

User Guide

Amazon Billing



Amazon Billing: User Guide

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What is Amazon Billing and Cost Management?

Welcome to the Amazon Billing User Guide.

Amazon Billing and Cost Management provides a suite of features to help you set up your billing, retrieve and pay invoices, and analyze, organize, plan, and optimize your costs.

To get started, set up your billing to match your requirements. For individuals or small organizations, Amazon will automatically charge the credit card provided.

For larger organizations, you can use Amazon Organizations to consolidate your charges across multiple Amazon Web Services accounts. You can then configure invoicing, tax, purchase order, and payment methods to match your organization's procurement processes.

You can allocate your costs to teams, applications, or environments by using cost categories or cost allocation tags, or using Amazon Cost Explorer. You can also export data to your preferred data warehouse or business intelligence tool.

See the following overview of features to help you manage your cloud finances.

Features of Amazon Billing and Cost Management

Topics

- Billing and payments
- Cost analysis
- <u>Cost organization</u>
- Budgeting and planning
- Savings and commitments

Billing and payments

Understand your monthly charges, view and pay invoices, and manage preferences for billing, invoices, tax, and payments.

• **Bills page** – Download invoices and view detailed monthly billing data to understand how your charges were calculated.

- Purchase orders Create and manage your purchase orders to comply with your organization's unique procurement processes.
- Payments Understand your outstanding or past-due payment balance and payment history.
- **Payment profiles** Set up multiple payment methods for different Amazon Web Services service providers or parts of your organization.
- **Credits** Review credit balances and choose where credits should be applied.
- **Billing preferences** Enable invoice delivery by email and your preferences for credit sharing, alerts, and discount sharing.

Cost analysis

Analyze your costs, export detailed cost and usage data, and forecast your spending.

- Amazon Cost Explorer Analyze your cost and usage data with visuals, filtering, and grouping.
 You can forecast your costs and create custom reports.
- Data exports Create custom data exports from Billing and Cost Management datasets.
- **Cost Anomaly Detection** Set up automated alerts when Amazon detects a cost anomaly to reduce unexpected costs.
- Amazon Web Services China Region Free Tier Monitor current and forecasted usage of free tier services to avoid unexpected costs.
- **Split cost allocation data** Enable detailed cost and usage data for shared Amazon Elastic Container Service (Amazon ECS) resources.
- **Cost Management preferences** Manage what data that member accounts can view, change account data granularity, and configure cost optimization preferences.

Cost organization

Organize your costs across teams, applications, or end customers.

- Cost categories Map costs to teams, applications, or environments, and then view costs along these dimensions in Cost Explorer and data exports. Define split charge rules to allocate shared costs.
- **Cost allocation tags** Use resource tags to organize, and then view costs by cost allocation tag in Cost Explorer and data exports.

Budgeting and planning

Estimate the cost of a planned workload, and create budgets to track and control costs.

- **Budgets** Set custom budgets for cost and usage to govern costs across your organization and receive alerts when costs exceed your defined thresholds.
- In-console Pricing calculator (Preview) Use this feature to estimate your planned cloud costs using your discount and purchase commitments.
- Public Pricing calculator website Create cost estimates for using Amazon services with On-Demand rates.

Savings and commitments

Optimize resource usage and use flexible pricing models to lower your bill.

- Amazon Cost Optimization Hub Identify savings opportunities with tailored recommendations including deleting unused resources, rightsizing, Savings Plans, and reservations.
- Savings Plans Reduce your bill compared to On-Demand prices with flexible pricing models. Manage your Savings Plans inventory, review purchase recommendations, run purchase analyses, and analyze Savings Plans utilization and coverage.
- Reservations Reserve capacity at discounted rates for Amazon Elastic Compute Cloud (Amazon EC2), Amazon Relational Database Service (Amazon RDS), Amazon Redshift, Amazon DynamoDB, and more.

Related services

Amazon Billing Conductor

Billing Conductor is a custom billing service that supports the showback and chargeback workflows of Amazon Solution Providers and Amazon Enterprise customers. You can customize a second, alternative version of your monthly billing data. The service models the billing relationship between you and your customers or business units.

Billing Conductor doesn't change the way that you're billed by Amazon each month. Instead, you can use the service to configure, generate, and display rates to specific customers over a given billing period. You can also use it to analyze the difference between the rates that you apply to your groupings relative to the actual rates for those same accounts from Amazon.

As a result of your Billing Conductor configuration, the payer account (management account) can also see the custom rate that's applied on the billing details page of the <u>Amazon Billing and Cost</u> <u>Management console</u>. The payer account can also configure Amazon Cost and Usage Reports per billing group.

For more information about Billing Conductor, see the <u>Amazon Billing Conductor User Guide</u>.

IAM

You can use Amazon Identity and Access Management (IAM) to control who in your account or organization has access to specific pages on the Billing and Cost Management console. For example, you can control access to invoices and detailed information about charges and account activity, budgets, payment methods, and credits. IAM is a feature of your Amazon Web Services account. You don't need to do anything else to sign up for IAM and there's no charge to use it.

When you create an account, you begin with one sign-in identity that has complete access to all Amazon Web Services services and resources in the account. This identity is called the Amazon Web Services 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 don't 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 <u>Tasks that require root</u> user credentials in the *IAM User Guide*.

By default, IAM users and roles in your account can't access the Billing and Cost Management console. To grant access, enable the **Activate IAM Access** setting. For more information, see <u>About IAM Access</u>.

If you have multiple Amazon Web Services accounts in your organization, you can manage linked account access to Cost Explorer data by using the **Cost Management preferences** page. For more information, see Controlling access to Cost Explorer.

For more information about IAM, see the <u>IAM User Guide</u>.

Amazon Organizations

You can use the consolidated billing feature in Organizations to consolidate billing and payment for multiple Amazon Web Services accounts. Every organization has a *management account* that pays the charges of all the *member accounts*.

Consolidated billing has the following benefits:

- **One bill** Get one bill for multiple accounts.
- **Easy tracking** Track charges across multiple accounts and download the combined cost and usage data.
- Combined usage Combine the usage across all accounts in the organization to share the volume pricing discounts, Reserved Instances discounts, and Savings Plans. This can result in a lower charge for your project, department, or company than with individual standalone accounts. For more information, see <u>Volume discounts</u>.
- No extra fee Consolidated billing is offered at no additional cost.

For more information about Organizations, see the <u>Amazon Organizations User Guide</u>.

Amazon Price List API

Amazon Price List API is a centralized catalog that you can programmatically query Amazon for services, products, and pricing information. You can use the bulk API to retrieve up-to-date Amazon service information in bulk, available in both JSON and CSV formats.

For more information, see <u>What is Amazon Price List API?</u>.

Getting set up with Billing

This section provides information that you need to get started with using the Amazon Billing and Cost Management console. Prerequisites include signing up for Amazon and setting up IAM users, reviewing your Amazon bills, and other pages in the console you can use to customize your Billing and Cost Management preferences.

Topics

- Learn more about Billing features
- What do I do next?
- Setting up your tax information
- Customizing your Billing preferences
- <u>Customizing your Amazon payment preferences</u>
- Setting up your India billing
- Finding the seller of record
- <u>Reviewing your monthly billing best practices</u>

Step 1: (Prerequisite) Sign up for Amazon and create an IAM user

If you're new to Amazon, create an Amazon account. For more information, see <u>Getting Started</u> with Amazon.

Sign up for an Amazon Web Services account

If you do not have an Amazon Web Services account, use the following procedure to create one.

To sign up for Amazon Web Services

- 1. Open <u>http://www.amazonaws.cn/</u> and choose **Sign Up**.
- 2. Follow the on-screen instructions.

Amazon sends you a confirmation email after the sign-up process is complete. At any time, you can view your current account activity and manage your account by going to <u>http://</u><u>www.amazonaws.cn/</u> and choosing **My Account**.

Secure IAM users

After you sign up for an Amazon Web Services account, safeguard your administrative user by turning on multi-factor authentication (MFA). For instructions, see <u>Enable a virtual MFA device for</u> an IAM user (console) in the *IAM User Guide*.

To give other users access to your Amazon Web Services account resources, create IAM users. To secure your IAM users, turn on MFA and only give the IAM users the permissions needed to perform their tasks.

For more information about creating and securing IAM users, see the following topics in the *IAM User Guide*:

- Creating an IAM user in your Amazon Web Services account
- Access management for Amazon resources
- Example IAM identity-based policies

Activating IAM access to the Amazon Billing and Cost Management console

By default, IAM roles within an Amazon Web Services account can't access the Billing and Cost Management console. This is true even if the IAM user or role has IAM policies that grant access to specific Billing features. The root user can allow IAM users and roles access to Billing and Cost Management console by using the **Activate IAM access** setting.

To provide access to the Billing and Cost Management console

- 1. Sign in to the **Account** page in the Billing and Cost Management console at <u>https://</u> console.amazonaws.cn/billing/home?#/account.
- 2. Under IAM user and role access to Billing information, choose Edit.
- 3. Select Activate IAM access.
- 4. Choose **Update**.

For more information about this feature, see <u>Activating access to the Billing and Cost Management</u> <u>console</u>.

Step 2: Review your bills and usage

Use features in the Billing and Cost Management console to view your current Amazon charges and Amazon usage.

To open the Billing and Cost Management console and view your usage and charges

- 1. Sign into the Amazon Web Services Management Console and open the Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. Choose **Bills** to see details about your current charges.
- 3. Choose **Payments** to see your historical payment transactions.
- 4. Choose Amazon Cost and Usage Reports to see reports that break down your costs.

For more information about setting up and using Amazon Cost and Usage Reports, see the <u>Amazon</u> Cost and Usage Reports User Guide.

Step 3: Download or print your bill

Amazon Billing closes the billing period at midnight on the last day of each month and calculates your bill. Most bills are ready for you to download by the seventh accounting day of the month.

To download or print your bill

- 1. Sign into the Amazon Web Services Management Console and open the Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. On the navigation pane, choose **Bills**.
- 3. For **Date**, choose the month of the bill you want to work with.
- 4. Choose **Download CSV** to download a comma-separated variable file or choose **Print**.

Adding or updating alternate contacts

Alternate contacts allows Amazon to contact another person about issues with your account, even if you're unavailable. The alternate contact doesn't have to be a specific person. You could instead add an email distribution list if you have a team that manages billing, operations and security related issues.

Examples for alternate contacts

Amazon will reach out to each contact type in the following scenarios:

- Billing When your monthly invoice is available, or your payment method needs to be updated. If you enabled Receive PDF Invoice By Email in your Billing preferences, your alternate billing contact also receives the PDF invoices. Notifications can be from Amazon Web Services service teams.
- Operations When your service is, or will be, temporarily unavailable in one of more Amazon Web Services Regions. Your contacts will also receive any notification related to operations. Notifications can be from Amazon Web Services service teams
- Security When you have notifications from the Amazon Security, Amazon Trust and Safety, or Amazon Web Services service teams. These notifications might include security issues or potential abusive or fraudulent activities on your Amazon Web Services account. Notifications can be from Amazon Web Services service teams concerning security related topics associated with your Amazon Web Services account usage. Don't include sensitive information in the subject line or full name fields since this might be used in email communications to you.

For more information about managing your alternate account contacts, see <u>Alternate account</u> <u>contacts</u> in the *Amazon Account Management* Reference Guide.

Learn more about Billing features

Understand the features available to you in the Billing and Cost Management console.

- Amazon Free Tier: Trying services using Amazon Web Services China Region Free Tier
- Payments: <u>Managing Your Payments</u>
- Viewing your bills: Understanding your bill
- Amazon Cost Categories: Organizing costs using Amazon Cost Categories
- Cost Allocation Tags: Organizing and tracking costs using Amazon cost allocation tags
- Amazon Purchase Orders: Managing your purchase orders
- Amazon Cost and Usage Reports: Using Amazon Cost and Usage Reports
- Using Amazon CloudTrail: Logging Billing and Cost Management API calls with Amazon CloudTrail
- Consolidated billing: Consolidating billing for Amazon Organizations

What do I do next?

Now that you can view and pay your Amazon bill, you're ready to use the features available to you. The rest of this guide helps you navigate your journey using the console.

Optimize your spending using Amazon Cost Management features

Use the Amazon Cost Management features to budget and forecast costs so you can optimize your Amazon spends and reduce your overall Amazon bill. Combine and use the Billing and Cost Management console resources to manage your payments, while using Amazon Cost Management features to optimize your future costs.

For more information about Amazon Cost Management features, see the <u>Amazon Cost</u> <u>Management User Guide</u>.

Using the Billing and Cost Management API

Use the <u>Amazon Billing and Cost Management API Reference</u> to programmatically use some Amazon Cost Management features.

Learn more

You can find more information about Billing features including presentations, virtual workshops, and blog posts on the marketing page <u>Cloud Financial Management with Amazon</u>.

You can find virtual workshops by choosing the **Services** dropdown list and selecting your feature.

Get help

If you have questions about any Billing features, there are many resources available for you. To learn more, see Getting help with your bills and payments.

Setting up your tax information

You can use the **Tax settings** page under **Preferences and Settings** in the left navigation of your Amazon Billing and Cost Management console. Use this page to manage your tax registration numbers, turn on tax setting inheritance so your tax registration information is aligned across your Organizations accounts, and manage your tax exemptions. This page also shows how you can set up your Amazon S3 buckets to use your Tax Settings API.

Updating and deleting tax registration numbers

Use the following steps to update or delete one or more tax registration numbers.

🚺 Note

If a country isn't listed in the **Tax settings** page dropdown, Amazon doesn't collect tax registration for that country at this time.

To update tax registration numbers

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax settings**.
- 3. Under **Tax registrations**, select the numbers to edit.
- 4. For Manage tax registration, choose Edit.
- 5. Enter your updated information and choose **Update**.

You can remove one or more tax registration numbers.

To delete tax registration numbers

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax settings**.
- 3. Under **Tax Registrations**, select the tax registration numbers to delete.
- 4. For Manage tax registration, choose Delete TRN.
- 5. In the **Delete tax registration** dialog box, choose **Delete**.

Turning on tax setting inheritance

You can use your tax registration information with your member accounts by turning on your **Tax settings inheritance**. After you activate it, your tax registration information is added to your other Amazon Organizations accounts, saving you the effort of registering redundant information. Tax

invoices are processed with the consistent tax information, and your usage from member accounts will consolidate to a single tax invoice.

1 Notes

- Tax inheritance settings are only available to accounts after a member account is added.
- If you turn off tax inheritance, the member accounts revert to the account's original TRN setting. If there was no TRN originally set for the account, no TRN will be assigned.

Tax registration information includes:

- Business legal name
- Tax address
- Tax registration number
- Special exemptions

To turn on tax setting inheritance

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax settings**.
- 3. Under Tax registrations, select Enable tax settings inheritance.
- 4. In the dialog box, choose **Enable**.

Managing your US tax exemptions

If your state is eligible, you can manage your US tax exemptions on the **Tax settings** page. The documents you upload for the exemption are reviewed by Amazon Web Services Support within 24 hours.

🚯 Note

You must have IAM permissions to view the **Tax exemptions** tab on the **Tax settings** page in the Billing and Cost Management console.

For an example IAM policy, see <u>Allow IAM users to view US tax exemptions and create</u> Amazon Web Services Support cases.

To upload or add your US tax exemption

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax settings**.
- 3. Choose **Tax exemptions**.
- 4. Choose all of the accounts to add the tax exemption. Choose Manage tax exemption and select Add tax exemption.
 - a. If you're logged in as a linked account, you can add tax exemptions to only the linked account.
 - b. If you're logged in as a payer account, you can add tax exemptions to both payer and linked accounts.
- 5. Specify your exemption type and jurisdiction.
- 6. Upload certificate documents.
- 7. Review your information, and choose **Submit**.

Within 24 hours, Amazon Web Services Support will notify you through a support case if they need additional information, or if any of your documents weren't valid.

Once the exemption is approved, you can view it under the **Tax exemption** tab with an **Active** validity period.

You will be notified through a support case contact if your exemption was rejected.

Setting up your Amazon S3 to use your Tax Settings API

Follow this procedure so that the <u>Tax Settings API</u> has permission to send your tax documents to an Amazon S3 bucket. You can then download the tax document from your Amazon S3 bucket. You only need to do this procedure for the following countries that require a tax registration document:

- BD: Bangladesh
- KE: Kenya

- KR: South Korea
- ES: Spain

For all other countries, you don't need to specify a tax registration document. If you call the Tax Settings API and provide a tax registration document in your request, the API will return a ValidationException error message.

The following Tax Settings API operations require access to your Amazon S3 bucket:

- BatchPutTaxRegistration: Requires access to read the Amazon S3 bucket
- PutTaxRegistration: Requires access to read the Amazon S3 bucket
- GetTaxRegistrationDocument: Requires access to write to the Amazon S3 bucket

Adding resource policies to your Amazon S3 bucket

To allow the Tax Settings API to access the object in your Amazon S3 bucket, add the following resource policies in your Amazon S3 bucket.

Example For BatchPutTaxRegistration and PutTaxRegistration

Replace *DOC-EXAMPLE-BUCKET1* with the name of your bucket.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "Allow the Tax Settings API to access objects",
            "Effect": "Allow",
            "Principal": {
                "Service": "tax.amazonaws.com"
            },
            "Action": [
                "s3:GetObject"
            ],
            "Resource": "arn:aws:s3:::amzn-s3-demo-bucket1/*",
            "Condition": {
                "StringEquals": {
                    "aws:SourceArn": "arn:aws:tax:us-east-1:${AccountId}:*",
                    "aws:SourceAccount": "${AccountId}"
                }
```

} } }

Example For GetTaxRegistrationDocument

Replace *amzn-s3-demo-bucket1* with the name of your bucket.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "Allow the Tax Settings API to access objects",
            "Effect": "Allow",
            "Principal": {
                "Service": "tax.amazonaws.com"
            },
            "Action": [
                "s3:PutObject"
            ],
            "Resource": "arn:aws:s3:::amzn-s3-demo-bucket1/*",
            "Condition": {
                "StringEquals": {
                     "aws:SourceArn": "arn:aws:tax:us-east-1:${AccountId}:*",
                    "aws:SourceAccount": "${AccountId}"
                }
            }
        }
    ]
}
```

Note

For the classic Amazon Web Services Regions (aws partition), the aws:SourceArn will be: arn:aws:tax:us-east-1:{YOUR_ACCOUNT_ID}:* For the China Regions (aws-cn partition), the aws:SourceArn will be: arn:awscn:tax:cn-northwest-1:{YOUR_ACCOUNT_ID}:*

To allow the Tax Settings API access to your S3 bucket

- 1. Go to the Amazon S3 console and sign in.
- 2. Choose **Buckets** from the left navigation, and then choose your bucket from the list.
- 3. Choose the **Permissions** tab, then, next to **Bucket policy**, choose **Edit**.
- 4. In the **Policy** section, add the policies to the bucket.
- 5. Choose **Save changes** to save your policy, attached to your bucket.

Repeat for each bucket that encrypts an S3 bucket that Tax Settings needs to access.

Amazon KMS managed key policy

If your S3 bucket is encrypted with Amazon KMS managed key (SSE-KMS), add the following permission to the KMS key. This permission is required for the following API operations:

- BatchPutTaxRegistration
- PutTaxRegistration
- GetTaxRegistrationDocument

```
{
    "Version": "2012-10-17",
    "Id": "key-consolepolicy-3",
    "Statement": [
        {
            "Sid": "Allow the Tax Settings API to access objects",
            "Effect": "Allow",
            "Principal": {
                "Service": "tax.amazonaws.com"
            },
            "Action": [
                "kms:Decrypt",
                "kms:GenerateDataKey*"
            ],
            "Resource": "*",
            "Condition": {
                "StringEquals": {
                    "aws:SourceArn": "arn:aws:tax:us-east-1:${YOUR_ACCOUNT_ID}:*",
                    "aws:SourceAccount": "${YOUR_ACCOUNT_ID}"
                }
```

To give Tax Settings access to Amazon KMS for SSE-KMS encrypted S3 buckets

- 1. Go to the <u>Amazon S3 console</u> and sign in.
- 2. Choose **Customer managed keys** from the left navigation, and then choose the key that is used to encrypt your bucket from the list.
- 3. Select **Switch to policy view**, then choose **Edit**.
- 4. In the **Policy** section, add the Amazon KMS policy statement.
- 5. Choose **Save changes** to save your policy, attached to your key.

Repeat for each key that encrypts an S3 bucket that Tax Settings needs to access.

Customizing your Billing preferences

You can use the **Amazon Billing preferences** page to manage your invoice delivery, alerts, credit sharing, Reserved Instances (RI) and Savings Plans discount sharing, and detailed billing (legacy) reports. For some sections, only the payer account can update them.

The Billing preferences page contains the following sections.

Contents

- Invoice delivery preferences
 - Additional invoice email
- Alert preferences
- <u>Credit sharing preferences</u>
- Reserved Instances and Savings Plans discount sharing preferences
- Detailed billing reports (legacy)

Invoice delivery preferences

You can choose to receive a PDF copy of your monthly invoice by email. The monthly invoices are sent to the emails registered as the Amazon Web Services account root user and the alternate

billing contact. For information about updating these email addresses, see <u>Setting up your tax</u> information.

To opt in or out of receiving monthly PDF invoices by email

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the **Invoice delivery preferences** section, choose **Edit**.
- 4. Select or clear **PDF invoices delivery by email**.
- 5. Choose **Update**.

Depending on the purchase, Amazon sends monthly or daily invoices to the following contacts:

- The Amazon Web Services account root user
- The billing contacts on the Payment preferences page
- The alternate billing contacts on the Account page

Additional invoice email

In addition to the PDF invoice email, Amazon sends monthly or daily email with your invoice details to the contact list in the previous section.

Note

If you specify a billing contact on the **Payment preferences** page, the root user won't receive the PDF invoice or the additional invoice by email.

Alert preferences

You can receive email alerts when your Amazon Web Services service usage is approaching or has exceeded the Amazon Web Services China Region Free Tier usage limits.

To opt in or out of receiving Amazon Web Services China Region Free Tier usage alerts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the Alert preferences section, choose Edit.
- 4. Select or clear Receive Amazon Web Services China Region Free Tier usage alerts.
- 5. (Optional) In the **Additional email address to receive alerts**, enter any email addresses that aren't already registered as a root user or alternate billing contact.
- 6. Choose **Update**.

You can also use Amazon CloudWatch billing alerts to receive email notifications when your charges reach a specified threshold.

To receive CloudWatch billing alerts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the Alert preferences section, choose Edit.
- 4. Select Receive CloudWatch billing alerts.

<u> Important</u>

This preference can't be deactivated at a later time.

5. Choose **Update**.

To manage your CloudWatch billing alerts, see your <u>CloudWatch dashboard</u> or view your <u>Amazon</u> <u>Budgets</u>. For more information, see the <u>Create a billing alarm to monitor your estimated Amazon</u> <u>charges</u> in the *Amazon CloudWatch User Guide*.

Credit sharing preferences

You can use this section to activate sharing credits across member accounts in your billing family. You can select specific accounts or enable sharing for all accounts.

🚯 Note

This section is only available for the management account (payer account) as part of Amazon Organizations.

To manage credit sharing for member accounts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the **Credit sharing preferences** section, choose **Edit**.
- 4. To activate or deactivate credit sharing for specific accounts, select them from the table and, then choose **Activate** or **Deactivate**.
- 5. To activate or deactivate credit sharing for all accounts, choose **Actions**, and then choose **Activate All** or **Deactivate All**.
- 6. Choose **Update**.

🚺 Tip

- To activate credit sharing for new accounts that join your organization, select **Default** sharing for newly created member accounts.
- To download a history of your credit sharing preferences, choose Download preference history (CSV).

For more information about Amazon credits, see Applying Amazon credits.

Reserved Instances and Savings Plans discount sharing preferences

You can use this section to activate sharing Reserved Instances and Savings Plan discounts across accounts in your billing family. You can select specific accounts or enable sharing for all accounts.

To share the Savings Plans discount, the Savings Plans owner account must be active in the RI and Savings Plans discount sharing preferences. This enables the discount usage across other eligible linked accounts in the organization.

🚯 Note

This section is only available for the management account (payer account) as part of Amazon Organizations.

To manage Reserved Instances and Savings Plans discount sharing for member accounts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- In the Reserved Instances and Savings Plans discount sharing preference section, choose Edit.
- 4. To activate or deactivate discount sharing for specific accounts, select them from the table, and then choose **Activate** or **Deactivate**.
- 5. To activate or deactivate discount sharing for all accounts, choose **Actions**, and then choose **Activate All** or **Deactivate All**.
- 6. Choose Update.

🚺 Tip

- To activate credit sharing for new accounts that join your organization, select **Default sharing for newly created member accounts**.
- To download a history of your credit sharing preferences, choose Download preference history (CSV).

Detailed billing reports (legacy)

You can receive legacy billing reports that are offered outside of the Amazon Cost and Usage Reports console page. However, we strongly recommend that you use Amazon Cost and Usage Reports instead because it provides the most comprehensive billing information. Also, these legacy reporting methods will not be supported at a later date.

For more information about detailed billing reports, see <u>Detailed Billing Reports</u> in the Amazon Cost and Usage Reports User Guide.

For more information about transferring your reports to Amazon Cost and Usage Reports, see Migrating from Detailed Billing Reports to Amazon Cost and Usage Reports.

1 Notes

- This section is only visible if you use Amazon Organizations.
- To download a CSV from the **Bills** page, first activate monthly reports.

To edit your detailed billing reports (legacy) settings

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the **Detailed billing reports (legacy)** section, choose **Edit**.
- 4. To set the Amazon S3 bucket for report delivery, select **Legacy report delivery to Amazon S3** and **Configure**.
- 5. In the **Configure Amazon S3 Bucket** section, select an existing Amazon S3 bucket to receive the Amazon Cost and Usage Reports, or create a new bucket.
- 6. Choose **Update**.
- 7. To configure the granularity of the reports to show your Amazon usage, select the reports to activate.
- 8. In the **Report activation** section, choose **Activate**.

Customizing your Amazon payment preferences

You can use the <u>Payment preferences</u> page of the Amazon Billing and Cost Management console to perform the following tasks for all payment types:

Topics

- View your payment methods
- Designate a default payment method
- <u>Remove a payment method</u>
- Changing the currency to pay your bill

Adding additional billing contact email addresses

For a list of accepted payment methods organized by Amazon Web Services service providers ("SOR", "seller of record), see <u>What payment methods does Amazon accept?</u> in the *Knowledge Center*.

For a full list of supported currencies, see What currencies does Amazon currently support?.

- 1 Notes
 - IAM users need explicit permission to access some of the pages in the Billing console. For more information, see Overview of managing access permissions.
 - You can also use the Payment preferences page to manage your credit cards and direct debit accounts. For more information, see <u>Managing credit card and ACH direct debit</u> and Manage ACH direct debit payment methods.

View your payment methods

You can use the console to view the payment methods that are associated with your account.

To view payment methods that are associated with your Amazon Web Services account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose Payment preferences.

Payment methods that are associated with your Amazon Web Services account are listed in the **Payment method** section.

Designate a default payment method

You can use the console to designate a default payment method for your Amazon Web Services account.

If you receive invoices from more than one Amazon service provider (seller of record or SOR), you can use payment profiles to assign a unique payment method for each one. For more information, see Using payment profiles.

To designate a default payment method

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.

Payment methods that are associated with your Amazon Web Services account are listed in the **Payment method** section.

 Next to the payment method that you want to use as your default payment method, choose Set as default.

1 Note

More information or actions might be required, depending on your payment method. Additional actions might include completing your tax registration information or choosing a supported payment currency.

Remove a payment method

You can use the console to remove a payment method from your account.

To remove a payment method from your Amazon Web Services account

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Ensure that your account has another valid payment method set as the default.
- 4. Select a payment method to remove, and choose **Delete**.
- 5. In the **Delete payment method** dialog box, choose **Delete**.

Changing the currency to pay your bill

To change the currency that you use to pay your bill, for example, from Danish kroner to South African rand, perform the following procedure. For a full list of currencies supported by Amazon, see What currencies does Amazon currently support? in the Amazon Knowledge Center.

To change the local currency that's associated with your account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. On the navigation bar in the upper-right corner, choose your account name (or alias), and choose **Account**.
- 3. In the navigation pane, choose Payment preferences.
- 4. In the **Default payment preferences** section, choose **Edit**.
- 5. On the **Payment currency** section, choose the payment currency you want to use.
- 6. Choose **Save changes**.

If you receive invoices from multiple Amazon Web Services service providers ("SOR", "seller of record"), you can create a payment profile for each Amazon Web Services service provider that specifies each currency you prefer to use. For more information, see <u>Using payment profiles</u>.

Adding additional billing contact email addresses

Use additional billing contacts to contact another person about billing related items impacting your Amazon Web Services accounts. Additional billing contacts will be contacted with the root account contact and alternate billing contact about billing events.

1 Notes

- If you use credit or debit cards as your payment method, see <u>Adding or updating</u> alternate contacts.
- If you have pay by invoice as your payment method, you can use the following procedure to add additional billing contacts to receive emails.

To add additional billing contacts to your account

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. In the **Default payment preferences** section, choose **Edit**.

- 4. For **Billing contact email**, enter the additional billing contact email messages that you want Amazon to send billing-related email notifications to.
- 5. Choose **Save changes**.

Setting up your India billing

If you sign up for a new account and choose India for your contact and billing address, your user agreement is with Amazon Web Services India Private Limited (Amazon India), a local Amazon seller in India. Amazon India manages your billing, and your invoice total is listed in rupees instead of dollars.

Contents

- Signing up for Amazon India
- Managing your Amazon India account
 - <u>Adding or editing a Permanent Account Number</u>
 - Editing multiple Permanent Account Numbers
 - Editing multiple Goods and Services Tax numbers
 - Viewing a tax invoice
- Changing the seller of record to or from Amazon India

Signing up for Amazon India

Amazon India is a local seller of Amazon in India. To sign up for an Amazon India account, see <u>Manage accounts in India</u> in the *Amazon Account Management Reference Guide*.

Managing your Amazon India account

Use the <u>Account Settings</u> page to perform the following tasks:

- Creating and editing your customer verification
- Manage customer verification
- Editing your username, password, or email address
- Add, update, or remote alternate contacts
- Editing your contact information

For more information about these tasks, see <u>Managing your Amazon India account</u> in the Amazon Account Management Reference Guide.

Use the <u>Tax Settings</u> page of the Billing and Cost Management console to perform the following tasks:

- Adding or editing a Permanent Account Number
- Editing multiple Permanent Account Numbers
- Editing multiple Goods and Services Tax numbers
- Viewing a tax invoice

Adding or editing a Permanent Account Number

You can add your Permanent Account Number (PAN) to your account and edit it.

To add or edit a PAN

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax Settings**.
- 3. On the **Tax Settings** navigation bar, choose **Edit**.
- 4. For **Permanent Account Number (PAN)**, enter your PAN, and then choose **Update**.

Editing multiple Permanent Account Numbers

You can edit multiple Permanent Account Numbers (PANs) in your account.

To edit multiple PAN numbers

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Tax Settings**.
- 3. Under Manage Tax Registration Numbers, select the PAN numbers that you want to edit.
- 4. For Manage Tax Registration, choose Edit.
- 5. Update the fields that you want to change, and then choose **Update**.

Editing multiple Goods and Services Tax numbers

You can edit multiple Goods and Services Tax numbers (GSTs) in your account.

To edit multiple GST numbers

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. On the navigation pane, choose **Tax Settings**.
- 3. Under Manage Tax Registration Numbers, select the GST numbers that you want to edit or choose Edit all.
- 4. For Manage Tax Registration, choose Edit.
- 5. Update the fields that you want to change and choose **Update**.

Viewing a tax invoice

You can view your tax invoices in the console.

To view a tax invoice

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. On the navigation pane, choose **Bills**.
- 3. Scroll down and choose the **Invoices** tab.
- 4. On the **Tax invoices** section, choose an invoice link that is mentioned under **Document ID**.

🚯 Note

The **Tax invoices** section only appears if there are tax invoices available.

Changing the seller of record to or from Amazon India

You can change your Amazon Web Services account seller of record (SOR) of your Amazon Web Services account to another SOR by updating your billing or tax information. This does not apply if your Amazon India account is operating in the legacy model where the functionality isn't available.

When you edit your country or region in your Amazon Web Services account billing or tax details, the SOR for your account will automatically change if the service provider of the new location is different from your current location.

If you're changing your account to or from Amazon India, you do not need to update your default payment method if it is set to invoice or wire transfer. If your default payment method is credit or debit card, you are required to reconfirm your default payment card details. This is to ensure the payment method is stored separately from the transactions outside of Amazon India. For more information, see Viewing eligible credit or debit cards for Amazon India invoices.

🚯 Note

If you have an Amazon India account with a credit or debit card as your default payment method and you have e-mandate set up for automatic payments, you must deactivate the e-mandate before you can edit your default payment preferences.

To change the SOR of your Amazon Web Services account, you can edit this information using the following options:

To change the SOR using billing information

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/costmanagement/</u>.
- 2. On the navigation pane, choose **Payment preferences**.
- 3. In the **Default payment preferences** section, choose **Edit**.
- 4. Enter the new billing address.
- 5. In the **Payment currency** section, choose a default currency from the list of accepted currencies of your new SOR.
- (If your default payment method is credit or debit card) Under the Confirm payment method section, reenter the details of your default payment card to confirm usage under the new service provider.

To change default cards under the new SOR, add your card at a later time and change your default payment method setting.

7. Choose **Save changes**.

After a few minutes, your changes including the updated SOR appears on the **Payment preferences** page.

To change the SOR using billing and tax information

To move your account to a different SOR, you must update the tax registration number (TRN) associated with the account and provide a new, valid TRN. You can also delete the TRN associated with the account. The new SOR of your account automatically resolves based on the country of your new tax address, and your current billing address, in order of availability and priority. When your account's SOR changes, you will receive a notification that your account is moving in or out of Amazon India.

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. On the navigation pane, choose **Tax Settings**.
- 3. Select your account and choose **Manage tax registration**, then choose either **Edit**, **Edit all**, or **Delete TRN**.
- 4. (If your default payment method is credit or debit card) On the navigation pane, choose **Payment preferences**.
- 5. Choose **Add payment method** to reenter the details of your default payment card, or add a new payment card.
- 6. After the card is saved, choose **Set as default**.

The **Default payment preferences** section alerts you that your previous default payment method is not eligible for use in the new SOR. Refresh the page after you add your payment card for this alert to disappear.

If you're unable to change the SOR using the preceding procedures, your account is likely operating in the legacy model where the functionality isn't available. We are currently migrating Amazon India account from the legacy to the new model where the functionality is available. The expected completion date is December 2025.

Finding the seller of record

Amazon regularly reviews its business structure to support customers. Amazon creates the seller of record (SOR), which is a local business entity established within a jurisdiction (country) to resell

Amazon Web Services services. The local SOR is subject to local laws and regulations. The SOR becomes the contracting party with local customers, so customers can be billed by and remit payment to a local business entity. When you sign up for an Amazon Web Services account, an SOR is automatically assigned to your account based on your billing and contact information.

To find the SOR for your account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. Choose **Payment preferences** and under your default payment method, see the name under **Service provider**.
- 3. You can also find this information in the **Tax settings** page, under the **Seller** column.

We recommend that you verify that your contact information, mailing address, and billing address are up-to-date on the <u>Account</u> and <u>Payment preferences</u> pages.

If you have a business account, check that your tax information is correct on the <u>Tax settings</u> page for the payer account and any member (linked) accounts.

Amazon uses this information to prepare and issue your invoices with proper header information, such as your preferred payment currency, tax settings, business legal name and address. For more information, see the Reviewing your monthly billing best practices.

Current SORs

Use this table to find the SORs for the following countries.

Account country	Amazon SOR	Mailing address
<u>Australia</u>	Amazon Web Services Australia Pty Ltd (ABN: 63 605 345 891)	Level 37, 2-26 Park Street, Sydney, NSW, 2000, Australia
<u>Brazil</u>	Amazon Amazon Serviços Brasil Ltda.	A. Presidente Juscelino Kubitschek, 2.041, Torre E - 18th and 19th Floors, Vila Nova Conceicao, São Paulo, Brasil

Account country	Amazon SOR	Mailing address
<u>Canada</u>	Amazon Web Services Canada, Inc.	120 Bremner Blvd, 26th Floor, Toronto, Ontario, M5J 0A8, Canada
<u>India</u>	Amazon Web Services India Private Limited (formerly known as Amazon Internet Services Private Limited)	Unit Nos. 1401 to 1421 International Trade Tower, Nehru Place, Delhi 110019, India
<u>Japan</u>	Amazon Web Services Japan G.K.	1-1, Kamiosaki 3-chome, Shinagawa-ku, Tokyo, 141-0021, Japan
<u>Malaysia</u>	Amazon Web Services Malaysia Sdn. Bhd. (Registra tion No. 201501028710 (1154031-W))	Level 26 & Level 35, The Gardens North Tower, Lingkaran Syed Putra, Mid Valley City, Kuala Lumpur, 59200, Malaysia
<u>New Zealand</u>	Amazon Web Services New Zealand Limited	Level 5, 18 Viaduct Harbour Ave, Auckland, 1010, New Zealand
<u>Singapore</u>	Amazon Web Services Singapore Private Limited	23 Church Street, #10-01, Singapore 049481
South Africa	Amazon Web Services South Africa Proprietary Limited	Wembley Square 2, 134 Solan Road, Gardens, Cape Town, 8001, South Africa
South Korea	Amazon Web Services Korea LLC	L12, East tower, 231, Teheran-ro, Gangnam-gu, Seoul, 06142, Republic of Korea

Account country	Amazon SOR	Mailing address
<u>Turkey</u>	Amazon Web Services Turkey Pazarlama, Teknoloji ve Danışmanlık Hizmetleri Limited Şirketi	Esentepe Mahallesi Bahar Sk. Özdilek/River Plaza/Wyn dham Grand Hotel Apt. No: 13/52 Şişli/İstanbul, Turkey
<u>EMEA</u> – Any country within Europe, the Middle East, or Africa (excluding South Africa and Turkey)	Amazon Web Services EMEA SARL	38 Avenue John F. Kennedy, L-1855, Luxembourg
For all other countries not listed in this table	Amazon Web Services, Inc.	410 Terry Avenue North, Seattle, WA 98109-5210 U.S.A.

Related resources

For more information about how Amazon determines the location of your account, see <u>How does</u> Amazon determine the location of your account?

If you have questions about your SOR, create an **Account and billing** <u>support case</u> and specify the **Other Billing Questions** option.

For more information about tax help, see Amazon Web Services Tax Help.

For more information about the Amazon Customer Agreement, see the <u>Amazon Customer</u> <u>Agreement</u>.

Reviewing your monthly billing best practices

Amazon uses information that you provide in the Amazon Billing and Cost Management console to prepare and issue your invoices with proper header information, such as your preferred payment currency, tax settings, business legal name and address.

If this information is missing or inaccurate, Amazon might issue inaccurate invoices that you can't use or process.

Follow this 10-minute checklist before the end of the monthly billing period to review your invoice and ensure that your information is up-to-date in your Amazon Web Services account.

Contents

- Check purchase order balance and expiration
- Review tax settings
- Enable tax setting inheritance
- Update billing contact information
- Review payment currency

Check purchase order balance and expiration

As part of the procure-to-pay process, you can use purchase orders to procure Amazon Web Services services and approve invoices for payment. To avoid issues with billing and payment, verify that your purchase orders aren't expired or out-of-balance.

To check purchase order balance and expiration

- Navigate to the <u>Purchase orders</u> page in the Amazon Billing and Cost Management console. The purchase order dashboard shows the state of your purchase orders.
- 2. Choose a purchase order to see the **Purchase order details** page.
- 3. Review the purchase order **Balance** and **Expiration** fields.

🚺 Tip

- You can set up email notifications so that you can proactively take action on expiring or out-of-balance purchase orders. For more information, see <u>Enabling purchase order</u> notifications.
- To add a purchase order to use in your invoices, see Adding a purchase order.

To determine your account's location for tax purposes, Amazon uses the tax registration number (TRN) and the business legal address associated with your account. A TRN is also known as a value-added tax (VAT) number, VAT ID, VAT registration number, or business registration number.

To review tax settings

- 1. Navigate to the <u>Tax settings</u> page in the Billing and Cost Management console.
- 2. Under the **Tax registrations** tab, select the account IDs to edit.
- 3. Under Manage tax registration, choose Edit.
- 4. Enter your updated information and then choose **Update**.

For more information, see Updating and deleting tax registration numbers.

Enable tax setting inheritance

The management account and member accounts that are part of Amazon Organizations can have different TRNs or the same TRN. Unless your organization needs to use different TRNs for member accounts, we recommend that you enable tax settings inheritance.

After you enable this setting from the management account, your tax registration information is added to your member accounts in your organization. This saves you time so that you don't need to enter this information for individual accounts. Tax invoices are processed with consistent tax information, and your usage from member accounts will consolidate to a single tax invoice.

To enable tax settings inheritance

- 1. Navigate to the <u>Tax settings</u> page in the Billing and Cost Management console.
- 2. Under Tax registrations, select Enable tax settings inheritance.
- 3. In the dialog box, choose **Enable**.

For information about how to manage documents required for US tax exemptions, see <u>Managing</u> your US tax exemptions.

Update billing contact information

Verify that your billing contact information is correct. Amazon uses these contacts to contact you about any billing or payment related communications. You can add additional billing contacts in two ways:

- The **Payment preferences** page
- The Accounts page

To add billing contacts from the Payments preference page

- 1. Navigate to the Payment preferences page in the Billing and Cost Management console.
- 2. In the **Default payment preferences** section, review the **Billing contact email** field. Amazon uses this contact for any billing or payment related communications.
- 3. Choose Edit.
- 4. In the **Billing contact email** *optional* field, enter the email addresses that you want Amazon to send billing related email notifications, payment reminders and payment support notifications to. You can add up to 15 email addresses.
- 5. Choose **Save changes**.

You can add alternate contacts so that Amazon has an alternate email address to contact about issues with your account, even if the Amazon Web Services account root user contact is unavailable. For the Billing alternate contact, you can specify the email address to receive the invoice. Your alternate contact will be authorized to communicate with Amazon for billing, invoice, and payment issues.

The alternate contact doesn't have to be a specific person. For example, you can add an email distribution list if you have a team that manages billing, operations, and security related issues.

To update alternate contact information from the Accounts page

- Navigate to the <u>Accounts</u> page in the Billing and Cost Management console and scroll down to the **Alternate contacts** section.
- 2. For the **Billing** field, review the contact information and confirm the email address where you want your invoices delivered.

For more information about how to use alternate contacts, see <u>Adding or updating alternate</u> contacts.

Review payment currency

The payment currency is the currency that your default payment method will be charged in. This is also the currency displayed on your invoice under your default service provider. Some organizations can't process invoices that are issued in the wrong currency, so it's important to ensure that your payment currency is accurate.

To review your payment currency

- 1. Navigate to <u>Payment preferences</u> in the Billing and Cost Management console.
- 2. In the **Default payment preferences** section, choose **Edit**.
- 3. In the **Payment currency** section, ensure that the **Default payment currency** is correct.

For more information about payment methods, see Managing credit card and ACH direct debit.

Getting help with your bills and payments

There are many resources available for you if you have any questions about your Amazon Billing and Cost Management console tools, your charges, or payment methods. If you have any inquiries or appeals regarding your Amazon bill, we recommend you open a case with Amazon Web Services Support so an associate can assist you directly.

Topics

- Amazon Knowledge Center
- Contacting Amazon Web Services Support
- Understanding your charged usage
- Monitoring your Free Tier usage
- Closing your Amazon Web Services account

Amazon Knowledge Center

All Amazon account owners have access to account and billing support free of charge. You can find answers to your questions quickly by visiting the Amazon Knowledge Center.

To find your question or request

- 1. Open Amazon Knowledge Center.
- 2. Choose Billing Management.
- 3. Scan the list of topics to locate a question that is similar to yours.

Contacting Amazon Web Services Support

Contacting Amazon Web Services Support is the fastest and most direct method for communicating with an Amazon associate about your questions. Amazon Web Services Support does not publish a direct phone number for reaching a support representative. You can use the following process to have an associate contact to you by email or phone instead.

Only personalized technical support requires a support plan. For more information, visit <u>Amazon</u> Web Services Support. To open an Amazon Web Services Support case where you specify *Regarding: Account and Billing Support*, you must either be signed into Amazon as the root account owner, or have IAM permissions to open a support case. For more information, see <u>Accessing Amazon Web Services</u> <u>Support</u> in the *Amazon Web Services Support User Guide*.

If you have closed your Amazon account, you can still sign in to Amazon Web Services Support and view past bills.

To contact Amazon Web Services Support

- Sign in and navigate to the <u>Amazon Web Services Support Center</u>. If prompted, enter the email address and password for your account.
- 2. Choose Create case.
- 3. On the **Create case** page, choose **Account and billing support** and fill in the required fields on the form.
- 4. After you complete the form, under **Contact options**, choose either **Web** for an email response, or **Phone** to request a telephone call from an Amazon Web Services Support representative. Instant messaging support is not available for billing inquiries.

To contact Amazon Web Services Support when you can't sign in to Amazon

- 1. Recover your password or submit a form at Amazon Web Services account support.
- 2. Choose an inquiry type in the **Request information** section.
- 3. Fill out the How can we help you? section.
- 4. Choose Submit.

Understanding your charged usage

If you want to see the usage behind your charged amount, you can check your usage yourself by enabling Cost Explorer. This tool enables you to analyze your costs in depth by providing you with premade reports and graphs.

Cost Explorer is available 24 hours after you activate the feature.

For more information about Cost Explorer, see Analyzing your costs with Amazon Cost Explorer.

Monitoring your Free Tier usage

You can track your Amazon Free Tier usage to keep you under the Free Tier limits. You can set up alerts on your Amazon account when your Free Tier limits reach a threshold, and monitor your usage through the Billing and Cost Management console.

For more information about using these features, see <u>Tracking your Amazon Web Services China</u> <u>Region Free Tier usage</u>.

To see details for usage that was charged beyond your Free Tier limit, see the <u>Understanding your</u> <u>charged usage</u> section.

Closing your Amazon Web Services account

For more information about closing your Amazon Web Services account, see <u>Close your account</u> in the *Amazon Account Management Reference Guide*.

Using the Amazon Billing and Cost Management home page

i Note

The Billing and Cost Management widgets aren't available in this Region. See Understanding the Billing dashboard.

Use the Billing and Cost Management home page for an overview of your Amazon cloud financial management data and to help you make faster and more informed decisions. Understand high-level cost trends and drivers, quickly identify anomalies or budget overruns which require your attention, review recommended actions, understand cost allocation coverage, and identify savings opportunities.

The data on this page comes from Amazon Cost Explorer. If you haven't used Cost Explorer before, it's *automatically* enabled for you once you visit this page. It can take up to 24 hours for your data to appear on this page. When available, your data will be refreshed at least once every 24 hours. The Cost Explorer data on the home page is tailored for analytical purposes. This means the data can differ from your invoices and the **Bills** page due to differences in how data is grouped into Amazon Web Services services; how discounts, credits, refunds, and taxes are displayed; differences in timing for the current month's estimated charges; and rounding.

For more information, see Knowing the differences between Billing and Cost Explorer data.

For more information about Amazon Web Services Cloud Financial Management, see the <u>Getting</u> <u>started</u> page in the Amazon Billing and Cost Management console. You can choose a topic and then follow the links to that specific console page or the documentation.

Managing Billing and Cost Management widgets

You can customize how the widgets appear by moving or resizing the widgets.

To manage the Billing and Cost Management widgets

 Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement.

- 2. (Optional) To customize the Billing and Cost Management home page, drag and drop a widget to move it, or change the widget size.
- 3. To take action on each recommendation or to learn more, review the data in the widget and then follow the links in the widget.
- 4. To reset the layout, choose **Reset layout** and then choose **Reset**.

You can use the following widgets:

- Cost summary
- <u>Cost monitor</u>
- <u>Cost breakdown</u>
- <u>Recommended actions</u>
- Savings opportunities

Cost summary

The cost summary widget provides a quick view of your current cost trends compared to your spending in the last month.

To view your month-to-date estimated charges on the Bills page, choose View bill.

All metrics shown in the cost summary widget exclude credits and refunds. This means you might see different numbers on the home page compared to the **Bills** page or your invoices. The widget shows the following metrics that you can choose to view in Cost Explorer:

- **Month-to-date cost** Your estimated costs for the current month. The trend indicator compares the current month's costs to last month's cost for the same time period.
- Last month's cost for same time period Your costs for last month, for the same time period. For example, if today is February 15, the widget also shows last month's cost for January 1–15.

🚯 Note

Trend calculations might be influenced by the number of days in each month. For example, on July 31, the trend indicator will look at costs from July 1–31 and compare it to costs for June 1–30.

- Total forecasted cost for current month A forecast of your estimated total costs for the current month.
- Last month's total cost The total costs for last month. For more information, choose each metric to view the costs in Cost Explorer, or choose View bill to view your month-to-date estimated charges on the Bills page.

Note

The metrics in this widget exclude credits and refunds. The costs here might differ from the costs on the **Bills** page or your invoices.

For more information about Cost Explorer, see Forecasting with Cost Explorer.

Cost monitor

This widget provides a quick view of your cost and usage budgets and any cost anomalies that Amazon detected, so that you can fix it.

• Budgets status – Alerts you if any of your cost and usage budgets were exceeded.

The status can be the following:

- **OK** Cost and usage budgets haven't been exceeded.
- **Over budget** A cost and usage budget has been exceeded. Your actual cost is greater than 100%. The number of exceeded budgets and a warning icon will appear.
- Setup required You haven't created any cost and usage budgets.

