094). The issuer (by definition) is always the resource owner. AWS doesn't permit Amazon SQS (p. 1055) users to create policies for resources they don't own. If John is the resource owner, AWS authenticates John's identity when he submits the policy he's written to grant permissions for that resource.
item	A group of attributes that's uniquely identifiable among all of the other items. Items in Amazon DynamoDB (p. 1050) are similar in many ways to rows, records, or tuples in other database systems.
item exploration	Amazon Personalize (p. 1053): The process that Amazon Personalize uses to test different item recommendations, including recommendations of new items with no or little interaction data, and learn how users respond. You configure item exploration at the campaign level for solution versions created with the user-personalization recipe. See Also recommendations, campaign, solution version, user-personalization recipe.
item-to-item similarities (SIMS) recipe	Amazon Personalize (p. 1053): A RELATED_ITEMS recipe that uses the data from an Interactions dataset to make recommendations for items that are similar to a specified item. The SIMS recipe calculates similarity based on the way users interact with items instead of matching item metadata, such as price or age. See Also recipe, RELATED_ITEMS recipes, Interactions dataset.
Items dataset	Amazon Personalize (p. 1053): A container for metadata about items, such as price, genre, or availability. See Also dataset.

J

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job flow	Amazon EMR (p. 1051): One or more steps (p. 1099) that specify all of the functions to be performed on the data.
job ID	A five-character, alphanumeric string that uniquely identifies an AWS Import/Export (p. 1060) storage device in your shipment. AWS issues the job ID in response to a `CREATE JOB` email command.
job prefix	An optional string that you can add to the beginning of an AWS Import/Export (p. 1060) log file name to prevent collisions with objects of the same name. See Also key prefix.
JSON	JavaScript Object Notation. A lightweight data interchange format. For information about JSON, see http://www.json.org/.
junk folder	The location where email messages that various filters determine to be of lesser value are collected so that they don't arrive in the recipient (p. 1092)'s inbox but are still accessible to the recipient. This is also referred to as a spam (p. 1099) or bulk folder.

K

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key

A credential that identifies an AWS account (p. 1048) or user (p. 1103) to AWS (such as the AWS secret access key (p. 1096)).

Amazon Simple Storage Service (Amazon S3) (p. 1055), Amazon EMR (p. 1051): The unique identifier for an object in a bucket (p. 1065). Every object in a bucket has exactly one key. Because a bucket and key together uniquely identify each object, you can think of Amazon S3 as a basic data map between the *bucket + key*, and the object itself. You can uniquely address every object in Amazon S3 through the combination of the web service endpoint, bucket name, and key, as in this example: `http://doc.s3.amazonaws.com/2006-03-01/AmazonS3.wsdl`, where `doc` is the name of the bucket, and `2006-03-01/AmazonS3.wsdl` is the key.

AWS Import/Export (p. 1060): The name of an object in Amazon S3. It's a sequence of Unicode characters whose UTF-8 encoding can't exceed 1024 bytes. If a key (for example, logPrefix + import-log-JOBID) is longer than 1024 bytes, AWS Elastic Beanstalk (p. 1059) returns an `InvalidManifestField` error.

IAM (p. 1060): In a policy (p. 1089), a specific characteristic that's the basis for restricting access (such as the current time or the IP address of the requester).

Tagging resources: A general tag (p. 1101) label that acts like a category for more specific tag values. For example, you might have EC2 instance (p. 1073) with the tag key of *Owner* and the tag value of *Jan*. You can tag an AWS resource (p. 1094) with up to 10 key–value pairs. Not all AWS resources can be tagged.

key pair

A set of security credentials that you use to prove your identity electronically. A key pair consists of a private key and a public key.

key prefix

A string of characters that is a subset of an object key name, starting with the first character. The prefix can be any length, up to the maximum length of the object key name (1,024 bytes).

kibibyte (KiB)

A contraction of kilo binary byte, a kibibyte is 2^10 or 1,024 bytes. A kilobyte (KB) is 10^3 or 1,000 bytes. 1,024 KiB is a mebibyte (MiB) (p. 1084).

KMS

See AWS Key Management Service (AWS KMS).

KMS key

The primary resource in AWS Key Management Service. In general, KMS keys are created, used, and deleted entirely within KMS. KMS supports symmetric and asymmetric KMS keys for encryption and signing. KMS keys can be either customer managed, AWS managed, or AWS owned. For more information, see AWS KMS keys in the AWS Key Management Service Developer Guide.

L

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labeled data	In machine learning, data for which you already know the target or "correct" answer.
launch configuration	A set of descriptive parameters used to create new EC2 instances (p. 1073) in an Amazon EC2 Auto Scaling (p. 1051) activity. A template that an Auto Scaling group (p. 1057) uses to launch new EC2 instances. The launch configuration contains information such as the Amazon Machine Image (AMI) (p. 1053) ID, the instance type, key pairs, security groups (p. 1096), and block device mappings, among other configuration settings.
launch permission	An Amazon Machine Image (AMI) (p. 1053) attribute that allows users to launch an AMI.
lifecycle	The lifecycle state of the EC2 instance (p. 1073) contained in an Auto Scaling group (p. 1057). EC2 instances progress through several states over their lifespan; these include *Pending*, *InService*, *Terminating* and *Terminated*.
lifecycle action	An action that can be paused by Auto Scaling, such as launching or terminating an EC2 instance.
lifecycle hook	A feature for pausing Auto Scaling after it launches or terminates an EC2 instance so that you can perform a custom action while the instance isn't in service.
load balancer	A DNS name combined with a set of ports, which together provide a destination for all requests intended for your application. A load balancer can distribute traffic to multiple application instances across every Availability Zone (p. 1057) within a Region (p. 1093). Load balancers can span multiple Availability Zones within an AWS Region into which an Amazon EC2 (p. 1050) instance was launched. But load balancers can't span multiple Regions.
local secondary index	An index that has the same partition key as the table, but a different sort key. A local secondary index is local in the sense that every partition of a local secondary index is scoped to a table partition that has the same partition key value. See Also local secondary index.
logical name	A case-sensitive unique string within an AWS CloudFormation (p. 1058) template that identifies a resource (p. 1094), mapping (p. 1084), parameter, or output. In an AWS CloudFormation template, each parameter, resource (p. 1094), property, mapping, and output must be declared with a unique logical name. You use the logical name when dereferencing these items using the `Ref` function.

M

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Mail Transfer Agent (MTA)	Software that transports email messages from one computer to another by using a client-server architecture.
mailbox provider	An organization that provides email mailbox hosting services. Mailbox providers are sometimes referred to as internet service providers (ISPs) (p. 1080), even if they only provide mailbox services.
mailbox simulator	A set of email addresses that you can use to test an Amazon SES (p. 1054)-based email-sending application without sending messages to actual recipients. Each