Choose the status indicator to go to the **Budgets** page to review details of each budget or to create one. The budgets status indicator only shows information about cost and usage budgets. Budgets that you created to track the coverage or utilization of your Savings Plans or reservations won't appear in this widget. Cost anomalies status alerts you if Amazon detected any anomalies with your costs since the first day of the current month. The status can be the following:

- **OK** Cost anomalies haven't been detected in the current month.
- Anomalies detected A cost anomaly has been detected. The number of anomalies detected and a warning icon will appear.

• Setup required – You haven't created any anomaly detection monitors.

Choose the status indicator to go to the **Cost Anomaly Detection** page to review details of each anomaly detected, or to create an anomaly detection monitor. The cost anomalies status indicator only displays information about cost anomalies detected in the current month. To view your full anomaly history, go to the **Cost Anomaly Detection** page.

For more information about budgets, see Managing your costs with Amazon Budgets.

For more information about anomaly detection monitors, see <u>Detecting unusual spend with</u> <u>Amazon Cost Anomaly Detection</u>.

Cost breakdown

This widget provides a breakdown of your costs for the last six months, so you can understand cost trends and drivers. To break down your costs, choose an option from the dropdown list:

- Service
- Amazon Web Services Region
- Member account (for Amazon Organizations management accounts)
- Cost allocation tag
- Cost category

If you choose cost category or cost allocation tag key, hover over the chart to see the values.

To dive deeper into your cost and usage, choose **Analyze your costs in Cost Explorer**. Use Cost Explorer to visualize, group, and filter your costs and usage, with additional dimensions, such as Availability Zone, instance type, and database engine.

For more information about Cost Explorer, see Exploring your data using Cost Explorer.

Recommended actions

This widget helps you implement Amazon cloud financial management best practices and optimize your costs.

To use the recommended actions widget

- 1. For each recommendation, follow the link to take action on your account. By default, the widget shows up to seven recommended actions.
- 2. To load additional recommended actions, choose **Load more actions**.
- 3. To dismiss a specific recommendation, choose the **X** icon on the top right corner.

Note

If you don't have permission to access the Amazon Web Services service that shows each recommendation, you will see an access denied error. For example, if you have access to all Billing and Cost Management actions *except* budgets:DescribeBudgets, you can view all recommendations on the page except for budgets. See the error message about adding the missing IAM action to your policy.

This widget provides the following recommendations:

Budgets

This widget shows recommendations if any budgets require your attention, such as the following examples:

- Cost and usage budgets have been exceeded or are forecasted to be exceeded
- Savings Plan, reservation coverage, or utilization has dropped below the defined budget thresholds
- Your custom budget alert thresholds have been exceeded

Unlike the cost monitor widget, this widget shows information related to:

- Budgets that are forecasted to be exceeded but haven't yet
- Budgets that are in alarm but haven't been exceeded
- Utilization and coverage budgets for your Savings Plans or reservations

Cost anomaly detection

This widget shows recommendations if any anomalies have been detected that require your attention. Unlike the cost monitor widget, this widget shows cost anomalies that were detected in the last 90 days with a total cost impact greater than \$100 and an impact percentage greater than 40%.

Cost optimization

This widget shows recommendations for the following reasons:

- To help you improve cost efficiency and lower your Amazon bill. You will see recommendations from Amazon Cost Optimization Hub when the total estimated savings amount is at least 5% of last month's costs.
- To review under-utilized Savings Plans or reservations
- To renew any Savings Plans or reservations that will expire within the next 30 days

Amazon Web Services China Region Free Tier

This widget shows recommendations if your usage exceeded 85% of any service's free tier usage limits.

Getting started

This widget shows recommendations to implement Amazon cloud financial management best practices, such as:

- Create budgets to track and govern spending
- You have active Savings Plans but haven't created a Savings Plan budget
- You have Reserved Instance commitments but haven't created a Reserved Instance budget
- Add an alternate billing contact so that the correct people receive communications from Amazon
- You haven't set up a cost anomaly monitor

Related resources

For more information, see the following topics:

- Managing your costs with Amazon Budgets
- Detecting unusual spend with Amazon Cost Anomaly Detection

- Cost Optimization Hub
- Using the Amazon Web Services China Region Free Tier
- Adding additional billing contact email addresses

Cost allocation coverage

To create cost visibility and accountability in your organization, it's important to allocate costs to teams, applications, environments, or other dimensions. This widget shows unallocated costs for your cost categories and cost allocation tags, so that you can identify where to take action to organize your costs.

Cost allocation coverage is defined as the percentage of your costs that don't have a value assigned to the cost category or cost allocation tag keys that you've created.

Example Example

- Your month-to-date spend is \$100, and you created a cost category (named *Teams*) to organize costs by individual teams.
- You have \$40 in the *Team A* cost category value, \$35 in the *Team B* cost category value, and \$25 that are unallocated.
- In this case, your cost allocation coverage is 25/100 = 25%.

A lower unallocated cost metric means that your costs are properly allocated along the dimensions important to your organization. For more information, see <u>Building a cost allocation strategy</u> in the *Best Practices for Tagging Amazon Resources* whitepaper.

This widget compares the month-to-date unallocated cost percentage to all of last month's unallocated cost percentage. The widget shows up to five cost allocation tag keys or five cost categories. If you have more than five of either cost allocation tag keys or cost categories, use the widget preferences to specify the ones that you want.

To analyze your unallocated costs in more detail by using Cost Explorer, choose the cost category or cost allocation name.

To improve cost allocation coverage for your cost categories or cost allocation tags, you can edit your cost category rules or improve resource tagging by using Amazon Tag Editor.

For more information, see the following topics:

- Managing your costs with Amazon cost categories
- Using Amazon cost allocation tags
- Using Tag Editor

Savings opportunities

This widget shows recommendations from Cost Optimization Hub to help you save money and lower your Amazon bill. This can include:

- Deleting unused resources
- Rightsizing over-provisioned resources
- Purchasing Savings Plans or reservations

For each savings opportunity, the widget shows your estimated monthly savings. Your estimated savings are *de-duplicated* and *automatically* adjusted for each recommended savings opportunity.

Example Example

- Let's say that you have two Amazon EC2 instances, *InstanceA* and *InstanceB*.
- If you purchased a Savings Plan, you could reduce the cost for *InstanceA* by \$20 and the cost of *InstanceB* by \$10, for a total of \$30 savings.
- However, if *InstanceB* is idle, the widget might recommend that you terminate it instead of purchasing a Savings Plan. The savings opportunity would tell you how much you could save by terminating the idle *InstanceB*.

To view the savings opportunities in this widget, you can opt in by visiting the Cost Optimization Hub page or using the <u>Cost Management preferences</u> page.

Understanding the Billing dashboard

🚯 Note

You can access the previous version of the **Billing** home page from the **Legacy Pages** section of the navigation pane.

Understanding the Billing dashboard (old console)

You can use the dashboard page of the Amazon Billing console to gain a general view of your Amazon spending. You can also use it to identify your highest cost service or Region and view trends in your spending over the past few months. You can use the dashboard page to see various breakdowns of your Amazon usage. This is especially useful if you're a Free Tier user. To view more details about your Amazon costs and invoices, choose **Billing details** in the left navigation pane. You can customize your dashboard layout at any time by choosing the gear icon at the top of the page to match your use case.

Viewing your Amazon costs in the Amazon Billing console dashboard doesn't require turning on Cost Explorer. To turn on Cost Explorer to access additional views of your cost and usage data, see Enabling Amazon Cost Explorer.

To open the Amazon Billing console and dashboard

• Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.

By default, the console shows the **Amazon Billing Dashboard** page.

Understanding your dashboard page

Your Amazon Billing console dashboard contains the following sections. To create your preferred layout, drag and drop sections of the **Dashboard** page. To customize the visible sections and layout, choose the gear icon at the top of the page. These preferences are stored for ongoing visits to the **Dashboard** page. To temporarily remove sections from your view, choose the x icon for each section. To make all sections visible, choose refresh at the top of the page.

Amazon summary

This section is an overview of your Amazon costs across all accounts, Amazon Web Services Regions, service providers, and services, and other KPIs. **Total compared to prior period** displays your total Amazon costs for the most recent closed month. It also provides a comparison to your total forecasted costs for the current month. Choose the gear icon on the card to decide which KPIs you want to display.

Highest cost and usage details

This section shows your top service, account, or Amazon Web Services Region by estimated month-to-date (MTD) spend. To choose which to view, choose the gear icon on the top right.

Cost trend by top five services

In this section, you can see the cost trend for your top five services for the most recent three to six closed billing periods.

You can choose between chart types and time periods on the top of the section. You can adjust additional preferences using the gear icon.

The columns provide the following information:

- Average: The average cost over the trailing three months.
- **Total**: The total for the most recent closed month.
- **Trend**: Compares the **Total** column with the **Average** column.

Account cost trend

This section shows the cost trend for your account for the most recent three to six closed billing periods. If you're a management account of Amazon Organizations, the **cost trend by top five section** shows your top five Amazon accounts for the most recent three to six closed billing periods. If invoices weren't already issued, the data isn't visible in this section.

You can choose between chart types and time periods on the top of the section. Adjust additional preferences using the gear icon.

The columns provide the following information:

- Average: The average cost over the trailing three months.
- Total: The total for the most recent closed month.
- Trend: Compares the Total column with the Average column.

On the dashboard, you can view the following graphs:

- Spend Summary
- Month-to-Date Spend by Service
- Month-to-Date Top Services by Spend

Spend Summary

The **Spend Summary** graph shows you how much you spent last month, the estimated costs of your Amazon usage for the month-to-date, and a forecast for how much you are likely to spend

this month. The forecast is an estimate that's based on your past Amazon costs. Therefore, your actual monthly costs might not match the forecast.

Month-to-Date Spend by Service

The **Month-to-Date Spend by Service** graph shows the top services that you use most and the proportion of your costs that service contributed to. The **Month-to-Date Spend by Service** graph doesn't include forecasting.

Month-to-Date Top Services by Spend

The **Month-to-Date Top Services by Spend** graph shows the services that you use most, along with the costs incurred for the month to date. The **Month-to-Date Top Services by Spend** graph doesn't include forecasting.

🚯 Note

The Billing and Cost Management console has a refresh time of approximately 24 hours to reflect your billing data.

Knowing the differences between Billing and Cost Explorer data

Once you have active data in your Billing and Cost Management console, there are key differences to note between when you see in the **Billing** and **Payments** pages, compared to your Cost Explorer data. This section explains in detail how each data sets are used, and the benefits of each.

Billing data

Your billing data appears on the **Bills** and **Payments** pages of the Amazon Billing and Cost Management console, and in the invoice that Amazon issues to you. Billing data helps you understand the actual invoiced charges for previous billing periods, and the estimated charges that you've accrued for the current billing period, based on your month-to-date service usage. Your invoice represents the amount that you owe to Amazon.

Cost Explorer data

Your Cost Explorer data appears in the following places:

- The Billing and Cost Management home page
- The pages for Cost Explorer, Budgets, and Cost Anomaly Detection
- Your reports for coverage and usage

Cost Explorer supports deep-dive analysis so that you can identify savings opportunities. Cost Explorer data provides more granular dimensions (such as Availability Zone or operating system) and includes features that might show differences when compared to billing data. On the **Cost Management** preferences page, you can manage your preferences for Cost Explorer data, including linked account access and historical and granular data settings. For more information, see <u>Controlling access to Cost Explorer</u>.

Amortized costs

Billing data is always presented on a *cash* basis. It represents the amount that Amazon charges you each month. For example, if you purchase a one-year, all-upfront Savings Plan in September, Amazon will charge you the full cost for that Savings Plan in the September billing period. Your billing data will then include the full cost of that Savings Plan in September. This helps you understand, validate, and pay your Amazon invoices on time.

In contrast, you can use Cost Explorer data to view amortized costs. When costs are amortized, an upfront charge is spread, or *amortized* over the life of that agreement. In the previous example, you can use Cost Explorer for an amortized view of your Savings Plan. A one-year, all-upfront Savings Plan purchase will be spread evenly across the 12 months of the commitment term. Use amortized costs to gain insight into the effective daily costs associated with your portfolio of reservations or Savings Plans.

Amazon Web Services service grouping

With billing data, your Amazon charges are grouped into Amazon Web Services services on your invoice. To help with deep-dive analysis, Cost Explorer will group some costs differently.

For example, let's say that you want to understand compute costs for Amazon Elastic Compute Cloud compared to ancillary cost, such as Amazon Elastic Block Store volumes or NAT gateways. Instead of a single group for Amazon EC2 costs, Cost Explorer will group costs into **EC2 - Instances** and **EC2 - Other**.

In another example, to help analyze data transfer costs, Cost Explorer groups your transfer costs by service. In billing data, data transfer costs are grouped into a single service named **Data Transfer**.

Estimated charges for the current month

Your billing data and Cost Explorer data are refreshed at least once per day. The cadence when they're refreshed might differ. This can result in differences for your month-to-date estimated charges.

Rounding

Your billing data and Cost Explorer data are processed at different granularities. For example, Cost Explorer data is available with hourly and resource-level granularity. Billing data is monthly and doesn't offer resource-level details. As a result, your billing data and Cost Explorer data might vary due to rounding. When these data sources are different, the amount on your invoice is the final amount that you owe to Amazon.

Presentation of discounts, credits, refunds, and taxes

The billing data on the **Bills** page (for example, in the **Charges by service** tab) excludes refunds, while Cost Explorer data includes refunds. When a refund is issued, this might cause differences in other charge types.

For example, let's say that a portion of your taxes was refunded. On the **Bills** page, the **Taxes by service** tab will continue to show the full tax amount. The Cost Explorer data will show the post-refund tax amount.

Understanding your bill

For questions about your Amazon bills or to appeal your charges, contact Amazon Web Services Support to address your inquiries immediately. To get help, see <u>Getting help with</u> <u>your bills and payments</u>. To understand your bills page contents, see <u>Using the Bills page to</u> <u>understand your monthly charges and invoice</u>.

You receive Amazon invoices monthly for usage charges and recurring fees. For one-time fees, such as fees for purchasing an All Upfront Reserved Instance, you're charged immediately.

At any time, you can view estimated charges for the current month and final charges for previous months. This topic describes how to view your monthly bill and past bills, how to receive and read billing reports, and how to download invoices. To make a payment, see <u>Making payments</u>.

Topics

- Viewing your monthly charges
- Using the Bills page to understand your monthly charges and invoice
- Downloading a PDF of your invoice
- Downloading a monthly report
- Understanding unexpected charges

Viewing your monthly charges

Follow this procedure to view your monthly charges from the Billing and Cost Management console.

To view your monthly charges

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Bills**.
- 3. Choose a **Billing period** (for example, August 2023).
- 4. View your Amazon bill summary.

Viewing your monthly charges (old console)

To view your monthly charges

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose Bills.
- 3. For **Billing period**, choose a month.

The **Summary** section displays a summary and details of your charges for that month.

🚯 Note

The summary isn't an invoice until the month's activity closes and Amazon calculates the final charges.

If you use the consolidated billing feature in Amazon Organizations, the **Bills** page lists totals for all accounts on the **Charges by account** tab. Choose the account ID to see the activity for each account in the organization. For more information about consolidated billing, see <u>Consolidating billing for Amazon Organizations</u>.

Using the Bills page to understand your monthly charges and invoice

At the end of a monthly billing period, or when you incur a one-time fee, Amazon issues an invoice as a PDF file. If you're paying by credit card, Amazon also charges the credit card that you have on file at this time.

To download invoices and view your monthly charge details, you can use the **Bills** page in the Amazon Billing and Cost Management console.

1 Note

IAM users need explicit permission to access some of the pages in the Billing and Cost Management console. For more information, see <u>Overview of managing access permissions</u>.

Bills page

You can use the **Bills** page to see your monthly chargeable costs, along with details of your Amazon Web Services services and purchases made through Amazon Web Services Marketplace. Invoices are generated when a monthly billing period closes (the billing status appears as **Issued**), or when subscriptions or one-time purchases are made. For monthly billing periods that haven't closed (the billing status appears as **Pending**), this page shows the most recent estimated charges based on your Amazon Web Services services metered to date.

If you're signed in as the management account of your Amazon Organizations, you can see the consolidated charges for your member accounts. You can use the **Charges by account** to also view account-level details.

To customize the visible sections, choose the gear icon at the top of the page. These preferences are saved for ongoing visits to the **Bills** page.

Amazon bill summary

The **Amazon bill summary** section shows an overview of your monthly charges. The information shows your invoice totals for the closed billing periods (the billing status appears as **Issued**).

Billing periods that haven't closed have the **Pending** billing status. The totals show the most recent estimated charges based on your Amazon Web Services services metered to date. Totals are shown in Chinese yuan (CNY).

Payment information

This section lists invoices for the selected billing period that Amazon received payments for. You can find the service provider, charge types, document types, invoice IDs, payment status, the date Amazon received the payments, and the total amount in CNY. For more information, see Managing Your Payments.

Highest cost by service provider

The **Highest cost by service provider** section identifies your account's service and Amazon Web Services Region with the highest cost for the billing period, and shows the month-over-month trends for each. For pending billing periods, the month-over-month trend compares the monthto-date spend in the current billing period with the equivalent portion of the previous billing period.

Charges by service

The **Charges by service** tab shows your spend in each Amazon Web Services service. You can sort by service name or amount in CNY, and filter by service name and Region. Choose the + icon next to each service to see the charges for that service by **Region**. Choose a **Region** to see charge details.

Charges by account

If you use Amazon Organizations and signed in to your management account, the **Charges by account** section shows the spend of each of your member accounts. You can sort by account ID or amount in CNY, and filter by account ID. Choose the + icon next to each account to see charges for that account by service provider. Choose the + icon next to each line item to see charges by service and Region. Choose a **Region** to see charge details.

Invoices

The **Invoices** tab lists the invoices for each service provider you transacted with during the selected billing period. This section includes details such as charge type, invoice date, and total in CNY. If your invoices are issued in another currency, the total in the other currency is also shown. To view and download a PDF format for individual invoices, choose the **Invoice ID**.

Savings

This tab summarizes your savings during the billing period as the outcome of credits, or other discount programs. These savings are also reflected in the **Charges by service**, **Charges by account**, and **Invoices** sections. Choose each savings type to see the details by service.

Taxes by service

This tab shows the pre-tax, tax, and post-tax charges for each service that was charged taxes. You can sort by service name, post-tax charge, pre-tax charge, or tax in CNY, and filter by service name.

Downloading a PDF of your invoice

Follow this procedure to download a PDF of your monthly invoice.

To download a copy of your charges as a PDF document

 Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.

- 2. On the **Bills** page, select a month from the **Billing period**.
- 3. Under the Amazon bill summary section, confirm that the Bill status appears as Issued.
- 4. Choose the **Invoiced charges** tab.
- 5. Choose the **Invoice ID** of the document that you want to download.

Downloading a copy of your charges as a PDF (old console)

To download a copy of your charges as a PDF document

- 1. On the **Bills** page, select a month from the **Date** list that all activity is closed for.
- 2. Under Total, choose Ningxia Western Cloud Data Technology Co., Ltd. or Beijing Sinnet Technology Co., Ltd.
- 3. Choose Invoice <invoiceID>.

Downloading a monthly report

You can download CSV files for any future billing *after* you turn on monthly reports. This feature delivers your reports to an Amazon S3 bucket.

🚺 Tip

We recommend that you use the Amazon Cost and Usage Report for the most granular set of cost and usage data available. For more information, see <u>What are Amazon Cost and</u> <u>Usage Reports?</u> in the Amazon Cost and Usage Reports User Guide.

To download CSV files for a monthly report

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. On the navigation pane, choose **Billing preferences**.
- Under Detailed billing reports (legacy), choose Edit, and then select Legacy report delivery to S3.
- 4. Choose **Configure an S3 bucket to activate** to specify where your reports are delivered.
- 5. In the **Configure S3 Bucket** dialog box, choose one of the following options:

- To use an existing S3 bucket, choose Use an existing S3 bucket, and then select the S3 bucket.
- To create a new S3 bucket, choose **Create a new S3 bucket**, and then for **S3 bucket name**, enter the name, and then choose the **Region**.
- 6. Choose Next.
- 7. Verify the default IAM policy and then select I have confirmed that this policy is correct.
- 8. Choose **Save**.
- 9. On the **Bills** page, choose **Download all to CSV**.

Understanding unexpected charges

For questions about your Amazon bills or to appeal your charges, contact Amazon Web Services Support to address your inquiries immediately. To get help, see <u>Getting help with</u> <u>your bills and payments</u>. To understand your bills page contents, see <u>Using the Bills page to</u> <u>understand your monthly charges and invoice</u>.

Here are examples to help you avoid unexpected charges on your bill. This page lists specific features or behaviors within individual services from Amazon that can sometimes result in unexpected charges, particularly if you unsubscribe from the service or close your account.

🚯 Note

This is not an exhaustive list. For any questions for your specific use case, contact Amazon Web Services Support by following the process on <u>Getting help with your bills and</u> <u>payments</u>.

If you close your account or unsubscribe from a service, make sure that you take the appropriate steps for every Amazon Web Services Region you've allocated Amazon resources.

Topics

- Usage exceeds Amazon Web Services China Region Free Tier
- <u>Charges received after account closure</u>
- <u>Charges incurred from resources in Amazon Web Services Regions that are turned off</u>

- Charges incurred by services launched by other services
- Charges incurred by Amazon EC2 instances
- Charges incurred by Amazon Elastic Block Store volumes and snapshots
- Charges incurred by Elastic IP addresses
- Charges incurred by storage services
- Contacting Amazon Web Services Support

Usage exceeds Amazon Web Services China Region Free Tier

Check if your services have expired your free tier usage. Your eligibility for the 12 months free service offering Free Tier expires 12 months after you first activate your Amazon Web Services account. After your eligibility expires, you're charged at the standard Amazon billing rates for usage. For more information about how to identify free tier resources that are active and generating charges, see Avoiding unexpected charges after Free Tier.

After you've identified the resources that are generating charges, you can continue to use the resources and manage your billing, terminate unused resources, or close your Amazon Web Services account.

- For information about managing your billing, see <u>What is Amazon Billing and Cost Management?</u> and Getting set up with Billing.
- For information about terminating resources, go to the resource documentation for that service.
 For example, if you have unused Amazon Elastic Compute Cloud instances, see <u>Terminate your</u> instance.
- For information about closing your Amazon Web Services account, see <u>Close your account</u> in the *Amazon Account Management Reference Guide*.

Charges received after account closure

You might receive a bill after you close your account due to one of the following reasons:

You incurred charges in the month before you closed your account

You receive a final bill for the usage incurred between the beginning of the month and the date that you closed your account. For example, if you closed your account on January 15, you will receive a bill at the beginning of February for usage incurred from January 1-15.

You have active Reserved Instances on your account

You might have provisioned Amazon EC2 Reserved Instances, Amazon Relational Database Service (Amazon RDS) Reserved Instances, Amazon Redshift Reserved Instances, or Amazon ElastiCache Reserved Cache Nodes. You will continue to receive a bill for these resources until the reservation period expires. For more information, see <u>Reserved Instances</u> in the *Amazon EC2 User Guide*.

You signed up for Savings Plans

You will continue to receive a bill for your compute usage covered under Savings Plans until the plan term is completed. For more information about Savings Plans, see the <u>Savings Plans User</u> Guide.

You have active Amazon Web Services Marketplace subscriptions

Amazon Web Services Marketplace subscriptions aren't automatically canceled on account closure. First, <u>terminate all instances of your software</u> in the subscriptions. Then, cancel subscriptions on the <u>Manage subscriptions</u> page of the Amazon Web Services Marketplace console.

<u> Important</u>

Within 90 days of closing your account, you can sign in to your account, view resources that are still active, view past billing, and pay for Amazon bills. For more information, see <u>Close</u> <u>your account</u> in the *Amazon Account Management Reference Guide*.

To pay your unpaid Amazon bills, see Making payments.

Charges incurred from resources in Amazon Web Services Regions that are turned off

If you turn off (disable) an Amazon Web Services Region that you still have resources in, you will continue to incur charges for those resources. However, can't access the resources in a disabled Region.

To avoid incurring charges from these resources, enable the Region, terminate all resources in that Region, and then disable the Region.

For more information about managing Regions for your account, see <u>Specify which Amazon Web</u> <u>Services Regions your account can use</u> in the *Amazon Account Management Reference Guide*.

Charges incurred by services launched by other services

A number of Amazon Web Services services can launch resources, so be sure to check for anything that might have launched through any service that you've used.

Charges incurred from resources created by Amazon Elastic Beanstalk

Elastic Beanstalk is designed to ensure that all the resources that you need are running, which means that it automatically relaunches any services that you stop. To avoid this, you must terminate your Elastic Beanstalk environment before you terminate resources that Elastic Beanstalk has created. For more information, see <u>Terminating an Environment</u> in the *Amazon Elastic Beanstalk Developer Guide*.

Charges incurred from Elastic Load Balancing (ELB) load balancers

Like Elastic Beanstalk environments, ELB load balancers are designed to keep a minimum number of Amazon Elastic Compute Cloud (Amazon EC2) instances running. You must terminate your load balancer before you delete the Amazon EC2 instances that are registered with it. For more information, see Delete Your Load Balancer in the *Elastic Load Balancing User Guide*.

Charges incurred by services started in Amazon OpsWorks

If you use the Amazon OpsWorks environment to create Amazon resources, you must use Amazon OpsWorks to terminate those resources or Amazon OpsWorks restarts them. For example, if you use Amazon OpsWorks to create an Amazon EC2 instance, but then terminate it by using the Amazon EC2 console, the Amazon OpsWorks auto healing feature categorizes the instance as failed and restarts it. For more information, see the Amazon OpsWorks User Guide.

Charges incurred by Amazon EC2 instances

After you remove load balancers and Elastic Load Balancing environments, you can stop or terminate Amazon EC2 instances. Stopping an instance allows you to start it again later, but you might be charged for storage. Terminating an instance permanently deletes it. For more information, see <u>Instance lifecycle</u>, particularly <u>Stop and start your instance</u> and <u>Terminate your</u> Instance in the *Amazon EC2 User Guide*.

Notes

- Amazon EC2 instances serve as the foundation for multiple Amazon Web Services services. They can appear in the Amazon EC2 console instances list even if they were started by other services. For example, Amazon RDS instances run on Amazon EC2 instances.
- If you terminate an underlying Amazon EC2 instance, the service that started it might interpret the termination as a failure and restart the instance. For example, Amazon OpsWorks has a feature called *auto healing* that restarts resources when it detects failures. In general, it's a best practice to delete resources through the services that started them.

Additionally, if you create Amazon EC2 instances from an Amazon Machine Image (AMI) that is backed by an instance store, check Amazon S3 for the related bundle. Deregistering an AMI doesn't delete the bundle. For more information, see <u>Deregistering your AMI</u> in the *Amazon EC2 User Guide*.

Charges incurred by Amazon Elastic Block Store volumes and snapshots

Most Amazon EC2 instances are configured so that their associated Amazon EBS volumes are deleted when they are terminated, but it's possible to set up an instance that preserves its volume and the data. Check the **Volumes** pane in the Amazon EC2 console for volumes that you don't need anymore. For more information, see <u>Deleting an Amazon EBS volume</u> in the *Amazon EC2 User Guide*.

If you have stored snapshots of your Amazon EBS volumes and no longer need them, you should delete them as well. Deleting a volume doesn't automatically delete the associated snapshots.

For more information about deleting snapshots, see <u>Deleting an Amazon EBS snapshot</u> in the *Amazon EC2 User Guide*.

Deleting a snapshot might not reduce your organization's data storage costs. Other snapshots might reference that snapshot's data, and referenced data is always preserved.

Say that when you take the first snapshot (*snap-A*) of a volume with 10 GiB of data, the size of the snapshot is also 10 GiB. Because snapshots are incremental, the second snapshot that you take of the same volume contains only blocks of data that changed since the first snapshot was taken.

The second snapshot (*snap-B*) also references the data in the first snapshot. That is, if you modify 4 GiB of data and take a second snapshot, the size of the second snapshot is 4 GiB. In addition, the second snapshot references the unchanged 6 GiB in the first snapshot. For more information, see <u>How snapshots work</u> in the *Amazon EC2 User Guide*.

In this example, you will see two entries in your daily Amazon Cost and Usage Reports (Amazon CUR). Amazon CUR captures the snapshot usage amount for a single day. In this example, the usage is 0.33 GiB (10 GiB/ 30 days) for *snap-A*, and 0.1333 GiB (4 GiB/ 30 days) for *snap-B*. Using the rate of \$0.05 per GB month, *snap-A* costs you 0.33 GiB x \$0.05 = \$0.0165. *Snap-B* costs you 0.133 GiB x \$0.05 = \$0.0066, for a total of \$0.0231 per day for both snapshots. For more information, see the <u>Amazon Data Exports User Guide</u>.

lineItem/ Operation	lineItem/ ResourceId	lineItem/ UsageAmount	lineItem/ UnblendedCost	resourceTags/ user:usage
CreateSnapshot	arn:aws:ec2:us- east-1:123:s napshot/snap-A	0.33	0.0165	dev
CreateSnapshot	arn:aws:ec2:us- east-1:123:s napshot/snap-B	0.133	0.0066	dev

If you delete the first snapshot (*snap-A* in the first row of the previous table), any data that is referenced by the second snapshot (*snap-B* in the second row of the previous table) is preserved. Remember that the second snapshot contains the 4 GiB of incremental data, and references 6 GiB from the first snapshot. After you delete *snap-A*, the size of *snap-B* becomes 10 GiB (4 changed GiB from the *snap-B* and 6 unchanged GiB from *snap-A*).

In the following table, your daily Amazon CUR will have the usage amount for *snap*-*B* as 0.33 GiB (10 GiB/ 30 days), charged at \$0.0165 per day. When you delete a snapshot, the charges for

the remaining snapshots are recalculated daily, resulting in the possibility that the cost for each snapshot can change daily as well.

lineItem/	lineItem/	lineItem/	lineItem/	resourceTags/
Operation	ResourceId	UsageAmount	UnblendedCost	user:usage
CreateSnapshot	arn:aws:ec2:us- east-1:123:s napshot/snap-B	0.33	0.0165	dev

For more information about snapshots, see the <u>Cost Allocation for EBS Snapshots</u> blog post.

Charges incurred by Elastic IP addresses

Any Elastic IP addresses that are attached to an instance that you terminate are unattached, but they are still allocated to you. If you don't need that IP address anymore, release it to avoid additional charges. For more information, see <u>Release an Elastic IP address</u> in the *Amazon EC2 User Guide*.

Charges incurred by storage services

When you're minimizing costs for Amazon resources, keep in mind that many services might incur storage costs, such as Amazon RDS and Amazon S3. For more information about storage pricing, see <u>Amazon S3 pricing</u> and <u>Amazon RDS pricing</u>.

Contacting Amazon Web Services Support

The above is not an exhaustive list of all the reasons why you might see unexpected charges in your Amazon Web Services account. If you receive charges that aren't due to any of the reasons listed on this page, see Contacting Amazon Web Services Support.

Managing your Amazon payments

To open an Amazon Web Services account, you must have a valid payment method on file. Use the procedures in this chapter to add, update, or remove payment methods and to make payments.

You can use the <u>Payment preferences</u> page of the Amazon Billing and Cost Management console to manage your Amazon payment methods.

🚺 Note

IAM users need explicit permission to access some of the pages in the Billing console. For more information, see Overview of managing access permissions.

For more information about payments or payment methods, see <u>Getting help with your bills and</u> payments.

Topics

- Manage payment method access using tags
- Making payments
- View remaining invoices, unapplied funds, and payment history
- Managing your payment verifications
- Managing credit card and ACH direct debit
- Using Advance Pay
- Making payments in Chinese yuan
- Making payments using PIX (Brazil)
- Managing your payments in China
- Managing your payments in India
- Managing your payments in Amazon Europe
- Using payment profiles

Manage payment method access using tags

You can use attribute-based access control (ABAC) to manage access to your purchase methods. When you create your payment methods, you can tags with key-value pairs. You can then create IAM policies and specify the tags. For example, if you add the project key and assign it a value of test, your IAM policies can explicitly allow or deny access to any payment instruments that has this tag.

To add tags to new payment instruments or update existing ones, see <u>Managing credit card and</u> <u>ACH direct debit</u>.

Example Use tags to allow access

The following policy allows the IAM entity to access payment instruments that have the creditcard key and a value of visa.

```
{
"Version": "2012-10-17",
    "Statement": [{
        "Effect": "Allow",
        "Action": [
            "payments:ListPaymentInstruments",
            "payments:GetPaymentInstrument",
            "payments:ListTagsForResource"
        ],
        "Resource": "arn:aws:payments:123456789012:*:payment-instrument/*",
        "Condition": {
            "StringEquals": {
            "aws:ResourceTag/creditcard": "visa"
            }
        }
    }]
}
```

Example Use tags to deny access

The following policy denies the IAM entity from completing any payment action on payment methods that have the creditcard key and a value of visa.

```
{
"Version": "2012-10-17",
    "Statement": [{
```

```
"Effect": "Allow",
    "Action": "payments:*",
    "Resource": "*"
},
{
    "Effect": "Deny",
    "Action": "payments:GetPaymentInstrument",
    "Resource": "arn:aws:payments::123456789012:payment-instrument:*",
    "Condition": {
        "StringEquals": {
            "aws:ResourceTag/creditcard": "visa"
            }
        }
    }
}
```

For more information, see the following topics in the IAM User Guide:

- What is ABAC for Amazon?
- <u>Controlling access to Amazon resources using tags</u>

Making payments

You can use the **Payments** page of the Amazon Billing and Cost Management console to pay your Amazon bill using the process in this section.

Amazon charges your default payment method automatically at the beginning of each month. If that charge doesn't process successfully, you can use the console to update your payment method and make a payment.

🚯 Note

If you pay by ACH direct debit, Amazon provides you with your invoice and initiates the charge to your payment method within 10 days of the start of the month. It can take 3–5 days for your payment to succeed. For more information, see <u>Manage ACH direct debit</u> payment methods.

Before making a payment, ensure that the payment method that you want to be automatically charged in the future is set as your default payment method. If you're using a credit card, confirm

that your credit card isn't expired. For more information, see <u>Designate a default payment method</u> and Managing credit card and ACH direct debit.

To make a payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose Payments.

The **Payments due** table lists all outstanding invoices. If there are no invoices that are listed, you don't need to do anything at this time.

- 3. If there are outstanding invoices, select the invoice that you want to pay in the **Payments due** table, and then choose **Complete payment**.
- 4. On the **Complete a payment** page, your default payment method is selected if it's eligible for you to use to pay the invoice. If you want to use a different payment method or choose an eligible payment method, choose **Change**.
- 5. Confirm that the summary matches what you want to pay, and choose **Verify and pay**.

After your bank processes your payment, you're redirected to the **Payments** page.

Suppose that you pay by ACH direct debit, and you receive an email message from Amazon saying that Amazon can't charge your bank account and will try again. Then, work with your bank to understand what went wrong.

If you receive an email saying that Amazon failed the last attempt to charge your bank account, select the invoice to pay in the **Payments due** table. Then, choose **Complete payment** to pay the invoice. If you have questions about issues with charging your bank account or paying an overdue balance, create a case in the <u>Support Center</u>.

If you pay by electronic funds transfer and your account payment is overdue, create a case in the <u>Support Center</u>.

Making partial payments

You can use the **Payments** page of the Amazon Billing and Cost Management console to pay your Amazon bill using the partial payment method. This section outlines the procedure in the console, as well as how to troubleshoot scenarios if your payment attempt fails.

To make a partial payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payments**.

The **Payments due** table lists all outstanding invoices. If there are no invoices that are listed, you don't need to do anything at this time.

- 3. If there are outstanding invoices, select the invoices that you want to pay in the **Payments due** table, and then choose **Complete payment**.
- 4. On the **Complete a payment** page, your default payment method is chosen.
 - a. To continue with the default payment method, proceed to the next step.
 - b. To use a different payment method, or if your current selection isn't eligible for partial payments, choose **Change**.
 - c. To add a new payment method, see <u>Managing credit card and ACH direct debit</u>.
- 5. In the **Payments due** table, select the invoices to pay.
- 6. Under the **Payment amount** column, enter the partial payment amount you're paying for each invoice.
- 7. Choose Verify and pay.

After your bank processes your payment, you're redirected to the **Payments** page.

🚯 Note

- Currently, only payment cards are eligible for partial payments. You can't make partial payments with other payment methods (for example, ACH).
- Chinese yuan (CNY) China Union Pay credit cards are not eligible for partial payments.
- Subscription invoices and Amazon Web Services Marketplace invoices are not eligible for partial payments.

Troubleshooting partial payments

If you receive an email notification that Amazon failed the previous charge attempt on your payment card, attempt the following troubleshooting process.

To troubleshoot a partial payment charge fail

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payments**.
- 3. The **Payments due** table, select the invoices to pay.
- 4. Choose the amount to pay.
- 5. Choose **Complete payment**.

If the transaction continues to fail, contact your bank to understand why they are declining your transaction. Alternatively, you can pay with another eligible card.

Using backup payment methods

You can use the backup payment method feature to avoid delays to your Amazon bill payments. You can update your backup payment method settings on the **Payment Preferences** page of the Amazon Billing and Cost Management console.

Eligible payment methods

Backup payment methods only support credit cards and SEPA bank accounts. Other payment methods cannot be used as a backup payment method.

To enable your backup payment methods

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payment Preferences**.
- 3. In the **Default payment preferences** section, choose **Edit**.
- 4. Turn on **Backup payment method**.
- 5. Choose **Save changes**.

To view your current backup payment method

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment Preferences**.

Payment methods show **Backup payment method** along with the status Enabled if your backup payment method is enabled successfully.

View remaining invoices, unapplied funds, and payment history

You can use the **Payments account summary** page in your Billing and Cost Management console to see your Amazon account's financial status. This section outlines what each console component represents.

Payments account summary

This page shows your consolidated view of your Amazon account's financial status. This includes what you owe Amazon and the funds you have available to use. This is a simplified view to understand your payment obligations and manage your available balances.

Total outstanding balance

This shows the amount you currently owe, including any invoice amounts that are past due. To make a payment, see <u>Making payments</u>.

Total unapplied funds

This is the total amount of unused funds that are currently available in your Amazon account. This might include **unapplied cash**, **credit memos**, or **Advance Pay** balance. Advance Pay balance is automatically used to pay for your invoices. For more information, see <u>Using Advance</u> Pay.

Your account might have unapplied funds or credit memos for various reasons, such as past overpayments, missing remittance advice, or billing adjustments. To use unapplied funds or credit memos towards your invoice payments or refund this amount, send the Amazon remittance instructions using the email address in your invoice. You can also contact Amazon Web Services Support by following the instructions in <u>Contacting Amazon Web Services</u> <u>Support</u>. After you request to use your unapplied funds, you can pay the total outstanding balance excluding the unapplied funds amount.

🚯 Note

Total unapplied funds do not include Amazon Credits. For more information, see Applying Amazon credits.

You can search and filter the **Payments due**, **Unapplied funds**, and **Payment history** tables described in the following procedures. Choose the gear icon to change the default columns and customize other table settings. Download items individually by choosing the appropriate ID, or choose **Download**, and then **Download CSV** to download a CSV file of the table for reporting purposes.

To view remaining invoice payments

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. Choose the **Payments due** tab to view the **Payments due** table.

The **Payments due** table lists all your remaining invoice payments. The table shows your total invoice amount and remaining balance.

The table includes the following statuses:

- **Due** Outstanding invoices with an approaching due date.
- **Past due** Outstanding invoices with a payment that wasn't made by the due date.
- **Scheduled** Invoices with an upcoming scheduled payment.
- **Processing** Invoices that a payment is currently being scheduled for.

To view unapplied funds

- 1. Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. Choose the **Unapplied funds** tab to view the **Unapplied funds** table.

The **Unapplied funds** table lists all unapplied credit memos. The table shows your total invoice amount and remaining balance.

If the status is **Unapplied**, there are available credit memos to be applied to an invoice.

If the status is **Partially applied**, there are credit memos where some amounts have been applied to a previous invoice.

To view payment history

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose Payments.
- 3. Choose the **Transactions** tab to view the **Transactions** table.

The Transactions table lists all completed transactions with Amazon.

Managing your payment verifications

Your bank might ask you for additional verification whenever you use a credit card to pay Amazon online, add or update a credit card, or register a new Amazon Web Services account.

If your bank requires additional verification, you will be redirected to your bank's website. Follow the instructions from your bank to complete the verification process. To complete verification, your bank might ask you to:

- Enter a one-time SMS code
- Use your bank's mobile application to verify your credit card
- Use biometrics or other authentication methods

Contents

- Best practices for verification
- Payment verification
- Troubleshooting payment verification
- <u>Amazon Organizations</u>

Subscription purchases

Best practices for verification

- Confirm that your default payment method is verified. See Troubleshoot unverified credit cards.
- Confirm that your credit card information with your bank is up-to-date. Banks send verification codes only to the registered card owner.
- Enter the newest code. If you close the authentication portal or request a new code, you might experience a delay in receiving your newest code.
- Enter the code as prompted. Don't enter the phone number that the code is sent from.

Payment verification

You can use the Amazon Billing console to confirm that your payment requires verification or to reattempt any failed payments.

You will receive an email from Amazon if your bank needs to verify your payments.

To verify your payment

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. Under **Payments due**, locate the invoice that you want to pay and choose **Verify and pay**.
- 4. On the choose <u>Payment preferences</u> page, select the preferred payment method.
- 5. Choose **Complete payment**.
- 6. If your payment requires verification, you're redirected to your bank's website. To complete verification, follow the provided prompts.

After your bank processed our payment, you're redirected to the **Payments** page.

Note

• Your invoice appears with a **Payment processing** status until your bank completes the payment process.

• Payment cards for Amazon Japan customers appear on the preference page after the verification process completes.

Troubleshooting payment verification

If you can't successfully complete your verification, we recommend that you take any of the following actions:

- Navigate to the <u>Payment preferences</u> page of the Amazon Billing console and ensure that your credit card is verified. See Troubleshoot unverified credit cards.
- Navigate to the <u>Payment preferences</u> page of the Amazon Billing console and update your billing contact information.
- Contact your bank to confirm that your contact information is up to date.
- Contact your bank for details about why your verification has failed.
- Clear your cache and cookies or use a different browser.

Amazon Organizations

If you're a member account in Amazon Organizations, your purchased services that require upfront payments might not activate until the Management account user verifies the payment. If verification is required, Amazon notifies the billing contact of the Management account by email.

Establish a communication process between your Management account and member accounts.

Subscription purchases

Suppose that you purchase multiple subscriptions at a time (or in bulk) and your bank requests verification. Then, the bank might ask you to verify each individual purchase.

Subscriptions can include immediate purchases such as Reserved Instances, Business Support plan, and Route 53 domains. Subscriptions don't include Amazon Web Services Marketplace charges.

Make sure to complete validation for all purchases.

Managing credit card and ACH direct debit

You can use the <u>Payment preferences</u> page of the Amazon Billing and Cost Management console to manage your credit cards and ACH direct debit payment methods.

Topics

- Add a credit card
- Update a credit card
- Troubleshoot unverified credit cards
- Delete a credit card
- Manage ACH direct debit payment methods

1 Note

If you're paying with a Chinese yuan credit card, see Use a Chinese yuan credit card.

Add a credit card

You can use the Billing and Cost Management console to add a credit card to your account.

To add a credit card to your Amazon Web Services account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. Enter the credit card information.
- 5. (Optional) For **Set as default payment method**, select whether you want this credit card to be your default payment method.
- 6. Enter your card billing address.
- 7. (Optional) Enter the tag key and value. You can add up to 50 tags. For more information on tags, see <u>Managing Your Payments using tags</u>.
- 8. Verify your information and then choose **Add payment method**.

You can update the expiration date, name, address, and phone number that's associated with your credit card.

🚯 Note

When you add or update your credit card, Amazon charges any unpaid invoices from the previous month to the new card.

To update a credit card

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.

Payment methods associated with your Amazon Web Services account appear in the **Payment methods** section.

- 3. Select the credit card to edit and then choose **Edit**.
- 4. Update the information that you want to change.
- 5. Verify your changes and then choose **Save changes**.

Troubleshoot unverified credit cards

To make a payment, you must have a valid, unexpired credit card on file.

To confirm that your credit card information is up-to-date

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Review your **Payments methods**. If your credit card is unverified, choose **Verify** and follow the prompts.
- 4. If you still can't verify this credit card, follow these steps:
 - a. Choose the payment method and then choose **Delete**.

- b. Choose **Add payment method**, and then enter your credit card information again.
- c. Follow the prompts to verify your credit card information.

🚯 Note

Your bank might ask for additional verification. You will be redirected to your bank's website. For more information, see Managing your payment verifications.

Delete a credit card

Before you delete your credit card, ensure that your Amazon Web Services account has another valid payment method set as the default.

You can't delete a payment method that is set to default.

To delete a credit card

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**. Payment methods associated with your Amazon Web Services account appear in the **Payment method** section.
- 3. Select the payment method and then choose **Delete**.
- 4. In the **Delete payment method?** dialog box, choose **Delete**.

Manage ACH direct debit payment methods

If you meet the eligibility requirements, add a US bank account as an ACH direct debit payment method to your payment methods.

To be eligible, you must be an Amazon Web Services customer and also meet the following requirements:

- You created your Amazon Web Services account at least 60 days ago
- You paid at least one invoice (in full) in the previous 12 months
- You paid at least \$100 (cumulatively) over the previous 12 months
- You set USD as the preferred currency

If you pay by ACH direct debit, Amazon provides you with your invoice and initiates the charge to your payment method within 10 days of the start of the month. It can take up to 20 days for the payment to complete successfully, even if the payment shows as **Succeeded** on the Amazon Billing and Cost Management console.

You can use Billing and Cost Management console to add or update a direct debit account.

Contents

- Add a direct debit account
- Update direct debit account

Add a direct debit account

You can use the Amazon Billing and Cost Management console to add a direct debit account to your Amazon payment methods. You can use any personal or business bank account, provided that the account is located at a branch in the US.

Before you add an ACH direct debit account, have the following information ready:

- A US bank account number
- A US bank account routing number
- The address that's associated with the bank account
- (For a personal bank account) A US driver's license number or other state-issued ID number
- (For a business bank account) A Federal tax ID number

To add a direct debit account to your Amazon Web Services account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose Payment preferences.
- 3. Choose Add payment method.
- 4. Choose **Bank account (ACH)**.
- 5. For Account type, choose Personal or Business.
- 6. For **Name on account**, enter the name of the principal account holder.
- 7. For **Bank routing number**, enter the nine-digit routing number.

Routing numbers are always nine digits long. Some banks list the routing number first on a check. Other banks list the account number first.

- 8. For **Re-enter bank routing number**, enter the routing number again.
- 9. For **Checking account number**, enter the account number.

Account numbers might be up to 17 digits long. The account must be an ACH-enabled checking account at a bank that's located in the US.

- 10. For **Re-enter checking account number**, enter the bank account number again.
- 11. For personal bank accounts:
 - a. For **Driver's license number or other state-issued ID**, enter the primary account holder's valid US driver's license or other state-issued ID number.
 - b. For **State of ID issued**, enter the name of the state.
- 12. For business bank accounts, for **Tax ID**, enter the Federal tax ID for the business.
- 13. (Optional) For **Set as default payment method**, select whether you want this direct debit account to be your default payment method.
- 14. For **Billing address**, enter the valid US billing address of the primary account holder.
- 15. (Optional) Enter the tag key and value. You can add up to 50 tags. For more information on tags, see Managing Your Payments using tags.
- 16. Choose **Add payment method** to agree to the **Terms and Conditions** and add your direct debit account.

Update direct debit account

You can update the name, address, or phone number that's associated with your direct debit account.

To update a direct debit account

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.

Payment methods that are associated with your Amazon Web Services account are listed in the **Payment method** section.

- 3. Select the direct debit account that you want to edit and then choose Edit.
- 4. Update the information that you want to change.
- 5. Verify your changes and then choose **Save changes**.

Using Advance Pay

🚺 Note

Advance Pay is in public preview for Amazon Billing and Cost Management and is subject to change. This feature is available for a select group of customers. Your use of advance pay is subject to the Betas and Previews terms of the Amazon Service Terms (Section 2).

Use *Advance Pay* to pay for your Amazon usage in advance. Amazon uses the funds to pay for your invoices automatically when they're due. Your default payment method is used when you don't have Advance Pay balance available.

You can register for Advance Pay in the Amazon Billing and Cost Management console. You can add funds to Advance Pay by using electronic fund transfer. Amazon Inc. customers can add funds using any personal or business bank account with a US branch location. To use Advance Pay in Europe, your account requires an Amazon Europe invoice.

1 Notes

- You can use Advance Pay if your seller of record (SOR) is Amazon Inc. or Amazon Europe and you're paying in USD. If you don't see the **Advance Pay** tab, this can be for the following reasons:
 - You have a different SOR for your Amazon Web Services account. To find your SOR, go to the **Payment preferences** page and under your default payment method, see the name under **Service provider**. You can also find this information in the **Tax settings** page, under the **Seller** column.
 - If you're a member account that is part of an organization, only the management account (also called the payer account) can use Advance Pay.
- Advance Pay isn't available in China Regions.
- For a full list of service restrictions for Advance Pay, see Advance Pay.

Topics

- <u>Registering your Advance Pay</u>
- Adding funds to your Advance Pay

Registering your Advance Pay

You can use the Amazon Billing and Cost Management console to register for Advance Pay.

To register for Advance Pay

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. Choose the **Advance Pay** tab.
- 4. Accept the Advance Pay terms and conditions.
- 5. Choose Register.

Adding funds to your Advance Pay

You can add funds to Advance Pay using electronic funds transfer, or a personal or business bank account.

To add funds to your Advance Pay using electronic funds transfer

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose Payments.
- 3. Choose the **Advance Pay** tab.
- 4. Choose **Add funds**.
- 5. Under **Amount**, enter the fund amount that you want to add.

The amount must be entered in US dollars.

- 6. Under Payment method, choose Choose payment method.
- 7. Choose Wire transfer.
- 8. Choose **Use this payment method**.

- 9. Review the payment details, and choose Verify.
- 10. Complete your electronic funds transfer by using the instructions in the **Payment summary** section.

You can download the funding summary document from the **Advance Pay summary** page.

To add funds to your Advance Pay using a bank account

To add funds to Advance Pay with a bank account, you must meet eligibility requirements to add a US bank account as an ACH direct debit payment method. For more information, see <u>Manage ACH</u> <u>direct debit payment methods</u>.

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose Payments.
- 3. Choose the **Advance Pay** tab.
- 4. Choose Add funds.
- 5. Under **Amount**, enter the fund amount that you want to add.

The amount must be entered in US dollars.

- 6. Under **Payment method**, choose **Choose payment method**.
- 7. Choose **Bank account**.
- 8. Choose **Use this payment method**.
- 9. Review the payment details, and choose **Add funds**.

Your bank account is charged with the amount that you enter.

You can download the funding summary document from the **Advance Pay summary** page.

Making payments in Chinese yuan

If you're an Amazon Inc. customer, you can make payments using the Chinese yuan currency.

Using the China bank redirect payment method

If you're a customer based in China, you can use the China bank redirect payment method to complete payments. To do this, you must have Chinese yuan payments activated and set as your

preferred currency. With the China bank redirect method, you can make payments in Chinese yuan for Amazon Inc.

Topics

- Requirements for using China bank redirect payments
- Setting up China bank redirect payments
- Making payments using China bank redirect
- Switching from China bank redirect to Pay by invoice

Requirements for using China bank redirect payments

To use China bank redirect as your payment method, you must be an Amazon Web Services, Inc. customer and also meet the following requirements:

- You have Chinese yuan payments activated.
- You set Chinese yuan as your preferred currency.

Setting up China bank redirect payments

To use China bank redirect as your payment method, activate Chinese yuan payments on the Amazon Billing and Cost Management console.

To activate Chinese yuan payments, submit information for identity verification. For a personal account, you need your national ID number for verification. For a business account, you must have the following information:

- Your uniform social credit code or organization code
- Your business license image

After you gathered the required information, follow the following procedure. This procedure outlines how to change your preferred currency to Chinese yuan and to set up China bank redirect payments.

To activate Chinese yuan payments and set up the China bank redirect payment method

1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.

- 2. In the navigation pane, choose **Payment methods**.
- 3. In the **Pay with Chinese yuan** section, choose **Get started** or **Pay in Chinese yuan**.
- 4. Review the Terms and Conditions for Chinese Yuan Payments. Then, select I have read and agree to the Terms and Conditions for Chinese Yuan Payments.
- 5. Choose Next.
- 6. If you have a personal account, do the following:
 - For Full name, enter your full name in Chinese.
 - For Identity card number, enter your national ID number.

If you have a business account, do the following:

- For **Company name**, enter the company name in Chinese.
- For **Contact name**, enter the contact name in Chinese.
- For **Contact phone number**, enter the contact phone number for your company.
- For **Uniform social credit code or organization code**, enter your company's code.
- For **Company business license**, upload the image of your company's business license.

i Note

If applicable to your account, you might be required to add a China UnionPay credit card. For more information, see Use a Chinese yuan credit card.

- 7. Choose Next.
- Review the identity information that you entered to make sure it's correct. Then, choose Submit.

It can take up to one business day to verify your identity information. After your identity is verified, your default currency automatically changes to Chinese yuan. Additionally, the China bank redirect payment method is made available to you in the **Pay with Chinese yuan** section of the **Payment Methods** console page.

Making payments using China bank redirect

After setting up the payment method, you can use China bank redirect to make payments on your invoices.

🚯 Note

If you have a business account, the bank account name that you choose for a China bank redirect payment method must be the same as your company's legal name that you submitted when you set up your CNY payment. See step 6 in the <u>previous procedure</u>.

To pay invoices using China bank redirect

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payments**.
- 3. Select the invoice that you want to pay, and then choose **Complete payment**.
- 4. For **Select payment option**, choose **China bank redirect**.
- 5. For payments that are more than \$50,000, confirm that you fulfilled the applicable tax and surcharge withholding obligations. To do so, select I confirm that I fulfilled the Chinese tax and surcharge withholding obligations according to Chinese tax laws and regulations.
- 6. Choose **Verify and pay**.
- 7. To proceed with the redirect, choose **OK**.

After you're redirected, choose your bank from the dropdown menu and complete your payment on your bank's website. It can take up to 24 hours for your transaction request to process.

Switching from China bank redirect to Pay by invoice

To change your default payment method to Pay by invoice, follow these steps.

To switch to the Pay by invoice method

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment methods**.

- 3. In the **Pay by invoice** section, choose **Make default** next to the default payment method that you want to use.
- 4. In the **Change your payment method and currency** dialog box, choose **Yes, I want to proceed**.

After you change your payment method, your preferred currency defaults to US dollars. To change your preferred currency back to Chinese yuan, choose **Make default** next to the China bank redirect payment method. To change your preferred currency to another supported currency, see <u>Changing</u> the currency to pay your bill.

Use a Chinese yuan credit card

If you have an account with Amazon Inc., are charged in USD, and are based in China, you can use the following sections to add a Chinese yuan (CNY) credit card to your account.

You can use the **Payment Methods** page of the Amazon Billing and Cost Management console to perform the following tasks:

- the section called "Set up a Chinese yuan credit card"
- the section called "Switch from a Chinese yuan credit card to an international credit card"
- the section called "Add a new Chinese yuan credit card"

Set up a Chinese yuan credit card

To change your preferred currency to CNY and add a credit card, you must have the following information:

- National ID number
- Business license number (if applicable)
- Business license image (if applicable)

After you have the required information, you can use the following procedure to change your preferred currency and add your first Chinese credit card.

To add your first Chinese credit card

1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.

- 2. In the navigation pane, choose **Payment methods**.
- 3. Choose **Pay with Chinese yuan**.
- 4. In the Setting up Chinese yuan payment dialog box, read the Terms and Conditions for Chinese yuan payments, select I've already read and agree to the above terms and conditions, and choose Next.
- 5. For **Verify customer identity**, provide the following information:
 - National ID name
 - Contact number
 - (Business only) Company Name
 - National ID number
 - (Business only) Business License number
 - (Business only) Business License image

After you provide the required information, choose Next.

- 6. For **Add a China Union Pay credit card**, for the credit card fields, enter the information for the card and bank.
- 7. Choose **Get Code**, enter the provided code, and choose **Next**.
- 8. Review your information, select I have confirmed that the provided information is accurate and valid, and choose Submit.

It can take up to one business day to verify your customer information. Amazon emails you after your information is fully verified.

Switch from a Chinese yuan credit card to an international credit card

To switch from a Chinese yuan credit card to an international credit card, change your preferred currency. You can use the following procedure to change your default payment method and preferred currency at the same time.

To change your default payment methods and currency

- 1. Open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment methods**.

- 3. Next to the international credit card that you want to use as your default payment method, choose **Make Default**.
- 4. In the dialog box, for **Select payment currency**, choose the currency that you want to use. Then, choose **Yes**, **I want to proceed**.

Add a new Chinese yuan credit card

Use the following procedure to add other Chinese yuan credit cards.

To add another Chinese credit card

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment methods**.
- 3. Choose Add a Chinese yuan credit card.
- 4. For the credit card boxes, enter the information about the card and bank.
- 5. Choose **Get Code**, enter the provided code, and choose **Continue**.

Making payments using PIX (Brazil)

If you meet the requirements, you can use your preferred mobile banking app with the PIX feature turned on. You can use this feature to scan the Amazon generated QR code and make a payment for your Amazon Web Services account.

To use PIX, you must be an Amazon Web Services Brazil customer and your Amazon Web Services account must meet the following requirements:

- Your invoices are generated in Brazilian real (BRL), with BRL set as the preferred currency.
- You have a credit card set as the default payment.

Registering a credit card is a requirement. However, if your credit card is a valid payment option, PIX isn't an available payment option. If your credit card payment fails, you can choose PIX as a payment method.

To complete a transaction using PIX

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. In the **Payments due** section, choose an invoice with a **Past due** status.
- 4. Choose **Complete payment**.
- 5. Choose Change payment method, or Use PIX.
- 6. Choose Generate QR code.

Note

The PIX QR code is active for 30 minutes. If the transaction time exceeds 30 minutes, complete these steps again to generate a new QR code.

- In your mobile banking app, open the PIX option and scan the Amazon generated QR code to see the details of your transaction. You can also choose Copy PIX code on the Amazon Complete a payment page to paste the code into your banking page.
- 8. Complete any additional steps that are required through your banking app.
- 9. Confirm your completed transaction in the **Payments** page.

i Note

It takes up to two minutes to receive the payment confirmation from your bank. Your **Payments** page to reflect the changes as soon as the information is received.

For any questions about your PIX payment, contact Amazon Web Services Support.

Managing your payments in China

If your account is in Amazon China, follow the procedures in this section to manage your payment methods and to verify payments with your bank. To learn whether your account is with Amazon or China, see ???.

1 Note

If you have questions about payment methods, see <u>Getting help with your bills and</u> payments.

Topics

• Corporate bank online payment method

Corporate bank online payment method

If your Amazon Web Services account is in the China Regions, use the corporate bank only payment method to manage your payments.

For more information, see Corporate bank only payment.

Managing your payments in India

If your account is with Amazon India, follow the procedures in this topic to manage your payment methods and make payments. For more information about whether your account is with Amazon or Amazon India, see Finding the seller of record.

Note

If you have questions about payment methods, see <u>Getting help with your bills and</u> payments.

Contents

- Supported payment methods
- Use a credit or debit card to make a payment
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- Use a net banking account to make a payment
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- Use Unified Payments Interface (UPI) to make a payment
- Set up automatic payments on your credit or debit card
- Understanding your automatic payments
- Making payments for Amazon Web Services Marketplace or Amazon subscriptions
- Cancel automatic payments on your credit or debit card
- Making payments for invoices outside of Amazon India
- Viewing eligible credit or debit cards for Amazon India invoices
 - Troubleshooting ineligible payment method alerts

Supported payment methods

Amazon supports Visa, Mastercard, American Express, and RuPay credit and debit cards for Amazon India accounts. In addition, you can use internet banking (net banking) accounts and Unified Payments Interface (UPI) to pay your Amazon bills for Amazon India. You can also set up automatic payments (e-mandates) on eligible credit or debit cards to automatically pay your Amazon bills when payments are due. You can only use e-mandates for charges up to INR 15,000.

Use a credit or debit card to make a payment

You can use the Billing and Cost Management console to pay your Amazon India bills. Follow this procedure to make a payment with a credit or debit card.

To use a credit or debit card to make a payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.

The **Payments due** table lists all of your remaining Amazon bills. If there aren't any bills listed, you don't have to do anything.

- 3. Choose the bill that you're paying in the **Payments due** table.
- 4. Choose **Complete payment**.

- 5. To enable automated recurring payments on this card, select the checkbox next to **Charge this payment method automatically for future payments**.
- 6. Choose Verify and pay.
- 7. For Visa, Mastercard, American Express, and RuPay payment methods, you're redirected to your bank to verify your payment.

After your payment is verified, you're redirected to the **Payments** page. Your Amazon bill will remain on the **Payments due** table until your bank processes your payment.

Save your credit or debit card details

You can save your credit or debit card details for card networks in Amazon for subsequent Amazon bill payments as per the guidelines of the Reserve Bank of India (RBI).

To save debit or credit card details

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. Choose **Credit / Debit Card**.
- 5. Enter your card number, expiration date, security code (CVV) and the name of the card holder.
- 6. Provide your consent to **Save card information for future payments**.
- 7. In the **Billing address** section, enter your name, billing address, and phone number.
- 8. Review your card information and then choose **Add payment method**.

You will be redirected to your bank website to verify the card and will be charged 2 Indian rupee (INR). This charge will be refunded back to your card within 5-7 business days.

After your card is verified successfully, your card details will be saved to your Amazon Web Services account.

Add card details when making a payment

You can also add your credit or debit card details when you pay your Amazon bill. After you add the card as a payment method, you don't need to repeat this procedure.

To add card details when making a payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payments**.

The **Payments due** table lists all of your remaining Amazon bills. If there aren't any bills listed, you don't have to do anything.

- 3. Choose the bills to pay in the **Payments due** table.
- 4. Choose Make payments.
- 5. Choose **Add payment method** and then choose **Credit / Debit Card**.
- 6. Enter your card number, expiration date, security code (CVV) and the name of the card holder.
- 7. Provide your consent to **Save card information for future payments**.
- 8. In the **Billing address** section, enter your name, billing address, and phone number.
- 9. Review your card information and then choose **Add payment method**.

You will be redirected to the bill payment summary where you will be prompted to make a payment.

Once your payment is successful, your card details will be saved to your Amazon Web Services account.

Delete a credit or debit card

Before you delete your credit or debit card, ensure that your Amazon Web Services account has another valid payment method set as the default.

To delete a credit or debit card

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**. Payment methods associated with your Amazon Web Services account appear in the **Payment method** section.
- 3. Select the payment method and then choose **Delete**.
- 4. In the **Delete payment method?** dialog box, choose **Delete**.

You can use the Billing and Cost Management console to add internet banking (net banking) accounts as your payment method. This payment option is available to all Amazon India customers.

To add a net banking account

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. Choose **Net Banking**.
- 5. Under **Net banking information**, choose your bank name.
- 6. In the **Billing address** section, enter your name, billing address, and phone number.
- 7. Choose **Add payment method**.

Use a net banking account to make a payment

You can use the Billing and Cost Management console to pay your Amazon India bills. Follow this procedure to make a payment with net banking.

🚯 Note

Because of current Amazon India regulations, you're redirected to your bank to authorize the charge with each Amazon payment. You can't use net banking for automatic payments.

To use net banking to make a payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.

The **Payments due** table lists all of your remaining Amazon bills. If there aren't any bills listed, you don't have to do anything.

3. Choose the bills that you're paying in the **Payments due** table.

- 4. Choose **Complete payment**.
- On the Complete a payment page, the net banking account that you previously saved is selected by default. To use another net banking account, choose Add payment method, then Net Banking.
- 6. Review the summary and then choose **Verify and pay**.
- 7. You're redirected to your bank's website to verify your payment. Sign in to your bank's account and follow the prompts to approve the payment.

After your payment is verified, you're redirected to the **Payments** page. A success message appears at the top of the page.

Remove a net banking account

You can use the Billing and Cost Management console to remove a net banking account from your Amazon Web Services account.

To remove a net banking account

- 1. Open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**. Payment methods that are associated with your Amazon Web Services account are listed in the **Payment method** section.
- 3. Ensure that your Amazon Web Services account has another valid payment method set as the default.
- 4. Select the payment method, and then choose **Delete**.
- 5. In the **Delete payment method** dialog box, choose **Delete**.

Use Unified Payments Interface (UPI) to make a payment

You can use the Billing console to pay your Amazon India bills. Follow this procedure to make a payment with Unified Payments Interface (UPI).

🚯 Note

In order to approve UPI transactions, after you enter a valid UPI ID and billing address, Amazon India will send a request to the UPI application (app) associated with the UPI ID that you specified. To complete a payment, open your UPI app and approve the transaction within 10 minutes. If the transaction isn't approved within 10 minutes, the request expires, and you will need to retry a payment again from the Billing console.

To use UPI to make a payment

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose Payments.

The **Payments due** table lists all of your remaining Amazon bills. If there aren't any bills listed, you don't have to do anything.

- 3. Choose the bills that you're paying in the **Payments due** table.
- 4. Choose **Complete payment**.
- 5. Do one of the following on the **Complete a payment** page:
 - Choose the Use UPI button.
 - Choose Add payment method, then choose Unified Payments Interface (UPI) from the menu.
- 6. Enter your UPI ID and choose **Verify**.
- 7. If successful, enter the billing address or choose to use an existing address.
- 8. Choose Add payment method.
- 9. Once you're redirected the **Payments** page, review the summary and then choose **Verify and pay**.

You will be redirected to an intermediate page that shows the instructions you need to approve the payment. After your payment is verified, you're redirected to the **Payments** page with a success message at the top of the page.

Set up automatic payments on your credit or debit card

Note

The e-mandate functionality is in preview release and is subject to change.

You can enable credit or debit card automatic recurring payments for your Amazon India bills using the following steps. We currently support automatic payments up to INR 15,000 for each bill. You are required to make manual payments to bills that exceed INR 15,000. To enable recurring payments on your card, you must set up an e-mandate on the card.

For select customers during the preview release, you can automatically charge your invoice with additional approval through your banks. Invoices between INR 15,000 and 100,000 require customer approval through the bank. Follow any instructions received from your bank to approve the payment.

To set up e-mandate

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.

The **Payments due** table lists all of your remaining Amazon bills. If there aren't any bills listed, you don't have to do anything.

- 3. Choose the bill that you're paying in the **Payments due** table.
- 4. Choose **Complete payment**.
- 5. In the **Payment summary** section, select the checkbox next to **Charge this payment method automatically for future payments**.
- 6. Choose **Verify and pay**.

í) Note

- You can't select the checkbox to set up e-mandate if your credit or debit card is not supported, or if it is not set up as the default payment method. Contact your bank to learn more about e-mandate support. To change your default payment method, see Designate a default payment method.
- You can't change or edit your default payment method without canceling the active emandate on the card. This is to ensure we automatically charge the default payment instrument only. To cancel the e-mandate, see <u>Cancel automatic payments on your credit</u> <u>or debit card</u>. After the e-mandate is canceled, you can edit or change your default card.

As next steps, your bank redirects you to verify your payment and e-mandate setup. Once emandate is successfully configured, your default payment method on the **Payment preference** page shows the status as AutoPay enabled.

Your future Amazon bills up to INR 15,000 are automatically charged to your credit or debit card each month, starting with the next billing cycle.

Understanding your automatic payments

Once you complete setting up your recurring payments, your Amazon India bills up to INR 15,000 is charged each month automatically.

When you succeed setting up your automatic payment, keep in mind the following points:

- In the **Payment preference** page, your default payment shows the status as AutoPay enabled.
- When your Amazon bill is generated, you receive a pre-debit reminder 24 hours prior to the charge through SMS or email from your bank.
- Manual payments are temporarily disabled up to 96 hours while Amazon attempts to charge your card automatically.

When your automatic payment fails, keep in mind the following points:

- Your automatic charges might fail for insufficient balance, or other reasons.
- We will attempt to charge your card several times, and you will receive an email alert with each attempt.
- You need to make manual payments for bills greater than INR 15,000.

Making payments for Amazon Web Services Marketplace or Amazon subscriptions

E-mandate is not available for automatic payments if you're making payments for Amazon Web Services Marketplace purchases or subscriptions from an Amazon India account. Instead, you must complete your payments from the **Payments** page.

For subscriptions, you must complete the payment within one hour to activate the subscription. Your subscription purchase and invoice is void if you are unable to complete the transaction during that time. To continue, repurchase your subscription and complete the payment.

Cancel automatic payments on your credit or debit card

You can disable credit or debit card automatic payments for your recurring Amazon bills by canceling the e-mandate.

To cancel an e-mandate through the Amazon console

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preference** page.
- 3. Under the **Default payment preferences** section, the status shows AutoPay enabled if AutoPay is currently active.
- 4. Choose **Disable AutoPay**.
- 5. On the **Disable automatic payments** modal, choose **Disable**.

To cancel an e-mandate through the bank portal or SiHub

- 1. Access your bank's website directly, or through the link sent from your bank in the pre-debit SMS or email notifications.
 - You might be required to enter your payment card details to view active e-mandates.
- 2. From the list of active e-mandate list, find **Amazon Web Services** and choose **Cancel**.
 - You bank might send a one-time password or require additional authentication to complete your cancel request.

Once Amazon validates that your e-mandate has been canceled, your default payment method will reflect the change. You can review your automatic payment status on the Billing and Cost Management console **Payment preference** page. No further action is needed from you in the Billing and Cost Management console. You will need to make manual payments for pending and future bills.

If the e-mandate cancel fails, your default payment method on the **Payment preference** page will show the status as AutoPay enabled. Attempt the cancel process again to prevent further charges to your payment card.

Making payments for invoices outside of Amazon India

🚯 Note

If you're unable to save a payment card on your account to make invoice payments for SORs other than Amazon India, your account is likely operating in the legacy model where the functionality isn't available. We are currently migrating Amazon India account from the legacy to the new model where the functionality is available. The expected completion date is December 2025.

You might encounter scenarios where you have an Amazon India account, but need to make Amazon payments for invoices other than the Amazon India seller of record (SOR).

Examples

- You received an Amazon Web Services Marketplace invoice from Amazon Inc.
- You have an outstanding invoice from an SOR other than Amazon India from before moving your account to Amazon India.
- Your account is the management account of an organization with member accounts that aren't in Amazon India.

🚯 Note

You can't use AutoPay for invoices that aren't for Amazon India SOR, from an Amazon India account. You must settle all invoices that aren't Amazon India from the **Payments** console page. For more information, see Making payments.

If you're in an Amazon India account where the default payment method is a credit or debit card and you are paying for invoices other than Amazon India, you must use a payment card that is eligible for payments for those SORs. When you add payment cards to your Amazon India account using **Payment preferences**, that payment method can only be used to make payments to Amazon India invoices according to RBI guidelines. If you don't have an eligible card saved, you must add a new payment method.

To complete a payment for invoices outside of Amazon India

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payments**.
- 3. Select the outstanding invoices for invoices outside of Amazon India.
- 4. Choose **Complete payment**.
- 5. On the **Complete payment** page, do one of the following:
 - (If you have an eligible card saved on file) The card is automatically selected for you to complete your payment for the invoices that aren't Amazon India.

To use another eligible payment card on file, choose **Change payment method**.

• (If you don't have an eligible card saved on file) Choose **Add payment method** and enter a credit or debit card eligible for payments outside of Amazon India. This card is stored for future payments for invoices other than Amazon India.

🚯 Note

If you can't save a payment card on your account, contact Amazon Web Services Support to ensure your account has the functionality enabled.

Viewing eligible credit or debit cards for Amazon India invoices

You can view all of your payment cards save to your account on the **Payments preferences** console page, under the **Payment methods** section.

Reserve Bank of India (RBI) guidelines require that Amazon India cards be stored following the Payment Aggregators and Payment Gateway (PAPG) regulations. This means cards are stored separately from payment cards used to transact outside of Amazon India. For accounts that transacted with a different service provider before moving to Amazon India, or Amazon India management accounts paying for member accounts from multiple service providers, the same card might appear twice under **Payment methods** - once for using with Amazon India per RBI guidelines, and once for transactions other than Amazon India.

When you view your payment methods from an Amazon India account, you see payment cards that are saved following the RBI guidelines and eligible for Amazon India invoices. To see all of your

payment cards, turn on **Show ineligible payment methods**. This shows all of your payment cards on file, including those marked as Ineligible for Amazon India invoices but can still be used for other SORs. If you see two of the same payment card, this is likely because one card is stored following the RBI regulations for Amazon India only, and the other is stored for other SOR invoices.

Troubleshooting ineligible payment method alerts

You might see an alert on your **Payment preferences** page if you recently changed your SOR to or from Amazon India. The alert will mention that your default payment method is not eligible to use under the current service provider. This is because RBI guidelines require that payment cards used for can only be used for Amazon India invoices. You can remedy this alert banner by updating your default payment card.

To register an eligible payment card

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. (If you have an eligible card saved on file for the new SOR) Choose the card and Set as default.
- 4. (If you don't have an eligible card saved on file) Choose **Add payment method** and enter a credit or debit card eligible for payments outside of Amazon India. After it is saved, choose **Set as default**.

Managing your payments in Amazon Europe

If your account is with Amazon Europe, follow the procedures in this section to manage your payment methods and payments.

Topics

- Managing your Amazon Europe credit card payment methods
- Managing your Amazon Europe credit card payment verifications
- Managing your SEPA direct debit payment method

Managing your Amazon Europe credit card payment methods

You can use the <u>Payment preferences</u> page of the Amazon Billing and Cost Management console to perform the following credit card tasks:

- Add a credit card to your AWS Europe account
- Update your credit card
- Confirm that your credit card is up to date

To add a credit card to your Amazon Europe account

You can use the console to add a credit card to your account.

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. For the credit card fields, enter the information and then choose **Continue**.
- 5. For the credit card information fields, enter your card billing address.
- 6. Choose **Continue**.

To update your credit card

You can update the name, address, or phone number that's associated with your credit card.

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose Payment preferences.
- 3. Next to the credit card that you want to edit, choose **Edit**.
- 4. Update the fields that you want to change.
- 5. At the bottom on the page, choose **Update**.

To confirm that your credit card is up to date

You must have a valid, unexpired credit card on file to make a payment.

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Ensure that the **Expires On** date for your card is in the future. If your card has expired, add a new card or update your current card.

Managing your Amazon Europe credit card payment verifications

To comply with the recent EU regulation, your bank might ask you for verification whenever you use a credit card to pay Amazon online, add or update a credit card, or register a new Amazon Web Services account. Banks typically verify by sending unique security codes to credit card holders before online purchases are completed. If your bank needs to verify your payment, you will receive an email from Amazon. After verification, you're redirected to the Amazon website.

If you prefer not to verify payments, register a bank account as your payment method. For more information about direct debit payment eligibility, see .

To learn more about the EU regulation, see the European Commission's website.

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Best practices for verification

- Confirm that your credit card information is up to date. Banks send verification codes only to the registered card owner.
- Enter the newest code. If you close the authentication portal or request a new code, you might experience a delay in receiving your newest code.
- Enter the code as prompted. Don't enter the phone number that the code is sent from.

You can use the Amazon Billing and Cost Management console to confirm that your payment requires verification or to reattempt any failed payments.

To verify your payment

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Orders and invoices**.
- 3. Under **Payments due**, locate the invoice that you want to pay and choose **Verify and pay**.
- 4. On the choose <u>Payment preferences</u> page, select the preferred payment method.
- 5. Choose **Complete payment**.
- 6. If your payment requires verification, you're redirected to your bank's website. To complete verification, follow the provided prompts.

After your bank processed our payment, you're redirected to the **Orders and invoices** page.

🚯 Note

Your invoice appears with a **Payment processing** status until your bank completes the payment process.

Troubleshooting payment verification

If you can't successfully complete your verification, we recommend that you take any of the following actions:

- Contact your bank to confirm that your contact information is up to date.
- Contact your bank for details about why your verification has failed.
- Clear your cache and cookies or use a different browser.
- Navigate to the <u>Payment preferences</u> page of the Amazon Billing and Cost Management console and update your billing contact information.

Amazon Organizations

If you're a member account in Amazon Organizations, your purchased services that require upfront payments might not activate until the Management account user verifies the payment. If verification is required, Amazon notifies the billing contact of the Management account by email.

Establish a communication process between your Management account and member accounts. To change your payment method, see .

Subscription purchases

Suppose that you purchase multiple subscriptions at a time (or in bulk) and your bank requests verification. Then, the bank might ask you to verify each individual purchase.

Subscriptions can include immediate purchases such as Reserved Instances, Business support plan, and Route 53 domains. Subscriptions don't include Amazon Web Services Marketplace charges.

Make sure to complete validation for all purchases or register a bank account as your payment method. For more information about eligibility for direct debit payment, see .

Managing your SEPA direct debit payment method

Amazon Europe customers can add a bank account to allow SEPA direct debit payments. You can use any personal or business bank account, provided that the account is located at a branch in a SEPA-supported country and payments are in the Euro currency.

If you pay by SEPA direct debit, Amazon provides you with your invoice and initiates the charge to your payment method either the following day or the invoice due date, whichever is latest. It can take up to 5 business days for the payment to complete successfully, even if the payment shows as **Succeeded** in the Amazon Billing console.

You can use the <u>Payment preferences</u> page of the Amazon Billing console to perform the following SEPA direct debit tasks:

Contents

- Verify and link your bank account to your Amazon Europe payment methods
- Manually add a direct debit account to your Amazon Europe payment methods
- Update your direct debit account information

Verify and link your bank account to your Amazon Europe payment methods

🚯 Note

To use this feature, you must have a billing address in Germany, Netherlands, Spain, United Kingdom, or Belgium. To change your billing address, see <u>Update your direct debit account</u> <u>information</u>.

You can verify and link a SEPA direct debit account to your Amazon Web Services account by signing in to your bank account. We ask that you to sign in to your bank account, so that we can verify your identity and confirm your ownership of the bank account.

Amazon works with TrueLayer to connect to your bank and securely verify ownership of your bank account. Your information is protected with an encrypted end-to-end connection during this one-time validation process. Your personal data won't be shared or used beyond the purpose of verifying that you're the owner of the connected bank account.

If you don't have access to the bank account sign in credentials, you can create an IAM entity (such as a user or role) for the bank account owner to provide them access to the Billing console. Then, they can update the Amazon Web Services account payment method. We recommend that you don't share sensitive information, including username, password, or payment methods for your account. For more information, see the following topics:

- Overview of managing access permissions
- <u>Best practices to protect your account's root user</u> in the Amazon Account Management Reference Guide

To verify and link your bank account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. Choose **Bank account**.
- 5. Choose **Sign in to your bank**.

- 6. Choose Link your bank account.
- 7. Select your bank name.
- 8. Choose **Allow**. The information that you share will only be used to confirm your ownership of the bank account and to prevent fraud.
- 9. Sign in to your bank account. Use the credentials for your bank account, *not* the credentials for your Amazon Web Services account. Your connection is encrypted and your credentials are protected. Amazon won't access or store your online banking credentials.

í) Note

Your bank might ask that you sign in your account with multi-factor authentication (MFA).

- 10. For **Billing address information**, enter the billing address of the primary account owner.
- Choose Add payment method to agree to the Terms and Conditions and add your direct debit account. Your bank account is now verified and added to your Amazon Europe payment methods.

🚯 Note

Amazon won't access or store your online banking credentials. Amazon will ask for your explicit consent and will only request the following information from your bank:

- Name of account holder
- Account number

Your bank might ask for your consent to share additional information. However, any additional information won't be shared with Amazon. Amazon can confirm your ownership of the bank account and charge your bank account after we first collect this information. Amazon access to this information will expire based on local regulations and your bank's policy.

To remove direct debit payments from your account, see <u>Remove a payment method</u>. To remove Amazon data access to your bank information, see the <u>TrueLayer documentation</u>.

Manually add a direct debit account to your Amazon Europe payment methods

To manually add a direct debit account, you must meet the following requirements:

- Paid at least one invoice in full in the previous 12 months
- Paid at least 100 (USD or EUR) cumulatively over the previous 2 months.

Before you add your payment method, you need the following information:

- Bank Identifier Code (BIC)
- International Bank Account Number (IBAN)
- The address that the bank associates with the account

To manually add a SEPA direct debit account

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.
- 3. Choose Add payment method.
- 4. Choose **Bank account**.
- 5. For Account Holder Name, enter the name of the principal account holder.
- 6. For **BIC (Swift Code)**, enter the 8 or 11 digit number. Routing numbers are either 8 or 11 digits long.
- 7. For **Confirm BIC (Swift Code)**, reenter the BIC. Don't copy and paste.
- 8. For **IBAN**, enter the digits for the IBAN.
- 9. For **Reenter IBAN**, reenter the IBAN digits. Don't copy and paste.
- 10. For **Make Default**, select whether you want this direct debit account to be your default payment method.
- 11. For **Billing Address information**, enter the billing address of the primary account holder.
- 12. Choose **Add bank account** to agree to the **Terms and Conditions** and add your direct debit account.

Update your direct debit account information

You can update the name, address, or phone number that's associated with your direct debit account.

To update your direct debit account information

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Payment preferences**.

Payment methods that are associated with your Amazon Web Services account are listed in the **Payment method** section.

- 3. Select the direct debit account that you want to edit, and choose **Edit**.
- 4. Update the fields that you want to change.
- 5. At the bottom of the dialog box, choose **Save changes**.

If you have questions about payment methods, see Getting help with your bills and payments.

Using payment profiles

Payment profiles allows you to manage payment methods when receiving invoices from multiple Amazon Web Services service providers ("SOR", "seller of record"). You can create payment profiles configured to each Amazon Web Services service provider, specifying the currency and preferred payment method used.

After you create a payment profile for a service provider, your payment profile pays your Amazon bills automatically by using the currency and payment method that you specified.

Payment profiles aren't required. If you don't create a payment profile, your default payment preference is used that was created when you signed up for your Amazon Web Services account.

Payment profiles are useful in avoiding situations such as incomplete payments, failed subscription orders, and unprocessed contract renewals despite having a valid default payment method. When you use payment profiles, you can do the following:

- Use different currencies for different Amazon Web Services service providers
- Use different payment methods for different Amazon Web Services service providers

- Consistently have valid payment methods for your automatic bill payments
- Avoid service interruptions and incomplete balances

🚯 Note

Because some country and technological limitations, not all payment methods are available for all providers. If your default payment method isn't valid for different service providers, create payment profiles by using the payment methods that are accepted by your service provider. For more information, see <u>Creating your payment profiles</u>.

Topics

- <u>Creating your payment profiles</u>
- Editing your payment profiles
- Deleting your payment profiles

Creating your payment profiles

You can create new custom profiles using the following steps in the Billing and Cost Management console.

To create payment profiles

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose **Visit payment profiles**.
- 4. Under the **Payment profiles** section, choose **Create payment profiles**.
- 5. Choose a service provider that matches your invoice.
- 6. Choose a payment currency.
- 7. (Optional) Enter a name for your payment profiles.
- 8. Under the **Payment method** section, choose the payment method to pay your specified service provider and currency with.
 - To add a new payment method

- a. Choose Add a new payment method to open a new tab.
- b. Add a new payment method to your account. For more information, see <u>Managing</u> Your Payments.
- c. Return to the **Create payment profile** tab.
- d. Under the **Payment method** section, choose the refresh icon.
- e. Choose the new payment method that you created.
- 9. Choose **Create payment profile**.

(i) Note

Creating a payment profile updates the currency and payment method for any new invoices issued by the specified Amazon Web Services service provider.

Example: Creating a payment profile for Amazon Inc. bills

This section shows an example of how to create a payment profile for the bills that you receive from the Amazon Inc. service provider. In this example, your Amazon Organizations management account is with Amazon Europe (shown as "Amazon EMEA SARL" as the service provider). Your default payment currency is Euro (EUR).

If you have a valid default payment method on file, you can pay your Amazon Europe invoices automatically. Examples of a valid payment method include a credit card and a SEPA direct debit account. For more information, see Managing your payments in Amazon Europe.

For your Amazon Inc. invoices, you can create a payment profile to pay using a different currency (for example, USD) and a different payment method (for example, a credit card).

To create a payment profile for this Amazon Inc. example

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose **Visit payment profiles**.
- 4. Choose Create payment profiles.
- 5. For **Service provider**, choose Amazon Inc.

- 6. For **Currency**, choose USD US dollar.
- 7. (Optional) Enter a name for your payment profiles (for example, My Amazon Inc. payment profile).
- 8. Under the **Payment method** section, choose the payment method to pay your specified service provider and currency with.
- 9. Choose Create payment profile.

After this payment profile is created, your Amazon Inc. invoices are paid automatically using USD currency and the payment method that you specified.

Example: Creating a payment profile for Amazon Europe bills

This section shows an example of how to create a payment profile for the bills that you receive from the Amazon Europe ("Amazon EMEA SARL") service provider. In this example, your Amazon Organizations management account is with Amazon Inc. Your default payment currency is US dollars (USD).

If you have a valid default payment method on file, you can pay your Amazon Inc. invoices automatically. Examples of a valid payment method include a credit card and a US bank account for ACH direct debit payments. For more information, see <u>Managing Your Payments</u>.

For your Amazon Europe invoices, you can create a payment profile to pay using a different currency (for example, USD) and a different payment method (for example, credit card).

To create a payment profiles for this Amazon Europe example

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose **Visit payment profiles**.
- 4. Choose Create payment profiles.
- 5. For **Service provider**, choose Amazon EMEA SARL.
- 6. For **Currency**, choose EUR Euro.
- 7. (Optional) Enter a name for your payment profiles (for example, My Amazon Europe payment profile).
- 8. Under the **Payment method** section, choose the payment method to pay your specified service provider and currency with.

9. Choose **Create payment profile**.

Example: Creating a payment profile for Amazon Brazil bills

This section shows an example of how to create a payment profile for the bills that you receive from the Amazon Brazil ("Amazon Web Services"/> Serviços Brasil Ltda.") service provider. In this example, your Amazon Organizations management account is with Amazon Inc. Your default payment currency is US dollars (USD).

If you have a valid default payment method on file, you can pay your Amazon Inc. invoices automatically. Examples of a valid payment method include a credit card and a US bank account for ACH direct debit payments. For more information, see <u>Managing Your Payments</u>.

For your Amazon Brazil invoices, you can create a payment profile to pay using a Brazilian real (BRL) currency credit card that's eligible for Amazon Brazil.

To create payment profiles for this Amazon Brazil example

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose **Visit payment profiles**.
- 4. Choose Create payment profiles.
- 5. For **Service provider**, choose Amazon Web Services"/> Serviços Brasil Ltda.
- 6. For **Currency**, choose BRL Brazilian real.
- 7. (Optional) Enter a name for your payment profiles (for example, My Amazon Brazil payment profile).
- 8. Under the **Payment method** section, choose the payment method to pay your specified service provider and currency with.
- 9. Choose Create payment profile.

Editing your payment profiles

After you create a payment profile, you can edit the details by using the Billing and Cost Management console at any time.

To edit a payment profile

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose a payment profile and choose **Edit**.
- 4. Update your payment profile and choose **Save changes**.

Deleting your payment profiles

You can delete your payment profiles by using the Billing and Cost Management console at any time.

To delete a payment profile

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, under **Preferences**, choose **Payment methods**.
- 3. Under the **Payment profiles** section, choose **Visit payment profiles**.
- 4. Choose a payment profile, and then choose **Delete**.

Applying Amazon credits

Amazon credits are automatically applied to bills to help cover costs that are associated with eligible services. For more information about eligible services, see <u>Redeem Your Amazon</u> <u>Promotional Credit</u>. Credits are applied until they are exhausted or they expire.

For any questions about Amazon credits in general or any credits that have already expired, contact Amazon Web Services Support. For more information about how to contact Amazon Web Services Support, see <u>Getting help with your bills and payments</u>.

(i) Viewing Amazon credits

- To view your credit balance since the last billing date, navigate to the Credits page in the Billing console. You can find the credit balance under the Amount remaining column.
 Your credit balance is updated each month at the *end* of the current billing cycle. For example, if you already applied a credit to an invoice this month, the Amount remaining column will be updated at the end of this billing cycle.
- To view your estimated credit balance for the current month, navigate to the **Bills** page in the **Billing** console, and then choose the **Savings** tab. This credit balance is updated every 24 hours and shows your latest estimated credit balance.

Topics

- Step 1: Choosing the credits to apply
- Step 2: Choose where to apply your credits
- Step 3: Applying Amazon credits across single and multiple accounts
- Step 4: Sharing Amazon credits

Step 1: Choosing the credits to apply

This section explains how Amazon credits apply in a single or standalone Amazon Web Services account. If an Amazon Web Services account has more than one credit, the available credits apply in the following order:

The order of how credits apply if an Amazon Web Services account has more than one credit

- 1. The soonest to expire amongst the credits
- 2. The credit with the least number of eligible services
- 3. The oldest of all credits

For example, Jorge has two credits available to him. Credit one is for 10 dollars, it expires January 2019, and it can be used for either Amazon S3 or Amazon EC2. Credit two is for 5 dollars, it expires December 2019, and it can be used only for Amazon EC2. Jorge has sufficient Amazon charges to apply all credits. Amazon selects credit one for application first because it expires sooner than credit two.

🚯 Note

- If you have remaining, eligible usage after credit is consumed, the process will repeat until your credits are consumed or your usage is covered.
- Credit is applied to the largest services charge (for example, Amazon EC2, Amazon S3). Then, the consumption will continue in a descending pattern for the remainder of the service charges.
- Credits don't require customer selection to apply during the billing process. Amazon will automatically apply eligible credits to applicable services.

Step 2: Choose where to apply your credits

This section shows how Amazon credits apply in an Amazon Organizations when credit sharing is turned on.

The order of how credits are applied in an Amazon Organizations when credit sharing is activated

- 1. Account that owns the credit is covered for the service charges
- 2. Credits are applied towards the Amazon Web Services account with the highest spend
- 3. Within the linked account, the charges are grouped by specific fields and credits are applied to the group with the highest charges
- 4. Within this group, credits are applied to the highest charge first

The process repeats until the credit is consumed, or all customer spend is covered.

Amazon applies the credit to the largest available charge across all eligible sellers of record. This means that Amazon tries to apply your credits before they expire. So they might use a generic credit for a specific service.

For example, Jorge has two credits available to him. Credit one is for 10 dollars, expires January 2019, and can be used for either Amazon S3 or Amazon EC2. Credit two is for 5 dollars, expires December 2019, and can be used only for Amazon EC2. Jorge has two Amazon charges: 100 dollars for Amazon EC2 and 50 dollars for Amazon S3. Amazon applies credit one, which expires in January, to the Amazon EC2 charge, which leaves him with a 90-dollar Amazon EC2 charge and a 50-dollar Amazon S3 charge. Amazon applies credit two to the remaining 90 dollars of Amazon EC2 usage, and Jorge has to pay 85 dollars for Amazon EC2 and 50 dollars for Amazon S3. He has now used all of his credits.

Step 3: Applying Amazon credits across single and multiple accounts

The following rules specify how Amazon applies credits to bills for single accounts and for organizations by default (Credit sharing turned on):

- The billing cycle begins on the first day of each month.
- Suppose that an Amazon Web Services account is owned on the first day of the month by an
 individual who isn't part of an organization. Later in the month, that individual account joins an
 organization. In this situation, Amazon applies that individual's credits to their individual bill for
 their usage for that month. That is, Amazon applies the credit up to the day that the individual
 joined the organization.

i Note

An individual's account credits don't cover the account usage from the day that the individual joined the organization to the end of that month. For this period, the individual's account credits aren't applied to the bill. However, starting the next month, Amazon applies the individual's account credits to the organization.

If an account is owned by an organization at the start of the month, Amazon applies credits
redeemed by the payer account or by any linked account to the organization's bill, even if the
account leaves the organization in the same month. The start of the month begins one second

after 0:00 UTC+0. For example, assume that an account leaves an organization on August 1. Amazon still applies the August credits the account redeemed to the organization's bill because the account belonged to the organization during that calendar month.

- If an individual leaves an organization during the month, Amazon begins applying credits to the individual's account on the first day of the following month.
- Credits are shared with all accounts that join an organization at any point in the month. However, the organization's shared credit pool consists of only credits from accounts that have been part of the organization since the first day of the month.

For example, assume that Susan owns a single account on the first day of the month and then joins an organization during the month. Also assume that she redeems her credits on any day after she joins the organization. Amazon applies her credits to her account for usage she incurred from the first of the month to the day that she joined the organization. However, from the first day of the next month, Amazon applies the credits to the organization's bill. If Susan leaves the organization, any credits that she redeems are also applied to the organization's bill until the first of the month after her departure. Starting the month after her departure, Amazon applies Susan's credits to her bill instead of the organization's bill.

In another example, assume that Susan owns a single account on January 1 and joins an organization on January 11. If Susan redeems 100 dollars of credits on January 18, Amazon applies them to her account for the usage that she incurred for the month of January. From February 1st onwards, Susan's credits are applied to the organization's consolidated bill. If Susan has 50 dollars of credits and leaves the organization on April 16, her credits are applied to the organization's consolidated bill for April. From May onward, Susan's credits are applied to her account.

Step 4: Sharing Amazon credits

You can turn off credit sharing on the **Billing preferences** page on the Billing and Cost Management console. The following rules specify how credits are applied to bills for single accounts and for organizations when credit sharing is turned off:

- The billing cycle begins on the first day of each month.
- Credits are applied to only the account that received the credits.
- Bills are calculated using the credit sharing preference that is active on the last day of the month.
- In an organization, only the payer account can turn credit sharing off or on. The payer account user can also select which accounts credits can be shared with.

Credit sharing preferences

You can use this section to activate sharing credits across member accounts in your billing family. You can select specific accounts or enable sharing for all accounts.

🚺 Note

This section is only available for the management account (payer account) as part of Amazon Organizations.

To manage credit sharing for member accounts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. In the **Credit sharing preferences** section, choose **Edit**.
- 4. To activate or deactivate credit sharing for specific accounts, select them from the table, and then choose **Activate** or **Deactivate**.
- 5. To activate or deactivate credit sharing for all accounts, choose **Actions**, and then choose **Activate All** or **Deactivate All**.
- 6. Choose Update.

🚺 Tip

- To activate credit sharing for new accounts that join your organization, select **Default sharing for newly created member accounts**.
- To download a history of your credit sharing preferences, choose Download preference history (CSV).

Managing your purchase orders

You can use your Billing and Cost Management console to manage your purchase orders and configure how they reflect on your invoices. You have the option to add multiple purchase orders with multiple line items. Based on your configurations, we select the purchase order that best matches with your invoice. You can manage purchase orders if you're using a regular Amazon account or an Amazon Organizations management account. For more information about accessing the feature, see <u>Overview of managing access permissions</u>.

Each purchase order can have several line items, and every line item is used for matching with invoices. The following types of line items are available:

- ALL All charges on your Amazon account.
- Amazon Monthly Usage Your Amazon monthly invoice charges.
- Amazon Subscription Purchase Your subscription invoice charges; for example, upfront charges for Reserved Instances (RI) and Amazon Web Services Support charges.

Many criteria and parameters are used to determine the optimal purchase order for your invoices. You can create up to 100 active purchase orders with up to 100 line items for each regular account or Amazon Organizations management account.

When an invoice is generated, all purchase orders that are added to your management account are considered for association. Then, expired or suspended purchase orders are filtered out, leaving only the active purchase orders. Your invoice's billing entity is matched with the "Bill from" entity in your purchase order, filtering out those that don't match. For example, you might have a purchase order added for the NWCD entity (PO_1), and another one for the Sinnet entity (PO-2). If you purchase a Reserved Instance in the Ningxia Region, only PO_1 will be considered for invoice association.

Next, we evaluate line item configurations to determine the best fit for your invoice. To be matched with a line item, the invoice's billing period must be within the line item's start and end month, and it must also match the line item type. If multiple line items match, we use the line item with the most specific type for invoice association. For example, if you have an RI invoice, we use the subscription line item instead of ALL if both are configured.

Lastly, the line items with enough balance to cover your invoice amount are selected above the out of balance line items. If line items that belong to multiple purchase orders match all criteria precisely, we use the purchase order that was most recently updated to match the invoice.

Topics

- Setting up purchase order configurations
- Adding a purchase order
- Editing your purchase orders
- Deleting your purchase orders
- Viewing your purchase orders
- Reading your purchase order details page
- Enabling purchase order notifications
- Use tags to manage access to purchase orders

Setting up purchase order configurations

You can use purchase orders and their line item attributes to flexibly define a configuration that best fits your needs. The following are examples of purchase order configuration scenarios that you can use.

You can configure separate purchase orders for different time periods by choosing distinct effective and expiration months.

🚯 Note

To be matched with a line item, the invoice's billing period must be within the line item's start and end month, and it must also match the line item type.

Example Example 1

If you use monthly purchase orders, you can define one purchase order for each month by selecting the same effective and expiration month for each purchase order. The purchase order will only apply to the billing period of the invoices.

Here are a few purchase order configurations that you can use for this setup:

- P0 #M1_2021 with the effective month set to Jan 2021 and expiration month Jan 2021.
- P0 #M2_2021 with the effective month set to Feb 2021 and expiration month Feb 2021.
- P0 #M3_2021 with the effective month set to Mar 2021 and expiration month Mar 2021.

Here is an example of how you can also define a purchase order for a particular quarter, half-year, or the entire year:

- P0 #Q4_2021 with the effective month set to Apr 2021 and expiration month Jun 2021.
- P0 #2H_2021 with the effective month set to Jul 2021 and expiration month Dec 2021.
- P0 #2022Y with the effective month set to Jan 2022 and expiration month as Dec 2022.

Example Example 2

You can configure separate purchase orders for different types of invoices through line item configurations.

- P0 #Anniversary_Q4_2021 with the effective month set to Apr 2021, and expiration month Jun 2021, Line item type = Amazon monthly usage.
- P0 #Subscriptions_Q4_2021 with the effective month set to Apr 2021, and expiration month Jun 2021, Line item type = Amazon Subscription Purchase.

You can track the balance of a given purchase order for different time periods by configuring granular line item start and end months.

Example Example 3

Consider P0 #Q4_2021 from Example 1 with an effective month of Apr 2021 and an expiration month Jun 2021. You can track this purchase order's balance on a monthly basis by setting up the following line items:

- Line item #1 with the start month Apr 2021, end month Apr 2021, Line item type = ALL.
- Line item #2 with the start month May 2021, end month May 2021, Line item type = ALL.
- Line item #3 with the start month Jun 2021, end month Jun 2021, Line item type = ALL.

Alternatively, you can track balance for each line item type separately for the same purchase order and time period.

Example Example 4

The same P0 #Q4_2021 from Example 1 can be set up using the following configuration to track balance of different line item types separately.

- Line item #1 with the start month Apr 2021, end month Jun 2021, Line item type = Amazon monthly usage.
- Line item #1.2 with the start month Apr 2021, end month Jun 2021, Line item type = Amazon Subscription Purchase.