	email address represents a specific scenario (such as a bounce or complaint) and generates a typical response that's specific to the scenario.
main route table	The default route table (p. 1095) that any new VPC (p. 1105) subnet (p. 1100) uses for routing. You can associate a subnet with a different route table of your choice. You can also change which route table is the main route table.
managed policy	A standalone IAM (p. 1060) policy (p. 1089) that you can attach to multiple users (p. 1103), groups (p. 1078), and roles (p. 1094)s in your IAM account (p. 1048). Managed policies can either be AWS managed policies (which are created and managed by AWS) or customer managed policies (which you create and manage in your AWS account).
manifest	When sending a *create job* request for an import or export operation, you describe your job in a text file called a manifest. The manifest file is a YAML-formatted file that specifies how to transfer data between your storage device and the AWS Cloud.
manifest file	Amazon Machine Learning: The file used for describing batch predictions. The manifest file relates each input data file with its associated batch prediction results. It's stored in the Amazon S3 output location.
mapping	A way to add conditional parameter values to an AWS CloudFormation (p. 1058) template. You specify mappings in the template's optional Mappings section and retrieve the desired value using the `FN::FindInMap` function.
marker	See pagination token.
master node	A process running on an Amazon Machine Image (AMI) (p. 1053) that keeps track of the work its core and task nodes complete.
maximum price	The maximum price you pay to launch one or more Spot Instances (p. 1099). If your maximum price exceeds the current Spot price (p. 1099) and your restrictions are met, Amazon EC2 (p. 1050) launches instances on your behalf.
maximum send rate	The maximum number of email messages that you can send per second using Amazon SES (p. 1054).
mean reciprocal rank at 25	Amazon Personalize (p. 1053): An evaluation metric that assesses the relevance of a model's highest ranked recommendation. Amazon Personalize calculates this metric using the average accuracy of the model when ranking the most relevant recommendation out of the top 25 recommendations over all requests for recommendations. See Also metrics, recommendations.
mebibyte (MiB)	A contraction of mega binary byte. A mebibyte (MiB) is 2^20 or 1,048,576 bytes. A megabyte (MB) is 10^6 or 1,000,000 bytes. 1,024 MiB is a gibibyte (GiB) (p. 1077).
member resources	See resource.
message ID	Amazon Simple Email Service (Amazon SES) (p. 1054): A unique identifier that's assigned to every email message that's sent. Amazon Simple Queue Service (Amazon SQS) (p. 1055): The identifier returned when you send a message to a queue.
metadata	Information about other data or objects. In Amazon Simple Storage Service (Amazon S3) (p. 1055) and Amazon EMR (p. 1051) metadata takes the form of

	name–value pairs that describe the object. These include default metadata such as the date last modified and standard HTTP metadata (for example, Content-Type). Users can also specify custom metadata at the time they store an object. In Amazon EC2 (p. 1050) metadata includes data about an EC2 instance (p. 1073) that the instance can retrieve to determine things about itself, such as the instance type or the IP address.
metric	An element of time-series data defined by a unique combination of exactly one namespace (p. 1086), exactly one metric name, and between zero and ten dimensions. Metrics and the statistics derived from them are the basis of Amazon CloudWatch (p. 1049).
metrics	Amazon Personalize (p. 1053): Evaluation data that Amazon Personalize generates when you train a model. You use metrics to evaluate the performance of the model, view the effects of modifying a solution's configuration, and compare results between solutions that use the same training data but were created with different recipes. See Also solution, recipe.
metric name	The primary identifier of a metric, used with a namespace (p. 1086) and optional dimensions.
MFA	See multi-factor authentication (MFA).
micro instance	A type of EC2 instance (p. 1073) that's more economical to use if you have occasional bursts of high CPU activity.
MIME	See Multipurpose Internet Mail Extensions (MIME).
ML model	In machine learning (ML), a mathematical model that generates predictions by finding patterns in data. Amazon Machine Learning supports three types of ML models: binary classification, multiclass classification, and regression. Also known as a *predictive model*. See Also binary classification model, multiclass classification model, regression model.
MTA	See Mail Transfer Agent (MTA).
Multi-AZ deployment	A primary DB instance (p. 1071) that has a synchronous standby replica in a different Availability Zone (p. 1057). The primary DB instance is synchronously replicated across Availability Zones to the standby replica.
multiclass classification model	A machine learning model that predicts values that belong to a limited, pre-defined set of permissible values. For example, "Is this product a book, movie, or clothing?"
multi-factor authentication (MFA)	An optional AWS account (p. 1048) security feature. After you enable AWS MFA, you must provide a six-digit, single-use code in addition to your sign-in credentials whenever you access secure AWS webpages or the AWS Management Console (p. 1061). You get this single-use code from an authentication device that you keep in your physical possession. See Also https://aws.amazon.com/mfa/.
multi-valued attribute	An attribute with more than one value.
multipart upload	A feature that you can use to upload a single object as a set of parts.
Multipurpose Internet Mail Extensions (MIME)	An internet standard that extends the email protocol to include non-ASCII text and nontext elements, such as attachments.

Multitool	A cascading application that provides a simple command-line interface for managing large datasets.

N

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namespace	An abstract container that provides context for the items (names, or technical terms, or words) it holds, and allows disambiguation of homonym items residing in different namespaces.
NAT	Network address translation. A strategy of mapping one or more IP addresses to another while data packets are in transit across a traffic routing device. This is commonly used to restrict internet communication to private instances while allowing outgoing traffic. See Also Network Address Translation and Protocol Translation, NAT gateway, NAT instance.
NAT gateway	A NAT (p. 1086) device, managed by AWS, that performs network address translation in a private subnet (p. 1100), to secure inbound internet traffic. A NAT gateway uses both NAT and port address translation. See Also NAT instance.
NAT instance	A NAT (p. 1086) device, configured by a user, that performs network address translation in a VPC (p. 1105) public subnet (p. 1100) to secure inbound internet traffic. See Also NAT gateway.
network ACL	An optional layer of security that acts as a firewall for controlling traffic in and out of a subnet (p. 1100). You can associate multiple subnets with a single network ACL (p. 1047), but a subnet can be associated with only one network ACL at a time.
Network Address Translation and Protocol Translation	(NAT (p. 1086)-PT) An internet protocol standard defined in RFC 2766. See Also NAT instance, NAT gateway.
n-gram processor	A processor that performs n-gram transformations. See Also n-gram transformation.
n-gram transformation	Amazon Machine Learning: A transformation that aids in text string analysis. An n-gram transformation takes a text variable as input and outputs strings by sliding a window of size *n* words, where *n* is specified by the user, over the text, and outputting every string of words of size *n* and all smaller sizes. For example, specifying the n-gram transformation with window size =2 returns all the two-word combinations and all of the single words.
NICE Desktop Cloud Visualization	A remote visualization technology for securely connecting users to graphic-intensive 3D applications hosted on a remote, high-performance server.
node	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): An OpenSearch instance. A node can be either a data instance or a dedicated master instance. See Also dedicated master node.
NoEcho	A property of AWS CloudFormation (p. 1058) parameters that prevent the otherwise default reporting of names and values of a template parameter.

	Declaring the `NoEcho` property causes the parameter value to be masked with asterisks in the report by the `cfn-describe-stacks` command.
normalized discounted cumulative gain (NCDG) at K (5/10/25)	Amazon Personalize (p. 1053): An evaluation metric that tells you about the relevance of your model's highly ranked recommendations, where K is a sample size of 5, 10, or 25 recommendations. Amazon Personalize calculates this by assigning weight to recommendations based on their position in a ranked list, where each recommendation is discounted (given a lower weight) by a factor dependent on its position. The normalized discounted cumulative gain at K assumes that recommendations that are lower on a list are less relevant than recommendations higher on the list. See Also metrics, recommendations.
NoSQL	Nonrelational database systems that are highly available, scalable, and optimized for high performance. Instead of the relational model, NoSQL databases (for example, Amazon DynamoDB (p. 1050)) use alternate models for data management, such as key–value pairs or document storage.
null object	A null object is one whose version ID is null. Amazon S3 (p. 1055) adds a null object to a bucket (p. 1065) when versioning (p. 1104) for that bucket is suspended. It's possible to have only one null object for each key in a bucket.
number of passes	The number of times that you allow Amazon Machine Learning to use the same data records to train a machine learning model.

O

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object	Amazon Simple Storage Service (Amazon S3) (p. 1055): The fundamental entity type stored in Amazon S3. Objects consist of object data and metadata. The data portion is opaque to Amazon S3. Amazon CloudFront (p. 1049): Any entity that can be served either over HTTP or a version of RTMP.
observation	Amazon Machine Learning: A single instance of data that Amazon Machine Learning (Amazon ML) uses to either train a machine learning model how to predict or to generate a prediction. Each row in an Amazon ML input data file is an observation.
On-Demand Instance	An Amazon EC2 (p. 1050) pricing option that charges you for compute capacity by the hour or second (minimum of 60 seconds) with no long-term commitment.
operation	An API function. Also called an *action*.
optimistic locking	A strategy to ensure that an item that you want to update has not been modified by others before you perform the update. For Amazon DynamoDB (p. 1050), optimistic locking support is provided by the AWS SDKs.
organization	AWS Organizations (p. 1062): An entity that you create to consolidate and manage your AWS accounts. An organization has one management account along with zero or more member accounts.
organizational unit	AWS Organizations (p. 1062): A container for accounts within a root (p. 1094) of an organization. An organizational unit (OU) can contain other OUs.

origin access identity — Also called OAI. When using Amazon CloudFront (p. 1049) to serve content with an Amazon S3 (p. 1055) bucket (p. 1065) as the origin, a virtual identity that you use to require users to access your content through CloudFront URLs instead of Amazon S3 URLs. Usually used with CloudFront private content (p. 1090).

origin server — The Amazon S3 (p. 1055) bucket (p. 1065) or custom origin containing the definitive original version of the content you deliver through CloudFront (p. 1049).

original environment — The instances in a deployment group at the start of an CodeDeploy blue/green deployment.

OSB transformation — Orthogonal sparse bigram transformation. In machine learning, a transformation that aids in text string analysis and that's an alternative to the n-gram transformation. OSB transformations are generated by sliding the window of size *n* words over the text, and outputting every pair of words that includes the first word in the window.
See Also n-gram transformation.

OU — See organizational unit.

output location — Amazon Machine Learning: An Amazon S3 location where the results of a batch prediction are stored.

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pagination — The process of responding to an API request by returning a large list of records in small separate parts. Pagination can occur in the following situations:

- The client sets the maximum number of returned records to a value below the total number of records.
- The service has a default maximum number of returned records that's lower than the total number of records.

When an API response is paginated, the service sends a subset of the large list of records and a pagination token that indicates that more records are available. The client includes this pagination token in a subsequent API request, and the service responds with the next subset of records. This continues until the service responds with a subset of records and no pagination token, indicating that all records have been sent.

pagination token — A marker that indicates that an API response contains a subset of a larger list of records. The client can return this marker in a subsequent API request to retrieve the next subset of records until the service responds with a subset of records and no pagination token, indicating that all records have been sent.
See Also pagination.

paid AMI — An Amazon Machine Image (AMI) (p. 1053) that you sell to other Amazon EC2 (p. 1050) users on AWS Marketplace (p. 1061).

paravirtual virtualization — See PV virtualization.

part — A contiguous portion of the object's data in a multipart upload request.

partition key	A simple primary key, composed of one attribute (also known as a *hash attribute*). See Also partition key, sort key.
PAT	Port address translation.
pebibyte (PiB)	A contraction of peta binary byte, a pebibyte is 2^50 or 1,125,899,906,842,624 bytes. A petabyte (PB) is 10^15 or 1,000,000,000,000,000 bytes. 1,024 PiB is an exbibyte (EiB) (p. 1075).
period	See sampling period.
permission	A statement within a policy (p. 1089) that allows or denies access to a particular resource (p. 1094). You can state any permission in the following way: "A has permission to do B to C." For example, Jane (A) has permission to read messages (B) from John's Amazon SQS (p. 1055) queue (C). Whenever Jane sends a request to Amazon SQS to use John's queue, the service checks to see if she has permission. It further checks to see if the request satisfies the conditions John set forth in the permission.
persistent storage	A data storage solution where the data remains intact until it's deleted. Options within AWS (p. 1055) include: Amazon S3 (p. 1055), Amazon RDS (p. 1054), Amazon DynamoDB (p. 1050), and other services.
PERSONALIZED_RANKING recipes	Amazon Personalize (p. 1053): Recipes that provide item recommendations in ranked order based on the predicted interest for a user. See Also recipe, recommendations, personalized-ranking recipe, popularity-count recipe.
personalized-ranking recipe	Amazon Personalize (p. 1053): A PERSONALIZED_RANKING recipe that ranks a collection of items that you provide based on the predicted interest level for a specific user. Use the personalized-ranking recipe to create curated lists of items or ordered search results that are personalized for a specific user. See Also recipe, PERSONALIZED_RANKING recipes.
physical name	A unique label that AWS CloudFormation (p. 1058) assigns to each resource (p. 1094) when creating a stack (p. 1099). Some AWS CloudFormation commands accept the physical name as a value with the `--physical-name` parameter.
pipeline	AWS CodePipeline (p. 1058): A workflow construct that defines the way software changes go through a release process.
plaintext	Information that has not been encrypted (p. 1074), as opposed to ciphertext (p. 1067).
policy	IAM (p. 1060): A document defining permissions that apply to a user, group, or role; the permissions in turn determine what users can do in AWS. A policy typically allows (p. 1049) access to specific actions, and can optionally grant that the actions are allowed for specific resources (p. 1094), such as EC2 instances (p. 1073) or Amazon S3 (p. 1055) buckets (p. 1065). Policies can also explicitly deny (p. 1072) access. Amazon EC2 Auto Scaling (p. 1051): An object that stores the information that's needed to launch or terminate instances for an Auto Scaling group. Running the policy causes instances to be launched or terminated. You can configure an alarm (p. 1048) to invoke an Auto Scaling policy.
policy generator	A tool in the IAM (p. 1060) AWS Management Console (p. 1061) that helps you build a policy (p. 1089) by selecting elements from lists of available options.

policy simulator	A tool in the IAM (p. 1060) AWS Management Console (p. 1061) that helps you test and troubleshoot policies (p. 1089) so you can see their effects in real-world scenarios.
policy validator	A tool in the IAM (p. 1060) AWS Management Console (p. 1061) that examines your existing IAM access control policies (p. 1089) to ensure that they comply with the IAM policy grammar.
popularity-count recipe	Amazon Personalize (p. 1053): A USER_PERSONALIZATION recipe that recommends the items that have had the most interactions with unique users. See Also recipe, USER_PERSONALIZATION recipes.
precision at K (5/10/25)	Amazon Personalize (p. 1053): An evaluation metric that tells you how relevant your model's recommendations are based on a sample size of K (5, 10, or 25) recommendations. Amazon Personalize calculates this metric based on the number of relevant recommendations out of the top K recommendations, divided by K, where K is 5, 10, or 25. See Also metrics, recommendations.
prefix	See job prefix.
Premium Support	A one-on-one, fast-response support channel that AWS customers can subscribe to for support for AWS infrastructure services. See Also https://aws.amazon.com/premiumsupport/.
presigned URL	A web address that uses query string authentication (p. 1091).
primary key	One or two attributes that uniquely identify each item in a Amazon DynamoDB (p. 1050) table, so that no two items can have the same key. See Also partition key, sort key.
primary shard	See shard.
principal	The user (p. 1103), service, or account (p. 1048) that receives permissions that are defined in a policy (p. 1089). The principal is A in the statement "A has permission to do B to C."
private content	When using Amazon CloudFront (p. 1049) to serve content with an Amazon S3 (p. 1055) bucket (p. 1065) as the origin, a method of controlling access to your content by requiring users to use signed URLs. Signed URLs can restrict user access based on the current date and time, the IP addresses that the requests originate from, or both.
private IP address	A private numerical address (for example, 192.0.2.44) that networked devices use to communicate with one another using the Internet Protocol (IP). Each EC2 instance (p. 1073) is assigned two IP addresses at launch, which are directly mapped to each other through network address translation (NAT (p. 1086)): a private address (following RFC 1918) and a public address. *Exception:* Instances launched in Amazon VPC (p. 1055) are assigned only a private IP address.
private subnet	A VPC (p. 1105) subnet (p. 1100) whose instances can't be reached from the internet.
product code	An identifier provided by AWS when you submit a product to AWS Marketplace (p. 1061).
properties	See resource property.
property rule	A JSON (p. 1081)-compliant markup standard for declaring properties, mappings, and output values in an AWS CloudFormation (p. 1058) template.