Continue this configuration for May and June.

Example Example 5

You can also combine the previous two configurations to track balances for different time periods and line item types separately.

- Line item #1.1 with the start month Apr 2021, end month Apr 2021, Line item type = Amazon monthly usage.
- Line item #1.2 with the start month Apr 2021, end month Apr 2021, Line item type = Amazon Subscription Purchase.

Continue this configuration for May and June.

Adding a purchase order

You can use the Billing and Cost Management console to add purchase orders to use in your invoices. Adding a purchase order is a two-step process involving purchase orders and line item configurations. First, you enter your purchase order details (for example, purchase order ID, shipping address, effective and expiration month). Then, you define the purchase order line item configurations that are used to match the purchase order with an invoice. If you add multiple purchase orders, we use the purchase order that has the line item best matching the invoice being generated.

To add a purchase order

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose Purchase orders.
- 3. Choose Add purchase order.
- 4. For **Purchase order ID**, enter a unique identifier for your purchase order ID. Purchase order IDs must be unique within your account. For details about character restrictions for your purchase ID, see <u>Purchase orders</u>.
- 5. (Optional) For **Description**, describe your purchase order, including any notes for your reference.
- 6. For **Bill from**, choose the Amazon billing entity that you are invoiced from.

Note

Remittance details are different for each **Bill from** location. Be sure to verify your **Bill from** selection. You must make your payments to the legal entity that you're billed from. We don't recommend configuring more than one **Bill from** location for a purchase order.

7. (Optional) If your purchase order is invoiced from the **Amazon Web Services EMEA SARL** billing entity: For **Tax registration number**, select the tax registration numbers that you want to associate with your purchase order. Your purchase order is associated with only the invoices generated for the tax registration numbers that you select.

🚯 Note

The **Tax registration number** selection is available for only the **Amazon Web Services EMEA SARL** billing entity. For more information on your tax registration number settings, see <u>Setting up your tax information</u>.

8. For **Ship to**, enter your shipping address.

(Optional) Select **Copy Bill to address** to copy and edit the address populated from your **Bill to** field.

- 9. For **Effective month**, choose the billing period when you want your purchase order to start. Your purchase order is eligible for invoices that are associated with usage, starting from the billing period that you specify.
- 10. For **Expiration month**, choose the billing period when you want your purchase order to end. Your purchase order expires at the end of the specified billing period. It's not used for invoices that are associated with usage after the billing period.
- 11. (Optional) For **Purchase order contacts**, enter the contact name, email address, and phone number. You can add up to 20 contacts.
- 12. (Optional) Enter the tag key and value. You can add up to 50 tags.
- 13. Choose **Configure line items**.
- 14. For Line item number, enter a unique identifier for your line item number.
- 15. (Optional) For **Description**, enter a description for your line item.
- 16. For **Line item type**, choose your preferred line item type. For a detailed description for each line item type, see <u>Managing your purchase orders</u>.
- 17. For **Start month**, choose the month you want your line item to start from. This date cannot be earlier than your purchase order **Effective month**.
- 18. For **End month**, choose the month you want your line item to end. This date cannot be later than your purchase order **Expiration month**.
- 19. (Optional) Choose **Enable balance tracking** to track the balance of your line item.
- 20. For **Amount**, enter the total amount of your purchase order line item.
- 21. For **Quantity**, enter the quantity amount.
- 22. (Optional) For **Tax**, enter the tax amount. This can be an absolute value or a percentage of the line item amount.

For **Tax type**, choose **% of amount** to enter a percentage, or **amount in \$** to enter an absolute tax amount.

- 23. To add other line items, choose **Add new line item**. You can add up to 100 line items.
- 24. Choose **Submit purchase order**.

Some fields are automatically filled and cannot be edited. Here is a list of where the automated fields are referenced from.

- Bill to The Bill to address for your invoice. This field is included as a reference, because your
 purchase order billing address should match your invoice billing address.
- Payment terms Your negotiated payment terms.
- **Currency** Your preferred invoice currency.

Editing your purchase orders

You can edit your purchase order, line item information, and status using the Billing and Cost Management console. You can't change your purchase order ID in this process.

To edit a purchase order

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Select the purchase order that you want to edit.
- 4. Choose **Edit purchase order**.
- 5. Change any parameter of your choice. Purchase order IDs cannot be changed.
- 6. Choose **Configure line items**.
- 7. Choose **Submit purchase order**.

To update contacts

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order that you want to edit.
- 4. Choose Manage contacts.
- 5. Change the contacts information as needed.
- 6. Choose **Save changes**.

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order that you want to edit.
- 4. Choose Change status.
- 5. Choose a status:
 - **Suspended** Your purchase order will no longer be used for invoice association.
 - Active Your purchase order will be used for invoice association.
- 6. Choose **Change status**.

Note

You can use a suspended purchase order for invoice association when it is past its expiration date and set to **Suspended-Expired** status. To do so, you must change the status to **Expired** and update the expiration month to make it **Active**. Be sure to update your line item end months accordingly.

To add a line item

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order you want to edit.
- 4. In the Line items section, choose Add line item.
- 5. Change the information as needed.
- 6. Choose **Save line item**.

To edit a line item

 Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.

- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order you want to edit.
- 4. In the **Line items** section, choose **Edit**.
- 5. Change the line item information as needed.
- 6. Choose **Save line item**.

To delete a line item

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order you want to edit.
- 4. Select all of the line items to delete in the Line items section.
- 5. Choose **Delete**.
- 6. Choose Confirm.

To update tags for purchase orders

- 1. Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose the purchase order that you want to edit.
- 4. Choose Manage tags.
- 5. Change your tag information as needed.
- 6. Choose **Save changes**.

To remove the Tax Registration Number (TRN) from the purchase order configuration

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Select the purchase order that you want to edit.
- 4. Choose **Edit purchase order**.

- 5. Remove the TRN value.
- 6. Choose **Save**.

Deleting your purchase orders

You can use the Billing and Cost Management console to delete your purchase order at any time, along with all of its notifications and associated contacts. A deleted purchase order can't be recovered.

To delete a purchase order

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Select all of the purchase orders that you want to delete.
- 4. Choose Delete purchase order.
- 5. Choose Confirm.

Viewing your purchase orders

Your purchase order dashboard on the Billing and Cost Management console shows you the state of your purchase orders at a glance. Your purchase orders are listed on the dashboard, along with the following information.

- Purchase order ID The unique identifier for your purchase order.
- Value Your purchase order amount. This is the sum of all line item amounts.
- **Balance** The sum of all line item balances. This sum is updated whenever an invoice is associated.
- Effective and Expiration The start and end of your purchase order ID.
- Status The current status of your purchase order.
- **Updated on** The most recent date you updated your purchase order.

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> <u>costmanagement/</u>.
- 2. In the navigation pane, choose **Purchase orders**.
- 3. Choose a purchase order to see the **Purchase order details** page.

Reading your purchase order details page

You can review the contents of your individual purchase orders on the **Purchase order details** page of the Billing and Cost Management console.

To change your purchase order or line items, see Editing your purchase orders.

- **Bill to** The address reflected on your invoice. To change your billing address, update the information from your Payment methods.
- Ship to Your purchase order's shipping address.
- Bill from The Amazon legal entity you're billed from.
- Tax registration numbers The tax registration numbers that you selected for your purchase order. Your purchase order is associated with the invoices generated for these tax registration numbers.

i Note

The **Tax registration number** selection is available for only the **Amazon Web Services EMEA SARL** billing entity. For more information on your tax registration number settings, see Setting up your tax information.

- Payment terms Your negotiated Amazon payment terms.
- Currency Your preferred invoice payment currency.
- Effective month
 The billing period from when your purchase order is effective. Your purchase
 order is eligible for invoices that are associated with usage, starting from the specified billing
 period.
- Expiration month
 The billing period when your purchase order expires. Your purchase order is
 only used for invoices in the current billing period. It's not used for invoices that are associated
 from usage after the specified billing period.

- Contacts A list of all contacts for this purchase order. Choose Manage contacts to see all listed.
- Status The current status of your purchase order.
 - Active Eligible for invoice association.
 - **Suspended** Not eligible for invoice association. You can suspend an active or expired purchase order.
 - **Expired** A purchase order that is past its expiration date, and is no longer eligible for invoice association.
 - Suspended-expired A suspended purchase order that is also past its expiration date.
- **Balance amount** The balance remaining on your purchase order. This is the total balance amount of all line items configured on your purchase order.
- **Total amount** The sum of your total values for all line items configured in your purchase order.
- Line items The line item details you used when adding the purchase order.
 - Number The unique identifier for your line item.
 - **Type** Your line item type.
 - **Start month** The month that your line is effective from. The line item is eligible for invoice association from this month.
 - End month The month your line item expires. The line item is not eligible for invoice association at the end of this month.
 - **Amount** The unit price amount.
 - Quantity The number of units.
 - **Tax** The tax amount.
 - **Total value** The total value of amount for the particular line item.
 - Current balance The remaining balance after subtracting the total amount of all invoices matched with this line item. To see details for all invoices matching this line item, see the invoices table.
- Invoices All invoices associated with your purchase order.
 - **Date issued** The date when the invoice was issued.
 - **Type** The type of invoice. For example, invoice and credit memo.
 - **ID** The unique identifier of the invoice.
 - Line item number The line item number of your purchase order, associated with the invoice.
 - Amount The invoice amount.
 - **Due date** Your payment due date for the invoice.

Enabling purchase order notifications

You can enable email notifications on the Billing and Cost Management console by adding contacts to your purchase orders. You need at least one purchase order contact added to receive notifications.

Notifications are beneficial to proactively take action on your expiring, or out of balance purchase orders. This helps you make payments without delay. To update your contacts information, see Editing your purchase orders.

Purchase order notifications are sent to your contacts for the following scenarios:

- Balance tracking When your purchase order's line item balance drops below the 75% threshold. The purchase order balance is tracked at the line item level, and must be enabled at each level.
- Expiration tracking When your purchase order is approaching its expiration. Your contacts
 receive notifications leading up to your expiration date. If your purchase order expiration is
 less than one month away, notifications are sent one week prior and on the expiration date. If
 your expiration date is one to three months away, a notification is sent one month before the
 expiration date. If the expiration is more than three months away, notifications are sent two
 months before the expiration date.

Use tags to manage access to purchase orders

You can use attribute-based access control (ABAC) to manage access to your purchase orders. When you create your purchase orders, you can tags with key-value pairs. You can then create IAM policies and specify the tags. For example, if you add the project key and assign it a value of test, your IAM policies can explicitly allow or deny access to any purchase order that has this tag.

To add tags to new purchase orders or update existing ones, see <u>Adding a purchase order</u> and <u>Editing your purchase orders</u>.

Example Example: Use tags to allow access

The following policy allows the IAM entity to add, modify, or tag purchase orders that have the project key and a value of test.

```
"Version": "2012-10-17",
```

{

```
"Statement": [{
        "Effect": "Allow",
        "Action": [
            "purchase-orders:AddPurchaseOrder",
            "purchase-orders:TagResource",
            "purchase-orders:ModifyPurchaseOrders"
        ],
        "Resource": "arn:aws:purchase-orders::*:purchase-order/*",
        "Condition": {
            "StringEquals": {
                "aws:RequestTag/project": "test"
            },
            "ForAllValues:StringEquals": {
                "aws:TagKeys": "project"
            }
        }
    }]
}
```

Example Example: Use tags to deny access

The following policy denies the IAM entity from completing any purchase order action on purchase orders that have the project key and a value of test.

For more information, see the following topics in the IAM User Guide:

- What is ABAC for Amazon?
- <u>Controlling access to Amazon resources using tags</u>

Trying services using Amazon Web Services China Region Free Tier

When you create an Amazon Web Services account, you can try some Amazon services free of charge within certain usage limits.

Amazon Web Services China Region Free Tier provides three types of offers:

Always free

These free tier offers don't expire and are available to all Amazon customers.

12 months free

You can use these offers for 12 months following your initial sign up date to Amazon.

Short-term trials

You can use a free tier limit each month for less than 12 months. Most short-term free trial offers start from the date that you activate a particular service.

To find services that offer Amazon Web Services China Region Free Tier benefits, types, and usage limits

- 1. Navigate to the Amazon Web Services China Region Free Tier page.
- 2. In the **Free Tier details** section, choose a filter to search for the tier type and product category.

For example, you can choose **Always Free** and choose **Compute** to learn about the number of free requests available for Amazon Lambda (Lambda).

For more information about Amazon Web Services China Region Free Tier and on how to avoid charges while you're eligible, see the following topics:

Topics

- Confirming eligibility to use Amazon Web Services China Region Free Tier
- Avoiding unexpected charges after Free Tier
- Tracking your Amazon Web Services China Region Free Tier usage
- Using the Free Tier API

Confirming eligibility to use Amazon Web Services China Region Free Tier

Your Amazon usage stays within the Amazon Web Services China Region Free Tier limits when all of these conditions are met:

- You're within the active trial period for the Amazon Web Services China Region Free Tier offering. For example, within 12 months for a 12-month free type of service like Amazon Elastic Compute Cloud (Amazon EC2).
- You use only Amazon Web Services services that offer Amazon Web Services China Region Free Tier benefits.
- Your usage stays within the Amazon Web Services China Region Free Tier limits of those services.

If you use Amazon Web Services services beyond one or more of these conditions, then you're charged at the standard Amazon billing rates for usage that exceeds the Free Tier limits.

To learn more about the Amazon Web Services China Region Free Tier limits, see <u>Amazon Web</u> <u>Services China Region Free Tier</u>.

🚯 Note

For Amazon Organizations, the Amazon Web Services China Region Free Tier eligibility for all member accounts begins on the day that the management account is created. For more information, see the Amazon Organizations User Guide.

Avoiding unexpected charges after Free Tier

Your eligibility for the 12 month free service offering Amazon Web Services China Region Free Tier expires 12 months after you first activate your Amazon Web Services account. You can't extend your Free Tier eligibility after this time.

🚯 Note

You can continue to use Always Free offers, even after your Amazon Web Services China Region Free Tier eligibility expires. To learn more about available Always Free offers, see Amazon Web Services China Region Free Tier.

As the expiration date of your Amazon Web Services China Region Free Tier eligibility approaches, we recommend that you shut down or delete any resources that you don't need. After your eligibility expires, you're charged at the standard Amazon billing rates for usage.

For short-term trials, there are no expiration notification for these services. You will receive free tier alerts during the trial period only. To avoid unexpected costs in a short-term trial, you must turn off these resources before the end of the trial period.

Even if you aren't regularly signing in to your account, you might have active resources running. Use the following procedure to identify your account's active resources.

🚯 Note

You can also use the GetFreeTierUsage API operation to get your free tier usage. For more information about the Free Tier API, see the <u>Amazon Billing and Cost Management</u> <u>API Reference</u>.

To identify your active resources by using Amazon Billing

- 1. Sign in to the Amazon Web Services Management Console and open the Billing console at https://console.amazonaws.cn/billing/.
- 2. On the navigation pane, choose Bills .
- 3. On the **Charges by service** tab, choose **Expand all**.
- 4. Review the list to find the services with active resources and by Amazon Web Services Region, and the charges for each resource.

To identify your active resources by using Amazon Cost Explorer

1. Sign in to the Amazon Web Services Management Console and open the Amazon Cost Management at https://console.amazonaws.cn/costmanagement/home.

- 2. On the navigation pane, choose **Cost Explorer**.
- 3. On the **Cost and usage graph**, note the services and Amazon Web Services Regions with resources that you don't need. For instructions on how to shut down or delete those resources, see the documentation for that service.

For example, to terminate an Amazon EC2 Linux instance, see the Amazon EC2 User Guide.

🚺 Tip

You might decide to close your Amazon Web Services account. For more information and important considerations, see <u>Close your account</u> in the *Amazon Account Management Reference Guide*.

Tracking your Amazon Web Services China Region Free Tier usage

You can track your Amazon Web Services China Region Free Tier usage in the following ways:

- Turn on Free Tier usage alerts in **Billing preferences**. By default, Amazon Web Services China Region Free Tier usage alerts automatically notifies you over email when you exceed 85 percent of the Free Tier limit for each service. You can also configure Amazon Budgets to track your usage to 100 percent of the Free Tier limit by setting a zero spend budget using the template.
- Review your Amazon Web Services China Region Free Tier usage by using the **Free Tier** page in the Billing and Cost Management console.

Topics

- Using Amazon Web Services China Region Free Tier usage alerts
- <u>Recommended actions for Free Tier</u>
- Trackable Amazon Web Services China Region Free Tier services

Using Amazon Web Services China Region Free Tier usage alerts

You can use Amazon Web Services China Region Free Tier usage alerts to track and take action on your cost and usage. For more information about this feature, see <u>Managing your costs with</u> Amazon Budgets.

Amazon Web Services China Region Free Tier usage alerts automatically notifies you over email when you exceed 85 percent of your Free Tier limit for each service. For additional tracking, you can configure Amazon Budgets to track your usage to 100% of the Free Tier limit by setting a zero spend budget using the template. You can also filter your budget to track individual services.

For example, you can set up a budget to send you an alert when you're forecasted to exceed 100 percent of the Free Tier limit for Amazon Elastic Block Store. To set up a usage budget, see <u>Creating</u> <u>a usage budget</u>.

Amazon Web Services China Region Free Tier usage alerts cover Free Tier offerings active in the current month, such as the first 25 GB of Amazon DynamoDB storage or the first 10 custom Amazon CloudWatch metrics. It's common to have all three types of Amazon Web Services China Region Free Tier offerings active within the first 12 months.

For example, you use Amazon EC2, Amazon SageMaker AI, and Amazon S3. You will see Free Tier usage for those usage types in the Billing and Cost Management console, **Free Tier** page. After using SageMaker AI for two months, the short-term trial will end while Amazon EC2 and Amazon S3 continue. After 12 months from account creation, the Amazon EC2 12-month free period expires, but Amazon S3 will continue because the service offers **Always free** status.

When you exceed the Free Tier limit for a service, Amazon sends an email to the email address that you used to create your account (the Amazon Web Services account root user). To change the email address for Amazon Web Services China Region Free Tier usage alerts, see the following procedure:

To change the email address for Amazon Web Services China Region Free Tier usage alerts

- 1. Sign in to the Amazon Web Services Management Console and open the Billing console at https://console.amazonaws.cn/billing/.
- 2. Under **Preferences** in the navigation pane, choose **Billing preferences**.
- 3. For Alert preferences, choose Edit.
- 4. Enter the email address to receive the usage alerts.
- 5. Choose **Update**.

Amazon Budgets usage alerts for 85 percent of the Free Tier limit are automatically activated for all individual Amazon Web Services accounts, but not for a management account in an Amazon Organizations. If you own a management account, you must opt in to get Amazon Web Services China Region Free Tier usage alerts. Use the following procedure to opt in or out of Free Tier usage alerts.

To opt in or out of Amazon Web Services China Region Free Tier usage alerts

- 1. Sign in to the Amazon Web Services Management Console and open the Billing console at https://console.amazonaws.cn/billing/.
- 2. Under **Preferences** in the navigation pane, choose **Billing preferences**.
- 3. For Alert preferences, choose Edit.
- 4. Select **Receive Amazon Web Services China Region Free Tier alerts** to opt in to Free Tier usage alerts. To opt out, clear **Receive Amazon Web Services China Region Free Tier alerts**.
- 5. Choose Update.

Recommended actions for Free Tier

If you're eligible for Amazon Web Services China Region Free Tier and you use a free tier offering, you can track your usage with the **Recommended actions** widget on the Billing and Cost Management home page. This widget shows recommendations if your usage exceeded 85% of any service's free tier usage limits.

The following conditions might limit whether you see Amazon Web Services China Region Free Tier data:

- You use an Amazon Web Services service that doesn't offer Free Tier
- Your Free Tier has expired
- You access Amazon through an Amazon Organizations member account
- You use an Amazon Web Services service in the Amazon GovCloud (US-West) or Amazon GovCloud (US-East) Regions

For more information, see <u>Recommended actions</u>.

Trackable Amazon Web Services China Region Free Tier services

With Amazon, you can track how much you used Amazon Web Services China Region Free Tier services and what service usage types you used. Usage types are the specific type of usage that Amazon tracks. For example, the usage type BoxUsage:freetier.micro means that you used an Amazon EC2 micro instance.

The Amazon Web Services China Region Free Tier usage alerts and the **Top Amazon Web Services China Region Free Tier Services by Usage** table cover both expiring and non-expiring Amazon Web Services China Region Free Tier offerings. You can track the following services and usage types.

Service	Usage type	Free Tier type
Amazon Amplify	BuildDuration	12 Months Free
	DataStorage	
	DataTransferOut	
	HostingComputeRequ estCount	
	HostingComputeRequ estDuration	
Amazon AppSync	ConnectionDuration	12 Months Free
	GraphQLInvocation	
	GraphQLNotification	
	ResponseData	
Amazon Audit Manager	Resource-Assessment- Collected	Free Trial
Amazon Budgets	ActionEnabledBudge tsUsage	Always Free

Usage type	Free Tier type
Resource-Invocation- Count-FreeTier	Always Free
Requests	Always Free
TimedStorage-ByteHrs	
User-Month	Always Free
actionExecutionMin ute	Always Free
activePipeline	
AWS-Activities-inf req	12 Months Free
AWS-Preconditions- infreq	
DataTransfer-Out-B ytes	Always Free
DataTransfer-Regio nal-Bytes	
InstanceUsg:dms.t2 .micro	Always Free
InstanceUsg:dms.t3 .micro	
ServiceUse-Train-E valuate-Job	Free Trial
TimedStorage-Gigab yteHrs	
	Count-FreeTier Requests TimedStorage-ByteHrs User-Month actionExecutionMin ute activePipeline AWS-Activities-inf req AWS-Preconditions- infreq DataTransfer-Out-B ytes DataTransfer-Regio al-Bytes DataTransfer-Regio cal-agytes InstanceUsg:dms.t2 micro ServiceUse-Train-E valuate-Job

Service	Usage type	Free Tier type
Amazon Directory Service	MicrosoftAD-DC-Usage	Free Trial
	Small-Directory-Us age	
AWS Elemental MediaConnect	DataTransfer-Out-B ytes	Always Free
Amazon Glue	Catalog-Request	Always Free
	Catalog-Storage	
Amazon IoT Greengrass	ActiveGGC-Devices	12 Months Free
Amazon HealthImaging	API-Requests-Core	12 Months Free
	EarlyDelete-Active ByteHrs	
	TimedStorage-Activ eByteHrs	
	TimedStorage-Archi veByteHrs	
Amazon IoT	ActionsExecuted	12 Months Free
	ConnectionMinutes	
	LoRaWAN-FUOTA	
	Messages	
	RegistryAndShadowO perations	
	RulesTriggered	
	Solved-Positions	

Service	Usage type	Free Tier type
Amazon IoT Analytics	DataProcessing-Bytes	12 Months Free
	DataScanned-TB	
	ProcessedStorage-B yteHrs	
	RawStorage-ByteHrs	
Amazon IoT Device Defender	Detect	Free Trial
Amazon IoT Device Management	JobExecutions	12 Months Free
Amazon IoT Events	Messages	12 Months Free

Service	Usage type	Free Tier type
Amazon loT TwinMaker	IoTTwinMaker-BaseT ier1-Queries	12 Months Free
	IoTTwinMaker-BaseT ier1-UnifiedDataAc cess	
	IoTTwinMaker-BaseT ier2-Queries	
	IoTTwinMaker-BaseT ier2-UnifiedDataAc cess	
	IoTTwinMaker-BaseT ier3-Queries	
	IoTTwinMaker-BaseT ier3-UnifiedDataAc cess	
	IoTTwinMaker-BaseT ier4-Queries	
	IoTTwinMaker-BaseT ier4-UnifiedDataAc cess	
	IoTTwinMaker-Unifi edDataAccess	
Amazon Key Management Service	KMS-Requests	Always Free

Service	Usage type	Free Tier type
Amazon Lambda	Lambda-GB-Second	Always Free
	Lambda-Streaming-R esponse-Processed- Bytes	
	Request	
Amazon Migration Hub	API-Request	Always Free
Refactor Spaces	EnvironmentHours	
Amazon OpsWorks	OpsWorks-Chef-Auto mate	12 Months Free
	OpsWorks-Puppet-En terprise	
Amazon RoboMaker	SimulationUnitHour	Free Trial
Amazon Security Hub	OtherProduct:PaidF indingsIngestion	Always Free
	RuleEvaluation	
Amazon Service Catalog	SC-API-Calls	Always Free
Amazon Step Functions	StateTransition	Always Free
Amazon Storage Gateway	Uploaded-Bytes	Always Free
Amazon Supply Chain	ADPSiteProductCount	Free Trial
	SiteProductCount	
	StorageSize	

Service	Usage type	Free Tier type
Amazon Systems Manager	AWS-Auto-ScriptDur ation-Tier3	Always Free
	AWS-Auto-Steps-Tier1	
	IM-Notifications-T ier1	
Amazon Virtual Private Cloud	PublicIPv4:InUseAd dress	12 Months Free
Amazon WAF	AMR-BotControl-Req uest	Always Free
	AMR-BotControl-Tar geted-Request	
	AMR-FraudControl-R equest	
	ShieldProtected-AMR- BotControl-Request	
	ShieldProtected-AMR- BotControl-Targeted- Request	
	ShieldProtected-AMR- FraudControl-Request	
Amazon X-Ray	XRay-TracesAccessed	Always Free
	XRay-TracesStored	

Service	Usage type	Free Tier type
Amazon API Gateway	ApiGatewayHttpRequ est	12 Months Free
	ApiGatewayMessage	
	ApiGatewayMinute	
	ApiGatewayRequest	
Amazon AppStream	<pre>stream-hrs:720p:g2</pre>	Free Trial
	stream.standard.la rge-ib	
Amazon Augmented Al	A2ICustom-Objects	12 Months Free
	A2IRek-Objects	
	A2ITextract-Objects	
Amazon Braket	Simulators-Task	Free Trial
Amazon Cloud Directory	Requests-Tier1	12 Months Free
	Requests-Tier2	
	TimedStorage-ByteHrs	
Amazon CloudFront	DataTransfer-Out-B ytes	Always Free
	Executions-CloudFr ontFunctions	
	Invalidations	
	Requests-Tier1	

Service	Usage type	Free Tier type
Amazon CloudSearch	DocumentBatchUpload	Free Trial
	IndexDocuments	
	SearchInstance:m1. large	
	SearchInstance:m1. small	
	SearchInstance:m2. 2xlarge	
	SearchInstance:m2. xlarge	
	SearchInstance:m3. 2xlarge	
	SearchInstance:m3. large	
	SearchInstance:m3. medium	
	SearchInstance:m3. xlarge	
	SearchInstance:m4. 2xlarge	
	SearchInstance:m4. large	
	SearchInstance:m4. xlarge	

Service	Usage type	Free Tier type
	SearchInstance:sea rch.2xlarge	
	SearchInstance:sea rch.large	
	SearchInstance:sea rch.medium	
	SearchInstance:sea rch.previousgenera tion.2xlarge	
	SearchInstance:sea rch.previousgenera tion.large	
	SearchInstance:sea rch.previousgenera tion.small	
	SearchInstance:sea rch.previousgenera tion.xlarge	
	SearchInstance:sea rch.small	
	SearchInstance:sea rch.xlarge	
Amazon Cognito	CognitoEnterpriseMAU	Always Free
	CognitoUserPoolMAU	
Amazon Cognito Sync	CognitoSyncOperation	Always Free
	TimedStorage-ByteHrs	

Service	Usage type	Free Tier type
Amazon Comprehend	Comprehend-DC-Custom	12 Months Free
	Comprehend-DE-Custom	
	Comprehend-EA	
	Comprehend-KP	
	Comprehend-LD	
	Comprehend-SA	
	Comprehend-Syntax	
	ContainsPiiEntities	
	DetectEvents	
	DetectPiiEntities	
	DetectTgtSentiment	
	DetectTopics	
	DocClassification- INSURANCE	
	DocClassification- MORTGAGE	
	DocClassification- PromptSafety	
Amazon Connect	chat-message	12 Months Free
	end-customer-mins	
	tasks	

Service	Usage type	Free Tier type
Amazon Connect Customer Profiles	MonthlyConnectBase Profiles	12 Months Free
	MonthlyProfiles	
Amazon Connect Voice ID	Authentication	12 Months Free
	Enrollment	
	FraudDetection	
Amazon DataZone	DataZoneCompute	Free Trial
	DataZoneRequests	
	DataZoneStorage	
	DataZoneUsers	
Amazon DevOps Guru	DevOpsGuru-APICalls	Free Trial
	ResourceGroup-A-us agehours	
	ResourceGroup-B-us agehours	
Amazon DocumentDB (with	BackupUsage	Free Trial
MongoDB compatibility)	InstanceUsage:db.t 3.medium	
	StorageIOUsage	
	StorageUsage	

Service	Usage type	Free Tier type
Amazon DynamoDB	ReadCapacityUnit-Hrs	Always Free
	ReplWriteCapacityU nit-Hrs	
	Streams-Requests	
	TimedStorage-ByteHrs	
	WriteCapacityUnit- Hrs	
Amazon Elastic Container Registry	TimedStorage-ByteHrs	12 Months Free
Amazon ElastiCache	NodeUsage:cache.t1 .micro	12 Months Free

Service	Usage type	Free Tier type
Amazon Elastic Compute Cloud	BoxUsage:freetier. micro	12 Months Free
	BoxUsage:freetrial	
	CW:AlarmMonitorUsage	
	CW:MetricMonitorUs age	
	CW:Requests	
	CarrierIP:IdleAddr ess	
	CarrierIP:Remap	
	DataProcessing-Bytes	
	DataTransfer-Out-B ytes	
	DataTransfer-Regio nal-Bytes	
	EBS:SnapshotUsage	
	EBS:VolumeIOUsage	
	EBS:VolumeUsage	
	ElasticIP:IdleAddr ess	
	ElasticIP:Remap	
	LCUUsage	
	LoadBalancerUsage	

Service	Usage type	Free Tier type
Amazon Elastic Container Registry Public	Internet-ECRPublic- Out-Bytes	12 Months Free
	TimedStorage-ByteHrs	
Amazon Elastic Container Service	ECS-Anywhere-Insta nce-hours-WithFree	Free Trial
Amazon Elastic File System	TimedStorage-ByteHrs	12 Months Free
Amazon Elastic Transcoder	ets-audio-success ets-hd-success	12 Months Free
	ets-sd-success	
Amazon Forecast	DataInjection	Free Trial
	ForecastDataPoints	
	TrainingHours	

Service	Usage type	Free Tier type
Amazon Fraud Detector	FraudPrediction-Ac countTakeoverInsig hts	Free Trial
	FraudPrediction-On lineFraudInsights	
	FraudPrediction-Ru lesOnly	
	FraudPrediction-Tr ansactionFraudInsi ghts	
	HostingHrs	
	StoredDataset	
	TrainingHrs	
Amazon GameLift Servers	BoxUsage:c3.large	12 Months Free
	DailyActiveUser	
	FlexMatchMatchmaki ngHrs	
	FlexMatchPlayerPac kages	
	GLAGameSessionsPla ced	
	GLAServerProcessCo nnMin	

Service	Usage type	Free Tier type
Amazon HealthLake	FHIRDataStorage	Always Free
	FHIRQueries	
Amazon IVS Chat	Messaging-Deliveries	12 Months Free
	Messaging-Requests	
Amazon Interactive Video	Input-Basic-Hours	12 Months Free
Service	Output-SD-Hours	
	Real-Time-Encode-H ours	
	Real-Time-Hours	
	Stages-Participant- Hours	
Amazon Kendra	KendraDeveloperEdi tion	Free Trial
	KendraIntelligentR anking-BaseCapacity	
Amazon Keyspaces (for	ReadRequestUnits	Free Trial
Apache Cassandra)	TimedStorage-ByteHrs	
	WriteRequestUnits	
Amazon Lex	Speech-Requests	12 Months Free
	Text-Requests	
	botdesign	

Service	Usage type	Free Tier type
Amazon Lightsail	BundleUsage:0.5GB	Free Trial
	BundleUsage:0.5GB_ win	
	BundleUsage:1GB	
	BundleUsage:1GB_win	
	BundleUsage:2GB	
	BundleUsage:2GB_win	
	ContainerSvcUsage:	
	Micro-0.25CPU-1GB- Free	
	DNS-Queries	
	DatabaseUsage:1GB	
	UnusedStaticIP	

Service	Usage type	Free Tier type
Amazon Location Service	DeviceDelete	Free Trial
	Geocode	
	GeofenceCreateRead UpdateDelete	
	GeofenceList	
	MapTile	
	PositionEvaluation	
	PositionRead	
	PositionWrite	
	ResourceCreateRead UpdateDelete	
	ReverseGeocode	
	Route	
	Suggest	
Amazon Lookout for Equipment	Inference-Hours-L4E	Free Trial
	Ingestion-GB-L4E	
	Training-Hours-L4E	
Amazon Lookout for Metrics	ANOMALY_DETECTION	Free Trial

Service	Usage type	Free Tier type
Amazon Lookout for Vision	EdgeInference	Free Trial
	Free-Inference	
	Free-Training	
	Inference	
	Training	
Amazon MQ	<pre>InstanceUsage:mq.t 2.micro</pre>	12 Months Free
	MQ:RabbitStorageUs age	
	MQ:StorageUsage	
Amazon Macie	EventsProcessing	Free Trial
	S3ContentClassific ation	
	SensitiveDataDisco very	
Amazon Managed Service for Prometheus	AMP:MetricSampleCo unt	Always Free
	AMP:MetricStorageB yteHrs	
	AMP:QuerySamplesPr ocessed	
Amazon MemoryDB	DataWritten	Free Trial
	NodeUsage:db.t4g.s mall	

Service	Usage type	Free Tier type
Amazon Mobile Analytics	EventsRecorded	12 Months Free
Amazon Neptune	BackupUsage DataTransfer-Out-B ytes InstanceUsage:db.t 3.medium StorageIOUsage StorageUsage	Free Trial

Service	Usage type	Free Tier type
Amazon HealthOmics	AnalyticsType:Anno tation-Bytes-hour	Free Trial
	AnalyticsType:Vari ant-Bytes-hour	
	StorageClass:Active- Gigabase-hour	
	StorageClass:Archi ve-Gigabase-hour	
	WorkflowType:Priva te-RunStorage-GB-h our	
	WorkflowType:Priva te-omics.c.12xlarg e-hours	
	WorkflowType:Priva te-omics.c.16xlarg e-hours	
	WorkflowType:Priva te-omics.c.24xlarg e-hours	
	WorkflowType:Priva te-omics.c.2xlarge- hours	
	WorkflowType:Priva te-omics.c.4xlarge- hours	

Service	Usage type	Free Tier type
	WorkflowType:Priva te-omics.c.8xlarge- hours	
	WorkflowType:Priva te-omics.c.large-h ours	
	WorkflowType:Priva te-omics.c.xlarge- hours	
	WorkflowType:Priva te-omics.m.12xlarg e-hours	
	WorkflowType:Priva te-omics.m.16xlarg e-hours	
	WorkflowType:Priva te-omics.m.24xlarg e-hours	
	WorkflowType:Priva te-omics.m.2xlarge- hours	
	WorkflowType:Priva te-omics.m.4xlarge- hours	
	WorkflowType:Priva te-omics.m.8xlarge- hours	

Service	Usage type	Free Tier type
	WorkflowType:Priva te-omics.m.large-h ours	
	WorkflowType:Priva te-omics.m.xlarge- hours	
	WorkflowType:Priva te-omics.r.12xlarg e-hours	
	WorkflowType:Priva te-omics.r.16xlarg e-hours	
	WorkflowType:Priva te-omics.r.24xlarg e-hours	
	WorkflowType:Priva te-omics.r.2xlarge- hours	
	WorkflowType:Priva te-omics.r.4xlarge- hours	
	WorkflowType:Priva te-omics.r.8xlarge- hours	
	WorkflowType:Priva te-omics.r.large-h ours	

Service	Usage type	Free Tier type
	WorkflowType:Priva te-omics.r.xlarge- hours	
Amazon OpenSearch Service	ES:freetier-Storage	12 Months Free
	ES:freetier-gp3-St orage	
	ESInstance:freetie r.micro	
	ESInstance:t3.small	
Amazon Personalize	DataIngestion	Free Trial
	TPS-hours	
	TrainingHour	
Amazon Pinpoint	Domain-Inboxplacem ent	12 Months Free
	EventsRecorded	
	InAppMessageRequests	
	MonthlyTargetedAud ience	
	Pinpoint_DeliveryA ttempts	
	<pre>Pinpoint_MonthlyTa rgetedAudience</pre>	
	Predictive-Tests	

Service	Usage type	Free Tier type
Amazon Polly	SynthesizeSpeech-C hars	12 Months Free
	SynthesizeSpeechLo ngForm-Characters	
	SynthesizeSpeechNe ural-Characters	
QuickSight	QS-ENT-Alerts-Free Trial	Free Trial
Amazon Redshift	Node:dc2.large	Free Trial
	Node:dw2.large	
Amazon Rekognition	FaceVectorsStored	12 Months Free
	Group1-ImagesProce ssed	
	Group2-ImagesProce ssed	
	ImagesProcessed	
	MinsOfLiveVideoPro cessed	
	MinutesOfVideoProc essed	
	UserVectorsStored	
	inferenceminutes	
	minutestrained	

Service	Usage type	Free Tier type
Amazon Relational Database Service	InstanceUsage:db.t 1.micro	12 Months Free
	PI_API	
	RDS:StorageIOUsage	
	RDS:StorageUsage	
Amazon Route 53	Cidr-Blocks	Always Free
	Health-Check-AWS	

Service	Usage type	Free Tier type
Amazon SageMaker Runtime	A2ICustom-Objects	Free Trial
	A2IRek-Objects	
	A2ITextract-Objects	
	AsyncInf:ml.m.xlar ge-AsyncInfParent	
	Autopilot-Redshift ML:CreateModelRequ est-Tier0-Parent	
	Canvas:CreateModel Request-Tier0-Pare nt	
	Canvas:Session-Hrs- Parent	
	DataWrangler:ml.m. xlarge-Parent	
	FeatureStore:ReadR equestUnitsParent	
	FeatureStore:Timed AndPITRStoragePare nt	
	FeatureStore:Write RequestUnitsParent	
	FreeMonitorParent	
	FreeServerlessParent	

Service	Usage type	Free Tier type
	Geospatial:Noteboo kCompute	
	Geospatial:TimedSt orage	
	Host:ml.m.xlarge-H ostingParent	
	LabeledObject	
	Notebk:ml.t.medium- NotebookParent	
	RStudio:RSessionGa teway-ml.t3.medium -RSessionGatewayPa rent	
	Rstudio:Rsession-m l.t3.medium-RSessi onParent	
	Train:ml.m.xlarge- TrainingParent	
Amazon Simple Email Service	Message	Always Free
	MessageUnits	
	Recipients-EC2	
	Recipients-Mailbox Sim-EC2	
	VirtDelivMgr	

Service	Usage type	Free Tier type
Amazon Simple Notification Service	DeliveryAttempts-H TTP	Always Free
	DeliveryAttempts-SMS	
	DeliveryAttempts-S MTP	
	Notifications-Mobile	
	Requests-Tier1	
	SMS-Price-US	
Amazon Simple Queue Service	Requests	Always Free
Amazon Simple Storage Service	Requests-Tier1	12 Months Free
Service	Requests-Tier2	
	TimedStorage-ByteHrs	
Amazon Simple Workflow Service	AggregateInitiated Actions	Always Free
	AggregateInitiated Workflows	
	AggregateWorkflowD ays	
Amazon SimpleDB	BoxUsage	Always Free
	TimedStorage-ByteHrs	

Service	Usage type	Free Tier type
Amazon Textract	PagesForLayout	Free Trial
	PagesForSignatures	
	PagesforAnalyzeDoc Forms	
	PagesforAnalyzeDoc Queries	
	PagesforAnalyzeDoc Tables	
	PagesforAnalyzeExp ense	
	PagesforAnalyzeLen ding	
	PagesforDocumentText	
	SyncExpensePagesPr ocessed	
	SyncIDPagesProcessed	
Amazon Timestream	DataIngestion-Bytes	Free Trial
	DataScanned-Bytes	
	MagneticStore-Byte Hrs	
	MemoryStore-ByteHrs	

Service	Usage type	Free Tier type
Amazon Transcribe	CallAnalyticsStrea mingAudio	12 Months Free
	CallAnalyticsTrans cribeAudio	
	HealthScribeBatch	
	MedicalStreamingAu dio	
	MedicalTranscribeA udio	
	StreamingAudio	
	TranscribeAudio	
Amazon Translate	ActiveCustomTransl ationJob	12 Months Free
	TranslateText	
Amazon WorkSpaces	AW-HW-1-AutoStop-U sage	Free Trial
	AW-HW-1-AutoStop-U ser	
	AW-HWU-3-AutoStop- Usage	
	AW-HWU-3-AutoStop- User	

Service	Usage type	Free Tier type
Amazon CloudWatch	CW:AlarmMonitorUsage	Always Free
	CW:Canary-runs	
	CW:ContributorInsi ghtEvents	
	CW:ContributorInsi ghtRules	
	CW:InternetMonitor- CityNetwork	
	CW:MetricMonitorUs age	
	CW:Requests	
	DashboardsUsageHour- Basic	
	DataDelivery-Bytes	
	DataProcessing-Bytes	
	DataScanned-Bytes	
	Logs-LiveTail	
	TimedStorage-ByteHrs	
CloudWatch Events	Event-8K-Chunks	Always Free
	ScheduledInvocation	
CodeBuild	Build-Min:Linux:g1 .small	Always Free
	Build-Sec:Lambda.1GB	

Service	Usage type	Free Tier type
CodeCatalyst	Compute	Always Free
	DevEnvironment-Com pute	
	DevEnvironment-Sto rage	
	Package-Storage	
	Repo-Storage	
CodeGuru	Profiler-Lambda-Sa mpling-Hour	Free Trial
Amazon Comprehend Medical	ComprehendMedical- Batching	Free Trial
	DetectEntities	
	DetectPHI	
	InferICD10CM	
	InferRxNorm	
	InferSNOMEDCT	

Service	Usage type	Free Tier type
Contact Center Telecommu	did-inbound-mins	12 Months Free
nications (service sold by AMCS, LLC)	did-numbers	
	outbound-mins	
	tollfree-inbound-m ins	
	tollfree-numbers	
	tollfree-numbers-STD	
Contact Center Telecommu	did-inbound-mins	12 Months Free
nications Korea	did-numbers	
Contact Center Telecommu	did-inbound-mins	12 Months Free
nications South Africa	did-numbers	
Contact Lens for Amazon	ChatAnalytics	12 Months Free
Connect	VoiceAnalytics	
Elastic Load Balancing	DataProcessing-Bytes	12 Months Free
	LCUUsage	
	LoadBalancerUsage	

Using the Free Tier API

<u>Amazon Web Services China Region Free Tier</u> offers free usage each month for Amazon Web Services services and products. You can use the Free Tier API to programmatically track your free tier usage against the monthly usage limits.

Use the API to understand when your free usage will change to pay-as-you-go pricing each month. This helps you avoid unintended charges by comparing forecasted usage to the free tier limit for each service throughout the month. For example, to know when your usage might exceed the free offer limit for Amazon Glue, you can use the API to track your Amazon Web Services account usage. You can then decide whether to keep the service or make any changes before the free tier limit ends.

You can also use the API to create visualizations or write scripts to automate changes to Amazon resources based on your API responses.

Example Example: Find your free tier offers for Amazon Glue

The following Amazon Command Line Interface (Amazon CLI) command uses the GetFreeTierUsage API operation to filter by free tier usage for Amazon Glue.

Request

```
aws freetier get-free-tier-usage --filter '{"Dimensions": {"Key": "SERVICE", "Values":
    ["Glue"], "MatchOptions": ["CONTAINS"]}}'
```

Response

The following response returns two Always Free offers from Amazon Glue.

```
{
    "freeTierUsages": [
        {
            "actualUsageAmount": 287.0,
            "description": "1000000.0 Request are always free per month as part of AWS
 Free Usage Tier (Global-Catalog-Request)",
            "forecastedUsageAmount": 2224.25,
            "freeTierType": "Always Free",
            "limit": 1000000.0,
            "operation": "Request",
            "region": "global",
            "service": "AWS Glue",
            "unit": "Request",
            "usageType": "Catalog-Request"
        },
        {
            "actualUsageAmount": 176.36827958,
            "description": "1000000.0 Obj-Month are always free per month as part of
 AWS Free Usage Tier (Global-Catalog-Storage)",
            "forecastedUsageAmount": 1366.8541667450002,
```

```
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```

```
"freeTierType": "Always Free",
    "limit": 1000000.0,
    "operation": "Storage",
    "region": "global",
    "service": "AWS Glue",
    "unit": "Obj-Month",
    "usageType": "Catalog-Storage"
}
```

Example Example: Find your free tier offers for Amazon Elastic Compute Cloud

The following Amazon CLI command uses the GetFreeTierUsage API operation to filter by free tier usage for Amazon EC2.

Request

}

```
aws freetier get-free-tier-usage --filter '{"Dimensions": {"Key": "SERVICE", "Values":
    ["EC2"], "MatchOptions": ["CONTAINS"]}}'
```

Response

The following response returns two 12 Months Free offers from Amazon EC2.