Provisioned IOPS	A storage option that delivers fast, predictable, and consistent I/O performance. When you specify an IOPS rate while creating a DB instance, Amazon RDS (p. 1054) provisions that IOPS rate for the lifetime of the DB instance.
pseudo parameter	A predefined setting (for example, `AWS:StackName`) that can be used in AWS CloudFormation (p. 1058) templates without having to declare them. You can use pseudo parameters anywhere you can use a regular parameter.
public AMI	An Amazon Machine Image (AMI) (p. 1053) that all AWS accounts (p. 1048) have permission to launch.
public dataset	A large collection of public information that can be seamlessly integrated into applications that are based in the AWS Cloud. Amazon stores public datasets at no charge to the community and, similar to other AWS services, users pay only for the compute and storage they use for their own applications. These datasets currently include data from the Human Genome Project, the US Census, Wikipedia, and other sources. See Also https://aws.amazon.com/publicdatasets.
public IP address	A public numerical address (for example, 192.0.2.44) that networked devices use to communicate with one another using the Internet Protocol (IP). Each EC2 instance (p. 1073) is assigned two IP addresses at launch, which are directly mapped to each other through Network Address Translation (NAT (p. 1086)): a private address (following RFC 1918) and a public address. *Exception:* Instances launched in Amazon VPC (p. 1055) are assigned only a private IP address.
public subnet	A subnet (p. 1100) whose instances can be reached from the internet.
PV virtualization	Paravirtual virtualization. Allows guest VMs to run on host systems that don't have special support extensions for full hardware and CPU virtualization. Because PV guests run a modified operating system that doesn't use hardware emulation, they can't provide hardware-related features, such as enhanced networking or GPU support. See Also HVM virtualization.

Q

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

quartile binning transformation	Amazon Machine Learning: A process that takes two inputs, a numerical variable and a parameter called a bin number, and outputs a categorical variable. Quartile binning transformations discover non-linearity in a variable's distribution by enabling the machine learning model to learn separate importance values for parts of the numeric variable's distribution.
Query	A type of web service that generally uses only the GET or POST HTTP method and a query string with parameters in the URL. See Also REST.
query string authentication	An AWS feature that you can use to place the authentication information in the HTTP request query string instead of in the `Authorization` header, which provides URL-based access to objects in a bucket (p. 1065).
queue	A sequence of messages or jobs that are held in temporary storage awaiting transmission or processing.

queue URL	A web address that uniquely identifies a queue.
quota	The maximum value for your resources, actions, and items in your AWS account

R

Numbers and symbols (p. 1047) | A (p. 1047) | B (p. 1064) | C (p. 1065) | D (p. 1070) | E (p. 1073) | F (p. 1076) | G (p. 1077) | H (p. 1078) | I (p. 1079) | J (p. 1081) | K (p. 1082) | L (p. 1082) | M (p. 1083) | N (p. 1086) | O (p. 1087) | P (p. 1088) | Q (p. 1091) | R (p. 1092) | S (p. 1095) | T (p. 1101) | U (p. 1103) | V (p. 1104) | W (p. 1105) | X, Y, Z (p. 1105)

range GET	A request that specifies a byte range of data to get for a download. If an object is large, you can break up a download into smaller units by sending multiple range GET requests that each specify a different byte range to GET.
raw email	A type of *sendmail* request with which you can specify the email headers and MIME types.
RDS	See Amazon Relational Database Service (Amazon RDS).
read replica	Amazon RDS (p. 1054): An active copy of another DB instance. Any updates to the data on the source DB instance are replicated to the read replica DB instance using the built-in replication feature of MySQL 5.1.
real-time predictions	Amazon Machine Learning: Synchronously generated predictions for individual data observations. See Also batch prediction.
recipe	Amazon Personalize (p. 1053): An Amazon Personalize algorithm that's preconfigured to predict the items that a user interacts with (for USER_PERSONALIZATION recipes), or calculate items that are similar to specific items that a user has shown interest in (for RELATED_ITEMS recipes), or rank a collection of items that you provide based on the predicted interest for a specific user (for PERSONALIZED_RANKING recipes). See Also USER_PERSONALIZATION recipes, RELATED_ITEMS recipes, PERSONALIZED_RANKING recipes.
recommendations	Amazon Personalize (p. 1053): A list of items that Amazon Personalize predicts that a user interacts with. Depending on the Amazon Personalize recipe used, recommendations can be either a list of items (with USER_PERSONALIZATION recipes and RELATED_ITEMS recipes), or a ranking of a collection of items you provided (with PERSONALIZED_RANKING recipes). See Also recipe, campaign, solution version, USER_PERSONALIZATION recipes, RELATED_ITEMS recipes, PERSONALIZED_RANKING recipes.
receipt handle	Amazon SQS (p. 1055): An identifier that you get when you receive a message from the queue. This identifier is required to delete a message from the queue or when changing a message's visibility timeout.
receiver	The entity that consists of the network systems, software, and policies that manage email delivery for a recipient (p. 1092).
recipient	Amazon Simple Email Service (Amazon SES) (p. 1054): The person or entity receiving an email message. For example, a person named in the "To" field of a message.
Redis	A fast, open-source, in-memory key-value data structure store. Redis comes with a set of versatile in-memory data structures with which you can easily create a variety of custom applications.

reference	A means of inserting a property from one AWS resource (p. 1094) into another. For example, you could insert an Amazon EC2 (p. 1050) security group (p. 1096) property into an Amazon RDS (p. 1054) resource.
Region	A named set of AWS resources (p. 1094) that's in the same geographical area. A Region comprises at least two Availability Zones (p. 1057).
regression model	Amazon Machine Learning: Preformatted instructions for common data transformations that fine-tune machine learning model performance.
regression model	A type of machine learning model that predicts a numeric value, such as the exact purchase price of a house.
regularization	A machine learning (ML) parameter that you can tune to obtain higher-quality ML models. Regularization helps prevent ML models from memorizing training data examples instead of learning how to generalize the patterns it sees (called overfitting). When training data is overfitted, the ML model performs well on the training data, but doesn't perform well on the evaluation data or on new data.
RELATED_ITEMS recipes	Amazon Personalize (p. 1053)Recipes that recommend items that are similar to a specified item, such as the item-to-item (SIMS) recipe. See Also recipe, item-to-item similarities (SIMS) recipe.
replacement environment	The instances in a deployment group after the CodeDeploy blue/green deployment.
replica shard	See shard.
reply path	The email address that an email reply is sent to. This is different from the return path (p. 1094).
representational state transfer	See REST.
reputation	1. An Amazon SES (p. 1054) metric, based on factors that might include bounces (p. 1065), complaints (p. 1067), and other metrics, regarding whether a customer is sending high-quality email. 2. A measure of confidence, as judged by an internet service provider (ISP) (p. 1080) or other entity that an IP address that they are receiving email from isn't the source of spam (p. 1099).
requester	The person (or application) that sends a request to AWS to perform a specific action. When AWS receives a request, it first evaluates the requester's permissions to determine whether the requester is allowed to perform the request action (if applicable, for the requested resource (p. 1094)).
Requester Pays	An Amazon S3 (p. 1055) feature that allows a bucket owner (p. 1065) to specify that anyone who requests access to objects in a particular bucket (p. 1065) must pay the data transfer and request costs.
reservation	A collection of EC2 instances (p. 1073) started as part of the same launch request. This is not to be confused with a Reserved Instance (p. 1093).
Reserved Instance	A pricing option for EC2 instances (p. 1073) that discounts the on-demand (p. 1087) usage charge for instances that meet the specified parameters. Customers pay for the entire term of the instance, regardless of how they use it.
Reserved Instance Marketplace	An online exchange that matches sellers who have reserved capacity that they no longer need with buyers who are looking to purchase additional capacity.

	reserved instances (p. 1093) that you purchase from third-party sellers have less than a full standard term remaining and can be sold at different upfront prices. The usage or reoccurring fees remain the same as the fees set when the Reserved Instances were originally purchased. Full standard terms for Reserved Instances available from AWS run for one year or three years.
resource	An entity that users can work with in AWS, such as an EC2 instance (p. 1073), an Amazon DynamoDB (p. 1050) table, an Amazon S3 (p. 1055) bucket (p. 1065), an IAM (p. 1060) user, or an AWS OpsWorks (p. 1062) stack (p. 1099).
resource property	A value required when including an AWS resource (p. 1094) in an AWS CloudFormation (p. 1058) stack (p. 1099). Each resource can have one or more properties associated with it. For example, an `AWS::EC2::Instance` resource might have a `UserData` property. In an AWS CloudFormation template, resources must declare a properties section, even if the resource has no properties.
resource record	Also called *resource record set*. The fundamental information elements in the Domain Name System (DNS). See Also Domain Name System on Wikipedia.
REST	Representational state transfer. A simple stateless architecture that generally runs over HTTPS/TLS. REST emphasizes that resources have unique and hierarchical identifiers (URIs), are represented by common media types (such as HTML, XML, or JSON (p. 1081)), and that operations on the resources are either predefined or discoverable within the media type. In practice, this generally results in a limited number of operations. See Also Query, WSDL, SOAP.
RESTful web service	Also known as RESTful API. A web service that follows REST (p. 1094) architectural constraints. The API operations must use HTTP methods explicitly, expose hierarchical URIs, and transfer either XML, JSON (p. 1081), or both.
return enabled	Amazon CloudSearch (p. 1049): An index field option that enables the field's values to be returned in the search results.
return path	The email address that bounced email is returned to. The return path is specified in the header of the original email. This is different from the reply path (p. 1093).
revision	AWS CodePipeline (p. 1058): A change that's made to a source that's configured in a source action, such as a pushed commit to a GitHub (p. 1077) repository or an update to a file in a versioned Amazon S3 (p. 1055) bucket (p. 1065).
role	A tool for giving temporary access to AWS resources (p. 1094) in your AWS account (p. 1048).
rollback	A return to a previous state that follows the failure to create an object, such as AWS CloudFormation (p. 1058) stack (p. 1099). All resources (p. 1094) that are associated with the failure are deleted during the rollback. For AWS CloudFormation, you can override this behavior using the `--disable-rollback` option on the command line.
root	AWS Organizations (p. 1062): A parent container for the accounts in your organization. If you apply a service control policy (p. 1097) to the root, it applies to every organizational unit (p. 1087) and account in the organization.
root credentials	Authentication information associated with the AWS account (p. 1048) owner.
root device volume	A volume (p. 1105) that contains the image used to boot the instance (p. 1080) (also known as a *root device*). If you launched the instance from an AMI (p. 1053)

	backed by instance store (p. 1080), this is an instance store volume (p. 1105) created from a template stored in Amazon S3 (p. 1055). If you launched the instance from an AMI backed by Amazon EBS (p. 1051), this is an Amazon EBS volume created from an Amazon EBS snapshot.
route table	A set of routing rules that controls the traffic leaving any subnet (p. 1100) that's associated with the route table. You can associate multiple subnets with a single route table, but a subnet can be associated with only one route table at a time.
row identifier	Amazon Machine Learning: An attribute in the input data that you can include in the evaluation or prediction output to make it easier to associate a prediction with an observation.
rule	AWS WAF (p. 1064): A set of conditions that AWS WAF searches for in web requests to AWS resources (p. 1094) such as Amazon CloudFront (p. 1049) distributions. You add rules to a web ACL (p. 1105), and then specify whether you want to allow or block web requests based on each rule.

S

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S3	See Amazon Simple Storage Service (Amazon S3).
sampling period	A defined duration of time, such as one minute, which Amazon CloudWatch (p. 1049) computes a statistic (p. 1099) over.
sandbox	A testing location where you can test the functionality of your application without affecting production, incurring charges, or purchasing products. Amazon SES (p. 1054): An environment that developers can use to test and evaluate the service. In the sandbox, you have full access to the Amazon SES API, but you can only send messages to verified email addresses and the mailbox simulator. To get out of the sandbox, you must apply for production access. Accounts in the sandbox also have lower sending limits (p. 1097) than production accounts.
scale in	To remove EC2 instances from an Auto Scaling group (p. 1057).
scale out	To add EC2 instances to an Auto Scaling group (p. 1057).
scaling policy	A description of how Auto Scaling automatically scales an Auto Scaling group (p. 1057) in response to changing demand. See Also scale in, scale out.
scaling activity	A process that changes the size, configuration, or makeup of an Auto Scaling group (p. 1057) by launching or terminating instances.
scheduler	The method used for placing tasks (p. 1101) on container instances (p. 1068).
schema	Amazon Machine Learning: The information that's needed to interpret the input data for a machine learning model, including attribute names and their assigned data types, and the names of special attributes.
score cut-off value	Amazon Machine Learning: A binary classification model outputs a score that ranges from 0 to 1. To decide whether an observation is classified as 1 or 0, you

	pick a classification threshold, or cut-off, and Amazon ML compares the score against it. Observations with scores higher than the cut-off are predicted as target equals 1, and scores lower than the cut-off are predicted as target equals 0.
SCP	See service control policy.
search API	Amazon CloudSearch (p. 1049): The API that you use to submit search requests to a search domain (p. 1096).
search domain	Amazon CloudSearch (p. 1049): Encapsulates your searchable data and the search instances that handle your search requests. You typically set up a separate Amazon CloudSearch domain for each different collection of data that you want to search.
search domain configuration	Amazon CloudSearch (p. 1049): A domain's indexing options, analysis schemes (p. 1056), expressions (p. 1076), suggesters (p. 1100), access policies, and scaling and availability options.
search enabled	Amazon CloudSearch (p. 1049): An index field option that enables the field data to be searched.
search endpoint	Amazon CloudSearch (p. 1049): The URL that you connect to when sending search requests to a search domain. Each Amazon CloudSearch domain has a unique search endpoint that remains the same for the life of the domain.
search index	Amazon CloudSearch (p. 1049): A representation of your searchable data that facilitates fast and accurate data retrieval.
search instance	Amazon CloudSearch (p. 1049): A compute resource (p. 1094) that indexes your data and processes search requests. An Amazon CloudSearch domain has one or more search instances, each with a finite amount of RAM and CPU resources. As your data volume grows, more search instances or larger search instances are deployed to contain your indexed data. When necessary, your index is automatically partitioned across multiple search instances. As your request volume or complexity increases, each search partition is automatically replicated to provide additional processing capacity.
search request	Amazon CloudSearch (p. 1049): A request that's sent to an Amazon CloudSearch domain's search endpoint to retrieve documents from the index that match particular search criteria.
search result	Amazon CloudSearch (p. 1049): A document that matches a search request. Also referred to as a *search hit*.
secret access key	A key that's used with the access key ID (p. 1047) to cryptographically sign programmatic AWS requests. Signing a request identifies the sender and prevents the request from being altered. You can generate secret access keys for your AWS account (p. 1048), individual IAM users (p. 1103)and temporary sessions.
security group	A named set of allowed inbound network connections for an instance. (Security groups in Amazon VPC (p. 1055) also include support for outbound connections.) Each security group consists of a list of protocols, ports, and IP address ranges. A security group can apply to multiple instances, and multiple groups can regulate a single instance.
sender	The person or entity sending an email message.
Sender ID	A Microsoft controlled version of SPF (p. 1099). An email authentication and anti-spoofing system. For more information about Sender ID, see Sender ID in Wikipedia.