```
{
    "freeTierUsages": [
        {
            "actualUsageAmount": 15.9777618,
            "description": "30.0 GB-Mo for free for 12 months as part of AWS Free Usage
 Tier (Global-EBS:VolumeUsage)",
            "forecastedUsageAmount": 23.96666427,
            "freeTierType": "12 Months Free",
            "limit": 30.0,
            "operation": "",
            "region": "global",
            "service": "Amazon Elastic Compute Cloud",
            "unit": "GB-Mo",
            "usageType": "EBS:VolumeUsage"
        },
        {
            "actualUsageAmount": 750.0,
```

```
"description": "750.0 Hrs for free for 12 months as part of AWS Free Usage
Tier (Global-BoxUsage:freetier.micro)",
    "forecastedUsageAmount": 1125.0,
    "freeTierType": "12 Months Free",
    "limit": 750.0,
    "operation": "RunInstances",
    "region": "global",
    "service": "Amazon Elastic Compute Cloud",
    "unit": "Hrs",
    "usageType": "BoxUsage:freetier.micro"
    }
]
```

Related resources

The Amazon CLI and the Amazon Software Development Kits (SDKs) include support for the Free Tier API. For a list of languages that support the Free Tier API, choose the operation name, and in the **See Also** section, choose your preferred language.

For more information about the Free Tier API, see the <u>Amazon Billing and Cost Management API</u> <u>Reference</u>.

To use the Amazon Billing and Cost Management console to track your free tier usage, such as receiving email alerts, see <u>Tracking your Amazon Web Services China Region Free Tier usage</u>.

For more information about using Free Tier with Amazon EC2, see the <u>Tutorial: Get started with</u> <u>Amazon EC2 Linux instances</u> in the *Amazon EC2 User Guide*.

You can also create budgets for your Amazon costs and then set up notifications and alerts when your budgets exceed or are forecasted to exceed your costs and usage. For more information, see <u>Managing your costs with Amazon Budgets</u> in the *Amazon Cost Management User Guide*.

Organizing costs using Amazon Cost Categories

Cost allocation helps you identify who is spending what, within your organization. Cost categories is a cost allocation service to help you map your Amazon costs, to your unique internal business structures.

With cost categories, you create rules to group your costs into meaningful categories.

Example Example scenario 1

Say that your business is organized into several teams, *Team1*, *Team2*, and so on. Your teams use 10 Amazon Web Services accounts in your business. You can define rules to group your Amazon costs, so that it's allocated between these teams.

- 1. You created a cost category named *Team* for your business.
- 2. For this cost category, you defined a rule so that:
 - All costs for accounts 1-3 are categorized as *Team* : *Team*1.
 - All costs for accounts 4-5 are categorized as *Team* : *Team*2.
 - For all other accounts, all costs are categorized as *Team : Team3*.
- 3. Using this rule, every cost line item from account 6 will be categorized with a cost category value *Team3*. These categorizations will appear as a column in your Amazon Cost and Usage Report (Amazon CUR) like in the following example. Based on your rule, costs for account 3 are categorized as *Team1*. and costs for account 6 is allocated to *Team3*.

Resource Id	AccountID	LineltemT ype	UsageType	Unblended Cost	NetUnblen ded Cost	ResourceT ag/ Project	costCateg ory/ Team
i-11223	3	Usage	BoxUsage: c1.xlarge	3.36	3.36	Beta	Team1
i-12345	6	SavingsPl anCovered Usage	BoxUsage: m5.xl	150	140	Alpha	Team3

You can also use these categories across multiple products in the Amazon Billing and Cost Management console. This includes Amazon Cost Explorer, Amazon Budgets, Amazon CUR, and Amazon Cost Anomaly Detection. For example, you can filter costs allocated to *Team1* in Cost Explorer. by applying the filter value = Team 1, to the cost category named *Team*.

You can also create multilevel hierarchical relationships among your cost categories to replicate your organizational structure.

Example Example scenario 2

- 1. You create another cost category named *BusinessUnit* that includes groupings of multiple teams.
- You then define a cost category value that's named *BU1*. For this cost category value, you select *Team 1* and *Team 2* from your *Team* cost category.
- 3. You then define a cost category value that's named *BU2*. For this cost category value, you select *Team 3* and *Team 4* from the *Team* cost category.

This example will appear in your cost and usage report, as shown below.

Resource Id	Accountli	Lineltem ⁻ ype	UsageTyp	Unblende Cost	NetUnble ded Cost	Resource ⁻ ag/ Project	costCatec ory/ Team	costCateg ory/ Busin essUnit
i-11223	3	Usage	BoxUsage c1.xlarge	3.36	3.36	Beta	Team1	BU1
i-12345	6	SavingsPl anCovere Usage	BoxUsage m5.xl	150	140	Alpha	Team3	BU2

Notes

• Similar to resource tags, which are key-value pairs applied to Amazon resources, a cost category is a key-value pair, applied to every cost line item. The key is the cost category name. The value is the cost category value. In the previous examples, this means that

the cost category name *Team* is the key. *Team1*, *Team2*, and *Team3* are the cost category values.

- Cost categories are effective at the start of the current month. If you create or update your cost category in the middle of the month, your change is automatically applied to cost and usage from the start of the month. For example, if you updated your rules for a cost category on Oct 15, any cost and usage since Oct 1 will use your updated rules.
- Only the management account in Amazon Organizations or individual accounts can create and manage cost categories.

Topics

- Supported dimensions
- Supported operations
- Supported rule types
- Default value
- Status
- Quotas
- <u>Term comparisons</u>
- Creating cost categories
- Tagging cost categories
- <u>Viewing cost categories</u>
- <u>Downloading your cost category values</u>
- Editing cost categories
- Deleting cost categories
- Splitting charges within cost categories

Supported dimensions

You can select from a list of billing dimensions to create your cost category rules. These billing dimensions are used to group your data. For example, assume that you wanted to group a set of accounts to form a team. You need to choose the account billing dimension, and then choose the list of accounts that you want to include in the team.

The following billing dimensions are supported.

Account

This can be the Amazon account name or the account ID, depending on the operation. If you're using an exact match operation (is or is not), account refers to the account ID. If you're using an approximate match operation (starts with, ends with, or contains), account refers to account name.

Charge type

The type of charges based on line items details. Also referred to as the RECORD_TYPE in the Cost Explorer API. For more information, see <u>Term comparisons</u>.

Cost category

A dimension from another cost category. Using cost categories as a dimension helps you organize the levels of categories.

Region

The geographic areas where Amazon hosts your resources.

Service

Amazon Web Services services, such as Amazon EC2, Amazon RDS, and Amazon S3.

Tag key

The cost allocation tag keys that are specified on the resource. For more information, see Organizing and tracking costs using Amazon cost allocation tags.

Usage Type

Usage types are the units that each service uses to measure the usage of a specific type of resource. For example, the BoxUsage:t2.micro(Hrs) usage type filters by the running hours of Amazon EC2 t2.micro instances.

Billing Entity

Billing entities are the units to identify if your invoices or transactions are for Amazon Web Services Marketplace or for purchases of other Amazon services. For example, the Amazon Web Services Marketplace billing entity filters by the invoices or transactions for purchases of Amazon Web Services Marketplace.

Supported operations

You can use these operations to create the filter expression when you're creating a cost category rule.

The following operations are supported.

ls

The exact match operation that's used to filter for the exact value specified.

ls not

The exact match operation that's used to filter for the exact value that isn't specified.

Is absent

The exact match operation that's used to exclude the tag key that matches this value.

Contains

The approximate match that's used to filter for a text string containing this value. This value is case sensitive.

Starts with

The approximate match that's used to filter for a text string that starts with this value. This value is case sensitive.

Ends with

The approximate match that's used to filter for a text string that ends with this value. This value is case sensitive.

Supported rule types

Use rule type to define which cost category values to use to categorize your costs.

The following rule types are supported.

Regular Rule

This rule type adds statically defined cost category values that categorize costs based on the defined dimension rules.

Inherited Value

This rule type adds the flexibility of defining a rule that dynamically inherits the cost category value from the dimension value defined. For example, assume that you wanted to dynamically group costs based on the value of a specific tag key. You need to choose the inherited value rule type, then choose the Tag dimension and specify the tag key to use. Optionally, you can use a tag key, teams, to tag your resources. They can tag them with values such as alpha, beta, and gamma. Then, with an inherited value rule, you can select Tag as the dimension and use teams as the tag key. This generates the dynamic cost category values of alpha, beta, and gamma.

Default value

Optionally, if no rules are matched for the cost category, you can define this value to be used instead.

Status

You can use the console to confirm the status of whether your cost categories completed processing the cost and usage information. After you create or edit a cost category, it can take up to 24 hours before it has categorized your cost and usage information in the Amazon Cost and Usage Report, Cost Explorer, and other cost management products.

There are two status states.

Applied

Cost categories completed processing, and the information in Amazon Cost and Usage Report, Cost Explorer, and other cost management products is up to date with the new rules.

Processing

The cost category updates are still in progress.

Quotas

For more information about cost categories quotas, see Quotas and restrictions.

Term comparisons

CHARGE_TYPE is a dimension supported for cost category expressions. It's the RECORD_TYPE value in the Cost Explorer API. This dimension uses different terms, depending on whether you're using the console or the API/JSON editor. The following table compares the terminology used for both scenarios.

Term comparison

Value in API or JSON editor	Name used in the console
Credit	Credit
DiscountedUsage	Reservation applied usage
Fee	Fee
Refund	Refund
RIFee	Recurring reservation fee
SavingsPlanCoveredUsage	Savings Plan Covered Usage
SavingsPlanNegation	Savings Plan Negation
SavingsPlanRecurringFee	Savings Plan Recurring Fee
SavingsPlanUpfrontFee	Savings Plan Upfront Fee
Тах	Tax
Usage	Usage

Creating cost categories

Cost allocation helps you map and assign your Amazon Web Services Cloud costs to the correct groups within your organization. To allocate these costs, create cost categories. Cost categories are composed of rules.

There are two types of rules:

Term comparisons

- 1. Rules to group costs
- 2. Rules to split costs

Rules to group costs

Define rules to group costs by using one or more of the following dimensions:

- Accounts
- Cost allocation tags
- Charge Type, such as credits and refunds
- Service
- Region
- Usage Type, such as BoxUsage:t2.micro
- Billing Entity, such as Amazon and Amazon Web Services Marketplace

Rules are evaluated in the order in which they're defined.

Example Example: Rules to group costs

Your engineering department has projects *Alpha* and *Beta*, and the marketing department has project *Gamma*.

All resources are tagged with the project name that they're used for, such as *Project:Alpha*, *Project:Beta*, or *Project:Gamma*.

You create a cost category named *Department* to allocate costs to the *Marketing* and *Engineering* departments. For the *Department* cost category, you define your rules as:

- Rule 1: If a cost has a cost allocation tag of *Project:Alpha* or *Project:Beta*, then assign the cost to *Department:Engineering*.
- Rule 2: If a cost has a cost allocation tag of *Project:Gamma*, then assign the cost to *Department:Marketing*.

You can also provide a default name for uncategorized costs. In this example, costs associated with untagged resources should be allocated to the *IT* department

- Rule 1: If a cost has a cost allocation tag of *Project:Alpha* or *Project:Beta*, then assign the cost to *Department:Engineering*.
- Rule 2: If a cost has a cost allocation tag of *Project:Gamma*, then assign the cost to *Department:Marketing*.

• For all other costs, assign it to *Department:IT*.

In this example, the cost category name is *Department*. The cost category values are *Engineering*, *Marketing*, and *IT*.

Rules to split costs

Costs that are allocated to one cost category value can be split among others. In this example, if *IT* costs should be split between *Engineering* and *Marketing* departments in a 70:30 ratio, you can define a split charge rule to perform that allocation.

When you create your cost category, you can provide additional details such as:

- Effective Date Set the start date for your cost category. By default, this date will be set to the current month. If you choose a prior month, your cost category rules are then applied retroactively from that date.
- Tags To control access to who can edit this cost category, add a tag to the cost category. You then update your IAM policy to allow or deny access to that cost category. For example, you can add a tag *Role: Administrator* to your cost categories and then update an IAM policy to explicitly allow specific roles access to cost categories that have that tag.

Dy default, regular accounts and the management account in Amazon Organizations have access to create cost categories.

🚺 Tip

To request a backfill of your cost data in your Amazon Cost and Usage Report, create a support case. In your support case, specify the report name and the billing period that you want backfilled. For more information, see Contacting Amazon Web Services Support.

Use the following procedure to create a cost category. After you create a cost category, wait up to 24 hours for your usage records to be updated with the cost category values.

To create a cost category

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost Categories**.

- 3. Choose **Create cost category**. You can use the cost preview panel as reference as you update your rules.
- 4. Next to **Group your costs**, enter the name of your cost category. Your cost category name must be unique within your account.
- 5. Use either the **Rule Builder** or **JSON editor** to define your cost categories.

For more information about the JSON request syntax, see the <u>Cost category</u> section in the *Amazon Billing and Cost Management API Reference*

- 6. For **Rule builder**, choose **Add rule**.
- 7. Choose **Rule type**, either **Manually define how to group costs (Regular rule)** or **Automatically group costs by account or tag (Inherit rule)**.
- 8. For regular rule, choose if your costs meets **all** or **any** of the conditions.
- 9. Choose a billing **Dimension** from the list.
 - a. For a regular rule type, you can choose Accounts, Service, Charge Type (for example, *recurring reservation fee*), Tag key, Region, Usage Type, Cost Category, or Billing Entity. (You can choose Cost Category to create hierarchical relationships among your cost categories.)
 - b. For an inherited value rule type, you can choose **Account** or **Tag key** (Cost allocation tags key).
- 10. For a regular rule type, choose **Operator** from the dropdown list. Your options are **Is**, **Contains**, **Starts with**, and **Ends with**.

🚯 Note

Contains, **Starts with**, and **Ends with** are only supported with Accounts and Tag dimensions. If you use these operators with Accounts, the engine evaluates against account name, and not account ID.

11. Choose a filtered value or enter your own value for your **Dimension** in the attribute selector.

1 Note

The **Account** dimension uses account names, not account IDs for the inherited cost category value.

- 12. Choose Add a condition as needed and repeat steps 9 11.
- 13. For **Group costs together as**, enter a cost category value.
- 14. Choose **Create rule**.
- 15. (Optional) Add a default value. It categorizes all unmatched costs to this value.
- 16. (Optional) To rearrange the rule order, use the arrows or change the number on the top right of each rule.

Rules are processed in order. If there are multiple rules that match the line item, then the first rule to match is used to determine that cost category value.

- 17. (Optional) To remove a rule, select the rule and choose **Delete**.
- 18. Choose Next.
- 19. (Optional) To split your cost, choose **Add a split charges**. For more information about split charge rules, see <u>Splitting charges within cost categories</u>.
 - a. Choose Add a split charge.
 - b. Under **Source value**, choose your cost category value.
 - c. Under **Target values**, choose one or more cost category values you wish to allocate split charges to.
 - d. Under **Charge allocation method**, choose how you want to allocate your costs. Your choices are **proportional**, **fixed**, and **even split**.
 - e. For **fixed** charge allocation, enter the percentage amount to allocate each target cost category value.
 - f. Repeat step 19 as needed.
- 20. Choose Next.
- 21. (Optional) To add a lookback period for your cost category rules, choose the month from when you want to retroactively apply the rules.
- 22. (Optional) To add a tag, choose Add new resource tag and enter a key and value.
- 23. Choose Create cost category.

Understanding the cost preview panel

The cost preview panel shows you in real time how your costs group together or split apart as you create or update your cost categories rules. The results you see in the cost preview panel is an estimate based on your month-to-date net amortized cost. Here are some things to keep in mind as you use the cost preview panel:

• The cost preview results might not be accurate if your rules have complex conditions. For example, containing too many matched values with Contains, Starts With, Ends With operators.

For a more precise results, save your rules and check the cost categories details page.

• If your rules are too complex or takes too long to calculate in real time, the preview will not show a cost breakdown.

Tagging cost categories

Tagging cost categories is beneficial to control access to cost categories. For more information, see Controlling access to Amazon resources using tags in the *IAM User Guide*.

You can tag your existing cost categories using the following procedure:

To tag a cost category

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost Categories**.
- 3. Choose the cost category you want to tag.
- 4. Navigate to the **Resource tags** section.
- 5. Choose Manage resource tags.
- 6. Choose Add new resource tag.
- 7. Enter a Key and Value.
- 8. Once you configure the tags, choose **Save changes**.

Viewing cost categories

From the cost categories dashboard in Amazon Billing and Cost Management, you can view comprehensive information about your category details and values by using details page. This section shows you how to navigate to the details page, understand values shown, and customize your view to show different cost types.

Topics

- Navigating to your cost category details page
- Understanding your cost category details page
- Your cost category month-to-date categorizations
- Change your cost type

Navigating to your cost category details page

You can choose any cost category name in the Billing and Cost Management console to open a details page. The details page is also shown when you add or edit a cost category.

To view your cost category details page

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost categories**.
- 3. Under the **Cost category** column, choose a cost category name.

Understanding your cost category details page

Your cost category details page breaks down your month-to-date cost allocations using the **Category details** and **Category values** sections.

- Use the **month selector** on the top right of the page to change the month you're viewing. You can see a detailed breakdown of cost category value cost allocations within your cost category.
- Under the **Category details** section, you can view your current <u>status</u>, <u>default value</u>, value count, and your total month-to-date net amortized costs.
- The graph under **Categorized costs** shows the allocation of cost category values in your monthly spend. Any uncategorized costs are shown as **Uncategorized**.

Your cost category month-to-date categorizations

In the **Category values** section, you can see the month-to-date spend for each configured cost category value. The amounts that are shown are the net amortized costs.

To further explore your costs, open Cost Explorer by choosing View in Amazon Cost Explorer.

Change your cost type

You can view your cost categories by using different cost types. You can choose the following options:

- Unblended costs
- Amortized costs
- Blended costs
- Net unblended costs
- Net amortized costs

For more information about these cost types, see <u>Exploring your data using Cost Explorer</u> in the *Amazon Cost Management User Guide*.

To change your cost category type

- Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.
- 2. In the navigation pane, choose **Cost categories**.
- 3. Under the **Cost category** column, choose a cost category name. Currently, you can change the cost type for a cost category one at a time.
- On the upper-right corner of the page, choose the preferences icon
- 5. In the **Cost category preferences** dialog box, choose how to aggregate your costs.
- 6. Choose **Confirm**. The page will refresh with the new cost type.

Downloading your cost category values

You can download an offline copy of your month-to-date cost category spend from your cost category dashboard details page. The details page is presented after you create or edit your cost category.

To download your cost category details page

 Open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/</u> costmanagement/.).

- 2. In the navigation pane, choose **Cost categories**.
- 3. Under the **Cost category** column, choose a cost category name.
- 4. Choose **Download CSV** to download a comma-separated values file.

Editing cost categories

You can edit your cost categories using the following procedure. Cost category names can't be edited. If you're using split charges, you can choose **Uncategorized** cost as your source value at this time.

To edit a cost category

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **cost categories**.
- 3. Select the cost category to edit.
- 4. Choose **Edit cost category**.
- 5. If you want the changes to retroactively apply from a previous date, choose the month you want the parameter changes to apply from.
- 6. Make changes to parameters and choose **Confirm cost category**.

Deleting cost categories

You can delete your cost categories using the following procedure.

To delete a cost category

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost categories**.
- 3. Select the cost category to delete.
- 4. Choose **Delete cost category**.

🚯 Note

The deletion of a cost category takes effect starting the current billing month. For example, if you deleted CostCategoryA on September 15th, CostCategoryA would no longer be visible in reports generated from September onwards. However, it would appear in Amazon Cost Explorer reports for the periods prior to September.

Splitting charges within cost categories

You can use split charge rules to allocate your charges between your cost category values. Splitting charges is useful when you have costs that aren't directly attributed to a single owner. Therefore, the costs can't be categorized into a single cost category value. For example, your organization has a set of costs shared by multiple teams, business units, and financial owners that incur data transfer costs, enterprise support, and operating costs. You can define split charge rules when you create or edit your cost categories. For more information about these processes, see <u>Creating cost</u> categories and Editing cost categories.

This is a list of terms you'll see when configuring your split charges.

Source

The group of shared costs you want to split. Sources can be any of your existing cost category values.

Targets

The cost category values you want to split your costs across, defined by the source.

Allocation method

How you want your source costs split between your targets. You can choose from the following methods:

Proportional - Allocates costs across your targets based on the proportional weighted cost of each target.

Fixed - Allocates costs across your targets based on your defined allocation percentage.

Even split - Allocates costs evenly across all targets.

Prerequisites

Before you define your split charge rules, you must categorize your costs into the appropriate cost category values.

Example Example

You define a business unit view of your organization, using a Business unit cost category, with values engineering, marketing, and FinOps. Your organization is also operating a shared infrastructure platform that supports engineering and marketing business units.

To allocate costs of this shared infrastructure platform to the target business unit, categorize its costs into a new cost category value, Infrastructure Platform using the appropriate dimensions.

We recommend that you move your cost category values containing shared costs to the top of the rule list. Because cost category rules are evaluated in a top-down order, your shared costs are categorized before individual business units are categorized. After these shared costs are categorized, they can then be split across your business units.

Understanding split charge best practices

For instructions on how to configure your split charges, see <u>Creating cost categories</u> step 15. After you define split charge rules, you can view the split and allocated costs on the **cost categories details** page in the console. The details page provides an overview of your costs for each cost category value. This includes the costs for before and after calculating the split charges. You can also download a CSV report from the details page.

Note the following scenarios when configuring your split charges:

- A cost category value can be used as a source only once across all split charge rules. This means that, if a value is used as a source, it can't be used as a target. If the value is used as a target, it can't be used as a source. A value can be used as a target in multiple split charge rules.
- If you want to use cost category values as a source or split charge target when the value was created from <u>inherited values</u> rules, you must wait until the <u>cost category status</u> changes to Applied.
- Split charge rules and the total allocated costs are only presented on the **cost categories details** page. These costs do not appear and don't impact your Amazon Cost and Usage Reports, Cost Explorer, and other Amazon Cost Management tools.

• You can define up to 10 split charge rules for a cost category

For more information about cost category quotas, see <u>Cost categories</u>.

Organizing and tracking costs using Amazon cost allocation tags

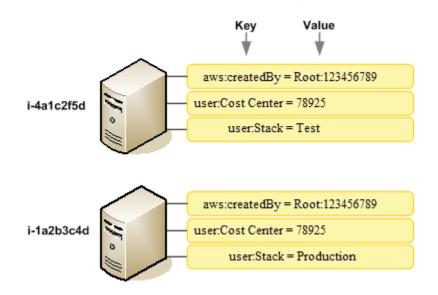
For questions about your Amazon bills or to appeal your charges, contact Amazon Web Services Support to address your inquiries immediately. To get help, see <u>Getting help with</u> <u>your bills and payments</u>. To understand your bills page contents, see <u>Using the Bills page to</u> <u>understand your monthly charges and invoice</u>.

A tag is a label that you or Amazon assigns to an Amazon resource. Each tag consists of a *key* and a *value*. For each resource, each tag key must be unique, and each tag key can have only one value. You can use tags to organize your resources, and cost allocation tags to track your Amazon costs on a detailed level. After you activate cost allocation tags, Amazon uses the cost allocation tags to organize your resource costs on your cost allocation report, to make it easier for you to categorize and track your Amazon costs.

Amazon provides two types of cost allocation tags, an *Amazon-generated tags* and *user-defined tags*.

Amazon, or Amazon Web Services Marketplace ISV defines, creates, and applies the Amazongenerated tags for you, and you define, create, and apply user-defined tags. You must activate both types of tags separately before they can appear in Cost Explorer or on a cost allocation report.

The following diagram illustrates the concept. In the example, you've assigned and activated tags on two Amazon EC2 instances, one tag called Cost Center and another tag called Stack. Each of the tags has an associated value. You also activated the Amazon-generated tags, createdBy before creating these resources. The createdBy tag tracks who created the resource. The user-defined tags use the user prefix, and the Amazon-generated tag uses the aws: prefix.



After you or Amazon applies tags to your Amazon resources (such as Amazon EC2 instances or Amazon S3 buckets) and you activate the tags in the Billing and Cost Management console, Amazon generates a cost allocation report as a comma-separated value (CSV file) with your usage and costs grouped by your active tags. You can apply tags that represent business categories (such as cost centers, application names, or owners) to organize your costs across multiple services.

The cost allocation report includes all of your Amazon costs for each billing period. The report includes both tagged and untagged resources, so that you can clearly organize the charges for resources. For example, if you tag resources with an application name, you can track the total cost of a single application that runs on those resources. The following screenshot shows a partial report with columns for each tag.

Total Cost 💌	user:Owner	user:Stack 💌	user:Cost Center 💌	user:Application 斗
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

At the end of the billing cycle, the total charges (tagged and untagged) on the billing report with cost allocation tags reconciles with the total charges on your **<u>Bills</u>** page total and other billing reports for the same period.

You can also use tags to filter views in Cost Explorer. For more information about Cost Explorer, see Analyzing your costs with Amazon Cost Explorer.

For more information about activating the Amazon-generated tags, see <u>Activating Amazon-generated tags cost allocation tags</u>. For more information about applying and activating user-defined tags, see <u>Using user-defined cost allocation tags</u>. All tags can take up to 24 hours to appear in the Billing and Cost Management console.

Notes

- As a best practice, don't include sensitive information in tags.
- Only the management account in an organization and single accounts that aren't members of an organization have access to the **cost allocation tags** manager in the Billing console.
- To create and update tags, use Amazon Tag Editor. For more information about Tag Editor, see <u>Using Tag Editor</u> in the *Tagging Amazon Resources User Guide*.

Topics

- <u>Using Amazon-generated tags</u>
- Using user-defined cost allocation tags
- Backfill cost allocation tags
- Using the monthly cost allocation report
- Understanding dates for cost allocation tags

Using Amazon-generated tags

The Amazon-generated tag createdBy is a tag that Amazon defines and applies to supported Amazon resources for cost allocation purposes. To use the Amazon-generated tag, a management account owner must activate it in the Billing and Cost Management console. When a management account owner activates the tag, the tag is also activated for all member accounts. After the tag is activated, Amazon starts applying the tag to resources that are created after the Amazongenerated tag is activated. The Amazon-generated tag is available only in the Billing and Cost Management console and reports, and doesn't appear anywhere else in the Amazon console, The aws:createdBy tags are populated only in the following Amazon Web Services Regions:

- ap-northeast-1
- ap-northeast-2
- ap-south-1
- ap-southeast-1
- ap-southeast-2
- cn-north-1
- eu-central-1
- eu-west-1
- sa-east-1
- us-east-1
- us-east-2
- us-gov-west-1
- us-west-1
- us-west-2

Resources created outside of these Amazon Web Services Regions will not have this tag autopopulated.

The createdBy tag uses the following key-value definition:

```
key = aws:createdBy
```

value = account-type:account-ID or access-key:user-name or role session name

Not all values include all of the value parameters. For example, the value for a Amazon-generated tag for a root account doesn't always have a user name.

Valid values for the *account-type* are Root, IAMUser, AssumedRole, and FederatedUser.

If the tag has an account ID, the *account-id* tracks the account number of the root account or federated user who created the resource. If the tag has an access key, then the *access-key* tracks the IAM access key used and, if applicable, the session role name.

The *user-name* is the user name, if one is available.

Here are some examples of tag values:

```
Root:1234567890
Root: 111122223333 :exampleUser
IAMUser: AIDACKCEVSQ6C2EXAMPLE :exampleUser
AssumedRole: AKIAIOSFODNN7EXAMPLE :exampleRole
FederatedUser:1234567890:exampleUser
```

For more information about IAM users, roles, and federation, see the IAM User Guide.

Amazon generated cost allocation tags are applied on a best-effort basis. Issues with services that Amazon-generated tag depends on, such as CloudTrail, can cause a gap in tagging.

The createdBy tag is applied only to the following services and resources after the following events.

Amazon Product	API or Console Event	Resource Type
Amazon CloudFormation (Amazon CloudFormation)	CreateStack	Stack
Amazon Data Pipeline (Amazon Data Pipeline)	CreatePipeline	Pipeline
Amazon Elastic Compute Cloud (Amazon EC2)	CreateCustomerGate way	Customer gateway
	CreateDhcp0ptions	DHCP options
	CreateImage	Image
	CreateInternetGate way	Internet gateway
	CreateNetworkAcl	Network ACL

Amazon Product	API or Console Event	Resource Type
	CreateNetworkInter face	Network interface
	CreateRouteTable	Route table
	CreateSecurityGroup	Security group
	CreateSnapshot	Snapshot
	CreateSubnet	Subnet
	CreateVolume	Volume
	CreateVpc	VPC
	CreateVpcPeeringCo nnection	VPC peering connection
	CreateVpnConnection	VPN connection
	CreateVpnGateway	VPN gateway
	PurchaseReservedIn stancesOffering	Reserved-instance
	RequestSpotInstances	Spot-instance-request
	RunInstances	Instance
Amazon ElastiCache (ElastiCa che)	CreateSnapshot	Snapshot
	CreateCacheCluster	Cluster
Amazon Elastic Beanstalk (Elastic Beanstalk)	CreateEnvironment	Environment
	CreateApplication	Application

Amazon Product	API or Console Event	Resource Type
Elastic Load Balancing (Elastic Load Balancing)	CreateLoadBalancer	Loadbalancer
Amazon S3 Glacier (S3 Glacier)	CreateVault	Vault
Amazon Kinesis (Kinesis)	CreateStream	Stream
Amazon Relational Database Service (Amazon RDS)	CreateDBInstanceRe adReplica	Database
	CreateDBParameterG roup	ParameterGroup
	CreateDBSnapshot	Snapshot
	CreateDBSubnetGroup	SubnetGroup
	CreateEventSubscri ption	EventSubscription
	CreateOptionGroup	OptionGroup
	PurchaseReservedDB InstancesOffering	ReservedDBInstance
	CreateDBInstance	Database
Amazon Redshift (Amazon Redshift)	CreateClusterParam eterGroup	ParameterGroup
	CreateClusterSnaps hot	Snapshot
	CreateClusterSubne tGroup	SubnetGroup
	CreateCluster	Cluster

Amazon Product	API or Console Event	Resource Type
Amazon Route 53 (Route 53)	CreateHealthCheck	HealthCheck
	CreatedHostedZone	HostedZone
Amazon Simple Storage Service (Amazon S3)	CreateBucket	Bucket
Amazon Storage Gateway (Storage Gateway)	ActivateGateway	Gateway

🚯 Note

The CreateDBSnapshot tag isn't applied to the snapshot backup storage.

Amazon Web Services Marketplace vendor-provided tags

Certain Amazon Web Services Marketplace vendors can create tags and associate them with your software usage. These tags will have the prefix aws:marketplace:isv:. To use the tags, a management account owner must activate the tag in the Billing and Cost Management console. When a management account owner activates the tag, the tag is also activated for all member accounts. Similar to aws:createdBy tags, these tags appear only in the Billing and Cost Management console and they don't count towards your tags per resource quota. You can find the tag keys that apply to the product on the Amazon Web Services Marketplace product pages.

Restrictions on Amazon-generated tags cost allocation tags

The following restrictions apply to the Amazon-generated tags:

- Only a management account can activate Amazon-generated tags.
- You can't update, edit, or delete Amazon-generated tags.
- The maximum active tag keys for Billing and Cost Management reports is 500.
- Amazon-generated tags are created using CloudTrail logs. CloudTrail logs over a certain size cause Amazon-generated tag creation to fail.
- The reserved prefix is aws:.

Amazon-generated tag names and values are automatically assigned the aws: prefix, which you can't assign. Amazon-generated tag names don't count towards the user-defined resource tag quota of 50. User-defined tag names have the prefix user: in the cost allocation report.

• Null tag values will not appear in Cost Explorer and Amazon Budgets. If there is only one tag value that is also null, the tag key will also not appear in Cost Explorer or Amazon Budgets.

Activating Amazon-generated tags cost allocation tags

Management account owners can activate the Amazon-generated tags in the Billing and Cost Management console. When a management account owner activates the tag, it's also activated for all member accounts. This tag is visible only in the Billing and Cost Management console and reports.

Note

You can activate the createdBy tag in the Billing and Cost Management console. This tag is available in specific Amazon Web Services Regions. For more information, see <u>Using Amazon-generated tags</u>.

To activate the Amazon-generated tags

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost allocation tags**.
- 3. Under Amazon-generated cost allocation tags, choose the createdBy tag.
- 4. Choose **Activate**. It can take up to 24 hours for tags to activate.

Deactivating the Amazon-generated tags cost allocation tags

Management account owners can deactivate the Amazon-generated tags in the Billing and Cost Management console. When a management account owner deactivates the tag, it's also deactivated for all member accounts. After you deactivate the Amazon-generated tags, Amazon no longer applies the tag to new resources. Previously tagged resources remain tagged. 1.

- 2. In the navigation pane, choose **Cost allocation tags**.
- 3. Under Amazon-generated cost allocation tags, choose Deactivate.

It can take up to 24 hours for tags to deactivate.

Using user-defined cost allocation tags

User-defined tags are tags that you define, create, and apply to resources. After you have created and applied the user-defined tags, you can activate by using the Billing and Cost Management console for cost allocation tracking. Cost allocation tags appear on the console after you've enabled Cost Explorer, Budgets, Amazon Cost and Usage Reports, or legacy reports. After you activate the Amazon services, they appear on your cost allocation report. You can then use the tags on your cost allocation report to track your Amazon costs. Tags are not applied to resources that were created before the tags were created.

🚺 Note

- As a best practice, reactivate your cost allocation tags when moving organizations.
 When an account moves to another organization as a member, previously activated cost allocation tags for that account lose their "active" status and need to be activated again by the new management account.
- As a best practice, do not include sensitive information in tags.
- Only a management account in an organization and single accounts that aren't members
 of an organization have access to the cost allocation tags manager in the Billing and
 Cost Management console.

Applying user-defined cost allocation tags

For ease of use and best results, use the Amazon Tag Editor to create and apply user-defined tags. The Tag Editor provides a central, unified way to create and manage your user-defined tags. For more information, see the Tagging Amazon Resources and Tag Editor User Guide. For supported services, you can also apply tags to resources using the API or the Amazon Web Services Management Console. Each Amazon service has its own implementation of tags. You can work with these implementations individually or use Tag Editor to simplify the process. For a full list of services that support tags, see <u>Supported Resources for Tag-based Groups</u> and <u>Resource</u> Groups Tagging API Reference.

Note

The behavior of cost allocation tags varies across Amazon services. To learn more about the cost allocation tag behavior for a supported service, refer to the service's documentation. For example, to learn more about using cost allocation tags with Amazon ECS, see <u>Tagging</u> your Amazon ECS resources in the Amazon Elastic Container Service Developer Guide.

After you create and apply user-defined tags, you can <u>activate them</u> for cost allocation. If you activate your tags for cost allocation, it's a good idea to devise a set of tag keys that represent how you want to organize your costs. Your cost allocation report displays the tag keys as additional columns with the applicable values for each row, so it's easier to track your costs if you use a consistent set of tag keys.

Some services launch other Amazon resources that the service uses, such as Amazon EMR launching an EC2 instance. If the supporting service (EC2) supports tagging, you can tag the supporting resources (such as the associated Amazon EC2 instance) for your report. For a full list of resources that can be tagged, use the Tag Editor to search. For more information about how to search for resources using Tag Editor, see <u>Searching for Resources to Tag</u>.

1 Notes

- Amazon Web Services Marketplace line items are tagged with the associated Amazon EC2 instance tag.
- The awsApplication tag will be automatically added to all resources that are associated with applications that are set up in Amazon Service Catalog AppRegistry. This tag is automatically activated for you as a cost allocation tag. Tags that are automatically activated don't count towards your cost allocation tag quota. For more information, see <u>Quotas and restrictions</u>.

User-defined tag restrictions

For basic tag restrictions, see <u>Tag Restrictions</u> in the Amazon EC2 User Guide.

The following restrictions apply to user-defined tags for Cost Allocation:

• The reserved prefix is aws :.

Amazon-generated tag names and values are automatically assigned the aws: prefix, which you can't assign. User-defined tag names have the prefix user: in the cost allocation report.

- Use each key only once for each resource. If you attempt to use the same key twice on the same resource, your request will be rejected.
- In some services, you can tag a resource when you create it. For more information, see the documentation for the service where you want to tag resources.
- If you need characters outside of those listed in <u>Tag Restrictions</u>, you can apply standard base-64 encoding to your tag. Billing and Cost Management does not encode or decode your tag for you.
- User-defined tags on non-metered services can be activated (for example, Account Tagging).
 However, these tags will not populate in the Cost Management suite because these services are not metered.

Activating user-defined cost allocation tags

For tags to appear on your billing reports, you must activate them. Your user-defined cost allocation tags represent the tag key, which you activate in the Billing and Cost Management console. Once you activate or deactivate the tag key, it will affect all tag values that share the same tag key. A tag key can have multiple tag values. You can also use the UpdateCostAllocationTagsStatus API operation to activate your tags in bulk. For more information, see the Amazon Billing and Cost Management API Reference.

To activate your tag keys

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost allocation tags**.
- 3. Select the tag keys that you want to activate.
- 4. Choose Activate.

After you create and apply user-defined tags to your resources, it can take up to 24 hours for the tag keys to appear on your cost allocation tags page for activation. It can then take up to 24 hours for tag keys to activate.

For an example of how tag keys appear in your billing report with cost allocation tags, see <u>Viewing</u> a cost allocation report.

About the awsApplication tag

The awsApplication tag will be automatically added to all resources that are associated with applications that are set up in Amazon Service Catalog AppRegistry. This tag is automatically activated for you as a cost allocation tag. Use this tag to analyze the costs trends for your application and its resources.

You can deactivate the awsApplication tag, but this will affect the cost reporting for the application. If you deactivate the tag, it won't be automatically activated again. To manually activate the tag, use the Billing console or the <u>UpdateCostAllocationTagsStatus</u> API operation.

The awsApplication tag doesn't count towards your cost allocation tag quota. For more information about quotas and restrictions for cost allocation tags, see <u>Quotas and restrictions</u>. For more information about AppRegistry, see the <u>Amazon Service Catalog AppRegistry Administrator</u> <u>Guide</u>.

Backfill cost allocation tags

Management account users can request a backfill of cost allocation tags for up to twelve months. When you request a backfill, the current **activation status** of the tags are backfilled for the duration of your choice.

For example, the Project tag was associated to an Amazon Resources in June 2023 and activated in November 2023. On December 2023, you request to backfill the tag from January 2023. As a result, the Project tag is retroactively activated for the prior months from January to December 2023. The tag values associated to the Project tag will be available with the cost data from June 2023 to December 2023. However, January 2023 to May 2023 will not have tag values associated because the Project tag was not present in the Amazon Resources.

Backfill can also be used to deactivate tags for alignment. For example, a Team tag was active in prior months, but currently is set to inactive status. Backfilling will result in the Team tag being deactivated and removed from the cost data for previous months.

🚯 Note

- The resource tag must be historically assigned to the Amazon Resource for the backfilled cost data to be available.
- You can't submit a new backfill request when there is a backfill in progress.
- You can only submit a new backfill request once every 24 hours.

To request a cost allocation tag backfill

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Cost allocation tags**.
- 3. At the top right of the page, choose **Backfill tags**.
- 4. In the **Backfill tags** dialog box, choose the month you want the backfill to start from.
- 5. Choose Confirm.

Updating your Amazon Cost Management services with backfill

Backfill will update your Cost Explorer, Data Exports, and Amazon Cost and Usage Report automatically. Because these services refresh your data once every 24 hours, your backfill won't update as soon as it succeeds. For more information, see the following resources in their corresponding guides:

- Analyzing your costs with Cost Explorer in the Amazon Cost Management User Guide
- What is Data Exports? in the Amazon Data Exports user guide

Using the monthly cost allocation report

The monthly cost allocation report lists the Amazon usage for your account by product category and linked account user. This report contains the same line items as the detailed <u>Amazon Cost and Usage Report</u> and additional columns for your tag keys. We recommend that you use Amazon Cost and Usage Report instead.

For more information about the monthly allocation report, see the following topics.

Topics

- Setting up a monthly cost allocation report
- Getting an hourly cost allocation report
- Viewing a cost allocation report

Setting up a monthly cost allocation report

By default, new tag keys that you add using the API or the Amazon Web Services Management Console are automatically excluded from the cost allocation report. You can add them using the procedures described in this topic.

When you select tag keys to include in your cost allocation report, each key becomes an additional column that lists the value for each corresponding line item. Because you might use tags for more than just your cost allocation report (for example, tags for security or operational reasons), you can include or exclude individual tag keys for the report. This ensures that you're seeing meaningful billing information that helps organize your costs. A small number of consistent tag keys makes it easier to track your costs. For more information, see <u>Viewing a cost allocation report</u>.

🚺 Note

Amazon stores billing reports in an Amazon S3 bucket that you create and own. You can retrieve these reports from the bucket using the Amazon S3 API, Amazon Web Services Management Console for Amazon S3, or the Amazon Command Line Interface. You can't download the cost allocation report from the <u>Account Activity</u> page of the Billing and Cost Management console.

To set up the cost allocation report and activate tags

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- Under Detailed billing reports (legacy), choose Edit, and then select Legacy report delivery to S3.
- 3. Choose **Configure an S3 bucket to activate** to specify where your reports are delivered.
- 4. In the **Configure S3 Bucket** dialog box, choose one of the following options:

- To use an existing S3 bucket, choose Use an existing S3 bucket, and then select the S3 bucket.
- To create a new S3 bucket, choose **Create a new S3 bucket**, and then for **S3 bucket name**, enter the name, and then choose the **Region**.
- 5. Choose Next.
- 6. Verify the default IAM policy and then select I have confirmed that this policy is correct.
- 7. Choose **Save**.
- 8. In the **Report** list, select the check box for **Cost allocation report**, and then choose **Activate**.
- 9. Choose Manage Report Tags.

The page displays a list of tags that you've created using either the API or the console for the applicable Amazon Web Services service. Tag keys that currently appear in the report are selected. Tag keys that are excluded aren't selected.

- 10. You can filter tags that are **Inactive** in the dropdown list, and then select the tags that you want to activate for your report.
- 11. Choose Activate.

If you own the management account in an organization, your cost allocation report includes all the usage, costs, and tags for the member accounts. By default, all keys registered by member accounts are available for you to include or exclude from your report. The detailed billing report with resources and tags also includes any cost allocation tag keys that you select using the preceding steps.

Getting an hourly cost allocation report

The cost allocation report is one of several reports that Amazon publishes to an Amazon S3 bucket several times a day.

🚺 Note

During the current billing period (monthly), Amazon generates an estimated cost allocation report. The current month's file is overwritten throughout the billing period until a final report is generated at the end of the billing period. Then a new file is created for the next billing period. The reports for the previous months remain in the designated Amazon S3 bucket.

Viewing a cost allocation report

The following example tracks the charges for several cost centers and applications. Resources (such as Amazon EC2 instances and Amazon S3 buckets) are assigned tags like "Cost Center"="78925" and "Application"="Widget1". In the cost allocation report, the user-defined tag keys have the prefix user, such as user:Cost Center and user:Application. Amazon-generated tag keys have the prefix aws. The keys are column headings identifying each tagged line item's value, such as "78925".

Total Cost 💌	user:Owner	user:Stack 💌	user:Cost Center 💌	user:Application 斗
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

Pick your keys carefully so that you have a consistent hierarchy of values. Otherwise, your report won't group costs effectively, and you will have many line items.

🚯 Note

If you add or change the tags on a resource partway through a billing period, costs are split into two separate lines in your cost allocation report. The first line shows costs before the update, and the second line shows costs after the update.

Unallocated resources in your report

Any charges that cannot be grouped by tags in your cost allocation report default to the standard billing aggregation (organized by Account/Product/Line Item) and are included in your report. Situations where you can have unallocated costs include:

- You signed up for a cost allocation report mid-month.
- Some resources aren't tagged for part, or all, of the billing period.
- You are using services that currently don't support tagging.
- Subscription-based charges, such as Amazon Web Services Support and Amazon Web Services Marketplace monthly fees, can't be allocated.

• One-time fees, such as Amazon EC2 Reserved Instance upfront charges, can't be allocated.

Unexpected costs associated with tagged resources

You can use cost allocation tags to see what resources are contributing to your usage and costs, but deleting or deactivating the resources doesn't always reduce your costs. For more information on reducing unexpected costs, see <u>Understanding unexpected charges</u>.

Understanding dates for cost allocation tags

Prerequisites

To view these dates in the **Cost allocation tags** page of the Amazon Billing and Cost Management console, you must have the ce:ListCostAllocationTags permission.

When you use cost allocation tags, you can determine when the tags were last used or last updated with the following metadata fields:

 Last updated date – The last date that the tag key was either activated or deactivated for cost allocation.

For example, suppose that your tag key lambda:createdby changed from inactive to active on July 1, 2023. This means that the **Last updated date** column will show July 1, 2023.

• Last used month – The last month that the tag key was used on an Amazon resource.

For example, suppose that your tag key lambda:createdby was last used on April 2023. The **Last used month** column will show April 2023. This means that the tag key hasn't been associated with any resource since that date.

1 Notes

- The Last updated date column appears empty for newly created tag keys that haven't been activated.
- The Last used month column shows Before April 2023 for tag keys that were used before April 2023 and that aren't currently associated with any resource.

Calling Amazon Web Services services and prices using the Amazon Price List

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

Amazon Price List provides a catalog of the products and prices for Amazon Web Services services that you can purchase on Amazon.

This catalog includes free offers from Amazon Web Services China Region Free Tier. This catalog doesn't include limited time or fixed usage based Free Tier products. For more information about Free Tier offers, see <u>Trying services using Amazon Web Services China Region Free Tier</u>. Also, this catalog doesn't include Amazon Elastic Compute Cloud (Amazon EC2) Spot Instances. For more information about Amazon EC2 Spot Instances, see <u>Amazon EC2 Spot Instances</u>.

For more information, see the following topics:

- Amazon Billing and Cost Management API Reference
- Language-specific Amazon SDKs
- Tools for Amazon Web Services

Overview

To help you use the Amazon Price List, the following are its key concepts:

Service

An Amazon Web Services service, such as Amazon EC2 or Savings Plans. For example, a Savings Plan for Amazon EC2 might be AWSComputeSavingsPlan and a Savings Plan for machine learning (ML) might be AWSMachineLearningSavingsPlans.

Product

An entity sold by an Amazon Web Services service. In the price list file, products are indexed by a unique stock keeping unit (SKU).

Attribute

The property associated with a product. This property consists of AttributeName and AttributeValue. Products can have multiple attributes. Each attribute has one AttributeName and a list of applicable AttributeValues.

You can use the following Amazon Price List APIs:

Amazon Price List Query API

This API provides a centralized and convenient way to programmatically query Amazon for services, products, and pricing information.

The Price List Query API uses product attributes and provides prices at the SKU level. Use this API to build cost control and scenario planning tools, reconcile billing data, forecast future spend for budgeting purposes, and provide cost benefit analyses that compare your internal workloads with Amazon.

🚯 Note

The Price List Query API doesn't support Savings Plan prices.

Amazon Price List Bulk API

This API provides a way to programmatically fetch up-to-date pricing information on current Amazon Web Services services and products in bulk by using the price list files. The price list files are available in JSON and CSV formats. The price list files are organized by Amazon Web Services service and Amazon Web Services Region.

1 Note

The Price List Query API and Price List Bulk API provide pricing details for informational purposes only. If there's a difference between the price list file and a service pricing page, Amazon charges the prices on the *service pricing page*.

For more information about Amazon Web Services service pricing, see Amazon Pricing.

To call the Amazon Price List APIs, we recommend that you use an Amazon SDK that supports your preferred programming language. Amazon SDKs save you time and simplify the process of signing requests. You can also integrate the Amazon SDKs with your development environment and access the related commands.

Getting started with Amazon Price List

IAM permissions

An Amazon Identity and Access Management (IAM) identity, such as a user or role, must have permission to use the Price List Query API or Price List Bulk API. To grant access, see <u>Find products</u> and prices.

Endpoints

The Price List Query API and Price List Bulk API provides the following endpoints:

https://api.pricing.cn-northwest-1.amazonaws.com.cn

The Amazon Web Services Region is the API endpoint for the Price List Query API. The endpoints aren't related to product or service attributes.

To call the Price List Query API or Price List Bulk API, see the following examples.

Java

In the following example, specify the *region_name* and use it to create the PricingClient.

```
public class Main {
    public static void main(String[] args) {
        // Create pricing client
        PricingClient client = PricingClient.builder()
            .region(Region.<region_name>)
            .credentialsProvider(DefaultCredentialsProvider.builder().build())
            .build();
        );
    }
}
```

Amazon Command Line Interface

Specify the Region with the following command.

aws pricing describe-services --region cn-northwest-1

Quotas

See Amazon Price List in the Quotas and restrictions page.

For more information about service quotas, see <u>Amazon Web Services service quotas</u> in the *Amazon Web Services General Reference*.

Finding services and products using Amazon Price List Query API

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

We recommend that you use the Price List Query API when you want to:

- Find pricing information about a product.
- Search for products and rates that match your filters.
- Quickly find products and prices that you need when you're developing applications that have limited resources, such as front-end environments.

To find Amazon Web Services services, their products, and the product attributes and prices, see the following steps.

Step 1: Finding available Amazon Web Services services

Once you find the service, you can then get its attributes by using the DescribeServices API operation. If you know the service code, you can also use the Amazon Price List Query API to get attributes for a service. Then, you can use the service attributes to find the products that meet your requirements based on the attribute values.

Examples: Find services

The following Amazon Command Line Interface (Amazon CLI) commands show how to find services.

Example Example: Find all services

aws pricing describe-services --region cn-northwest-1

Response

```
{
    "FormatVersion": "aws_v1",
    "NextToken": "abcdefg123",
    "Services": [
        {
             "AttributeNames": [
                 "volumeType",
                 "maxIopsvolume",
                 "instanceCapacity10xlarge",
                 "locationType",
                 "operation"
            ],
             "ServiceCode": "AmazonEC2"
        },
        {
             "AttributeNames": [
                 "productFamily",
                 "volumeType",
                 "engineCode",
                 "memory"
            ],
             "ServiceCode": "AmazonRDS"
        },
        {...}
    ]
}
```

Example Example: Find service metadata for Amazon Elastic Compute Cloud (Amazon EC2)

The following command shows how to find service metadata for Amazon EC2.

aws pricing describe-services --region cn-northwest-1 --service-code AmazonEC2

Response

```
{
    "FormatVersion": "aws_v1",
    "NextToken": "abcdefg123",
    "Services": [
        {
            "AttributeNames": [
               "productFamily",
               "volumeType",
               "engineCode",
               "memory"
        ],
        "ServiceCode": "AmazonEC2"
        }
    ]
}
```

The Amazon Web Services Region is the API endpoint for the Price List Query API. The endpoints aren't related to product or service attributes.

For more information, see <u>DescribeServices</u> in the Amazon Billing and Cost Management API Reference.

Step 2: Finding available values for attributes

In <u>step 1</u>, you retrieved a list of attributes for an Amazon Web Services service. In this step, you use these attributes to search for products. In step 3, you need the available values for these attributes.

To find the values for an attribute, use the GetAttributeValues API operation. To call the API, specify the AttributeName and ServiceCode parameters.

Example: Get attribute values

The following Amazon Command Line Interface (Amazon CLI) command shows how to get attribute values for an Amazon Web Services service.

Example Example: Find attribute values for Amazon Relational Database Service (Amazon RDS)

```
aws pricing get-attribute-values --service-code AmazonRDS --attribute-name operation -- region cn-northwest-1
```

Response

```
{
    "AttributeValues": [
        {
             "Value": "CreateDBInstance:0002"
        },
        {
            "Value": "CreateDBInstance:0003"
        },
        {
            "Value": "CreateDBInstance:0004"
        },
        {
            "Value": "CreateDBInstance:0005"
        }
    ],
    "NextToken": "abcdefg123"
}
```

The Amazon Web Services Region is the API endpoint for the Price List Query API. The endpoints aren't related to product or service attributes.

For more information, see <u>GetAttributeValues</u> and <u>language-specific Amazon SDKs</u> in the Amazon Billing and Cost Management API Reference.

Step 3: Finding products from attributes

In this step, you use the information from <u>step 1</u> and <u>step 2</u> to find the products and their terms. To get information about products, use the GetProducts API operation. You can specify a list of filters to return the products that you want.

Note

The Price List Query API supports only "AND" matching. The response to your command only contains products that match all specified filters.

Examples: Find products from attributes

The following Amazon Command Line Interface (Amazon CLI) commands show how to find products by using attributes.

Example Example: Find products with specified filters

The following command shows how you can specify filters for Amazon Relational Database Service (Amazon RDS).

```
aws pricing get-products --service-code AmazonRDS --region cn-northwest-1 --filters
Type=TERM_MATCH,Field=operation,Value="CreateDBInstance:0002"
```

Response

```
{
    "FormatVersion": "aws_v1",
    "PriceList": ["{
        \"product\":{
            \"productFamily\":\"Database Instance\",
            \"attributes\":{
                \"engineCode\":\"2\",
                \"enhancedNetworkingSupported\":\"Yes\",
                \mbox{"memory}":\"64 GiB\",
                \"dedicatedEbsThroughput\":\"2000 Mbps\",
                \"vcpu\":\"16\",
                \"locationType\":\"AWS Region\",
                \"storage\":\"EBS Only\",
                \"instanceFamily\":\"General purpose\",
                \"regionCode\":\"cn-northwest-1\",
                \"operation\":\"CreateDBInstance:0002\",
                 . . .
            },
            \"sku\":\"22ANV4NNQP3UUCWY\"},
            \"serviceCode\":\"AmazonRDS\",
            \"terms\":{...}"
    ],
    "NextToken": "abcd1234"
}
```

Example Example: Use the filters.json file to specify filters

The following command shows how you can specify a JSON file that contains all filters.