sending limits	The sending quota (p. 1097) and maximum send rate (p. 1084) that are associated with every Amazon SES (p. 1054) account.
sending quota	The maximum number of email messages that you can send using Amazon SES (p. 1054) in a 24-hour period.
server-side encryption (SSE)	The encrypting (p. 1074) of data at the server level. Amazon S3 (p. 1055) supports three modes of server-side encryption: SSE-S3, where Amazon S3 manages the keys; SSE-C, where the customer manages the keys; and SSE-KMS, where AWS Key Management Service (AWS KMS) (p. 1061) manages keys.
service control policy	AWS Organizations (p. 1062): A policy-based control that specifies the services and actions that users and roles can use in the accounts that the service control policy (SCP) affects.
service endpoint	See endpoint.
service health dashboard	A webpage showing up-to-the-minute information about AWS service availability. The dashboard is located at http://status.aws.amazon.com/.
Service Quotas	A service for viewing and managing your quotas easily and at scale as your AWS workloads grow. Quotas, also referred to as limits, are the maximum number of resources that you can create in an AWS account.
service role	An IAM (p. 1060) role (p. 1094) that grants permissions to an AWS service so it can access AWS resources (p. 1094). The policies that you attach to the service role determine which AWS resources the service can access and what it can do with those resources.
SES	See Amazon Simple Email Service (Amazon SES).
session	The period when the temporary security credentials that are provided by AWS Security Token Service (AWS STS) (p. 1063) allow access to your AWS account.
SHA	Secure Hash Algorithm. SHA1 is an earlier version of the algorithm, which AWS has replaced with SHA256.
shard	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): A partition of data in an index. You can split an index into multiple shards, which can include primary shards (original shards) and replica shards (copies of the primary shards). Replica shards provide failover. This means that, if a cluster node that contains a primary shard fails, a replica shard is promoted to a primary shard. Replica shards also can handle requests.
shared AMI	An Amazon Machine Image (AMI) (p. 1053) that a developer builds and makes available for others to use.
shutdown action	Amazon EMR (p. 1051): A predefined bootstrap action that launches a script that runs a series of commands in parallel before terminating the job flow.
signature	Refers to a *digital signature*, which is a mathematical way to confirm the authenticity of a digital message. AWS uses signatures to authenticate the requests you send to our web services. For more information, to https://aws.amazon.com/security.
SIGNATURE file	AWS Import/Export (p. 1060): A file that you copy to the root directory of your storage device. The file contains a job ID, manifest file, and a signature.
Signature Version 4	Protocol for authenticating inbound API requests to AWS services in all AWS Regions.

Simple Mail Transfer Protocol	See SMTP.
Simple Object Access Protocol	See SOAP.
Simple Storage Service	See Amazon Simple Storage Service (Amazon S3).
SIMS recipe	See item-to-item similarities (SIMS) recipe.
single sign-on	An authentication scheme that allows users to sign in one time to access multiple applications and websites. The service name AWS Single Sign-On is now AWS IAM Identity Center (successor to AWS Single Sign-On). See Also AWS IAM Identity Center (successor to AWS Single Sign-On).
Single-AZ DB instance	A standard (non-Multi-AZ) DB instance (p. 1071) that's deployed in one Availability Zone (p. 1057), without a standby replica in another Availability Zone. See Also Multi-AZ deployment.
sloppy phrase search	A search for a phrase that specifies how close the terms must be to one another to be considered a match.
SMTP	Simple Mail Transfer Protocol. The standard that's used to exchange email messages between internet hosts for the purpose of routing and delivery.
snapshot	Amazon Elastic Block Store (Amazon EBS) (p. 1051): A backup of your volumes (p. 1105) that's stored in Amazon S3 (p. 1055). You can use these snapshots as the starting point for new Amazon EBS volumes or to protect your data for long-term durability. See Also DB snapshot.
SNS	See Amazon Simple Notification Service (Amazon SNS).
SOAP	Simple Object Access Protocol. An XML-based protocol that you can use to exchange information over a particular protocol (for example, HTTP or SMTP) between applications. See Also REST, WSDL.
soft bounce	A temporary email delivery failure such as one resulting from a full mailbox.
software VPN	A software appliance-based VPN connection over the internet.
solution	Amazon Personalize (p. 1053): The recipe, customized parameters, and trained models (solution versions) that can be used to generate recommendations. See Also recipe, solution version, recommendations.
solution version	Amazon Personalize (p. 1053): A trained model that you create as part of a solution in Amazon Personalize. You deploy a solution version in a campaign to generate recommendations. See Also solution, campaign, recommendations.
sort enabled	Amazon CloudSearch (p. 1049): An index field option that enables a field to be used to sort the search results.
sort key	An attribute used to sort the order of partition keys in a composite primary key (also known as a *range attribute*). See Also partition key, primary key.
source/destination checking	A security measure to verify that an EC2 instance (p. 1073) is the origin of all traffic that it sends and the ultimate destination of all traffic that it receives. In other words, this measure verifies that the instance isn't relaying traffic. By

	default, source/destination checking is turned on. For instances that function as gateways, such as VPC (p. 1105) NAT (p. 1086) instances, source/destination checking must be disabled.
spam	Unsolicited bulk emails.
spamtrap	An email address that's set up by an anti-spam (p. 1099) entity. This email address isn't for correspondence but rather for monitoring unsolicited emails. This is also called a *honeypot*.
SPF	Sender Policy Framework. A standard for authenticating email.
Spot Instance	A type of EC2 instance (p. 1073) that you can bid on to use unused Amazon EC2 (p. 1050) capacity.
Spot price	The price for a Spot Instance (p. 1099) at any given time. If your maximum price exceeds the current price and your restrictions are met, Amazon EC2 (p. 1050) launches instances on your behalf.
SQL injection match condition	AWS WAF (p. 1064): An attribute that specifies the part of web requests (such as a header or a query string) that AWS WAF inspects for malicious SQL code. Based on the specified conditions, you can configure AWS WAF to allow or block web requests to an AWS resource (p. 1094), such as an Amazon CloudFront (p. 1049) distribution.
SQS	See Amazon Simple Queue Service (Amazon SQS).
SSE	See server-side encryption (SSE).
SSL	Secure Sockets Layer See Also Transport Layer Security (TLS).
stack	AWS CloudFormation (p. 1058): A collection of AWS resources that you create and delete as a single unit. AWS OpsWorks (p. 1062): A set of instances that you manage collectively, typically because they have a common purpose such as serving PHP applications. A stack serves as a container and handles tasks that apply to the group of instances as a whole, such as managing applications and cookbooks.
station	AWS CodePipeline (p. 1058): A portion of a pipeline workflow where one or more actions are performed.
station	A place at an AWS facility where your AWS Import/Export data is transferred on to, or off of, your storage device.
statistic	One of five functions of the values submitted for a given sampling period (p. 1095). These functions are `Maximum`, `Minimum`, `Sum`, `Average`, and `SampleCount`.
stem	The common root or substring shared by a set of related words.
stemming	The process of mapping related words to a common stem. This enables matching on variants of a word. For example, a search for "horse" could return matches for horses, horseback, and horsing, as well as horse. Amazon CloudSearch (p. 1049) supports both dictionary based and algorithmic stemming.
step	Amazon EMR (p. 1051): A single function applied to the data in a job flow (p. 1081). The sum of all steps comprises a job flow.