```
aws pricing get-products --service-code AmazonRDS --region cn-northwest-1 --filters
file://filters.json
```

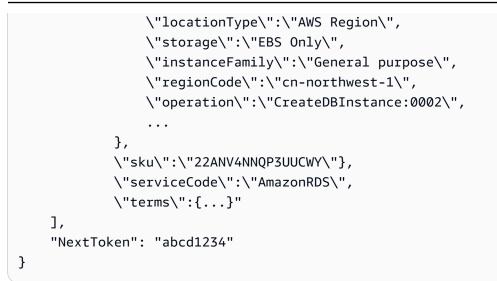
For example, the filters.json file might include the following filters.

The following example shows how you can specify more than one filter.

```
[
  {
    "Type": "TERM_MATCH",
    "Field": "AttributeName1",
    "Value": "AttributeValue1"
  },
  {
    "Type": "TERM_MATCH",
    "Field": "AttributeName2",
    "Value": "AttributeValue2"
  },
  ....
]
```

Response

```
{
    "FormatVersion": "aws_v1",
    "PriceList": ["{
        \"product\":{
            \"productFamily\":\"Database Instance\",
            \"attributes\":{
                \"engineCode\":\"2\",
                \"enhancedNetworkingSupported\":\"Yes\",
                \"memory\":\"64 GiB\",
                \"dedicatedEbsThroughput\":\"2000 Mbps\",
                \"vcpu\":\"16\",
```



For more information, see the following topics:

- <u>GetProducts</u> and <u>language-specific Amazon SDKs</u> in the Amazon Billing and Cost Management API Reference
- Reading the service price list files
- Finding prices in the service price list file

Getting price list files using the Amazon Price List Bulk API

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

We recommend that you use the Price List Bulk API when you want to do the following tasks:

- Consume large amounts of product and pricing information for Amazon Web Services services.
- Consume product and pricing information with a high throughput for an Amazon Web Services service, such as processing in bulk.

Also, when the Price List Query API doesn't provide sufficient throughput and quotas for your use case, use the Price List Bulk API.

We recommend that you use the Amazon Price List Bulk API to find and download price list files programmatically. To get the URL of the price list files, see the following steps.

If you don't want to use the Amazon Price List Bulk API, you can download the price list files manually. For more information, see Getting price list files manually.

Step 1: Finding available Amazon Web Services services

Use the DescribeServices API operation to find all available Amazon Web Services services that the Price List Bulk API supports. This API operation returns the ServiceCode value from the list of services. You use this value later to find relevant price list files.

Example Example: Find available services

The following command shows how to find available Amazon Web Services services.

```
aws pricing describe-services --region cn-northwest-1
```

The Amazon Web Services Region is the API endpoint for the Price List Bulk API. The endpoints aren't related to product or service attributes.

Response

```
{
    "FormatVersion": "aws_v1",
    "NextToken": "abcdefg123",
    "Services": [
        {
            "AttributeNames": [
                 "volumeType",
                "maxIopsvolume",
                "instanceCapacity10xlarge",
                "locationType",
                 "operation"
            ],
            "ServiceCode": "AmazonEC2"
        },
        {
            "AttributeNames": [
                 "productFamily",
                 "volumeType",
                 "engineCode",
                "memory"
            ],
            "ServiceCode": "AmazonRDS"
```

For more information about this API operation, see <u>DescribeServices</u> and <u>language-specific Amazon</u> <u>SDKs</u> in the Amazon Billing and Cost Management API Reference

Step 2: Finding price list files for an available Amazon Web Services service

Use the ListPriceLists API operation to get a list of price list references that you have permission to view. To filter your results, you can specify the ServiceCode, CurrencyCode, and EffectiveDate parameters.

The Amazon Web Services Region is the API endpoint for the Price List Bulk API. The endpoints aren't related to product or service attributes.

Examples to find price list files

Example Example: Find price list files for all Amazon Web Services Regions

If you don't specify the --region-code parameter, the API operation returns price list file references from all available Amazon Web Services Regions.

```
aws pricing list-price-lists --service-code AmazonRDS --currency-code USD --effective-
date "2023-04-03 00:00"
```

Response

```
{
    "NextToken": "abcd1234",
    "PriceLists": [
        {
            "CurrencyCode": "USD",
            "FileFormats": [ "json", "csv" ],
            "PriceListArn": "arn:cn:pricing:::price-list/cn/AmazonRDS/
USD/20230328234721/cn-northwest-1",
            "RegionCode": "cn-northwest-1"
        },
        {
            "CurrencyCode": "USD",
            "CurrencyCode": "USD",
            "FileFormats": [ "json", "csv" ],
            "FileFormats": [ "json", "csv" ],
            "Superiors and the set the
```

Example Example: Find price list files for a specific Region

If you specify the RegionCode parameter, the API operation returns price list file references that are specific to that Region. To find historical price list files, use the EffectiveDate parameter. For example, you can specify a date in the past to find a specific price list file.

From the response, you can then use the PriceListArn value with the <u>GetPriceListFileUrl</u> API operation to get your preferred price list files.

```
aws pricing list-price-lists --service-code AmazonRDS --currency-code USD --region-
code cn-northwest-1 --effective-date "2023-04-03 00:00"
```

Response

```
{
    "PriceLists": [
        {
         "CurrencyCode": "USD",
         "FileFormats": [ "json", "csv" ],
         "PriceListArn": "arn:cn:pricing:::price-list/cn/AmazonRDS/
USD/20230328234721/cn-northwest-1",
         "RegionCode": "cn-northwest-1"
        }
    ]
}
```

For more information about this API operation, see <u>ListPriceLists</u> and <u>language-specific Amazon</u> SDKs in the *Amazon Billing and Cost Management API Reference*.

Step 3: Getting a specific price list file

Use the GetPriceListFileUrl API operation to get a URL for a price list file. This URL is based on the PriceListArn and FileFormats values that you retrieved from the ListPriceLists response in step 1 and step 2

Example Example: Get a specific price list file

The following command gets the URL for a specific price list file for Amazon RDS.

```
aws pricing get-price-list-file-url --price-list-arn arn:cn:pricing:::price-list/cn/
AmazonRDS/USD/20230328234721/cn-northwest-1 --file-format json --region cn-northwest-1
```

Response

```
{
    "Url": "https://pricing.cn-northwest-1.amazonaws.com/offers/v1.0/aws/
AmazonRDS/20230328234721/cn-northwest-1/index.json"
}
```

From the response, you can use the URL to download the price list file.

For more information about this API operation, see the following topics:

- <u>GetPriceListFileUrl</u> and <u>language-specific Amazon SDKs</u> in the Amazon Billing and Cost Management API Reference
- Reading the price list files

Getting price list files manually

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

We recommend that you use the Amazon Price List Bulk API to find and download price list files programmatically. For more information, see <u>Step 1: Finding available Amazon Web Services</u> <u>services</u>.

If you don't want to use the Amazon Price List Bulk API, you can download the price list files manually. You can skip to the relevant topics if you already have the information that you need.

Step 1: Finding available Amazon Web Services services

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

You can use the service index file to find available Amazon Web Services services and Savings Plans that are provided by the Amazon Price List Bulk API.

To download the service index file, navigate to the following URL.

https://pricing.cn-north-1.amazonaws.com.cn/offers/v1.0/cn/index.json

In the service index file, you can search for the service to find its prices. To download the servicespecific price list file, use either the offerCode or serviceCode.

For more information, see the following topics:

- Reading the service index file
- Step 1: Finding available Amazon Web Services services

Step 2: Finding available versions for an Amazon Web Services service

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

For an Amazon Web Services service or Savings Plan that you retrieved in <u>step 1</u>, you can find all the historical versions of the price lists by using the <u>service version index file</u>.

To download the service version index file, use the serviceCode or savingsPlanCode. To find the values for serviceCode and savingsPlanCode, see <u>Step 1: Finding available Amazon Web</u> <u>Services services</u>.

To download the service version index file for an Amazon Web Services service, navigate to the following URL. Replace <<u>serviceCode</u>> with your own information.

https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/<serviceCode>/index.json

For example, Amazon Elastic Compute Cloud (Amazon EC2) appears in a URL like the following URL.

https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/AmazonEC2/index.json

i Note

In addition to the versions available in the service version index file, there is another version named current. The current version points to the latest version of the price list files for a specific Amazon Web Services service.

To download the latest service version index file for Savings Plan, specify savingsPlanCode and current in the URL. Replace <savingsPlanCode> with your own information.

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/<savingsPlanCode>/
current/index.json
```

For example, the current version of AWSComputeSavingsPlan and AWSMachineLearningSavingsPlans appears like the following URLs.

https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/ AWSComputeSavingsPlan/current/index.json

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/
AWSMachineLearningSavingsPlans/current/index.json
```

For more information, see Reading the service index file.

Step 3: Finding available Amazon Web Services Regions for a version of an Amazon Web Services service

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

For a version of an Amazon Web Services service or Savings Plan in <u>the previous step</u>, you can find all the Amazon Web Services Regions and edge locations in which an Amazon Web Services service provides products for purchase.

To download the service Region index file for an Amazon Web Services service, navigate to the following URL. Replace *<serviceCode>* and *<version>* with your own information.

https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/<serviceCode>/<version>/
region_index.json

For example, the service code for AmazonRDS and its current version has the following URL.

```
https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/AmazonRDS/current/
region_index.json
```

To download the service Region index file for Savings Plan, navigate to the following URL. Replace <<u>savingsPlanCode</u>> with your own information.

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/<savingsPlanCode>/
current/region_index.json
```

For example, a Savings Plan for AWSComputeSavingsPlan and its current version has the following URL.

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/
AWSComputeSavingsPlan/current/region_index.json
```

For more information, see <u>Reading the service Region index file</u>.

Step 4: Finding available price lists for an Amazon Web Services Region and version of an Amazon Web Services service

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

In the previous steps, you retrieved the following information about an Amazon Web Services service:

- Service code
- Savings Plan code
- Version
- Amazon Web Services Regions

Next, you can use this information to find the prices in the service price list files. These files are available in JSON and CSV formats.

Contents

- Finding service price list files
- Finding service price list files for Savings Plan

Finding service price list files

The service price list file provides the service related details, such as the following:

- The effective date of the prices in that file
- The version of the service price list
- The list of offered products and their details, along with prices in JSON and CSV formats

In the following URLs, you can change the URL to specify the format that you want (JSON or CSV).

To download the service price list file, navigate to the following URL. Replace each *user input placeholder* with your own information.

```
https://pricing.cn-northwest-1.amazonaws.com.cn/offers/
v1.0/cn/<serviceCode>/<version>/<regionCode>/index.<format>
```

The following examples are for Amazon Relational Database Service (Amazon RDS). This service appears as AmazonRDS in the URL.

Example Example: Current version of the price list file for Amazon RDS

To get the current version of the price list file for Amazon RDS, use the following URL.

CSV format

```
https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/AmazonRDS/current/cn-
northwest-1/index.csv
```

JSON format

```
https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/AmazonRDS/current/cn-
northwest-1/index.json
```

Example Example: Specific version of the price list file for Amazon RDS

To get the specific version of the price list file for Amazon RDS, use the following URL.

CSV format

https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/ AmazonRDS/20230328234721/cn-northwest-1/index.csv

JSON format

https://pricing.cn-northwest-1.amazonaws.com.cn/offers/v1.0/cn/ AmazonRDS/20230328234721/cn-northwest-1/index.json

Finding service price list files for Savings Plan

The service price list file for Savings Plan provides Savings Plan related details, such as the following:

- The effective date of the prices in that file
- The version of the service price list
- The list of offered products and their details, along with prices in JSON and CSV formats

In the following URLs, you can change the URL to specify the format that you want (JSON or CSV).

To download the service price list files for Savings Plan, use the following URL. Replace each *user input placeholder* with your own information.

https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/ v1.0/cn/<savingsPlanCode>/<version>/<regionCode>/index.json

Example Example: Service price list file for Amazon SageMaker AI

To get a specific version (20230509202901) of the price list file for SageMaker AI (AWSComputeSavingsPlan), use the following URL.

CSV format

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/
AWSComputeSavingsPlan/20230509202901/cn-northwest-1/index.csv
```

JSON format

```
https://pricing.cn-northwest-1.amazonaws.com.cn/savingsPlan/v1.0/cn/
AWSComputeSavingsPlan/20230509202901/cn-northwest-1/index.json
```

For more information, see Reading the service price list files.

Reading the price list files

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

Use this section to understand how to read your price list files. This covers the service index file, the service version index file, the Region index file, and the price list files for both Amazon Web Services services and Savings Plans use cases.

Reading the service index file

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

After you have the service index file, you can use it to find an service price list file.

The service index file is available as a JSON file. To read the file, you can use a text application or a program that parses the JSON.

The service index file has two main sections:

- Metadata about the service index file
- Either a list of the services that Amazon offers (for the service index file) and a list of Amazon Web Services Regions where a service is offered (for the service Region index file)

The information about the service index file includes the URL where you can download the prices and a URL for the service Region index file for that service.

Example: Service index file

The service index file looks like the following.

```
{
   "formatVersion":"The version number for the offer index format",
   "disclaimer": "The disclaimers for this offer index",
   "publicationDate":"The publication date of this offer index",
   "offers":{
      "firstService":{
         "offerCode": "The service that this price list is for",
         "currentVersionUrl":"The URL for this offer file",
         "currentRegionIndexUrl":"The URL for the regional offer index file",
         "savingsPlanVersionIndexUrl": "The URL for the Savings Plan index file (if
 applicable)"
      },
      "secondService":{
         "offerCode": ...,
         "currentVersionUrl": ...,
         "currentRegionIndexUrl": ...,
         "savingsPlanVersionIndexUrl":...
      },
      . . .
   },
}
```

Service index file definitions

The following list defines the terms that are used in the service index file:

FormatVersion

An attribute that tracks which format version the service version index file is in. The formatVersion of the file is updated when the structure is changed. For example, the version will change from v1 to v2.

Disclaimer

Any disclaimers that apply to the service version index file.

PublicationDate

The date and time in UTC format when a service version index file was published. For example, this might look like 2015-04-09T02:22:05Z and 2015-09-10T18:21:05Z.

Offers

A list of available service price list files.

Offers:OfferCode

A unique code for the product of an Amazon service. For example, this might be AmazonEC2 or AmazonS3. The OfferCode is used as the lookup key for the index.

Offers:CurrentVersionUrl

The URL where you can download the most up-to-date service price list file.

Offers:currentRegionIndexUrl

A list of available service price list files by Region.

Offers:savingsPlanVersionIndexUrl

The list of applicable Savings Plan offers.

Reading the service version index file

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The service version index file is available in JSON format. To read the file, you can use a text program or an application that parses the JSON.

The service version index file consists of two main sections:

- Metadata about the service version index file
- List of all versions of price list files available for an Amazon Web Services service

The information about a service version includes the URL that you can use to download the prices for that service for the specified time period.

Topics

Service version index file for an Amazon Web Services service

<u>Service version index file for Savings Plan</u>

Service version index file for an Amazon Web Services service

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

To understand the service version index file, see the following references:

Topics

- Example: Service version index file for a service
- Service version index file definitions

Example: Service version index file for a service

The service version index file looks like the following.

```
{
   "formatVersion":"The version number for the service version index format",
   "disclaimer": "The disclaimers for this service version index",
   "publicationDate":"The publication date of this service version index",
   "offerCode": "The service code/Savings Plan code",
   "currentVersion": "The latest version of the service"
   "versions":{
      "firstVersion":{
         "versionEffectiveBeginDate":"The date starting which this version is
 effective",
         "versionEffectiveEndDate":"The date until which this version is effective",
         "offerVersionUrl":"The relative URL for the service price list file of this
 version"
      },
      "secondVersion":{
         "versionEffectiveBeginDate": ...,
         "versionEffectiveEndDate": ...,
         "offerVersionUrl": ...
      },
      . . .
   },
}
```

Service version index file definitions

The following list defines the terms in the service version index file.

formatVersion

An attribute that tracks which format version the service version index file is in. The formatVersion of the file is updated when the structure is changed. For example, the version will change from v1 to v2.

disclaimer

Any disclaimers that apply to the service version index file.

publicationDate

The date and time in UTC format when a service version index file was published. For example, 2023-03-28T23:47:21Z.

offerCode

A unique code for the product of an Amazon Web Services service. For example, AmazonRDS or AmazonS3.

currentVersion

The latest version number of the Amazon Web Services service. For example, 20230328234721.

versions

The list of available versions for this Amazon Web Services service.

versions:version

A unique code for the version of a price list for an Amazon Web Services service. This is used as the lookup key in the versions list. For example, 20230328234721,

versions:version:versionEffectiveBeginDate

The start date and time in UTC format, which this version is effective. For example, 2023-03-28T23:47:21Z.

versions:version:versionEffectiveEndDate

The end date and time in UTC format, which this version is effective. For example, 2023-03-28T23:47:21Z. If this property isn't set, this means that this version is the currently active version.

versions:version:offerVersionUrl

The relative URL for the service price list files of the version. For example, /offers/v1.0/ aws/AmazonRDS/20230328234721/index.json.

Service version index file for Savings Plan

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

To understand the service version index file for Savings Plan, see the following references:

Contents

- Example: Service version index file for Savings Plan
- Service version index definitions

Example: Service version index file for Savings Plan

The service version index file for a Savings Plan looks like the following.

```
{
   "disclaimer": "The disclaimers for this service version index",
   "publicationDate":"The publication date of this service version index",
   "currentOfferVersionUrl" "The relative URL of region index file for latest version
number of the service"
   "versions":[
      {
         "publicationDate":"The publication date of this version of service from which
this version was effective",
         "offerVersionUrl":"The relative URL for the service region index file of this
version"
      },
      {
         "publicationDate": ...,
         "offerVersionUrl": ...
      },
  ],
```

}

Service version index definitions

The following list defines the terms in the service version index file.

disclaimer

Any disclaimers that apply to the service version index file.

publicationDate

The date and time in UTC format when a service version index file was published. For example, 2023-03-28T23:47:21Z.

currentOfferVersionUrl

The relative URL of the regional index file for latest version number of the service. For example, /savingsPlan/v1.0/aws/AWSComputeSavingsPlan/current/region_index.json.

versions

The list of available version for this Amazon Web Services service.

versions:version:publicationDate

The date and time in UTC format when an service version index file was published. For example, 2023-04-07T14:57:05Z

versions:version:offerVersionUrl

The relative URL for the service regional index file of this version. For example, /savingsPlan/v1.0/aws/AWSComputeSavingsPlan/20230407145705/ region_index.json.

Reading the service Region index file

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The service Region index file is available in JSON format. To read the file, you can use a text program or an application that parses the JSON.

The service Region index file consists of two main sections:

- Metadata about the service Region index file
- List of all Amazon Web Services Regions in which Amazon Web Services services or Savings Plan are available

The information about a service Region includes the URL where you can download the prices for that service for the specified time period and Region.

Topics

- Service Region index file for Amazon Web Services services
- Service Region index file for Savings Plan

Service Region index file for Amazon Web Services services

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

To understand the service version index file for Amazon Web Services services, see the following references:

Contents

- Example: Service Region index file for an Amazon Web Services service
- Service Region index definitions

Example: Service Region index file for an Amazon Web Services service

The service Region index file for an Amazon Web Services service looks like the following.

```
"currentVersionUrl":"The relative URL for the service regional price list file
of this version"
    },
    "secondRegion":{
        "regionCode": ...,
        "currentVersionUrl": ...
    },
    ....
    }
}
```

Service Region index definitions

The following list defines the terms in the service Region index file.

formatVersion

An attribute that tracks which format version the service Region index file is in. The formatVersion of the file is updated when the structure is changed. For example, the version will change from v1 to v2.

disclaimer

Any disclaimers that apply to the service Region index file.

publicationDate

The date and time in UTC format when a service Region index file was published. For example, 2023-03-28T23:47:21Z.

regions

The list of available Amazon Web Services Region for the Amazon Web Services service.

regions:regionCode

A unique code for the Region in which this Amazon Web Services service is offered. This is used as the lookup key in the Regions list. For example, us-east-2 is the US East (Ohio) Region.

regions:regionCode:currentVersionUrl

The relative URL for the service Region index file of this version. For example, /offers/v1.0/ aws/AmazonRDS/20230328234721/us-east-2/index.json.

Service Region index file for Savings Plan

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

To understand the service Region index file for Savings Plan, see the following references:

Topics

- Example: Service Region index file for Savings Plan
- Service Region index definitions

Example: Service Region index file for Savings Plan

The service Region index file for Savings Plan looks like the following.

```
{
   "disclaimer": "The disclaimers for this service version index",
   "publicationDate":"The publication date of this service region index",
   "regions":[
      {
         "regionCode":"A unique identifier that identifies this region",
         "versionUrl":"The relative URL for the service regional price list file of
 this version"
      },
      {
         "regionCode": ...,
         "versionUrl": ...
      },
      . . .
   ]
}
```

Service Region index definitions

The following list defines the terms in the service Region index file.

disclaimer

Any disclaimers that apply to the service Region index file.

publicationDate

The date and time in UTC format when a service Region index file was published. For example, 2023-03-28T23:47:21Z.

regions

The list of available Amazon Web Services Region for the Amazon Web Services service.

regions:regionCode

A unique code for the Region in which this Amazon Web Services service is offered. This is used as the lookup key in the Regions list. For example, us-east-2 is the (US East (Ohio) Region.

regions:versionUrl

The relative URL for the service Region index file of this version. For example, /savingsPlan/v1.0/aws/AWSComputeSavingsPlan/20230407145705/us-east-2/index.json.

Reading the service price list files

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The service price list file lists the products and prices for a single Amazon Web Services service or Savings Plan in *all Amazon Web Services Regions* or a single Amazon Web Services service or Savings Plan in a *specific Region*.

Service price list files are available in CSV or JSON format.

To read the file, you can use a spreadsheet program to read and sort the CSV file or an application that parses the JSON file.

Note

In the CSV file, the product and pricing details are combined into one section. In the JSON file, the product details and pricing details are in separate sections.

Topics

- Reading the service price list file for an Amazon Web Services service
- Reading the service price list file for a Savings Plan

Reading the service price list file for an Amazon Web Services service

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The service price list files for an Amazon Web Services service includes the following types of information:

- Service price list file details Metadata about the service price list files, such as format version and publication date
- Product details Product metadata that lists the products in a service price list file, along with product information
- Pricing details (terms) Prices for all products in this service price list file

Contents

- CSV file
- JSON file
- Service price list definitions
- Product details (products) definitions
- Product details (terms) definitions

CSV file

The first five rows of the CSV file contain the metadata for the price list file. The sixth row has the column names for the products and their attributes, such as SKU, OfferTermCode, RateCode, TermType, and more.

The number of columns depends on the service. The first few columns contain the pricing details, and other columns contain the product details for a service.

JSON file

The product details and pricing details are in separate sections. The same product can be offered under multiple terms, and the same term can apply to multiple products.

For example, an Amazon Elastic Compute Cloud (Amazon EC2) instance is available for an Hourly or Reserved term. You can use the SKU of a product to identify the terms that are available for that product.

Example Example: JSON

```
{
   "formatVersion": "The version of the file format",
   "disclaimer": "The disclaimers for the price list file",
   "offerCode": "The code for the service",
   "version":"The version of the price list file",
   "publicationDate":"The publication date of the price list file",
   "products": {
      "sku": {
         "sku":"The SKU of the product",
         "productFamily":"The product family of the product",
         "attributes": {
            "attributeName":"attributeValue",
         }
      }
   },
   "terms": {
      "termType": {
         "sku": {
            "sku": {
               "offerTermCode": "The term code of the product",
               "sku":"The SKU of the product",
               "effectiveDate":"The effective date of the pricing details",
               "termAttributesType":"The attribute type of the terms",
               "termAttributes": {
                  "attributeName":"attributeValue",
               },
               "priceDimensions": {
                  "rateCode": {
                     "rateCode":"The rate code of the price",
                     "description": "The description of the term",
                     "unit": "The usage measurement unit for the price",
                     "startingRange": "The start range for the term",
```

Service price list definitions

The following list defines the terms in the service price list files.

formatVersion

An attribute that tracks which format version the service price list file is in. The formatVersion of the file is updated when the structure is changed. For example, the version will change from v1 to v2.

disclaimer

Any disclaimers that apply to the service price list file.

offerCode

A unique code for the product of an Amazon Web Services service. For example, AmazonEC2 for Amazon EC2 or AmazonS3 for Amazon S3.

version

An attribute that tracks the version of the service price list file. Each time a new file is published, it contains a new version number. For example, 20150409022205 and 20150910182105.

publicationDate

The date and time in UTC format when a service price list file was published. For example, 2015-04-09T02:22:05Z and 2015-09-10T18:21:05Z.

Product details (products) definitions

This section provides information about products in a service price list file for an Amazon Web Services service. Products are indexed by SKU.

products:sku

A unique code for a product. Use the SKU code to correlate product details and pricing.

For example, a product with a SKU of HCNSHWWAJSGVAHMH is available only for a price that also lists HCNSHWWAJSGVAHMH as a SKU.

products:sku:productFamily

The category for the type of product. For example, compute for Amazon EC2 or storage for Amazon S3.

products:sku:attributes

A list of all of the product attributes.

products:sku:attributes:Attribute Name

The name of a product attribute. For example, Instance Type, Processor, or OS.

products:sku:attributes:Attribute Value

The value of a product attribute. For example, m1.small (instance type), xen (type of processor), or Linux (type of OS).

Product details (terms) definitions

This section provides information about the prices for products in a service price list file for an Amazon Web Services service.

Prices are indexed first by the terms (onDemand and reserved), and then by SKU.

terms:termType

The specific type of term that a term definition describes. The valid term types are reserved and onDemand.

terms:termType:SKU

A unique code for a product. Use the SKU code to correlate product details and pricing.

For example, a product with a SKU of HCNSHWWAJSGVAHMH is available only for a price that also lists HCNSHWWAJSGVAHMH as a SKU.

terms:termType:sku:Offer Term Code

A unique code for a specific type of term. For example, KCAKZHGHG.

Product and price combinations are referenced by the SKU code followed by the term code, separated by a period. For example, U7ADXS4BEK5XXHRU.KCAKZHGHG.

terms:termType:sku:Effective Date

The date that an service price list file goes into effect. For example, if a term has an EffectiveDate of November 1, 2017, the price isn't valid before that date.

terms:termType:sku:Term Attributes Type

A unique code for identifying what product and product offering are covered by a term. For example, an EC2-Reserved attribute type means that a term is available for Amazon EC2 reserved hosts.

terms:termType:sku:Term Attributes

A list of all of the attributes that are applicable to a term type. The format appears as attribute-name: attribute-value. For example, this can be the length of term and the type of purchase covered by the term.

terms:termType:sku:Term Attributes:Attribute Name

The name of a TermAttribute. You can use it to look up specific attributes. For example, you can look up terms by length or PurchaseOption.

terms:termType:sku:Term Attributes:Attribute Value

The value of a TermAttribute. For example, terms can have a length of one year and a purchase option of All Upfront.

terms:termType:sku:Price Dimensions

The pricing details for the price list file, such as how usage is measured, the currency that you can use to pay with, and the pricing tier limitations.

terms:termType:sku:Price Dimensions:Rate Code

A unique code for a product, offer, and pricing-tier combination. Product and term combinations can have multiple price dimensions, such as free tier, low use tier, and high use tier.

terms:termType:sku:Price Dimensions:Rate Code:Description

The description for a price or rate.

terms:termType:sku:Price Dimensions:Rate Code:Unit

The type of unit that each service uses to measure usage for billing. For example, Amazon EC2 uses hours, and Amazon S3 uses GB.

terms:termType:sku:Price Dimensions:Rate Code:Starting Range

The lower limit of the price tier covered by this price. For example, 0 GB or 1,001 API operation calls.

terms:termType:sku:Price Dimensions:Rate Code:Ending Range

The upper limit of the price tier covered by this price. For example, 1,000 GB or 10,000 API operation calls.

terms:termType:sku:Price Dimensions:Rate Code:Price Per Unit

A calculation of how much a single measured unit for a service costs.

terms:termType:sku:Price Dimensions:Rate Code:Price Per Unit:Currency Code

A code that indicates the currency for prices for a specific product.

terms:termType:sku:Price Dimensions:Rate Code:Price Per Unit:Currency Rate

The rate for a product in various supported currencies. For example, \$1.2536 per unit.

Reading the service price list file for a Savings Plan

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The service price list files for an Amazon Web Services service includes the following types of information:

- Service price list file details Metadata about the service price list file, such as the version, Amazon Web Services Region, and publication date
- Product details Product metadata that lists the products in a service price list file along with product information
- Pricing details (terms) Prices for all products in the service price list file

Contents

- <u>CSV file</u>
- JSON file
- <u>Service price list definitions</u>
- Product details (products) definitions
- Pricing details (terms) definitions

CSV file

The first five rows of the CSV file are the metadata for the price list file. The sixth row has the column names for the products and their attributes, such as SKU, RateCode, and more.

The number of columns varies depends on the Savings Plan. The first few columns contain the pricing details, while other columns contain the product details for a Savings Plan.

JSON file

The product details and pricing details are in separate sections. A JSON service price list file looks like the following example.

```
}
      },
      . . .
   ],
   "terms" : {
      "savingsPlan" : [
         {
            "sku" : "The SKU of the product",
            "description" : "Description of the product",
            "effectiveDate" : "The effective date of the pricing details",
            "leaseContractLength" : {
                "duration" : "Length of the lease contract - it is a number",
                "unit" : "Unit of the duration"
            },
            "rates" : [
                {
                    "discountedSku" : "The SKU of the discounted on demand product",
                    "discountedUsageType" : "Usage type of the discounted product",
                    "discountedOperation" : "Operation of the discounted product",
                    "discountedServiceCode" : "Service code of the discounted product",
                    "rateCode" : "The rate code of this price detail",
                    "unit" : "Unit used to measure usage of the product",
                    "discountedRate" : {
                         "price" : "Price of the product",
                         "currency" : "Currency of the price"
                    }
                },
                 . . .
            ]
        },
        . . .
      ]
   }
}
```

Service price list definitions

The following list defines the terms in the service price list files.

regionCode

The Region code of the Region for which the price list is valid for.

version

An attribute that tracks the version of the price list file. Each time a new file is published, it contains a new version number. For example, 20150409022205 and 20150910182105.

publicationDate

The date and time in UTC format when a service price list file was published. For example, 2015-04-09T02:22:05Z and 2015-09-10T18:21:05Z.

Product details (products) definitions

This section provides information about products in a price list file for a Savings Plan. Products are indexed by SKU.

products:product:sku

A unique code for a product. Use the SKU code to correlate product details and pricing.

For example, a product with a SKU of HCNSHWWAJSGVAHMH is available only for a price that also lists HCNSHWWAJSGVAHMH as a SKU.

products:product:productFamily

The category for the type of product. For example, EC2InstanceSavingsPlans for Compute Savings Plans.

products:product:serviceCode

The service code of the Savings Plan. For example, ComputeSavingsPlans.

products:product:attributes

A list of all product attributes.

products:product:attributes:attributeName

The name of a product attribute. For example, Instance Type, Location Type, or Purchase Option.

products:product:attributes:attributeValue

The value of a product attribute. For example, m1.small (instance type), Amazon Local Zone (type of location), or No Upfront (type of purchase option).

Pricing details (terms) definitions

This section provides information about the prices for products in a price list file for a Savings Plan.

Prices are indexed first by the terms (savingsPlan).

terms:termType

The specific type of term that a term definition describes. The valid term type is savingsPlan.

terms:termType:sku

A unique code for a product. Use the SKU code to correlate product details and pricing.

For example, a product with a SKU of T496KPMD8YQ8RZNC is available only for a price that also lists 496KPMD8YQ8RZNC as a SKU.

terms:termType:sku:description

The description of the product.

terms:termType:sku:effectiveDate

The date that an service price list file goes into effect. For example, if a term has an EffectiveDate of November 1, 2017, the price isn't valid before that date.

terms:termType:sku:leaseContractLength:duration

The length of the lease contract. This value is a number. For example, 1 or 3.

terms:termType:sku:rates

A list all of the discounted rates that are applicable to a Savings Plan product. One Savings Plan product is a combination of multiple products from other services and this contains multiple rates for the combination.

terms:termType:sku:rates:discountedSku

The SKU of the discounted on demand product.

terms:termType:sku:rates:discountedUsageType

The usage type of the discounted on-demand product.

terms:termType:sku:rates:discountedOperation

The operation of the discounted on-demand product.

terms:termType:sku:rates:discountedServiceCode

The service code of the discounted on-demand product.

terms:termType:sku:rates:rateCode

The rate code of this rate offered under the Savings Plan product. For example, T496KPMD8YQ8RZNC.26PW7ZDSYZZ6YBTZ

terms:termType:sku:rates:unit

The unit used to measure usage of the product. For example, Hrs for an Amazon EC2 instance.

terms:termType:sku:rates:discountedRate:price

The price of the offered discounted product under Savings Plan product. For example, 3.434.

terms:termType:sku:rates:discountedRate:currency

The currency of the price of the offered discounted product under a Savings Plan product. For example, USD.

Finding prices in the service price list file

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

The Amazon Price List Bulk API provides prices for all Amazon products for informational purposes, including On-Demand and Reserved Instances pricing.

To find the prices and terms for a specific product, you can use the offer files. For example, you can find a list of Amazon Elastic Compute Cloud (Amazon EC2) instance prices.

Note

The Amazon Price List Bulk API is not a comprehensive source for limited period offers, such as Amazon Web Services China Region Free Tier pricing. For information about Free Tier prices, see Amazon Web Services China Region Free Tier.

To find prices for the products you're interested in.

Contents

- Finding On-Demand prices for services
- Finding tiered prices for services
- Finding tiered prices for services with Free Tier
 - Example
- Finding prices for services with Reserved Instances

Finding On-Demand prices for services

The following procedure shows how to find On-Demand prices for Amazon Web Services services, such as Amazon EC2.

To find an On-Demand price by using the CSV file

- 1. Download the CSV file for the service.
- 2. Open the CSV file with your preferred application.
- 3. Under the **TermType** column, filter to show **OnDemand**.
- 4. Find the usage type and operation that you want.
- 5. In the **PricePerUnit** column, see the corresponding price.

To find an On-Demand price by using the JSON file

- 1. Download the JSON file for the service.
- 2. Open the JSON file with your preferred application.
- 3. Under **terms** and **On-Demand**, find the SKU that you want.

If you don't know the SKU, search under **products** for the **usage type** and **operation**.

4. See the **pricePerUnit** to find the corresponding On-Demand price for the SKU.

Finding tiered prices for services

The following procedure shows how to find tiered prices for services, such as Amazon Simple Storage Service (Amazon S3).

To find tiered prices for services by using the CSV file

- 1. Download the CSV file for the service.
- 2. Open the CSV file with your preferred application
- 3. Under the **TermType** column, filter to show **OnDemand**.
- 4. Find the usage type and operation that you want.
- 5. In the **PricePerUnit** column, see the corresponding price for each **StartingRange** and **EndingRange**.

To find tiered prices for services by using the JSON file

- 1. Download the JSON file.
- 2. Open the JSON file with your preferred application.
- 3. Under **terms** and **On-Demand** find the SKU that you want.

If you don't know the SKU, search under **products** for the **usage type** and **operation**.

4. Under each **beginRange** and **endRange**, see the **pricePerUnit** to find the corresponding tiered prices.

Finding tiered prices for services with Free Tier

The following procedure shows how to find Amazon Web Services services that publish Free Tier prices in the Amazon Price List Bulk API, such as Amazon Lambda.

All Free Tier prices are subject to the terms documented in <u>Amazon Web Services China Region</u> Free Tier.

To find prices for services with Free Tier by using the CSV file

- 1. Download the CSV file for the service.
- 2. Open the CSV file with your preferred application.
- 3. Under the **TermType** column, filter to show **OnDemand**.
- 4. Under the **Location** column, filter to show **Any**.

Any doesn't represent all Amazon Web Services Regions in this scenario. It's a subset of Regions defined by other line items in the CSV file, with a **RelatedTo** column matching the SKU for the location **Any** entry.

- 5. To find a list of all eligible locations and products for a specific Free Tier SKU, find the Free Tier SKU under the **RelatedTo** column.
- 6. To find the covered usage by Free Tier across all eligible locations, see the **StartingRange** and **EndingRange** for the location **Any**.

Example

This example assumes there are no more entries in the price file where **RelatedTo** equals to the SKU ABCD.

As shown in the following table, the Free Tier offer with SKU ABCD is valid in the Asia Pacific (Singapore) and US East (Ohio) Regions, but not in Amazon GovCloud (US). The covered usage by Free Tier is 400,000 seconds total, used across both eligible Regions.

SKU	StartingRage	EndingRan ge	Unit	RelatedTo	Location
ABCD	0	400000	seconds		Any
QWER	0	Inf	seconds	ABCD	Asia Pacific (Singapor e)
WERT	0	Inf	seconds	ABCD	US East (Ohio)
ERTY	0	Inf	seconds		AWS GovCloud (US)

To find tiered prices for services with Free Tier by using the JSON file

- 1. Download the JSON file for the service.
- 2. Open the JSON file with your preferred application.
- 3. Under **products**, find the **usagetype** with the Region prefix **Global**.
- 4. Take note of the SKU, and look for the same SKU under **terms** and **OnDemand**.

5. For the amount of Free Tier usage, see the BeginRange and EndRange .

For a list of products and Regions covered by Free Tier, see **appliesTo**.

Finding prices for services with Reserved Instances

The following procedure shows how to find prices for services with Reserved Instances, such as Amazon Relational Database Service (Amazon RDS).

To find prices for a Reserved Instance by using the CSV file

- 1. Download the Amazon EC2 CSV file.
- 2. Open the CSV file with your preferred application.
- 3. Under the **TermType** column, filter to show **reserved**.
- 4. Find the usage type and operation that you want.
- 5. For each **LeaseContractLength**, **PurchaseOption**, and **OfferingClass**, see the **PricePerUnit** column for the corresponding price.

To find prices for Reserved Instances by using the JSON file

- 1. Download the JSON file for the service.
- 2. Open the JSON file with your preferred application.
- 3. Under **terms** and **Reserved**, find the SKU that you want.

If you don't know the SKU, search under **products** for the **usage type** and **operation**.

You can find prices for LeaseContractLength, PurchaseOption, and OfferingClass for the same product.

Setting up price update notifications

To provide feedback about Amazon Price List, complete this <u>short survey</u>. Your responses will be anonymous. **Note:** This survey is in English only.

Price list files can change anytime. When the price list files are updated, an Amazon Simple Notification Service (Amazon SNS) notification is sent. You can set up to receive notifications when prices change, such as when Amazon lowers prices, or when new products and services are launched.

You can get notified every time a price changes or only once a day. If you choose to be notified once a day, the notification includes all price changes applied during the previous day. We recommend that you set up notifications and get the latest files when they change.

🚺 Note

Notifications for Savings Plan price list changes aren't supported in China Regions.

Contents

- Set up Amazon SNS notifications
- Notification structure for Amazon Web Services services
- Notification structure for Savings Plans

Set up Amazon SNS notifications

You can use the Amazon Web Services Management Console to sign up for Amazon SNS notifications.

To set up Amazon SNS notifications for price list file updates

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon SNS console at https://console.amazonaws.cn/sns/v3/home.
- 2. If you're new to Amazon SNS, choose **Get Started**.
- If necessary, change the Amazon Web Services Region on the navigation bar to US East (N. Virginia).
- 4. On the navigation pane, choose **Subscriptions**.
- 5. Choose **Create subscription**.
- 6. For **Topic ARN**, enter the following as needed:
 - For service pricing:

- To get notified every time a price changes, enter: arn:aws:sns:useast-1:278350005181:price-list-api
- To get notified about price changes once a day, enter: arn:aws:sns:useast-1:278350005181:daily-aggregated-price-list-api
- For Savings Plans prices, enter: arn:aws:sns:useast-1:626627529009:SavingsPlanPublishNotifications
- 7. For **Protocol**, use the default HTTP setting.
- 8. For **Endpoint**, specify the format that you want to receive the notification, such as Amazon Simple Queue Service (Amazon SQS), Amazon Lambda, or email.
- 9. Choose **Create subscription**.

When a price changes, you will receive a notification from your preferred format that you specified in step 8.

<u> Important</u>

If you get an error message Couldn't create subscription. Error code: InvalidParameter -Error message: Invalid parameter: TopicArn, it's likely that you're not using the US East (N. Virginia) Region. The billing metric data is stored in this Region, even for resources in other Regions. Return to step 3 and complete the rest of this procedure.

Notification structure for Amazon Web Services services

The pricing update notification has a subject line in the following format.

```
[Pricing Update] New <serviceCode> offer file available.
```

Example Example: Subject line

A price update notification for Amazon Relational Database Service (Amazon RDS) looks like the following.

[Pricing Update] New AmazonRDS offer file available.

Example Example: Notification message

If you subscribed to Amazon Web Services services such as Amazon SQS, Lambda, or other services, the structure of the pricing update notification message body looks like the following.

```
{
    "formatVersion":"v1.0",
    "offerCode":"<serviceCode>",
    "version":"<Version number of this new price list>",
    "timeStamp":"<Publish date of this new price list>",
    "url":{
        "JSON":"<JSON URL of the current version price list>",
        "CSV":"<CSV URL of the current version price list>"
    },
    "regionIndex":"<Region index url of the current version price list>",
    "operation":"Publish"
}
```

For example, the notification message for Amazon RDS looks like the following.

```
{
    "formatVersion":"v1.0",
    "offerCode":"AmazonRDS",
    "version":"20230328234721",
    "timeStamp":"2023-03-28T23:47:21Z",
    "url":{
        "JSON":"https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/AmazonRDS/
current/index.json",
        "CSV":"https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/AmazonRDS/
current/index.csv"
    },
    "regionIndex":"https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/AmazonRDS/
current/region_index.json",
        "operation":"Publish"
}
```

Example Example: Email notification

If you subscribed to email, the structure of the pricing update email message body looks like the following.

Hello,

You've received this notification because you subscribed to receiving updates from SNS
topic arn:aws:sns:us-east-1:278350005181:price-list-api.
We've published a new version of the offer file for Service <serviceCode>. To download
the offer file, use the following URLs:
 - JSON format : <JSON URL of the current version price list>
 - CSV format : <CSV URL url of the current version price list>
To download the index for the region-specific offer files, use the following URL:
 - RegionIndexUrl : <Region index URL of the current version price list>
To get a daily email that shows all price changes made the previous day, subscribe to
the following SNS topic: arn:aws:sns:us-east-1:278350005181:daily-aggregated-pricelist-api.
To learn more about offer files and index files, see http://docs.aws.amazon.com/
awsaccountbilling/latest/aboutv2/price-changes.html.
Thank You,
Amazon Web Services Team

Am example email message for Amazon RDS looks like the following.

```
Hello,
You've received this notification because you subscribed to receiving updates from SNS
topic arn:aws:sns:us-east-1:278350005181:price-list-api.
We've published a new version of the offer file for Service AmazonRDS. To download the
offer file, use the following URLs:
    - JSON format : https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/AmazonRDS/
current/index.json
    - CSV format : https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/AmazonRDS/
current/index.csv
To download the index for the region-specific offer files, use the following URL:
    - RegionIndexUrl : https://pricing.us-east-1.amazonaws.com/offers/v1.0/aws/
AmazonRDS/current/region_index.json
To get a daily email that shows all price changes made the previous day, subscribe to
the following SNS topic: arn:aws:sns:us-east-1:278350005181:daily-aggregated-price-
```

list-api.

To learn more about offer files and index files, see http://docs.aws.amazon.com/ awsaccountbilling/latest/aboutv2/price-changes.html.

```
Thank You,
Amazon Web Services Team
```

Notification structure for Savings Plans

The pricing update notification has a subject line in the following format.

[Pricing Update] New <Savings Plan name> is available.

Example Example: Subject line for Savings Plan

A subject line for Savings Plan looks like the following.

[Pricing Update] New Amazon Compute Savings Plan is available.

Example Example: Notification message

If you subscribed to Amazon Web Services services such as Amazon SQS, Lambda, or other services, the structure of the pricing update notification message body looks like the following,

```
{
    "version":"<Version number of this new price list>",
    "offerCode":"<savingsPlanCode which can be used as input to API calls>",
    "savingsPlanCode":"<savingsPlan Name>",
    "topicArn":"arn:aws:sns:us-east-1:626627529009:SavingsPlanPublishNotifications",
    "versionIndex":"<version index url of the version price list>",
    "regionIndex":"<Region index URL of the version price list>"
}
```

For example, a notification for ComputeSavingsPlans looks like the following.

```
{
    "version":"20230509202901",
    "offerCode":"AWSComputeSavingsPlan",
    "savingsPlanCode":"ComputeSavingsPlans",
    "topicArn":"arn:aws:sns:us-east-1:626627529009:SavingsPlanPublishNotifications",
    "versionIndex":"https://pricing.us-east-1.amazonaws.com/savingsPlan/v1.0/aws/
AWSComputeSavingsPlan/20230509202901/index.json",
```

```
"regionIndex":"https://pricing.us-east-1.amazonaws.com/savingsPlan/v1.0/aws/
AWSComputeSavingsPlan/20230509202901/region_index.json"
```

}

Example Example: Email notification

If you subscribed to email, the structure of the pricing update email body looks like the following.

```
Hello,
You've received this notification because you subscribed to receiving updates from SNS
topic arn:aws:sns:us-east-1:626627529009:SavingsPlanPublishNotifications.
We've published a new version of <Savings Plan name>.
To download the index of current region specific savings plans, use the following URL:
  - <Region index URL of the version price list>
To download the index of previous versions of savings plans, use the following URL:
  - <version index URL of the version price list>
To learn more about Savings Plans, see http://docs.aws.amazon.com/awsaccountbilling/
latest/aboutv2/price-changes.html.
To learn about finding Savings Plan prices in an offer file, see https://
docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/sp-offer-file.html
Thank You,
```

Amazon Web Services Team

For example, an email body for Savings Plan looks like the following.

Hello,
You've received this notification because you subscribed to receiving updates from SNS topic arn:aws:sns:us-east-1:626627529009:SavingsPlanPublishNotifications.
We've published a new version of Compute Savings Plans.
To download the index of current region specific savings plans, use the following URL: - https://pricing.us-east-1.amazonaws.com/savingsPlan/v1.0/aws/ AWSComputeSavingsPlan/20230509202901/region_index.json
To download the index of provious versions of sovings plans, use the following UDL.

To download the index of previous versions of savings plans, use the following URL:

https://pricing.us-east-1.amazonaws.com/savingsPlan/v1.0/aws/
AWSComputeSavingsPlan/20230509202901/index.json
To learn more about savings plans, see http://docs.aws.amazon.com/awsaccountbilling/
latest/aboutv2/price-changes.html.
To learn about finding Savings Plan prices in an offer file, see https://
docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/sp-offer-file.html

Thank You, Amazon Web Services Team

Consolidating billing for Amazon Organizations

You can use the consolidated billing feature in Amazon Organizations to consolidate billing and payment for multiple Amazon Web Services accounts. Every organization in Amazon Organizations has a *management account* that pays the charges of all the *member accounts*. For more information about organizations, see the <u>Amazon Organizations User Guide</u>.

Consolidated billing has the following benefits:

- **One bill** You get one bill for multiple accounts in the same SOR. If an organization has accounts from multiple SORs, you receive one bill per SOR.
- **Easy tracking** You can track the charges across multiple accounts and download the combined cost and usage data.
- Combined usage You can combine the usage across all accounts in the organization to share the volume pricing discounts, Reserved Instance discounts, and Savings Plans. This can result in a lower charge for your project, department, or company than with individual standalone accounts. For more information, see <u>Volume discounts</u>.
- No extra fee Consolidated billing is offered at no additional cost.

1 Note

The member account bills are for informational purpose only. The management account might reallocate the additional volume discounts, Reserved Instance, or Savings Plans discounts that your account receives.

If you have access to the management account, you can see a combined view of the Amazon charges that the member accounts incur. You also can get a cost report for each member account.

🔥 Important

When a member account leaves an organization, the member account can no longer access Cost Explorer data that was generated when the account was in the organization. The data isn't deleted, and the management account in the organization can still access the data. If the member account rejoins the organization, the member account can access the data again.

Topics

- <u>Consolidated billing process</u>
- Consolidated billing in Amazon EMEA
- Consolidated billing in India
- Effective billing date, account activity, and volume discounts
- <u>Reserved Instances</u>
- Understanding Consolidated Bills
- <u>Requesting shorter PDF invoices</u>
- Amazon Web Services Support charges for accounts in an Amazon Organizations

Consolidated billing process

Amazon Organizations provides consolidated billing so that you can track the combined costs of all the member accounts in your organization. The following steps provide an overview of the process for creating an organization and viewing your consolidated bill.

- Open the <u>Amazon Organizations console</u> or the <u>Amazon Billing and Cost Management console</u>. If you open the Amazon Billing and Cost Management console, choose **Consolidated Billing**, and then choose **Get started**. You are redirected to the Amazon Organizations console.
- 2. Choose **Create organization** on the Amazon Organizations console.
- Create an organization from the account that you want to be the management account of your new organization. For details, see <u>Creating an Organization</u>. The management account is responsible for paying the charges of all the member accounts.
- 4. (Optional) Create accounts that are automatically member to the organization. For details, see Creating an Amazon Web Services account in Your Organization.
- 5. (Optional) Invite existing accounts to join your organization. For details, see <u>Inviting an</u> Amazon Web Services account to Join Your Organization.
- 6. Each month Amazon charges your management account for all the member accounts in a consolidated bill.

The management account is billed for all charges of the member accounts. However, unless the organization is changed to support all features in the organization (not consolidated billing features only) and member accounts are explicitly restricted by policies, each member account is otherwise independent from the other member accounts. For example, the owner of a member account can sign up for Amazon services, access resources, and use Amazon Premium Support unless the management account restricts those actions. Each account owner continues to use their own sign-in credentials, with account permissions assigned independently of other accounts in the organization.

Securing the consolidated billing management account

The owner of the management account in an organization should secure the account by using <u>Amazon Multi-Factor Authentication</u> and a strong password that has a minimum of eight characters with both uppercase and lowercase letters, at least one digit, and at least one special character. You can change your password on the <u>Amazon Security Credentials</u> page.

Consolidated billing in Amazon EMEA

The consolidated daily invoice feature combines your charges, so that you receive fewer invoices each day. You're automatically opted into this feature if you meet the following requirements:

- Your Amazon Web Services account is invoiced through the Amazon Web Services EMEA SARL (Amazon Europe) entity. For more information, see <u>Managing your payments in Amazon Europe</u>.
- You're using the pay by invoice payment method. This feature isn't available for credit card or direct debit payment methods.

This feature consolidates the following:

- Daily subscriptions and out-of-cycle invoices into one invoice
- Credit memos into one invoice

For example, if you purchase three Reserved Instances and receive two credit memos today, you receive a total of two invoices at the end of the day. One invoice includes your Reserved Instance purchases, and the other includes your credit memos.

Consolidation period

Amazon processes subscription invoices and refunds between 23:59 to 24:00 midnight UTC. Amazon then generates the consolidated invoices and credit memos during the previous 24-hour period. Your consolidated bill is available within minutes.

Services covered

Your daily invoice includes Amazon Web Services service subscriptions, out-of-cycle purchases, and credit memos. This feature doesn't include the following:

- Amazon Web Services Marketplace purchases
- Amazon monthly service and anniversary invoices
- Credit memos issued for different original invoices

For example, suppose that you receive credit memo A for original invoice ID 123, and another credit memo B for original invoice ID 456. Both credit memos aren't consolidated, even if they're issued on the same day. Credit memos are consolidated only if they're issued against the same original invoice ID.

- Amazon Web Services Support purchases, such as changing Amazon Web Services Support plans
- Charges for some Amazon Route 53 offerings (for example, purchasing a domain name), Amazon Partner Network, Amazon Managed Services, and Amazon conferences such as re:Invent, and re:Inforce

Currency and foreign exchange rate

Credit memos use the same currency and exchange rate as the original invoice.

For subscription invoices, Amazon applies the latest currency preference to all one-time fees processed during the previous 24-hour period. For example, if you purchase a Reserved Instance in the morning, and then change your preferred currency in the afternoon, Amazon converts the currency for the morning purchase into the new preferred currency. This update appears in the consolidated invoice generated for that day.

Changes to your Amazon Cost and Usage Report

With consolidated billing, it can take up to 24 hours after Amazon processes your one-time charges for them to appear in your Amazon Cost and Usage Report (Amazon CUR), Cost Explorer, or cost budget alerts set up using Amazon Budgets.

You can continue to view your amortized one-time upfront Reserved Instance charges in Amazon CUR, Cost Explorer, or Budgets.

Turn off consolidated billing

By default, this feature is enabled for your account. If you don't want this feature, use the following procedure.

To turn off consolidated billing

- 1. Sign in to the <u>Amazon Support Center Console</u>.
- 2. Create an Account & billing support case.
- 3. For **Service**, choose **Billing**,
- 4. For **Category**, choose **Consolidated Billing**.
- 5. Follow the prompts to create your support case.

1 Note

Repeat this procedure if you want to turn on consolidated billing later.

Consolidated billing in India

If you sign up for a new account and choose India for your contact and billing address, your user agreement is with Amazon Web Services India Private Limited (Amazon India), a local Amazon seller in India. Amazon India manages your billing, and your invoice total is listed in Indian rupees instead of US dollars, and you are expected to make payments in rupees.

Enabling multi-SOR organizations for Amazon India accounts

If your Amazon India management account is unable to invite an account from a different SOR, or your Amazon India account can't accept invites from an Amazon Web Services account other than Amazon India, your account is likely operating in the legacy model where the functionality isn't available. We are currently migrating Amazon India account from the legacy to the new model where the functionality is available. The expected completion date is December 2025.

Understanding SOR impact for linked Amazon India accounts

The SOR of the Amazon India accounts that join your organization might change depending on your management account's SOR:

- If your management account is in Amazon India, the SOR of all of the linked accounts is retained and doesn't change when they join your organization.
- If your management account isn't in Amazon India, you can still invite Amazon India accounts to join your organization. However, their SORs automatically resolve to Amazon Inc.

Effective billing date, account activity, and volume discounts

When the member account owner accepts your request to join the organization, you immediately become responsible for the member account's charges. If the member account joins in the middle of the month, the management account is billed only for the latter part of the month.

For example, if a member account joins an organization on March 10, then Amazon bills the management account for the member account's period of usage starting on March 10. The member account's original owner is still billed for the first part of the month.

Billing and account activity

Each month, Amazon charges the management account owner, and not the owners of the member accounts. To see the total usage and charges across all the accounts in an organization, see the **Bills** page of the management account. Amazon updates the page multiple times each day. Additionally, Amazon makes a downloadable cost report available each day.

Although the owners of the member accounts aren't charged, they can still see their usage and charges by going to their Amazon **Bills** pages. They can't view or obtain data for the management account or any other member accounts on the bill.

Volume discounts

For billing purposes, Amazon treats all of the accounts in the organization as if they were one account. Some services, such as Amazon Data Transfer and Amazon S3, have volume pricing tiers across certain usage dimensions that give you lower prices the more you use the service. With consolidated billing, Amazon combines the usage from all accounts to determine which volume pricing tiers to apply, giving you a lower overall price whenever possible. Amazon then allocates each member account a portion of the overall volume discount based on the account's usage.

For example, let's say that Bob's consolidated bill includes both Bob's own account and Susan's account. Bob's account is the management account, so he pays the charges for both himself and Susan.

Bob transfers 8 TB of data during the month and Susan transfers 4 TB.

For the purposes of this example, Amazon charges \$0.17 per GB for the first 10 TB of data transferred and \$0.13 for the next 40 TB. This translates into \$174.08 per TB (= .17*1024) for the first 10 TB, and \$133.12 per TB (= .13*1024) for the next 40 TB. Remember that 1 TB = 1024 GB.

For the 12 TB that Bob and Susan used, Bob's management account is charged (\$174.08 * 10 TB) + (\$133.12 * 2 TB) = \$1740.80 + \$266.24 = \$2,007.04.

Without the benefit of tiering across the consolidated bill, Amazon would have charged Bob and Susan each \$174.08 per TB for their usage, for a total of \$2,088.96.

To learn more about pricing, see Amazon Pricing.

Amazon Free Tier for Amazon Organizations

For services such as Amazon EC2 that support a free tier, Amazon applies the free tier to the total usage across all accounts in an Amazon organization. Amazon doesn't apply the free tier to each account individually.

Amazon provides budgets that track whether you exceed the free tier limits or are forecasted to go over the free tier limits. Free tier budgets are not enabled for organizations by default. Management account can opt in to free tier usage alerts through the Billing and Cost Management console. Free tier usage alerts aren't available to individual member accounts.

For more information about free tiers, see <u>Amazon Free Usage Tier FAQs</u>. For more information about Amazon Free Tier usage alerts through Amazon Budgets and opting in, see <u>Using Amazon</u> Web Services China Region Free Tier usage alerts.

Reserved Instances

For billing purposes, the consolidated billing feature of Amazon Organizations treats all the accounts in the organization as one account. This means that all accounts in the organization can receive the hourly cost benefit of Reserved Instances that are purchased by any other account.

You can turn off Reserved Instance discount sharing on the **Preferences** page on the Billing and Cost Management console. For more information, see <u>the section called "Reserved Instances and</u> <u>Savings Plans discount sharing"</u>.

Topics

• Billing examples for specific services

Billing examples for specific services

There are a few other things to know about how consolidated billing works with specific services in Amazon.

Amazon EC2 Reserved Instances

For an Amazon EC2 Reserved Instances example, suppose that Bob and Susan each have an account in an organization. Susan has five Reserved Instances of the same type, and Bob has none. During one particular hour, Susan uses three instances and Bob uses six, for a total of nine instances on the organization's consolidated bill. Amazon bills five instances as Reserved Instances, and the remaining four instances as regular instances.

Bob receives the cost benefit from Susan's Reserved Instances only if he launches his instances in the same Availability Zone where Susan purchased her Reserved Instances. For example, if Susan specifies us-west-2a when she purchases her Reserved Instances, Bob must specify us-west-2a when he launches his instances to get the cost benefit on the organization's consolidated bill. However, the actual locations of Availability Zones are independent from one account to another. For example, the us-west-2a Availability Zone for Bob's account might be in a different location than the location for Susan's account.

Amazon RDS Reserved DB Instances

For an Amazon RDS Reserved DB Instances example, suppose that Bob and Susan each have an account in an organization. Susan has five Reserved DB Instances, and Bob has none. During one particular hour, Susan uses three DB Instances and Bob uses six, for a total of nine DB Instances on the consolidated bill. Amazon bills five as Reserved DB Instances, and the remaining four as On-Demand DB Instances (for Amazon RDS Reserved DB Instance charges, see the <u>pricing page</u>). Bob receives the cost benefit from Susan's Reserved DB Instances only if he launches his DB Instances in the same region where Susan purchased her Reserved DB Instances.

Also, all of the relevant attributes of Susan's Reserved DB Instances should match the attributes of the DB Instances launched by Bob as described in <u>Reserved DB Instances</u>. For example, let's say Susan purchased a Reserved DB Instance in us-west-2 with the following attributes:

• DB Engine: Oracle

- DB Instance Class: m1.xlarge
- Deployment Type: Multi-AZ

This means that Bob must launch his DB Instances in us-west-2 with the exact same attributes to get the cost benefit on the organization's consolidated bill.

Amazon ElastiCache reserved node instances

For an Amazon ElastiCache Reserved Nodes example, suppose Bob and Susan each have an account in an organization. Susan has five Reserved Nodes, and Bob has none. During one particular hour, Susan uses three nodes and Bob uses six. This makes a total of nine nodes used on the consolidated bill.

Amazon bills five as Reserved Nodes. Amazon bills the remaining four as On-Demand nodes. (For Amazon ElastiCache Reserved Nodes charges, see <u>Amazon ElastiCache Pricing</u>.) Bob receives the cost benefit from Susan's Reserved Nodes only if he launches his On-Demand nodes in the same region where Susan purchased her Reserved Nodes.

Also, to receive the cost benefit of Susan's Reserved Nodes, all attributes of Bob's nodes must match the attributes of the nodes launched by Susan. For example, let's say Susan purchased Reserved Nodes in us-west-2 with the following attributes:

- Cache engine: Redis
- Node type: cache.r3.large

Bob must launch his ElastiCache nodes in us-west-2 with the same attributes to get the cost benefit on the organization's consolidated bill.

Amazon OpenSearch Service Reserved Instances

For an Amazon OpenSearch Service Reserved Nodes example, suppose Bob and Susan each have an account in an organization. Susan has five Reserved Instances, and Bob has none. During one particular hour, Susan uses three instances and Bob uses six. This makes a total of nine instances used on the consolidated bill.

Amazon bills five as Reserved Instances. Amazon bills the remaining four as On-Demand instances. (For Amazon OpenSearch Service Reserved Instance charges, see <u>Amazon OpenSearch Service</u> <u>Pricing</u>.) Bob receives the cost benefit from Susan's Reserved Instances only if he launches his OnDemand instances in the same Amazon Web Services Region where Susan purchased her Reserved Instances.

To receive the cost benefit of Susan's Reserved Instances, Bob also must use the same instance type that Susan reserved. For example, let's say Susan purchased m4.large.elasticsearch instances in us-west-2. Bob must launch his Amazon OpenSearch Service domains in us-west-2 with the same instance type to get the cost benefit on the organization's consolidated bill.

Reserved Instances and Savings Plans discount sharing

The management account of an organization can deactivate Reserved Instance discount and Savings Plans discount sharing for any accounts in that organization, including the management account. This means that Reserved Instances and Savings Plans discounts aren't shared between any accounts that have deactivated sharing.

To share an Reserved Instance or Savings Plans discount with an account, both accounts must have sharing activated. You can change your preference at any time. Each estimated bill is computed by using the last set of preferences. The final bill for the month is calculated based on the preferences set at 23:59:59 UTC time on the last day of the month.

If Savings Plans sharing is turned on for an Amazon Organizations account, then it must meet the following criteria:

- At least one account in the consolidated billing family must have Amazon compute usage for the Savings Plans to apply to the management account's bill.
- Savings Plans first apply usage in the purchasing account. If there are any unused hourly commitments, the Savings Plans automatically applies them to other accounts in the organization that have sharing turned on. Accounts with the largest calculated savings are prioritized.
- To apply discounts to other eligible linked accounts, the Savings Plans opener account must be included and activated under the RI and Savings Plans discount sharing preferences.
- If the Savings Plans owner account is removed or deactivated from the sharing preferences, the Savings Plans discount no longer applies to the other eligible linked accounts.
- If a Savings Plans owner member account leaves or is removed from the organization, the Savings Plans no longer apply to the consolidated bill.

🔥 Important

- Deactivating Reserved Instance and Savings Plans discount sharing can result in a higher monthly bill.
- To share the Savings Plans discount, the Savings Plans owner account must be active in the RI and Savings Plans discount sharing preferences. This enables the discount usage across other eligible linked accounts in the organization.

Topics

- Deactivating shared Reserved Instances and Savings Plans discounts
- Activating shared Reserved Instances and Savings Plans discounts

Deactivating shared Reserved Instances and Savings Plans discounts

You can deactivate sharing discounts for individual member accounts.

To deactivate shared Reserved Instances and Savings Plans discounts

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. In the navigation pane, choose **Billing preferences**.
- 3. Under **Reserved Instances and Savings Plans discount sharing preference by account**, select the accounts that you want to deactivate discount sharing for.
- 4. Choose **Deactivate**.
- 5. In the **Deactivate Reserved Instance and Savings Plan sharing** dialog box, choose **Deactivate**.

🚺 Tip

You can also choose **Actions** and then choose **Deactivate All** to deactivate Reserved Instance and Savings Plans sharing for all accounts.

Activating shared Reserved Instances and Savings Plans discounts

You can use the console to activate Reserved Instance sharing discounts for an account.

You can share Savings Plans with a set of accounts. You can either choose to not share the benefit with other accounts, or to open up line item eligibility for the entire consolidated billing family of accounts.

To activate shared Reserved Instances and Savings Plans discounts

 Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at <u>https://console.amazonaws.cn/costmanagement/</u>.

🚯 Note

Ensure that you're signed in to the management account of your Amazon Organizations.

- 2. In the navigation pane, choose **Billing preferences**.
- 3. Under **Reserved Instances and Savings Plans discount sharing preference by account**, select the accounts that you want to activate discount sharing for.
- 4. Choose Activate.
- 5. In the Activate Reserved Instance and Savings Plan sharing dialog box, choose Activate.

🚺 Tip

You can also choose **Actions** and then choose **Activate All** to activate Reserved Instance and Savings Plans sharing for all accounts.

Understanding Consolidated Bills

If you manage an organization in Amazon Organizations, you can use consolidated billing to view aggregated usage costs for accounts in the organization. Consolidated billing can also help you reduce those costs. For example, to ensure that you pay the lowest available prices for Amazon products and services, Amazon offers pricing tiers that reward higher usage with lower prices and discounted rates for purchasing instances in advance (known as *reservations* or *Reserved Instances*). Using consolidated billing, you can combine usage from multiple accounts into a single invoice,

allowing you to reach the tiers with lower prices faster. You can also apply unused reservations from one account to another account's instance usage.

Topics

- <u>Calculating Consolidated Bills</u>
- Pricing Tiers
- Reserved Instances
- <u>Savings Plans</u>
- Blended Rates and Costs

Calculating Consolidated Bills

In an organization, the management account is responsible for paying all charges that the member accounts incur. If you're an administrator of a management account and you have the appropriate permissions, you can view aggregated usage costs for Reserved Instance discounts and volume tiering for all member accounts. You can also view the charges that individual member accounts incur, because Amazon creates a separate bill for each member account based on that account's usage. Amazon also includes invoice summaries for each account in the management account invoice. During each billing period, Amazon calculates your estimated charges several times each day so that you can track your costs as your organization incurs them. Your bill is not finalized until the beginning of the next month.

i Note

Like member accounts, a management account can incur usage charges. However, as a best practice you shouldn't use the management account to run Amazon services. An exception is for services and resources that are required to manage the organization itself. For example, as part of managing your consolidated billing you might create an S3 bucket in the management account to store Amazon Cost and Usage Reports.

Pricing Tiers

Some Amazon services are priced in *tiers*, which specify unit costs for defined amounts of Amazon usage. As your usage increases, your usage crosses thresholds into new pricing tiers that specify lower unit costs for additional usage in a month. Your Amazon usage is measured every

month. To measure usage, Amazon treats all accounts in an organization as a single account. Member accounts don't reach tier thresholds individually. Instead, all usage in the organization is aggregated for each service, which ensures faster access to lower-priced tiers. As each month begins, your service usage is reset to zero.

Each Amazon service publishes its pricing information independently. You can access all individual pricing pages from the <u>Amazon Pricing</u> page.

Reserved Instances

Amazon also offers discounted hourly rates in exchange for an upfront fee and term contract.

Zonal Reserved Instances

A Reserved Instance is a reservation that provides a discounted hourly rate in exchange for an upfront fee and term contract. Services such as Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Relational Database Service (Amazon RDS) use this approach to sell reserved capacity for hourly use of *Reserved Instances*. It is not a virtual machine. It is a commitment to pay in advance for specific Amazon EC2 or Amazon RDS instances. In return, you get a discounted rate as compared to On-Demand Instance usage. From a technical perspective, there is no difference between a Reserved Instance and an On-Demand Instance. When you launch an instance, Amazon checks for qualifying usage across all accounts in an organization that can be applied to an active reservation. For more information, see <u>Reserved Instances</u> in the *Amazon EC2 User Guide* and Working with Reserved DB Instances in the *Amazon Relational Database Service Developer Guide*.

When you reserve capacity with Reserved Instances, your hourly usage is calculated at a discounted rate for instances of the same usage type in the same Availability Zone.

Regional Reserved Instances

Regional Reserved Instances don't reserve capacity. Instead, they provide Availability Zone flexibility and in certain cases instance size flexibility. Availability Zone flexibility allows you to run one or more instances in any Availability Zone in your reserved Amazon Region. The Reserved Instance discount is applied to any usage in any Availability Zone. Instance size flexibility provides the Reserved Instance discount to instance usage regardless of size, within that instance family. Instance size flexibility applies to only regional Reserved Instances on the Linux/Unix platform with default tenancy. For more information about regional Reserved Instances, see <u>Reservation Details</u> in the *Cost and Usage Reports Guide* in this documentation and <u>Applying Reserved Instances</u> in the Amazon Elastic Compute Cloud User Guide for Linux Instances.

Calculating Costs for Amazon EC2 with Reserved Instances

Amazon calculates the charges for Amazon EC2 instances by aggregating all the EC2 usage for a specific instance type in a specific Amazon Region for an organization.

Calculation Process

Amazon calculates blended rates for Amazon EC2 instances using the following logic:

- 1. Amazon aggregates usage for all accounts in an organization for the month or partial month, and calculates costs based on unblended rates such as rates for On-Demand and Reserved Instances. Line items for these costs are created for the management account. This bill computation model attempts to apply the lowest unblended rates that each line item is eligible for. The allocation logic first applies Reserved Instance hours, then free tier hours, and then On-Demand rates to any remaining usage. In the Amazon Cost and Usage Reports, you can see line items for these aggregated costs.
- 2. Amazon identifies each Amazon EC2 usage type in each Amazon Region and allocates cost from the aggregated management account to the corresponding member account line items for identical usage types in the same region. In the Amazon Cost and Usage Reports, the **Unblended Rate** column shows that rate applied to each line item.

i Note

When Amazon assigns Reserved Instance hours to member accounts, it always starts with the account that purchased the reservation. If there are hours from the capacity reservation left over, Amazon applies them to other accounts that operate identical usage types in the same Availability Zone.

Amazon allocates a regional RI by instance size: The RI is applied first to the smallest instance in the instance family, then to the next smallest, and so on. Amazon applies an RI or a fraction of an RI based on the <u>normalization factor</u> of the instance. The order in which Amazon applies RIs doesn't result in a price difference.

Savings Plans

Savings Plans is a flexible pricing model that can help you reduce your Amazon usage bill. Compute Savings Plans enables you to commit to an amount each hour, and receive discounted Amazon EC2, Fargate, and Amazon Lambda usage up to that amount.

Calculating Costs with Savings Plans

Amazon calculates the charges for Amazon EC2, Fargate, and Amazon Lambda by aggregating all usage that's not covered by Reserved Instances, and applying the Savings Plans rates starting with the highest discount.

The Savings Plans are applied to the account that owns the Savings Plans. Then, it is shared with other accounts in the Amazon organization. For more information, see <u>Understanding How Savings</u> <u>Plans are Applied to Your Usage</u> in the *Savings Plans User Guide*.

Blended Rates and Costs

Blended rates are the averaged rates of the Reserved Instances and On-Demand Instances that are used by member accounts in an organization in Amazon Organizations. Amazon calculates blended costs by multiplying the blended rate for each service with an account's usage of that service.

🚯 Note

- Amazon shows each member account their charges as unblended costs. Amazon continues to apply all of the consolidated billing benefits such as reservations and tiered prices across all member accounts in Amazon Organizations.
- Blended rates for Amazon EC2 are calculated at the hourly level.

This section includes examples that show how Amazon calculates blended rates for the following services.

- <u>Calculating Blended Rates for Amazon S3 Standard Storage</u>
- <u>Calculating Blended Rates for Amazon EC2</u>

Calculating Blended Rates for Amazon S3 Standard Storage

Amazon calculates blended rates for Amazon S3 standard storage by taking the total cost of storage and dividing by the amount of data stored per month.

Calculating Blended Rates for Amazon EC2

The consolidated billing logic aggregates Amazon EC2 costs to the management account and then allocates it to the member accounts based on proportional usage.

Requesting shorter PDF invoices

The Amazon PDF invoice contains the Amazon Web Services service charges for the payer account (management account) and associated member accounts that are part of your Amazon Organizations.

This Amazon PDF invoice has the following sections:

- 1. Overall invoice summary
- 2. Amazon Web Services service summary for all accounts
- 3. Summary activity for member accounts
- 4. Detailed activity for member accounts

When you request this feature for your account, member account details are removed from the PDF invoice, so that you receive fewer pages.

Note

This feature only removes the member account details from the PDF invoice. You can continue to view this information in the Billing and Cost Management console and Amazon Cost Explorer.

You can request the following PDF invoice summary options:

Invoice summary option 1

Option 1 contains the following sections:

- 1. Overall invoice summary
- 2. Amazon Web Services service summary for all accounts
- 3. Summary activity for member accounts

Option 1 excludes the detailed activity for member accounts.

Invoice summary option 2

Option 2 contains the following sections:

- 1. Overall invoice summary
- 2. Amazon Web Services service summary for all accounts

Option 2 excludes the summary activity and the detailed activity for member accounts.

To request either option, see the following procedure.

To request shorter PDF invoices

- 1. Sign in to the <u>Amazon Support Center Console</u> as the payer account.
- 2. Create an Account & billing support case.
- 3. For **Service**, choose **Billing**.
- 4. For Category, choose Consolidated Billing.
- 5. Follow the prompts to create your support case.
- 6. In the case details, specify which PDF invoice summary that you want for your account: Option 1 or 2.

After the support agent completes your request, your next available invoice is updated to use your requested invoice option. This feature doesn't apply to previously generated invoices.

Note

You can follow the same procedure to change your invoice summary option or request the original PDF invoice summary for member accounts.

Amazon Web Services Support charges for accounts in an Amazon Organizations

Amazon calculates Amazon Web Services Support fees independently for each member account. Typically a Amazon Web Services Support subscription for a member account does not apply to the entire organization. Each account subscribes independently. Enterprise Support plan customers have the option to include multiple accounts in an aggregated monthly billing. Monthly charges for the Developer, Business, and Enterprise Support plans are based on each month's Amazon usage, subject to a monthly minimum. Amazon Web Services Support fees associated with Reserved Instance and Savings Plan purchases apply to the member accounts that made the purchase. For more information, see Amazon Web Services Support Plan Pricing.

Security in Amazon Billing

Cloud security at Amazon is the highest priority. As an Amazon customer, you benefit from a data center and network architecture that is built to meet the requirements of the most security-sensitive organizations.

Security is a shared responsibility between Amazon and you. The <u>shared responsibility model</u> describes this as security *of* the cloud and security *in* the cloud:

- Security of the cloud Amazon is responsible for protecting the infrastructure that runs Amazon services in the Amazon Cloud. Amazon also provides you with services that you can use securely. Third-party auditors regularly test and verify the effectiveness of our security as part of the <u>Amazon Compliance Programs</u>. To learn about the compliance programs that apply to Amazon Billing and Cost Management, see Amazon Services in Scope by Compliance Program.
- Security in the cloud Your responsibility is determined by the Amazon service that you use. You are also responsible for other factors including the sensitivity of your data, your company's requirements, and applicable laws and regulations.

This documentation helps you understand how to apply the shared responsibility model when using Billing and Cost Management. The following topics show you how to configure Billing and Cost Management to meet your security and compliance objectives. You also learn how to use other Amazon services that help you to monitor and secure your Billing and Cost Management resources.

Topics

- Data protection in Amazon Billing and Cost Management
- Identity and Access Management for Amazon Billing
- Logging and monitoring in Amazon Billing and Cost Management
- <u>Compliance validation for Amazon Billing and Cost Management</u>
- <u>Resilience in Amazon Billing and Cost Management</u>
- Infrastructure security in Amazon Billing and Cost Management

Data protection in Amazon Billing and Cost Management

The Amazon <u>shared responsibility model</u> applies to data protection in Amazon Billing and Cost Management. As described in this model, Amazon is responsible for protecting the global infrastructure that runs all of the Amazon Web Services Cloud. You are responsible for maintaining control over your content that is hosted on this infrastructure. You are also responsible for the security configuration and management tasks for the Amazon Web Services services that you use. For more information about data privacy, see the <u>Data Privacy FAQ</u>.

For data protection purposes, we recommend that you protect Amazon Web Services account credentials and set up individual users with Amazon IAM Identity Center or Amazon Identity and Access Management (IAM). That way, each user is given only the permissions necessary to fulfill their job duties. We also recommend that you secure your data in the following ways:

- Use multi-factor authentication (MFA) with each account.
- Use SSL/TLS to communicate with Amazon resources. We require TLS 1.2 and recommend TLS 1.3.
- Set up API and user activity logging with Amazon CloudTrail. For information about using CloudTrail trails to capture Amazon activities, see <u>Working with CloudTrail trails</u> in the Amazon CloudTrail User Guide.
- Use Amazon encryption solutions, along with all default security controls within Amazon Web Services services.
- Use advanced managed security services such as Amazon Macie, which assists in discovering and securing sensitive data that is stored in Amazon S3.
- If you require FIPS 140-3 validated cryptographic modules when accessing Amazon through a command line interface or an API, use a FIPS endpoint. For more information about the available FIPS endpoints, see <u>Federal Information Processing Standard (FIPS) 140-3</u>.

We strongly recommend that you never put confidential or sensitive information, such as your customers' email addresses, into tags or free-form text fields such as a **Name** field. This includes when you work with Billing and Cost Management or other Amazon Web Services services using the console, API, Amazon CLI, or Amazon SDKs. Any data that you enter into tags or free-form text fields used for names may be used for billing or diagnostic logs. If you provide a URL to an external server, we strongly recommend that you do not include credentials information in the URL to validate your request to that server.

Identity and Access Management for Amazon Billing

Amazon Identity and Access Management (IAM) is an Amazon Web Services service that helps an administrator securely control access to Amazon resources. IAM administrators control who can be *authenticated* (signed in) and *authorized* (have permissions) to use Billing resources. IAM is an Amazon Web Services service that you can use with no additional charge.

To start activating access to the Billing console, see <u>IAM tutorial: grant access to the Billing console</u> in the *IAM User Guide*.

User types and billing permissions

This table summarizes the default actions that are permitted in Billing for each type of billing user.

User type	Description	Billing permissions
Account owner	The person or entity in whose name your account is set up as.	 Has full control of all Billing and Cost Management resources. Receives a monthly invoice of Amazon charges.
User	A person or application defined as a user in an account by an account owner or administrative user. Accounts can contain multiple users.	 Has permissions explicitl y granted to the user or a group that includes the user. Can be granted permissio n to view Billing and Cost Management console pages. For more informati on, see <u>Overview of</u> <u>managing access permissio</u> <u>ns</u>. Can't close accounts.
Organization management account owner	The person or entity associate d with an Amazon Organizat	 Has full control of all Billing and Cost Managemen
	J	3

User types and billing permissions

User type	Description	Billing permissions
	ions management account. The management account pays for Amazon usage that is incurred by a member account in an organization.	 t resources for the management account only. Receives a monthly invoice of Amazon charges for the management account and member accounts. Views the activity of member accounts in the billing reports for the management account.
Organization member account owner	The person or entity associate d with an Amazon Organizat ions member account. The management account pays for Amazon usage that is incurred by a member account in an organization.	 Doesn't have permission to review any usage reports or account activity except for its own. Doesn't have access to usage reports or account activity for other member accounts in the organizat ion or for the management account. Doesn't have permission to view billing reports. Has permission to update account information only for its own account. Can't access other member accounts or the management account.

Overview of managing access permissions

Granting access to your billing information and tools

By default, IAM users don't have access to the <u>Amazon Billing and Cost Management console</u>.

When you create an Amazon Web Services account, you begin with one sign-in identity that has complete access to all Amazon Web Services services and resources in the account. This identity is called the Amazon Web Services 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 don't 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 <u>Tasks that require root user credentials</u> in the *IAM User Guide*.

As an administrator, you can create roles under your Amazon account that your users can assume. After you create roles, you can attach your IAM policy to them, based on the access needed. For example, you can grant some users limited access to some of your billing information and tools, and grant others complete access to all of the information and tools.

To grant IAM entities access to the Billing and Cost Management console, complete the following:

- <u>Activate IAM Access</u> as the Amazon Web Services account root user. You only need to complete this action once for your account.
- Create your IAM identities, such as a user, group, or role.
- Use an Amazon managed policy or create a customer managed policy that grants permission to specific actions on the Billing and Cost Management console. For more information, see <u>Using</u> <u>identity-based policies for Billing</u>.

For more information, see the <u>IAM tutorial: Grant access to the Billing console</u> in the *IAM User Guide*.

1 Note

Permissions for Cost Explorer apply to all accounts and member accounts, regardless of the IAM policies. For more information, see Controlling access to Amazon Cost Explorer.

Activating access to the Billing and Cost Management console

IAM users and roles in an Amazon Web Services account can't access the Billing and Cost Management console by default. This is true even if they have IAM policies that grant access to certain Billing features. To grant access, the Amazon Web Services account root user can use the **Activate IAM Access** setting. If you use Amazon Organizations, activate this setting in each management or member account where you want to allow IAM user and role access to the Billing and Cost Management console. For more information, see Activating IAM access to the Amazon Billing and Cost Management console.

On the Billing console, the Activate IAM Access setting controls access to the following pages:

- Home
- Budgets
- Budgets Reports
- Amazon Cost and Usage Reports
- Cost categories
- Cost allocation tags
- Bills
- Payments
- Credits
- Purchase Order
- Billing preferences
- Payment methods
- Fapiao management
- Real name information
- Cost Explorer
- Reports
- Rightsizing recommendations
- Savings Plans recommendations
- Savings Plans utilization report
- Savings Plans coverage report
- Reservations overview
- Reservations recommendations
- Reservations utilization report
- Reservations coverage report

Preferences

🔥 Important

Activating IAM access alone doesn't grant roles the necessary permissions for these Billing and Cost Management console pages. In addition to activating IAM access, you must also attach the required IAM policies to those roles. For more information, see <u>Using identity-based policies for Billing</u>.

The **Activate IAM Access** setting doesn't control access to the following pages and resources:

- The console pages for Amazon Cost Anomaly Detection, Savings Plans overview, Savings Plans inventory, Purchase Savings Plans, and Savings Plans cart
- The Cost Management view in the Amazon Console Mobile Application
- The Billing and Cost Management SDK APIs (Amazon Cost Explorer, Amazon Budgets, and Amazon Cost and Usage Reports APIs)
- Amazon Systems Manager Application Manager
- The in-console Amazon Pricing Calculator
- The cost analysis capability in Amazon Q
- The Amazon Activate Console

Audience

How you use Amazon Identity and Access Management (IAM) differs, depending on the work that you do in Billing.

Service user – If you use the Billing service to do your job, then your administrator provides you with the credentials and permissions that you need. As you use more Billing features to do your work, you might need additional permissions. Understanding how access is managed can help you request the right permissions from your administrator. If you cannot access a feature in Billing, see Troubleshooting Amazon Billing identity and access.

Service administrator – If you're in charge of Billing resources at your company, you probably have full access to Billing. It's your job to determine which Billing features and resources your service users should access. You must then submit requests to your IAM administrator to change

the permissions of your service users. Review the information on this page to understand the basic concepts of IAM. To learn more about how your company can use IAM with Billing, see <u>How</u> Amazon Billing works with IAM.

IAM administrator – If you're an IAM administrator, you might want to learn details about how you can write policies to manage access to Billing. To view example Billing identity-based policies that you can use in IAM, see Identity-based policy with Amazon Billing.

Authenticating with identities

Authentication is how you sign in to Amazon using your identity credentials. You must be *authenticated* (signed in to Amazon) as the Amazon Web Services account root user, as an IAM user, or by assuming an IAM role.

If you access Amazon programmatically, Amazon provides a software development kit (SDK) and a command line interface (CLI) to cryptographically sign your requests by using your credentials. If you don't use Amazon tools, you must sign requests yourself. For more information about using the recommended method to sign requests yourself, see <u>Amazon Signature Version 4 for API requests</u> in the *IAM User Guide*.

Regardless of the authentication method that you use, you might be required to provide additional security information. For example, Amazon recommends that you use multi-factor authentication (MFA) to increase the security of your account. To learn more, see <u>Amazon Multi-factor authentication in IAM</u> in the *IAM User Guide*.

Amazon Web Services account root user

When you create an Amazon Web Services account, you begin with one sign-in identity that has complete access to all Amazon Web Services services and resources in the account. This identity is called the Amazon Web Services 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 don't 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 <u>Tasks that require root user credentials</u> in the *IAM User Guide*.

Federated identity

As a best practice, require human users, including users that require administrator access, to use federation with an identity provider to access Amazon Web Services services by using temporary credentials.

A *federated identity* is a user from your enterprise user directory, a web identity provider, the Amazon Directory Service, or any user that accesses Amazon Web Services services by using credentials provided through an identity source. When federated identities access Amazon Web Services accounts, they assume roles, and the roles provide temporary credentials.

IAM users and groups

An <u>IAM user</u> is an identity within your Amazon Web Services account that has specific permissions for a single person or application. Where possible, we recommend relying on temporary credentials instead of creating IAM users who have long-term credentials such as passwords and access keys. However, if you have specific use cases that require long-term credentials with IAM users, we recommend that you rotate access keys. For more information, see <u>Rotate access keys regularly for</u> use cases that require long-term credentials in the *IAM User Guide*.

An <u>IAM group</u> is an identity that specifies a collection of IAM users. You can't sign in as a group. You can use groups to specify permissions for multiple users at a time. Groups make permissions easier to manage for large sets of users. For example, you could have a group named *IAMAdmins* and give that group permissions to administer IAM resources.

Users are different from roles. A user is uniquely associated with one person or application, but a role is intended to be assumable by anyone who needs it. Users have permanent long-term credentials, but roles provide temporary credentials. To learn more, see <u>Use cases for IAM users</u> in the *IAM User Guide*.

IAM roles

An <u>IAM role</u> is an identity within your Amazon Web Services account that has specific permissions. It is similar to an IAM user, but is not associated with a specific person. To temporarily assume an IAM role in the Amazon Web Services Management Console, you can <u>switch from a user to an IAM</u> <u>role (console)</u>. You can assume a role by calling an Amazon CLI or Amazon API operation or by using a custom URL. For more information about methods for using roles, see <u>Methods to assume a</u> <u>role</u> in the *IAM User Guide*.

IAM roles with temporary credentials are useful in the following situations:

 Federated user access – To assign permissions to a federated identity, you create a role and define permissions for the role. When a federated identity authenticates, the identity is associated with the role and is granted the permissions that are defined by the role. For information about roles for federation, see <u>Create a role for a third-party identity provider</u> (federation) in the *IAM User Guide*.

- **Temporary IAM user permissions** An IAM user or role can assume an IAM role to temporarily take on different permissions for a specific task.
- Cross-account access You can use an IAM role to allow someone (a trusted principal) in a different account to access resources in your account. Roles are the primary way to grant cross-account access. However, with some Amazon Web Services services, you can attach a policy directly to a resource (instead of using a role as a proxy). To learn the difference between roles and resource-based policies for cross-account access, see Cross account resource access in IAM in the IAM User Guide.
- **Cross-service access** Some Amazon Web Services services use features in other Amazon Web Services services. For example, when you make a call in a service, it's common for that service to run applications in Amazon EC2 or store objects in Amazon S3. A service might do this using the calling principal's permissions, using a service role, or using a service-linked role.
 - Forward access sessions (FAS) When you use an IAM user or role to perform actions in Amazon, you are considered a principal. When you use some services, you might perform an action that then initiates another action in a different service. FAS uses the permissions of the principal calling an Amazon Web Services service, combined with the requesting Amazon Web Services service to make requests to downstream services. FAS requests are only made when a service receives a request that requires interactions with other Amazon Web Services services or resources to complete. In this case, you must have permissions to perform both actions. For policy details when making FAS requests, see <u>Forward access sessions</u>.
 - Service role A service role is an <u>IAM role</u> that a service assumes to perform actions on your behalf. An IAM administrator can create, modify, and delete a service role from within IAM. For more information, see <u>Create a role to delegate permissions to an Amazon Web Services</u> <u>service</u> in the *IAM User Guide*.
 - Service-linked role A service-linked role is a type of service role that is linked to an Amazon Web Services service. The service can assume the role to perform an action on your behalf. Service-linked roles appear in your Amazon Web Services account and are owned by the service. An IAM administrator can view, but not edit the permissions for service-linked roles.
- Applications running on Amazon EC2 You can use an IAM role to manage temporary credentials for applications that are running on an EC2 instance and making Amazon CLI or Amazon API requests. This is preferable to storing access keys within the EC2 instance. To assign an Amazon role to an EC2 instance and make it available to all of its applications, you create an instance profile that is attached to the instance. An instance profile contains the role and enables programs that are running on the EC2 instance to get temporary credentials. For more

information, see <u>Use an IAM role to grant permissions to applications running on Amazon EC2</u> instances in the *IAM User Guide*.

Managing access using policies

You control access in Amazon by creating policies and attaching them to Amazon identities or resources. A policy is an object in Amazon that, when associated with an identity or resource, defines their permissions. Amazon evaluates these policies when a principal (user, root user, or role session) makes a request. Permissions in the policies determine whether the request is allowed or denied. Most policies are stored in Amazon as JSON documents. For more information about the structure and contents of JSON policy documents, see <u>Overview of JSON policies</u> in the *IAM User Guide*.

Administrators can use Amazon JSON policies to specify who has access to what. That is, which **principal** can perform **actions** on what **resources**, and under what **conditions**.

By default, users and roles have no permissions. To grant users permission to perform actions on the resources that they need, an IAM administrator can create IAM policies. The administrator can then add the IAM policies to roles, and users can assume the roles.

IAM policies define permissions for an action regardless of the method that you use to perform the operation. For example, suppose that you have a policy that allows the iam:GetRole action. A user with that policy can get role information from the Amazon Web Services Management Console, the Amazon CLI, or the Amazon API.

Identity-based policies

Identity-based policies are JSON permissions policy documents that you can attach to an identity, such as an IAM user, group of users, or role. These policies control what actions users and roles can perform, on which resources, and under what conditions. To learn how to create an identity-based policy, see <u>Define custom IAM permissions with customer managed policies</u> in the *IAM User Guide*.

Identity-based policies can be further categorized as *inline policies* or *managed policies*. Inline policies are embedded directly into a single user, group, or role. Managed policies are standalone policies that you can attach to multiple users, groups, and roles in your Amazon Web Services account. Managed policies include Amazon managed policies and customer managed policies. To learn how to choose between a managed policy or an inline policy, see <u>Choose between managed</u> policies and inline policies in the *IAM User Guide*.

Resource-based policies

Resource-based policies are JSON policy documents that you attach to a resource. Examples of resource-based policies are IAM *role trust policies* and Amazon S3 *bucket policies*. In services that support resource-based policies, service administrators can use them to control access to a specific resource. For the resource where the policy is attached, the policy defines what actions a specified principal can perform on that resource and under what conditions. You must <u>specify a principal</u> in a resource-based policy. Principals can include accounts, users, roles, federated users, or Amazon Web Services services.

Resource-based policies are inline policies that are located in that service. You can't use Amazon managed policies from IAM in a resource-based policy.

Access control lists (ACLs)

Access control lists (ACLs) control which principals (account members, users, or roles) have permissions to access a resource. ACLs are similar to resource-based policies, although they do not use the JSON policy document format.

Amazon S3, Amazon WAF, and Amazon VPC are examples of services that support ACLs. To learn more about ACLs, see <u>Access control list (ACL) overview</u> in the *Amazon Simple Storage Service Developer Guide*.

Other policy types

Amazon supports additional, less-common policy types. These policy types can set the maximum permissions granted to you by the more common policy types.

- Permissions boundaries A permissions boundary is an advanced feature in which you set the maximum permissions that an identity-based policy can grant to an IAM entity (IAM user or role). You can set a permissions boundary for an entity. The resulting permissions are the intersection of an entity's identity-based policies and its permissions boundaries. Resource-based policies that specify the user or role in the Principal field are not limited by the permissions boundary. An explicit deny in any of these policies overrides the allow. For more information about permissions boundaries, see Permissions boundaries for IAM entities in the IAM User Guide.
- Service control policies (SCPs) SCPs are JSON policies that specify the maximum permissions for an organization or organizational unit (OU) in Amazon Organizations. Amazon Organizations is a service for grouping and centrally managing multiple Amazon Web Services accounts that

your business owns. If you enable all features in an organization, then you can apply service control policies (SCPs) to any or all of your accounts. The SCP limits permissions for entities in member accounts, including each Amazon Web Services account root user. For more information about Organizations and SCPs, see <u>Service control policies</u> in the *Amazon Organizations User Guide*.

- **Resource control policies (RCPs)** RCPs are JSON policies that you can use to set the maximum available permissions for resources in your accounts without updating the IAM policies attached to each resource that you own. The RCP limits permissions for resources in member accounts and can impact the effective permissions for identities, including the Amazon Web Services account root user, regardless of whether they belong to your organization. For more information about Organizations and RCPs, including a list of Amazon Web Services services that support RCPs, see <u>Resource control policies (RCPs)</u> in the *Amazon Organizations User Guide*.
- Session policies Session policies are advanced policies that you pass as a parameter when you programmatically create a temporary session for a role or federated user. The resulting session's permissions are the intersection of the user or role's identity-based policies and the session policies. Permissions can also come from a resource-based policy. An explicit deny in any of these policies overrides the allow. For more information, see <u>Session policies</u> in the *IAM User Guide*.

Multiple policy types

When multiple types of policies apply to a request, the resulting permissions are more complicated to understand. To learn how Amazon determines whether to allow a request when multiple policy types are involved, see <u>Policy evaluation logic</u> in the *IAM User Guide*.

How Amazon Billing works with IAM

Billing integrates with the Amazon Identity and Access Management (IAM) service so that you can control who in your organization has access to specific pages on the <u>Billing console</u>. You can control access to invoices and detailed information about charges and account activity, budgets, payment methods, and credits.

For more information about how to activate access to the Billing and Cost Management Console, see <u>Tutorial: Delegate Access to the Billing Console</u> in the *IAM User Guide*.

Before you use IAM to manage access to Billing, learn what IAM features are available to use with Billing.

IAM features you can use with Amazon Billing

IAM feature	Billing support
Identity-based policies	Yes
Resource-based policies	No
Policy actions	Yes
Policy resources	Partial
Policy condition keys	Yes
ACLs	No
ABAC (tags in policies)	Partial
Temporary credentials	Yes
Forward access sessions (FAS)	Yes
Service roles	Yes
Service-linked roles	No

To get a high-level view of how Billing and other Amazon services work with most IAM features, see Amazon services that work with IAM in the *IAM User Guide*.

Identity-based policies for Billing

Supports identity-based policies: Yes

Identity-based policies are JSON permissions policy documents that you can attach to an identity, such as an IAM user, group of users, or role. These policies control what actions users and roles can perform, on which resources, and under what conditions. To learn how to create an identity-based policy, see <u>Define custom IAM permissions with customer managed policies</u> in the *IAM User Guide*.

With IAM identity-based policies, you can specify allowed or denied actions and resources as well as the conditions under which actions are allowed or denied. You can't specify the principal in an identity-based policy because it applies to the user or role to which it is attached. To learn about all of the elements that you can use in a JSON policy, see <u>IAM JSON policy elements reference</u> in the *IAM User Guide*.

Identity-based policy examples for Billing

To view examples of Billing identity-based policies, see Identity-based policy with Amazon Billing.

Resource-based policies within Billing

Supports resource-based policies: No

Resource-based policies are JSON policy documents that you attach to a resource. Examples of resource-based policies are IAM *role trust policies* and Amazon S3 *bucket policies*. In services that support resource-based policies, service administrators can use them to control access to a specific resource. For the resource where the policy is attached, the policy defines what actions a specified principal can perform on that resource and under what conditions. You must <u>specify a principal</u> in a resource-based policy. Principals can include accounts, users, roles, federated users, or Amazon Web Services services.

To enable cross-account access, you can specify an entire account or IAM entities in another account as the principal in a resource-based policy. Adding a cross-account principal to a resource-based policy is only half of establishing the trust relationship. When the principal and the resource are in different Amazon Web Services accounts, an IAM administrator in the trusted account must also grant the principal entity (user or role) permission to access the resource. They grant permission by attaching an identity-based policy to the entity. However, if a resource-based policy grants access to a principal in the same account, no additional identity-based policy is required. For more information, see <u>Cross account resource access in IAM</u> in the *IAM User Guide*.

Policy actions for Billing

Supports policy actions: Yes

Administrators can use Amazon JSON policies to specify who has access to what. That is, which **principal** can perform **actions** on what **resources**, and under what **conditions**.

The Action element of a JSON policy describes the actions that you can use to allow or deny access in a policy. Policy actions usually have the same name as the associated Amazon API operation. There are some exceptions, such as *permission-only actions* that don't have a matching API operation. There are also some operations that require multiple actions in a policy. These additional actions are called *dependent actions*.

Include actions in a policy to grant permissions to perform the associated operation.

To see a list of Billing actions, see <u>Actions defined by Amazon Billing</u> in the *Service Authorization Reference*.

Policy actions in Billing use the following prefix before the action:

billing

To specify multiple actions in a single statement, separate them with commas.

```
"Action": [
"billing:action1",
"billing:action2"
]
```

To view examples of Billing identity-based policies, see Identity-based policy with Amazon Billing.

Policy resources for Billing

Supports policy resources: Partial

Policy resources are only supported for monitors, subscriptions, and cost categories.

Administrators can use Amazon JSON policies to specify who has access to what. That is, which **principal** can perform **actions** on what **resources**, and under what **conditions**.

The Resource JSON policy element specifies the object or objects to which the action applies. Statements must include either a Resource or a NotResource element. As a best practice, specify a resource using its <u>Amazon Resource Name (ARN)</u>. You can do this for actions that support a specific resource type, known as *resource-level permissions*.

For actions that don't support resource-level permissions, such as listing operations, use a wildcard (*) to indicate that the statement applies to all resources.

```
"Resource": "*"
```

To see a list of Amazon Cost Explorer resource types, see <u>Actions, resources, and condition keys for</u> Amazon Cost Explorer in the *Service Authorization Reference*. To view examples of Billing identity-based policies, see <u>Identity-based policy with Amazon Billing</u>.

Policy condition keys for Billing

Supports service-specific policy condition keys: Yes

Administrators can use Amazon JSON policies to specify who has access to what. That is, which **principal** can perform **actions** on what **resources**, and under what **conditions**.

The Condition element (or Condition *block*) lets you specify conditions in which a statement is in effect. The Condition element is optional. You can create conditional expressions that use <u>condition operators</u>, such as equals or less than, to match the condition in the policy with values in the request.

If you specify multiple Condition elements in a statement, or multiple keys in a single Condition element, Amazon evaluates them using a logical AND operation. If you specify multiple values for a single condition key, Amazon evaluates the condition using a logical OR operation. All of the conditions must be met before the statement's permissions are granted.

You can also use placeholder variables when you specify conditions. For example, you can grant an IAM user permission to access a resource only if it is tagged with their IAM user name. For more information, see IAM policy elements: variables and tags in the IAM User Guide.

Amazon supports global condition keys and service-specific condition keys. To see all Amazon global condition keys, see Amazon global condition context keys in the *IAM User Guide*.

To see a list of Billing condition keys, actions, and resources, see <u>Condition keys for Amazon Billing</u> in the *Service Authorization Reference*.

To view examples of Billing identity-based policies, see Identity-based policy with Amazon Billing.

Access control lists (ACLs) in Billing

Supports ACLs: No

Access control lists (ACLs) control which principals (account members, users, or roles) have permissions to access a resource. ACLs are similar to resource-based policies, although they do not use the JSON policy document format.