step type	Amazon EMR (p. 1051): The type of work done in a step. There are a limited number of step types, such as moving data from Amazon S3 (p. 1055) to Amazon EC2 (p. 1050) or from Amazon EC2 to Amazon S3.
sticky session	A feature of the Elastic Load Balancing (p. 1074) load balancer that binds a user's session to a specific application instance. This is so that all requests that are coming from the user during the session are sent to the same application instance. By contrast, a load balancer defaults to route each request independently to the application instance with the smallest load.
stopping	The process of filtering stop words from an index or search request.
stopword	A word that isn't indexed and is automatically filtered out of search requests because it's either insignificant or so common that including it results in too many matches to be useful. Stopwords are language specific.
streaming	Amazon EMR (p. 1051): A utility that comes with Hadoop (p. 1078) that you can use to develop MapReduce executables in languages other than Java. Amazon CloudFront (p. 1049): The ability to use a media file in real time—as it's transmitted in a steady stream from a server.
streaming distribution	A special kind of distribution (p. 1072) that serves streamed media files using a Real Time Messaging Protocol (RTMP) connection.
Streams	See Amazon Kinesis Data Streams.
string-to-sign	Before you calculate an HMAC (p. 1078) signature, you first assemble the required components in a canonical order. The preencrypted string is the string-to-sign.
string match condition	AWS WAF (p. 1064): An attribute that specifies the strings that AWS WAF searches for in a web request, such as a value in a header or a query string. Based on the specified strings, you can configure AWS WAF to allow or block web requests to an AWS resource (p. 1094), such as a CloudFront (p. 1049) distribution.
strongly consistent read	A read process that returns a response with the most up-to-date data. This data reflects the updates from all previous write operations that were successful—regardless of the Region. See Also data consistency, eventual consistency, eventually consistent read.
structured query	Search criteria that are specified using the Amazon CloudSearch (p. 1049) structured query language. You use the structured query language to construct compound queries that use advanced search options and combine multiple search criteria using Boolean operators.
STS	See AWS Security Token Service (AWS STS).
subnet	A segment of the IP address range of a VPC (p. 1105) that an EC2 instance (p. 1073) can be attached to. You can create subnets to group instances according to security and operational needs.
Subscription button	An HTML-coded button that provides a simple way to charge customers a recurring fee.
suggester	Amazon CloudSearch (p. 1049): Specifies an index field for getting autocomplete suggestions and options that can enable fuzzy matches and control how suggestions are sorted.
suggestions	Documents that contain a match for the partial search string in the field that's designated by the suggester (p. 1100). Amazon CloudSearch (p. 1049)

	suggestions include the document IDs and field values for each matching document. To be a match, the string must match the contents of the field starting from the beginning of the field.
supported AMI	An Amazon Machine Image (AMI) (p. 1053) similar to a paid AMI (p. 1088), except that the owner charges for additional software or a service that customers use with their own AMIs.
SWF	See Amazon Simple Workflow Service (Amazon SWF).
symmetric encryption	Encryption (p. 1074) that uses a private key only. See Also asymmetric encryption.
synchronous bounce	A type of bounce (p. 1065) that occurs while the email servers of the sender (p. 1096) and receiver (p. 1092) are actively communicating.
synonym	A word that's the same or nearly the same as an indexed word and that likely produces the same results when specified in a search request. For example, a search for "Rocky Four" or "Rocky 4" likely returns the fourth *Rocky* movie. You can do this by designating that `four` and `4` are synonyms for `IV`. Synonyms are language specific.

T

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table	A collection of data. Similar to other database systems, DynamoDB stores data in tables.
tag	Metadata that you can define and assign to AWS resources (p. 1094), such as an EC2 instance (p. 1073). Not all AWS resources can be tagged.
tagging	Tagging resources: Applying a tag (p. 1101) to an AWS resource (p. 1094). Amazon SES (p. 1054): Also called *labeling*. A way to format return path (p. 1094) email addresses so that you can specify a different return path for each recipient of a message. You can use tagging to support VERP (p. 1104). For example, if Andrew manages a mailing list, he can use the return paths `andrew+recipient1@example.net` and `andrew+recipient2@example.net` so that he can determine which email bounced.
target attribute	Amazon Machine Learning (Amazon ML): The attribute in the input data that contains the “correct” answers. Amazon ML uses the target attribute to learn how to make predictions on new data. For example, if you were building a model for predicting the sale price of a house, the target attribute would be “target sale price in USD.”
target revision	AWS CodeDeploy (p. 1058): The most recent version of the application revision that has been uploaded to the repository and will be deployed to the instances in a deployment group. In other words, the application revision currently targeted for deployment. This is also the revision that will be pulled for automatic deployments.
task	An instantiation of a task definition (p. 1102) that's running on a container instance (p. 1068).

task definition	The blueprint for your task. Specifies the name of the task (p. 1101), revisions, container definitions (p. 1068), and volume (p. 1105) information.
task node	An EC2 instance (p. 1073) that runs Hadoop (p. 1078) map and reduce tasks, but doesn't store data. Task nodes are managed by the master node (p. 1084), which assigns Hadoop tasks to nodes and monitors their status. While a job flow is running, you can increase and decrease the number of task nodes. Because they don't store data and can be added and removed from a job flow, you can use task nodes to manage the EC2 instance capacity your job flow uses, increasing capacity to handle peak loads and decreasing it later. Task nodes only run a TaskTracker Hadoop daemon.
tebibyte (TiB)	A contraction of tera binary byte. A tebibyte (TiB) is 2^40 or 1,099,511,627,776 bytes. A terabyte (TB) is 10^12 or 1,000,000,000,000 bytes. 1,024 TiB is a pebibyte (PiB) (p. 1089).
template format version	The version of an AWS CloudFormation (p. 1058) template design that determines the available features. If you omit the `AWSTemplateFormatVersion` section from your template, AWS CloudFormation assumes the most recent format version.
template validation	The process of confirming the use of JSON (p. 1081) code in an AWS CloudFormation (p. 1058) template. You can validate any AWS CloudFormation template using the `cfn-validate-template` command.
temporary security credentials	Authentication information that's provided by AWS STS (p. 1063) when you call an STS API action. Includes an access key ID (p. 1047), a secret access key (p. 1096), a session (p. 1097) token, and an expiration time.
throttling	The automatic restricting or slowing down of a process based on one or more limits. For example, Amazon Kinesis Data Streams (p. 1052) throttles operations if an application (or group of applications operating on the same stream) attempts to get data from a shard at a rate faster than the shard limit. Amazon API Gateway (p. 1049) uses throttling to limit the steady-state request rates for a single account. Amazon SES (p. 1054) uses throttling to reject attempts to send email that exceeds the sending limits (p. 1097).
time-series data	Data that's provided as part of a metric. The time value is assumed to be when the value occurred. A metric is the fundamental concept for Amazon CloudWatch (p. 1049) and represents a time-ordered set of data points. You publish metric data points into CloudWatch and later retrieve statistics about those data points as a time-series ordered dataset.
timestamp	A date/time string in the ISO 8601 format (more specifically, in the `YYYY-MM-DD` format).
TLS	See Transport Layer Security (TLS).
tokenization	The process of splitting a stream of text into separate tokens on detectable boundaries such as white space and hyphens.
topic	A communication channel to send messages and subscribe to notifications. It provides an access point for publishers and subscribers to communicate with each other.
Traffic Mirroring	An Amazon VPC feature that you can use to copy network traffic from an elastic network interface of Amazon EC2 instances. You can then send this network traffic to out-of-band security and monitoring appliances for content inspection, threat monitoring, and troubleshooting.

	See Also https://aws.amazon.com/vpc/.
training datasource	A datasource that contains the data that Amazon Machine Learning uses to train the machine learning model to make predictions.
transition	AWS CodePipeline (p. 1058): The act of a revision in a pipeline continuing from one stage to the next in a workflow.
Transport Layer Security (TLS)	A cryptographic protocol that provides security for communication over the internet. Its predecessor is Secure Sockets Layer (SSL).
trust policy	An IAM (p. 1060) policy (p. 1089) that's an inherent part of an IAM role (p. 1094). The trust policy specifies which principals are allowed to use the role.
trusted key groups	Amazon CloudFront key groups whose public keys CloudFront can use to verify the signatures of CloudFront signed URLs and signed cookies.
trusted signers	See trusted key groups (p. 1103).
tuning	Selecting the number and type of AMIs (p. 1053) to run a Hadoop (p. 1078) job flow most efficiently.
tunnel	A route for transmission of private network traffic that uses the internet to connect nodes in the private network. The tunnel uses encryption and secure protocols such as PPTP to prevent the traffic from being intercepted as it passes through public routing nodes.

U

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unbounded	The number of potential occurrences isn't limited by a set number. This value is often used when defining a data type that's a list (for example, `maxOccurs="unbounded"`), in WSDL (p. 1105).
unit	Standard measurement for the values submitted to Amazon CloudWatch (p. 1049) as metric data. Units include seconds, percent, bytes, bits, count, bytes/second, bits/second, count/second, and none.
usage report	An AWS record that details your usage of a particular AWS service. You can generate and download usage reports from https://aws.amazon.com/usage-reports/.
user	A person or application under an account (p. 1048) that makes API calls to AWS products. Each user has a unique name within the AWS account, and a set of security credentials that aren't shared with other users. These credentials are separate from the security credentials for the AWS account. Each user is associated with one and only one AWS account.
Users dataset	Amazon Personalize (p. 1053): A container for metadata about your users, such as age, gender, or loyalty membership. See Also dataset.
user-personalization recipe	Amazon Personalize (p. 1053): An HRNN-based USER_PERSONALIZATION recipe that predicts the items that a user interacts with. The user-personalization recipe

	can use item exploration and impressions data to generate recommendations for new items. See Also HRNN, recipe, USER_PERSONALIZATION recipes, item exploration, impressions data, recommendations.
USER_PERSONALIZATION recipes	Amazon Personalize (p. 1053): Recipes that are used to build a recommendation system that predicts the items that a user interacts with based on data provided in Interactions, Items, and Users datasets. See Also recipe, user-personalization recipe, popularity-count recipe, HRNN.

V

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validation	See template validation.
value	Instances of attributes (p. 1057) for an item, such as cells in a spreadsheet. An attribute might have multiple values. Tagging resources: A specific tag (p. 1101) label that acts as a descriptor within a tag category (key). For example, you might have EC2 instance (p. 1073) with the tag key of *Owner* and the tag value of *Jan*. You can tag an AWS resource (p. 1094) with up to 10 key–value pairs. Not all AWS resources can be tagged.
Variable Envelope Return Path	See VERP.
verification	The process of confirming that you own an email address or a domain so that you can send email from or to it.
VERP	Variable Envelope Return Path. A way that email-sending applications can match bounced (p. 1065) email with the undeliverable address that caused the bounce by using a different return path (p. 1094) for each recipient. VERP is typically used for mailing lists. With VERP, the recipient's email address is embedded in the address of the return path, which is where bounced email is returned. This makes it possible to automate the processing of bounced email without having to open the bounce messages, which might vary in content.
versioning	Every object in Amazon S3 (p. 1055) has a key and a version ID. Objects with the same key, but different version IDs can be stored in the same bucket (p. 1065). Versioning is enabled at the bucket layer using PUT Bucket versioning.
VGW	See virtual private gateway (VGW).
virtualization	Allows multiple guest virtual machines (VM) to run on a host operating system. Guest VMs can run on one or more levels above the host hardware, depending on the type of virtualization. See Also PV virtualization, HVM virtualization.
virtual private cloud	See VPC.
virtual private gateway (VGW)	The Amazon side of a VPN connection (p. 1105) that maintains connectivity. The internal interfaces of the virtual private gateway connect to your VPC (p. 1105) through the VPN attachment. The external interfaces connect to the VPN connection, which leads to the customer gateway (p. 1070).

visibility timeout	The period of time that a message is invisible to the rest of your application after an application component gets it from the queue. During the visibility timeout, the component that received the message usually processes it, and then deletes it from the queue. This prevents multiple components from processing the same message.
VM Import/Export	A service for importing virtual machine (VM) images from your existing virtualization environment to Amazon EC2 and then exporting them back. See Also https://aws.amazon.com/ec2/vm-import.
volume	A fixed amount of storage on an instance (p. 1080). You can share volume data between more than one container (p. 1068) and persist the data on the container instance (p. 1068) when the containers are no longer running.
VPC	Virtual private cloud. An elastic network that's populated by infrastructure, platform, and application services that share common security and interconnection.
VPC endpoint	A feature that you can use to create a private connection between your VPC (p. 1105) and another AWS service without requiring access over the internet, through a NAT (p. 1086) instance, a VPN connection (p. 1105), or AWS Direct Connect (p. 1059).
VPG	See virtual private gateway (VGW).
VPN CloudHub	See AWS VPN CloudHub.
VPN connection	Amazon Web Services (AWS) (p. 1055): The IPsec connection that's between a VPC (p. 1105) and some other network, such as a corporate data center, home network, or colocation facility.

W

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WAM	See Amazon WorkSpaces Application Manager (Amazon WAM).
web access control list (web ACL)	AWS WAF (p. 1064): A set of rules that defines the conditions that AWS WAF searches for in web requests to an AWS resource (p. 1094), such as a Amazon CloudFront (p. 1049) distribution. A web access control list (web ACL) specifies if to allow, block, or count the requests.
Web Services Description Language	See WSDL.
WSDL	Web Services Description Language. A language that's used to describe the actions that a web service can perform, along with the syntax of action requests and responses. See Also REST, SOAP.

X, Y, Z

X.509 certificate	A digital document that uses the X.509 public key infrastructure (PKI) standard to verify that a public key belongs to the entity that's described in the certificate (p. 1066).

yobibyte (YiB)	A contraction of yotta binary byte. A yobibyte (YiB) is 2^80 or 1,208,925,819,614,629,174,706,176 bytes. A yottabyte (YB) is 10^24 or 1,000,000,000,000,000,000,000,000 bytes.
zebibyte (ZiB)	A contraction of zetta binary byte. A zebibyte (ZiB) is 2^70 or 1,180,591,620,717,411,303,424 bytes. A zettabyte (ZB) is 10^21 or 1,000,000,000,000,000,000,000 bytes. 1,024 ZiB is a yobibyte (YiB) (p. 1106).
zone awareness	Amazon OpenSearch Service (OpenSearch Service) (p. 1051): A configuration that distributes nodes in a cluster across two Availability Zones (p. 1057) in the same Region. Zone awareness helps to prevent data loss and minimizes downtime if a node and data center fails. If you enable zone awareness, you must have an even number of data instances in the instance count, and you also must use the Amazon OpenSearch Service Configuration API to replicate your data for your OpenSearch cluster.