Attribute-based access control (ABAC) with Billing

Supports ABAC (tags in policies): Partial

ABAC (tags in policies) are only supported for monitors, subscriptions, and cost categories.

Attribute-based access control (ABAC) is an authorization strategy that defines permissions based on attributes. In Amazon, these attributes are called *tags*. You can attach tags to IAM entities (users or roles) and to many Amazon resources. Tagging entities and resources is the first step of ABAC. Then you design ABAC policies to allow operations when the principal's tag matches the tag on the resource that they are trying to access.

ABAC is helpful in environments that are growing rapidly and helps with situations where policy management becomes cumbersome.

To control access based on tags, you provide tag information in the <u>condition element</u> of a policy using the aws:ResourceTag/key-name, aws:RequestTag/key-name, or aws:TagKeys condition keys.

If a service supports all three condition keys for every resource type, then the value is **Yes** for the service. If a service supports all three condition keys for only some resource types, then the value is **Partial**.

For more information about ABAC, see <u>Define permissions with ABAC authorization</u> in the *IAM User Guide*. To view a tutorial with steps for setting up ABAC, see <u>Use attribute-based access control</u> (ABAC) in the *IAM User Guide*.

Using Temporary credentials with Billing

Supports temporary credentials: Yes

Some Amazon Web Services services don't work when you sign in using temporary credentials. For additional information, including which Amazon Web Services services work with temporary credentials, see Amazon Web Services services that work with IAM in the *IAM User Guide*.

You are using temporary credentials if you sign in to the Amazon Web Services Management Console using any method except a user name and password. For example, when you access Amazon using your company's single sign-on (SSO) link, that process automatically creates temporary credentials. You also automatically create temporary credentials when you sign in to the console as a user and then switch roles. For more information about switching roles, see <u>Switch</u> from a user to an IAM role (console) in the *IAM User Guide*.

You can manually create temporary credentials using the Amazon CLI or Amazon API. You can then use those temporary credentials to access Amazon. Amazon recommends that you dynamically generate temporary credentials instead of using long-term access keys. For more information, see Temporary security credentials in IAM.

Forward access sessions for Billing

Supports forward access sessions (FAS): Yes

When you use an IAM user or role to perform actions in Amazon, you are considered a principal. When you use some services, you might perform an action that then initiates another action in a different service. FAS uses the permissions of the principal calling an Amazon Web Services service, combined with the requesting Amazon Web Services service to make requests to downstream services. FAS requests are only made when a service receives a request that requires interactions with other Amazon Web Services services or resources to complete. In this case, you must have permissions to perform both actions. For policy details when making FAS requests, see <u>Forward</u> <u>access sessions</u>.

Service roles for Billing

Supports service roles: Yes

A service role is an <u>IAM role</u> that a service assumes to perform actions on your behalf. An IAM administrator can create, modify, and delete a service role from within IAM. For more information, see <u>Create a role to delegate permissions to an Amazon Web Services service</u> in the *IAM User Guide*.

🔥 Warning

Changing the permissions for a service role might break Billing functionality. Edit service roles only when Billing provides guidance to do so.

Service-linked roles for Billing

Supports service-linked roles: No

A service-linked role is a type of service role that is linked to an Amazon Web Services service. The service can assume the role to perform an action on your behalf. Service-linked roles appear in

your Amazon Web Services account and are owned by the service. An IAM administrator can view, but not edit the permissions for service-linked roles.

For details about creating or managing service-linked roles, see <u>Amazon services that work with</u> <u>IAM</u>. Find a service in the table that includes a Yes in the **Service-linked role** column. Choose the **Yes** link to view the service-linked role documentation for that service.

Identity-based policy with Amazon Billing

By default, users and roles don't have permission to create or modify Billing resources. They also can't perform tasks by using the Amazon Web Services Management Console, Amazon Command Line Interface (Amazon CLI), or Amazon API. To grant users permission to perform actions on the resources that they need, an IAM administrator can create IAM policies. The administrator can then add the IAM policies to roles, and users can assume the roles.

To learn how to create an IAM identity-based policy by using these example JSON policy documents, see Create IAM policies (console) in the IAM User Guide.

For details about actions and resource types defined by Billing, including the format of the ARNs for each of the resource types, see <u>Actions, resources, and condition keys for Amazon Billing</u> in the *Service Authorization Reference*.

Contents

- Policy best practices
- Using the Billing console
- Allow users to view their own permissions
- Using identity-based policies for Billing
 - Amazon Billing console actions

Policy best practices

Identity-based policies determine whether someone can create, access, or delete Billing resources in your account. These actions can incur costs for your Amazon Web Services account. When you create or edit identity-based policies, follow these guidelines and recommendations:

- Get started with Amazon managed policies and move toward least-privilege permissions
 - To get started granting permissions to your users and workloads, use the Amazon managed

policies that grant permissions for many common use cases. They are available in your Amazon Web Services account. We recommend that you reduce permissions further by defining Amazon customer managed policies that are specific to your use cases. For more information, see <u>Amazon</u> managed policies or Amazon managed policies for job functions in the *IAM User Guide*.

- **Apply least-privilege permissions** When you set permissions with IAM policies, grant only the permissions required to perform a task. You do this by defining the actions that can be taken on specific resources under specific conditions, also known as *least-privilege permissions*. For more information about using IAM to apply permissions, see <u>Policies and permissions in IAM</u> in the *IAM User Guide*.
- Use conditions in IAM policies to further restrict access You can add a condition to your policies to limit access to actions and resources. For example, you can write a policy condition to specify that all requests must be sent using SSL. You can also use conditions to grant access to service actions if they are used through a specific Amazon Web Services service, such as Amazon CloudFormation. For more information, see <u>IAM JSON policy elements: Condition</u> in the *IAM User Guide*.
- Use IAM Access Analyzer to validate your IAM policies to ensure secure and functional permissions – IAM Access Analyzer validates new and existing policies so that the policies adhere to the IAM policy language (JSON) and IAM best practices. IAM Access Analyzer provides more than 100 policy checks and actionable recommendations to help you author secure and functional policies. For more information, see <u>Validate policies with IAM Access Analyzer</u> in the *IAM User Guide*.
- Require multi-factor authentication (MFA) If you have a scenario that requires IAM users or a root user in your Amazon Web Services account, turn on MFA for additional security. To require MFA when API operations are called, add MFA conditions to your policies. For more information, see <u>Secure API access with MFA</u> in the *IAM User Guide*.

For more information about best practices in IAM, see <u>Security best practices in IAM</u> in the *IAM User Guide*.

Using the Billing console

To access the Amazon Billing console, you must have a minimum set of permissions. These permissions must allow you to list and view details about the Billing resources in your Amazon Web Services account. If you create an identity-based policy that is more restrictive than the minimum required permissions, the console won't function as intended for entities (users or roles) with that policy.

You don't need to allow minimum console permissions for users that are making calls only to the Amazon CLI or the Amazon API. Instead, allow access to only the actions that match the API operation that they're trying to perform.

You can find access details such as permissions required to enable Amazon Billing console, administrator access, and read-only access in the Amazon managed policies section.

Allow users to view their own permissions

This example shows how you might create a policy that allows IAM users to view the inline and managed policies that are attached to their user identity. This policy includes permissions to complete this action on the console or programmatically using the Amazon CLI or Amazon API.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "ViewOwnUserInfo",
            "Effect": "Allow",
            "Action": [
                "iam:GetUserPolicy",
                "iam:ListGroupsForUser",
                "iam:ListAttachedUserPolicies",
                "iam:ListUserPolicies",
                "iam:GetUser"
            ],
            "Resource": ["arn:aws-cn:iam::*:user/${aws:username}"]
        },
        {
            "Sid": "NavigateInConsole",
            "Effect": "Allow",
            "Action": [
                "iam:GetGroupPolicy",
                "iam:GetPolicyVersion",
                "iam:GetPolicy",
                "iam:ListAttachedGroupPolicies",
                "iam:ListGroupPolicies",
                "iam:ListPolicyVersions",
                "iam:ListPolicies",
                "iam:ListUsers"
            ],
            "Resource": "*"
        }
```

]

}

Using identity-based policies for Billing

🚯 Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- aws-portal namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

A Important

In addition to IAM policies, you must grant IAM access to the Billing and Cost Management console on the <u>Account Settings</u> console page. For more information, see the following topics:

- Activating access to the Billing and Cost Management console
- IAM tutorial: Grant access to the billing console in the IAM User Guide

Use this section to see how an identity-based policies account administrator can attach permissions policies to IAM identities (roles and groups) and grant permissions to perform operations on Billing resources.

For more information about Amazon Web Services accounts and users, see <u>What Is IAM</u>? in the *IAM User Guide*.

For information on how you can update customer managed policies, see <u>Editing customer</u> managed policies (console) in the *IAM User Guide*.

Amazon Billing console actions

This table summarizes the permissions that grant access to your billing console information and tools. For examples of policies that use these permissions, see Amazon Billing policy examples.

For a list of actions policies for the Amazon Cost Management console, see <u>Amazon Cost</u> Management actions policies in the *Amazon Cost Management User Guide*.

Permission name	Description
aws-portal:ViewBilling	Grants permission to view the Billing and Cost Management console pages.
<pre>aws-portal:ModifyBilling</pre>	Grants permission to modify the following Billing and Cost Management console pages: • <u>Budgets</u> • <u>Consolidated Billing</u> • <u>Billing preferences</u> • <u>Credits</u> • <u>Fapiao management</u> • <u>Real name information</u> • <u>Payment methods</u> • <u>Purchase orders</u> • <u>Cost Allocation Tags</u> To allow IAM users to modify these console pages, you must allow both ModifyBil ling and ViewBilling . For an example policy, see <u>Allow IAM users to modify billing</u> information.
aws-portal:ViewAccount	Grants permission to view Account Settings.

Permission name	Description
aws-portal:ModifyAccount	Grants permission to modify <u>Account Settings</u> . To allow IAM users to modify account settings, you must allow both ModifyAccount and ViewAccount . For an example of a policy that explicitly denies an IAM user access to the Account Settings console page, see <u>Deny access to</u> <u>account settings, but allow full access to all</u> <u>other billing and usage information</u> .
aws-portal:ViewPaymentMethods	Grants permission to view Payment Methods.
aws-portal:ModifyPaymentMethods	Grants permission to modify <u>Payment</u> <u>Methods</u> . To allow users to modify payment methods, you must allow both ModifyPaymentMetho ds and ViewPaymentMethods .
billing:ListBillingViews	Grants permission to get a list of available billing views. This includes custom billing views and billing views corresponding to pro forma billing groups. For more information about custom billing views, see <u>Controlling cost management data</u> access with <u>Billing View</u> . For more information about viewing your billing group details, see <u>Viewing your billing</u> group details in the Amazon Billing Conductor User Guide.

Permission name	Description
billing:CreateBillingView	Grants permission to create custom billing views.
	For an example policy, see <u>Allow users to</u> <u>create, manage, and share custom billing</u> <u>views</u> .
billing:UpdateBillingView	Grants permission to update custom billing views.
	For an example policy, see <u>Allow users to</u> create, manage, and share custom billing <u>views</u> .
billing:DeleteBillingView	Grants permission to delete custom billing views.
	For an example policy, see <u>Allow users to</u> <u>create, manage, and share custom billing</u> <u>views</u> .
billing:GetBillingView	Grants permission to get the definition of billing views.
	For an example policy, see <u>Allow users to</u> create, manage, and share custom billing views.
sustainability:GetCarbonFoo tprintSummary	Grants permission to view the Amazon Customer Carbon Footprint Tool and data. This is accessible from the Amazon Cost and Usage Reports page of the Billing and Cost Management console.
	For an example of a policy, see <u>Allow IAM</u> users to view your billing information and <u>carbon footprint report</u> .

Permission name	Description
<pre>cur:DescribeReportDefinitions</pre>	Grants permission to view Amazon Cost and Usage Reports. Amazon Cost and Usage Reports permissions apply to all reports that are created using the <u>Amazon Cost and Usage Reports Service</u> API and the Billing and Cost Management console. If you create reports using the Billing and Cost Management console, we recommend that you update the permissions for IAM users. Not updating the permissions will result in users losing access to viewing, editing, and removing reports on the console reports page.
	For an example of a policy, see <u>Allow IAM</u> users to access the reports console page.
<pre>cur:PutReportDefinition</pre>	Grants permission to create Amazon Cost and Usage Reports. Amazon Cost and Usage Reports permissions apply to all reports that are created using the <u>Amazon Cost and Usage Reports Service</u> API and the Billing and Cost Management console. If you create reports using the Billing and Cost Management console, we recommend that you update the permissions for IAM users. Not updating the permissions will result in users losing access to viewing, editing, and removing reports on the console reports page.
	For an example of a policy, see <u>Allow IAM</u> users to access the reports console page.

Permission name	Description
cur:DeleteReportDefinition	Grants permission to delete Amazon Cost and Usage Reports.
	Amazon Cost and Usage Reports permissions apply to all reports that are created using the <u>Amazon Cost and Usage Reports Service</u> API and the Billing and Cost Management console. If you create reports using the Billing and Cost Management console, we recommend that you update the permissions for IAM users. Not updating the permissions will result in users losing access to viewing, editing, and removing reports on the console reports page. For an example of a policy, see <u>Create, view</u> , edit, or delete Amazon Cost and Usage
	Reports.
<pre>cur:ModifyReportDefinition</pre>	Grants permission to modify Amazon Cost and Usage Reports.
	Amazon Cost and Usage Reports permissions apply to all reports that are created using the <u>Amazon Cost and Usage Reports Service</u> API and the Billing and Cost Management console. If you create reports using the Billing and Cost Management console, we recommend that you update the permissions for IAM users. Not updating the permissions will result in users losing access to viewing, editing, and removing reports on the console reports page.
	For an example of a policy, see <u>Create, view,</u> edit, or delete Amazon Cost and Usage <u>Reports</u> .

Permission name	Description
ce:CreateCostCategoryDefinition	Grants permissions to create cost categories.
	For an example policy, see <u>View and manage</u> <u>cost categories</u> .
ce:DeleteCostCategoryDefinition	Grants permissions to delete cost categories.
	For an example policy, see <u>View and manage</u> <u>cost categories</u> .
<pre>ce:DescribeCostCategoryDefi</pre>	Grants permissions to view cost categories.
nition	For an example policy, see <u>View and manage</u> <u>cost categories</u> .
ce:ListCostCategoryDefinitions	Grants permissions to list cost categories.
	For an example policy, see <u>View and manage</u> <u>cost categories</u> .
ce:UpdateCostCategoryDefinition	Grants permissions to update cost categories.
	For an example policy, see <u>View and manage</u> <u>cost categories</u> .
aws-portal:ViewUsage	Grants permission to view Amazon usage <u>Reports</u> .
	To allow IAM users to view usage reports, you must allow both ViewUsage and ViewBilling .
	For an example policy, see <u>Allow IAM users to</u> <u>access the reports console page</u> .

Permission name	Description
<pre>payments:AcceptFinancingApp licationTerms</pre>	Allows IAM users to agree with the terms provided by the financing lender. Users are required to provide their bank account details for repayment, and sign the legal documents provided by the lender.
<pre>payments:CreateFinancingApp lication</pre>	Allows IAM users to apply for a new finance loan, and reference the chosen financing option.
payments:GetFinancingApplication	Allows IAM users to retrieve the details of a financing application. For example, status, limits, terms, and lender information.
payments:GetFinancingLine	Allows IAM users to retrieve the details of a financing loan. For example, status and balances.
payments:GetFinancingLineWi thdrawal	Allows IAM users to retrieve the withdrawal details. For example, balances and repayment s.
payments:GetFinancingOption	Allows IAM users to retrieve the details of a specific financing option.
<pre>payments:ListFinancingAppli cations</pre>	Allows IAM users to retrieve the identifiers for all financing applications, across all lenders.
<pre>payments:ListFinancingLines</pre>	Allows IAM users to retrieve the identifiers for all financing loans, across all lenders.
payments:ListFinancingLineW ithdrawals	Allows IAM users to retrieve all of the existing withdrawals for a given loan.
<pre>payments:ListTagsForResource</pre>	Allow or deny IAM users permission to view tags for a payment method.

Permission name	Description
payments:TagResource	Allow or deny IAM users permission to add tags for a payment method.
payments:UntagResource	Allow or deny IAM users permission to remove tags from a payment method.
<pre>payments:UpdateFinancingApp lication</pre>	Allow IAM users to change a financing application and submit additional information requested by the lender.
<pre>payments:ListPaymentInstruments</pre>	Allow or deny IAM users permission to list their registered payment methods.
<pre>payments:UpdatePaymentInstrument</pre>	Allow or deny IAM users permission to update their payment methods.
pricing:DescribeServices	Grants permission to view Amazon service products and pricing via the Amazon Price List Service API. To allow IAM users to use Amazon Price List Service API, you must allow DescribeS ervices , GetAttributeValues , and GetProducts .
	For an example policy, see <u>Find products and</u> <u>prices</u> .

Permission name	Description
pricing:GetAttributeValues	Grants permission to view Amazon service products and pricing via the Amazon Price List Service API.
	To allow IAM users to use Amazon Price List Service API, you must allow DescribeS ervices , GetAttributeValues , and GetProducts .
	For an example policy, see <u>Find products and</u> <u>prices</u> .
pricing:GetProducts	Grants permission to view Amazon service products and pricing via the Amazon Price List Service API.
	To allow IAM users to use Amazon Price List Service API, you must allow DescribeS ervices , GetAttributeValues , and GetProducts .
	For an example policy, see <u>Find products and</u> <u>prices</u> .
<pre>purchase-orders:ViewPurchas</pre>	Grants permission to view Purchase Orders.
eOrders	For an example policy, see <u>View and manage</u> purchase orders.
purchase-orders:ModifyPurch aseOrders	Grants permission to modify Purchase Orders.
	For an example policy, see <u>View and manage</u> purchase orders.
fapiao:GetAccountFapiaoSetting	Grants permission to view Fapiao settings.

Permission name	Description
fapiao:UpdateAccountFapiaoI nformation	Grants permission to update Fapiao informati on in <u>Fapiao settings</u> .
fapiao:UpdateAccountMailing Address	Grants permission to update Fapiao mailing addresses in <u>Fapiao settings</u> .
fapiao:CreateAccountFapiaoS etting	Grants permission to create Fapiao settings.
tax:GetExemptions	Grants permission for read-only access to view exemptions and exemption types by tax console.
	For an example policy, see <u>Allow IAM users to</u> view US tax exemptions and create Amazon Web Services Support cases.
tax:UpdateExemptions	Grants permission to upload an exemption to the US tax exemptions console.
	For an example policy, see <u>Allow IAM users to</u> view US tax exemptions and create Amazon Web Services Support cases.
<pre>support:CreateCase</pre>	Grants permission to file support cases, required to upload exemption from tax exemptions console.
	For an example policy, see <u>Allow IAM users to</u> <u>view US tax exemptions and create Amazon</u> <u>Web Services Support cases</u> .

Permission name	Description
<pre>support:AddAttachmentsToSet</pre>	Grants permission to attach documents to support cases that are required to upload exemption certificates to the tax exemption console.
	For an example policy, see <u>Allow IAM users to</u> <u>view US tax exemptions and create Amazon</u> <u>Web Services Support cases</u> .
cloudassist:DescribeAccount RealNameInformation	Grants permission to view <u>real name informati</u> <u>on</u> .
cloudassist:UpdateAccountRe alNameInformation	Grants permission to update <u>real name</u> <u>information</u> .
<pre>customer-verification:GetCu stomerVerificationEligibility</pre>	(For customers with an India billing or contact address only)
	Grants permission to retrieve customer verification eligibility.
<pre>customer-verification:GetCu stomerVerificationDetails</pre>	(For customers with an India billing or contact address only)
	Grants permission to retrieve customer verification data.
<pre>customer-verification:Creat eCustomerVerificationDetails</pre>	(For customers with an India billing or contact address only)
	Grants permission to create customer verificat ion data.
<pre>customer-verification:Updat eCustomerVerificationDetails</pre>	(For customers with an India billing or contact address only)
	Grants permission to update customer verification data.

Permission name	Description
<pre>mapcredit:ListAssociatedPrograms</pre>	Grants permission to view the associated Migration Acceleration Program agreements and dashboard for the payer account.
<pre>mapcredit:ListQuarterSpend</pre>	Grants permission to view the Migration Acceleration Program eligible spend for the payer account.
<pre>mapcredit:ListQuarterCredits</pre>	Grants permission to view the Migration Acceleration Program credits for the payer account.
<pre>invoicing:BatchGetInvoiceProfile</pre>	Grants permission for read-only access to view invoice profiles for Amazon invoice configura tion
<pre>invoicing:CreateInvoiceUnit</pre>	Grants permission to create invoice units for Amazon invoice configuration.
invoicing:DeleteInvoiceUnit	Grants permission to delete invoice units for Amazon invoice configuration.
invoicing:GetInvoiceUnit	Grants permission for read-only access to view invoice units for Amazon invoice configuration.
invoicing:ListInvoiceUnits	Grants permission to list all invoice units for Amazon invoice configuration.
invoicing:ListTagsForResource	Allow or deny IAM users permission to view tags for an invoice unit for Amazon invoice configuration.
invoicing:TagResource	Allow or deny IAM users permission to add tags for an invoice unit for Amazon invoice configuration.

Permission name	Description
invoicing:UntagResource	Allow or deny IAM users permission to remove tags from an invoice unit for Amazon invoice configuration.
<pre>invoicing:UpdateInvoiceUnit</pre>	Grants edit permissions to update invoice units for Amazon invoice configuration.

Amazon Billing policy examples

🚺 Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- aws-portal namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

A Important

- These policies require that you activate IAM user access to the Billing and Cost Management console on the <u>Account Settings</u> console page. For more information, see <u>Activating access to the Billing and Cost Management console</u>.
- To use Amazon managed policies, see Amazon managed policies.

This topic contains example policies that you can attach to your IAM user or group to control access to your account's billing information and tools. The following basic rules apply to IAM policies for Billing and Cost Management:

- Version is always 2012-10-17.
- Effect is always Allow or Deny.
- Action is the name of the action or a wildcard (*).

The action prefix is budgets for Amazon Budgets, cur for Amazon Cost and Usage Reports, aws-portal for Amazon Billing, or ce for Cost Explorer.

• Resource is always * for Amazon Billing.

For actions that are performed on a budget resource, specify the budget Amazon Resource Name (ARN).

• It's possible to have multiple statements in one policy.

For a list of actions policies for the Amazon Cost Management console, see <u>Amazon Cost</u> <u>Management policy examples</u> in the *Amazon Cost Management user guide*.

Topics

- Allow IAM users to view your billing information
- Allow IAM users to view your billing information and carbon footprint report
- Allow IAM users to access the reports console page
- Deny IAM users access to the Billing and Cost Management consoles
- Deny Amazon Console cost and usage widget access for member accounts
- Deny Amazon Console cost and usage widget access for specific IAM users and roles
- <u>Allow IAM users to view your billing information, but deny access to carbon footprint report</u>
- Allow IAM users to access carbon footprint reporting, but deny access to billing information
- <u>Allow full access to Amazon services but deny IAM users access to the Billing and Cost</u> Management consoles
- Allow IAM users to view the Billing and Cost Management consoles except for account settings
- Allow IAM users to modify billing information
- Deny access to account settings, but allow full access to all other billing and usage information

- Deposit reports into an Amazon S3 bucket
- Find products and prices
- View costs and usage
- Enable and disable Amazon Regions
- <u>View and manage cost categories</u>
- Create, view, edit, or delete Amazon Cost and Usage Reports
- View and manage purchase orders
- View and update the Cost Explorer preferences page
- View, create, update, and delete using the Cost Explorer reports page
- View, create, update, and delete reservation and Savings Plans alerts
- Allow read-only access to Amazon Cost Anomaly Detection
- Allow Amazon Budgets to apply IAM policies and SCPs
- Allow Amazon Budgets to apply IAM policies and SCPs and target EC2 and RDS instances
- <u>Allow IAM users to view, create, and update your Fapiao settings information</u>
- Allow IAM users to view US tax exemptions and create Amazon Web Services Support cases
- Allow IAM users to view and update your real name information
- (For customers with a billing or contact address in India) Allow read-only access to customer verification information
- (For customers with a billing or contact address in India) View, create, and update customer verification information
- View Amazon Migration Acceleration Program information in the Billing console
- Allow access to Amazon invoice configuration in the Billing console

Allow IAM users to view your billing information

To allow an IAM user to view your billing information without giving the IAM user access to sensitive account information, use a policy similar to the following example policy. Such a policy prevents users from accessing your password and account activity reports. This policy allows IAM users to view the following Billing and Cost Management console pages, without giving them access to the **Account Settings** or **Reports** console pages:

Dashboard

- Cost Explorer
- Bills
- Orders and invoices
- Consolidated Billing
- Preferences
- Credits
- Advance Payment

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": "aws-portal:ViewBilling",
            "Resource": "*"
        }
    ]
}
```

Allow IAM users to view your billing information and carbon footprint report

To allow an IAM user to view both billing information and carbon footprint reporting, use a policy similar to the following example. This policy prevents users from accessing your password and account activity reports. This policy allows IAM users to view the following Billing and Cost Management console pages, without giving them access to the **Account Settings** or **Reports** console pages:

- Dashboard
- Cost Explorer
- Bills
- Orders and invoices
- Consolidated Billing
- Preferences
- Credits
- Advance Payment

The Amazon Customer Carbon Footprint Tool section of the Amazon Cost and Usage Reports page

```
{
    "Version": "2012-10-17",
    "Statement": [
        {"Effect": "Allow",
            "Action": "aws-portal:ViewBilling",
            "Resource": "*"
        },
        {"Effect": "Allow",
            "Action": "sustainability:GetCarbonFootprintSummary",
            "Resource": "*"
        }
    ]
}
```

Allow IAM users to access the reports console page

To allow an IAM user to access the **Reports** console page and to view the usage reports that contain account activity information, use a policy similar to this example policy.

For definitions of each action, see Amazon Billing console actions.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "aws-portal:ViewUsage",
                "aws-portal:ViewBilling",
                "cur:DescribeReportDefinitions",
                "cur:PutReportDefinition",
                "cur:DeleteReportDefinition",
                "cur:ModifyReportDefinition"
            ],
            "Resource": "*"
        }
    ]
}
```

Deny IAM users access to the Billing and Cost Management consoles

To explicitly deny an IAM user access to the all Billing and Cost Management console pages, use a policy similar to this example policy.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Deny",
            "Action": "aws-portal:*",
            "Resource": "*"
        }
    ]
}
```

Deny Amazon Console cost and usage widget access for member accounts

To restrict member (linked) account access to cost and usage data, use your management (payer) account to access the Cost Explorer preferences tab and uncheck **Linked Account Access**. This will deny access to cost and usage data from the Cost Explorer (Amazon Cost Management) console, Cost Explorer API, and Amazon Console Home page's cost and usage widget regardless of the IAM actions a member account's IAM user or role has.

Deny Amazon Console cost and usage widget access for specific IAM users and roles

To deny Amazon Console cost and usage widget access for specific IAM users and roles, use the permissions policy below.

🚺 Note

Adding this policy to an IAM user or role will deny users access to Cost Explorer (Amazon Cost Management) console and Cost Explorer APIs as well.

```
"Effect": "Deny",
"Action": "ce:*",
"Resource": "*"
}
]
}
```

Allow IAM users to view your billing information, but deny access to carbon footprint report

To allow an IAM user to both billing information in the Billing and Cost Management consoles, but doesn't allow access to the Amazon Customer Carbon Footprint Tool. This tool is located in the Amazon Cost and Usage Reports page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {"Effect": "Allow",
            "Action": "aws-portal:ViewBilling",
            "Resource": "*"
        },
        {"Effect": "Deny",
            "Action": "sustainability:GetCarbonFootprintSummary",
            "Resource": "*"
        }
    ]
}
```

Allow IAM users to access carbon footprint reporting, but deny access to billing information

To allow an IAM users to access the Amazon Customer Carbon Footprint Tool in the Amazon Cost and Usage Reports page, but denies access to view billing information in the Billing and Cost Management consoles.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {"Effect": "Deny",
        "Action": "aws-portal:ViewBilling",
        "Resource": "*"
```

```
},
{"Effect": "Allow",
        "Action": "sustainability:GetCarbonFootprintSummary",
        "Resource": "*"
}
]
}
```

Allow full access to Amazon services but deny IAM users access to the Billing and Cost Management consoles

To deny IAM users access to everything on the Billing and Cost Management console, use the following policy. Deny user access to Amazon Identity and Access Management (IAM) to prevent access to the policies that control access to billing information and tools.

🛕 Important

This policy doesn't allow any actions. Use this policy in combination with other policies that allow specific actions.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Deny",
            "Action": [
                "aws-portal:*",
                "iam:*"
        ],
        "Resource": "*"
        }
    ]
}
```

Allow IAM users to view the Billing and Cost Management consoles except for account settings

This policy allows read-only access to all of the Billing and Cost Management console. This includes the **Payments Method** and **Reports** console pages. However, this policy denies access to the

Account Settings page. This means it protects the account password, contact information, and security questions.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": "aws-portal:View*",
            "Resource": "*"
        },
        {
            "Effect": "Deny",
            "Action": "aws-portal:*Account",
            "Resource": "*"
        }
    ]
}
```

Allow IAM users to modify billing information

To allow IAM users to modify account billing information in the Billing and Cost Management console, allow IAM users to view your billing information. The following policy example allows an IAM user to modify the **Consolidated Billing**, **Preferences**, and **Credits** console pages. It also allows an IAM user to view the following Billing and Cost Management console pages:

- Dashboard
- Cost Explorer
- Bills
- Orders and invoices
- Advance Payment

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": "aws-portal:*Billing",
            "Resource": "*"
```

]

}

Deny access to account settings, but allow full access to all other billing and usage information

To protect your account password, contact information, and security questions, deny IAM user access to **Account Settings** while still enabling full access to the rest of the functionality in the Billing and Cost Management console. The following is an example policy.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
             "Effect": "Allow",
            "Action": [
                 "aws-portal:*Billing",
                 "aws-portal:*Usage",
                 "aws-portal:*PaymentMethods"
            ],
            "Resource": "*"
        },
        {
            "Effect": "Deny",
            "Action": "aws-portal:*Account",
            "Resource": "*"
        }
    ]
}
```

Deposit reports into an Amazon S3 bucket

The following policy allows Billing and Cost Management to save your detailed Amazon bills to an Amazon S3 bucket if you own both the Amazon account and the Amazon S3 bucket. This policy must be applied to the Amazon S3 bucket, rather than an IAM user. This is because it's a resource-based policy, not a user-based policy. We recommend that you deny IAM user access to the bucket for IAM users who don't need access to your bills.

Replace *amzn-s3-demo-bucket1* with the name of your bucket.

For more information, see <u>Using Bucket Policies and User Policies</u> in the Amazon Simple Storage Service User Guide.

```
{
  "Version": "2012-10-17",
  "Statement": [
  {
    "Effect": "Allow",
    "Principal": {
      "Service": "billingreports.amazonaws.com"
    },
    "Action": [
      "s3:GetBucketAcl",
      "s3:GetBucketPolicy"
    ],
    "Resource": "arn:aws:s3:::amzn-s3-demo-bucket1"
  },
  {
    "Effect": "Allow",
    "Principal": {
      "Service": "billingreports.amazonaws.com"
    },
    "Action": "s3:PutObject",
    "Resource": "arn:aws:s3:::amzn-s3-demo-bucket1/*"
  }
  ]
}
```

Find products and prices

To allow an IAM user to use the Amazon Price List Service API, use the following policy to grant them access.

This policy grants permission to use both the Amazon Price List Bulk API Amazon Price List Query API.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
```

```
"pricing:DescribeServices",
    "pricing:GetAttributeValues",
    "pricing:GetProducts",
    "pricing:GetPriceListFileUrl",
    "pricing:ListPriceLists"
    ],
    "Resource": [
        "*"
    ]
    }
}
```

View costs and usage

To allow IAM users to use the Amazon Cost Explorer API, use the following policy to grant them access.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
               "ce:*"
        ],
        "Resource": [
            "*"
        ]
      }
    ]
}
```

Enable and disable Amazon Regions

For an example IAM policy that allows users to enable and disable Regions, see <u>Amazon: Allows</u> <u>Enabling and Disabling Amazon Regions</u> in the *IAM User Guide*.

View and manage cost categories

To allow IAM users to use, view, and manage cost categories, use the following policy to grant them access.



Create, view, edit, or delete Amazon Cost and Usage Reports

This policy allows an IAM user to create, view, edit, or delete sample-report using the API.

```
"Effect": "Allow",
    "Action": "cur:DescribeReportDefinitions",
    "Resource": "*"
    }
]
```

View and manage purchase orders

This policy allows an IAM user to view and manage purchase orders, using the following policy to grant access.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
               "aws-portal:ViewBilling",
               "purchase-orders:*"
            ],
            "Resource": "*"
        }
    ]
}
```

View and update the Cost Explorer preferences page

This policy allows an IAM user to view and update using the **Cost Explorer preferences page**.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
               "aws-portal:ViewBilling",
               "ce:UpdatePreferences"
            ],
            "Resource": "*"
        }
}
```

Amazon Billing

]

}

The following policy allows IAM users to view Cost Explorer, but deny permission to view or edit the **Preferences** page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                 "aws-portal:ViewBilling"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                 "ce:GetPreferences",
                 "ce:UpdatePreferences"
            ],
            "Resource": "*"
        }
    ]
}
```

The following policy allows IAM users to view Cost Explorer, but deny permission to edit the **Preferences** page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
               "aws-portal:ViewBilling"
        ],
            "Resource": "*"
        },
```

```
{
    "Sid": "VisualEditor1",
    "Effect": "Deny",
    "Action": [
        "ce:UpdatePreferences"
    ],
    "Resource": "*"
    }
]
```

View, create, update, and delete using the Cost Explorer reports page

This policy allows an IAM user to view, create, update, and delete using the **Cost Explorer reports page**.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": [
        "aws-portal:ViewBilling",
        "ce:CreateReport",
        "ce:UpdateReport",
        "ce:DeleteReport"
       ],
      "Resource": "*"
    }
  ]
}
```

The following policy allows IAM users to view Cost Explorer, but deny permission to view or edit the **Reports** page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
```



The following policy allows IAM users to view Cost Explorer, but deny permission to edit the **Reports** page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                 "aws-portal:ViewBilling"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "ce:CreateReport",
                "ce:UpdateReport",
                "ce:DeleteReport"
            ],
            "Resource": "*"
        }
```

]

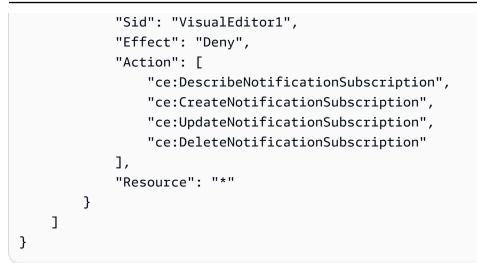
}

View, create, update, and delete reservation and Savings Plans alerts

This policy allows an IAM user to view, create, update, and delete <u>reservation expiration</u> <u>alerts</u> and <u>Savings Plans alerts</u>. To edit reservation expiration alerts or Savings Plans alerts, a user needs all three granular actions: ce:CreateNotificationSubscription, ce:UpdateNotificationSubscription, and ce:DeleteNotificationSubscription.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": [
        "aws-portal:ViewBilling",
        "ce:CreateNotificationSubscription",
        "ce:UpdateNotificationSubscription",
        "ce:DeleteNotificationSubscription"
       ],
      "Resource": "*"
    }
  ]
}
```

The following policy allows IAM users to view Cost Explorer, but denies permission to view or edit the **Reservation Expiration Alerts** and **Savings Plans alert** pages.



The following policy allows IAM users to view Cost Explorer, but denies permission to edit the **Reservation Expiration Alerts** and **Savings Plans alert** pages.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "aws-portal:ViewBilling"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "ce:CreateNotificationSubscription",
                "ce:UpdateNotificationSubscription",
                "ce:DeleteNotificationSubscription"
            ],
            "Resource": "*"
        }
    ]
}
```

Allow read-only access to Amazon Cost Anomaly Detection

To allow IAM users read-only access to Amazon Cost Anomaly Detection, use the following policy to grant them access. ce:ProvideAnomalyFeedback is optional as a part of the read-only access.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Action": [
            "ce:Get*"
        ],
            "Effect": "Allow",
            "Resource": "*"
        }
    ]
}
```

Allow Amazon Budgets to apply IAM policies and SCPs

This policy allows Amazon Budgets to apply IAM policies and service control policies (SCPs) on behalf of the user.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "iam:AttachGroupPolicy",
        "iam:AttachRolePolicy",
        "iam:AttachUserPolicy",
        "iam:DetachGroupPolicy",
        "iam:DetachRolePolicy",
        "iam:DetachUserPolicy",
        "organizations:AttachPolicy",
        "organizations:DetachPolicy"
      ],
      "Resource": "*"
    }
 ]
```

Allow Amazon Budgets to apply IAM policies and SCPs and target EC2 and RDS instances

This policy allows Amazon Budgets to apply IAM policies and service control policies (SCPs), and to target Amazon EC2 and Amazon RDS instances on behalf of the user.

Trust policy

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Principal": {
               "Service": "budgets.amazonaws.com"
        },
        "Action": "sts:AssumeRole"
        }
    ]
}
```

Permissions policy

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "ec2:DescribeInstanceStatus",
        "ec2:StartInstances",
        "ec2:StopInstances",
        "iam:AttachGroupPolicy",
        "iam:AttachRolePolicy",
        "iam:AttachUserPolicy",
        "iam:DetachGroupPolicy",
        "iam:DetachRolePolicy",
        "iam:DetachUserPolicy",
        "organizations:AttachPolicy",
        "organizations:DetachPolicy",
```

```
"rds:DescribeDBInstances",
    "rds:StartDBInstance",
    "rds:StopDBInstance",
    "ssm:StartAutomationExecution"
    ],
    "Resource": "*"
    }
]
```

Allow IAM users to view, create, and update your Fapiao settings information

This policy allows an IAM user to view, create, and update your Fapiao settings information without giving the IAM user access to sensitive account information.

For definitions of each action, see Amazon Billing console actions

```
{
"Version": "2012-10-17",
   "Statement": [
      {"Effect": "Allow",
      "Action": [
          "fapiao:GetAccountFapiaoSetting",
          "fapiao:UpdateAccountFapiaoInformation",
          "fapiao:UpdateAccountMailingAddress",
          "fapiao:CreateAccountFapiaoSetting"
        ],
        "Resource": "*"
      }
   ]
}
```

Allow IAM users to view US tax exemptions and create Amazon Web Services Support cases

This policy allows an IAM user to view US tax exemptions and create Amazon Web Services Support cases to upload exemption certificates in the tax exemption console.

```
{
    "Version": "2012-10-17",
    "Statement": [
```

{	
"Actio	n": [
"a	ws-portal:*",
"t	ax:GetExemptions",
"t	<pre>ax:UpdateExemptions",</pre>
"s	upport:CreateCase",
"s	upport:AddAttachmentsToSet"
],	
"Resou	rce": [
"*	
],	
"Effec	t": "Allow"
}	
]	
}	

Allow IAM users to view and update your real name information

This policy allows an IAM user to view and update the account's real name information.

For definitions of each action, see <u>Amazon Billing console actions</u>.

```
{
"Version": "2012-10-17",
    "Statement": [
        {"Effect": "Allow",
            "Action": [
               "cloudassist:DescribeAccountRealNameInformation",
               "cloudassist:UpdateAccountRealNameInformation"
               ],
               "Resource": "*"
              }
        ]
}
```

(For customers with a billing or contact address in India) Allow read-only access to customer verification information

This policy allows IAM users read-only access to customer verification information.

For definitions of each action, see <u>Amazon Billing console actions</u>.

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Effect": "Allow",
        "Action": [
            "customer-verification:GetCustomerVerificationEligibility",
            "customer-verification:GetCustomerVerificationDetails"
        ],
        "Resource": "*"
    }]
}
```

(For customers with a billing or contact address in India) View, create, and update customer verification information

This policy allows IAM users to manage their customer verification information.

For definitions of each action, see Amazon Billing console actions

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Effect": "Allow",
        "Action": [
            "customer-verification:CreateCustomerVerificationDetails",
            "customer-verification:UpdateCustomerVerificationDetails",
            "customer-verification:GetCustomerVerificationEligibility",
            "customer-verification:GetCustomerVerificationDetails"
        ],
        "Resource": "*"
    }]
}
```

View Amazon Migration Acceleration Program information in the Billing console

This policy allows IAM users to view the Migration Acceleration Program agreements, credits, and eligible spend for the payer's account in the Billing console.

For definitions of each action, see <u>Amazon Billing console actions</u>.

```
"Version": "2012-10-17",
"Statement": [{
    "Effect": "Allow",
    "Action": [
        "mapcredits:ListQuarterSpend",
        "mapcredits:ListQuarterCredits",
        "mapcredits:ListAssociatedPrograms"
    ],
    "Resource": "*"
 }]
```

Allow access to Amazon invoice configuration in the Billing console

This policy allows IAM users Amazon invoice configuration access in the Billing console.

For definitions of each action, see <u>Amazon Billing console actions</u>.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "invoicing:ListInvoiceUnits",
                "invoicing:GetInvoiceUnit",
                "invoicing:CreateInvoiceUnit",
                "invoicing:UpdateInvoiceUnit",
                "invoicing:DeleteInvoiceUnit",
                "invoicing:BatchGetInvoiceProfile"
            ],
            "Resource": [
                "*"
            ]
        }
    ]
}
```

Migrating access control for Amazon Billing

🚯 Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- *aws-portal* namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

You can use fine-grained access controls to provide individuals in your organization access to Amazon Billing and Cost Management services. For example, you can provide access to Cost Explorer without providing access to the Billing and Cost Management console.

To use the fine-grained access controls, you'll need to migrate your policies from under aws - portal to the new IAM actions.

The following IAM actions in your permission policies or service control policies (SCP) require updating with this migration:

- aws-portal:ViewAccount
- aws-portal:ViewBilling
- aws-portal:ViewPaymentMethods
- aws-portal:ModifyAccount
- aws-portal:ModifyBilling
- aws-portal:ModifyPaymentMethods
- purchase-orders:ViewPurchaseOrders

purchase-orders:ModifyPurchaseOrders

To learn how to use the **Affected policies** tool to identify your impacted IAM policies, see <u>How to</u> <u>use the affected policies tool</u>.

🚯 Note

API access to Amazon Cost Explorer, Amazon Cost and Usage Reports, and Amazon Budgets remains unaffected.

Activating access to the Billing and Cost Management console remain unchanged.

Topics

- Managing access permissions
- How to use the affected policies tool
- Use scripts to bulk migrate your policies to use fine-grained IAM actions
- Mapping fine-grained IAM actions reference

Managing access permissions

Amazon Billing integrates with the Amazon Identity and Access Management (IAM) service so that you can control who in your organization can access specific pages on the <u>Billing and Cost</u> <u>Management console</u>. This includes features like Payments, Billing, Credits, Free Tier, Payment preferences, Consolidated billing, and Account pages.

Use the following IAM permissions for granular control for the Billing and Cost Management console.

To provide fine-grained access, replace the aws-portal policy with account, billing, payments, freetier, invoicing, and consolidatedbilling.

Additionally, replace purchase-orders:ViewPurchaseOrders and purchaseorders:ModifyPurchaseOrders with the fine-grained actions under purchase-orders, account, and payments. This table summarizes the permissions that allow or deny IAM users and roles access to your billing information. For examples of policies that use these permissions, see <u>Amazon Billing policy</u> examples.

For a list of actions for the Amazon Cost Management console, see <u>Amazon Cost Management</u> actions policies in the Amazon Cost Management User Guide.

Feature name in the Billing and Cost Management console	IAM action	Description
<u>Billing Home</u>	<pre>account:GetAccount Information billing:Get* payments:List*</pre>	Grants permission to view the Home page. These are read- only permissions. () Note These are permissio ns for the console only. No API access is available for these permissions.
Bills	<pre>account:GetAccount Information billing:Get* consolidatedbillin g:Get* consolidatedbillin g:List* invoicing:List* payments:List*</pre>	Grants permission to view the Bills page. These are read- only permissions. (Note These are permissio ns for the console only. No API access is available for these permissions.

Feature name in the Billing and Cost Management console	IAM action	Description
	invoicing:Get*	Grants permission to download invoices from the Bills page.
		(i) Note This is a permissio n for the console only. No API access is available for this permission.
	cur:Get*	Grants permission to download CSV reports from the Bills page. Note This is a permissio n for the console only. No API access is available for this permission.

Feature name in the Billing and Cost Management console	IAM action	Description
Payments	<pre>account:GetAccount Information billing:Get* payments:Get* payments:List*</pre>	Grants permission to view the Payments page. These are read-only permissions to the Payments due, Unapplied funds, Transaction, and Advance pay tabs. Note These are permissio ns for the console only. No API access is available for these permissions.
	invoicing:Get*	Grants permission to download an invoice from the Transactions tab. (i) Note This is a permissio n for the console only. No API access is available for this permission.
	payments:Update*	Grants permission action required to use Advance Pay and set up payment details.

Feature name in the Billing and Cost Management console	IAM action	Description
	<pre>payments:Make* invoicing:Get*</pre>	Grants permission to generate a funding request document for Advance Pay, and make a payment.
<u>Credits</u>	<pre>billing:Get* account:GetAccount Information</pre>	Grants permission to view the Credits page.
	<pre>billing:RedeemCred its</pre>	Grants permission to redeem credits.
Purchase orders	<pre>account:GetAccount Information account:GetContact Information payments:Get* payments:List* purchase-orders:Li stPurchaseOrders purchaseOrders:Li stPurchaseOrderInv oices consolidatedbillin g:GetAccountBillin gRole</pre>	Grants permission to view the Purchase orders page.

Feature name in the Billing and Cost Management console	IAM action	Description
	purchase-orders:Ge tPurchaseOrder	Grants permission to view details of a purchase order.
	purchase-orders:Ad dPurchaseOrder	Grants permission to add a purchase order.
	purchase-orders:De letePurchaseOrder	Grants permission to delete a purchase order.
	purchase-orders:Up datePurchaseOrder	Grants permission to update purchase orders and purchase order status.
	purchase-orders:Up datePurchaseOrderS tatus	
Amazon Cost and Usage Reports	<pre>cur:GetClassic* cur:DescribeReport Definitions</pre>	Grants permission to view a list of Amazon CUR reports on the Amazon Cost and Usage Reports page. (i) Note Cur:GetClassic* is a permission for the console only. No API access is available for
		this permission.

Feature name in the Billing and Cost Management console	IAM action	Description
	s3:ListAllMyBuckets s3:CreateBucket	Grants permission actions required to create a new Amazon CUR report.
	<pre>s3:PutBucketPolicy s3:GetBucketLocation cur:Validate* cur:PutReportDefin ition</pre>	(i) Note cur:Validate* is a permission for the console only. No API access is available for these permissions.
	cur:Validate* s3:CreateBucket	Grants permission to edit Amazon CUR definition.
	<pre>s3:ListAllMyBuckets s3:PutBucketPolicy s3:GetBucketLocation cur:ModifyReportDe finition</pre>	(i) Note cur:Validate* is a permission for the console only. No API access is available for these permissions.
	<pre>cur:DeleteReportDe finition</pre>	Grants permission to delete Amazon CUR reports.
	cur:GetUsage*	Grants permission to download usage reports.
	sustainability:Get CarbonFootprintSum mary	Grants permission to view sustainability data for your Amazon Web Services account.

Feature name in the Billing and Cost Management console	IAM action	Description
<u>Cost categories</u>	account:GetAccount Information ce:ListCostCategor yDefinitions ce:DescribeCostCat egoryDefinition ce:GetCostAndUsage ce:ListTagsForReso urce consolidatedbillin g:GetAccountBillin gRole	Grants permission to view cost categories. (Note account:G etAccount Information is a permission for the console only. No API access is available for these permissions.

Feature name in the Billing and Cost Management console	IAM action	Description
	<pre>billing:Get* ce:TagResource</pre>	Grants permission to create cost categories.
	<pre>ce:ListCostAllocat ionTags consolidatedbillin g:List* ce:CreateCostCateg oryDefinition pricing:DescribeSe rvices ce:GetDimensionVal ues</pre>	(i) Note billing:Get* and consolida tedbillin g:List* is a permission for the console only. No API access is available for these permissions.
	<pre>ce:GetTags ce:UpdateCostCateg oryDefinition ce:UntagResource</pre>	Grants permission to modify cost categories.
	<pre>ce:DeleteCostCateg oryDefinition</pre>	Grants permission to delete cost categories.

Feature name in the Billing and Cost Management console	IAM action	Description
<u>Cost allocation tags</u>	account:GetAccount Information ce:ListCostAllocat ionTags consolidatedbillin g:GetAccountBillin gRole	Grants permission to view cost allocation tags.
	<pre>ce:UpdateCostAlloc ationTagsStatus</pre>	Grants permission to activate or deactivate cost allocation tags.
<u>Amazon Budgets</u>	<pre>budgets:ViewBudget budgets:DescribeBu dgetActionsForBudg et budgets:DescribeBu dgetAction budgets:DescribeBu dgetActionsForAcco unt budgets:DescribeBu dgetActionHistories</pre>	Grants permission to view the Budgets page.

Feature name in the Billing and Cost Management console	IAM action	Description
	<pre>budgets:CreateBudg etAction budgets:ExecuteBud getAction budgets:DeleteBudg etAction budgets:UpdateBudg etAction budgets:ModifyBudget</pre>	Grants permission to create, delete, and modify Budgets and Budgets actions.
<u>Free tier</u>	<pre>billing:Get* freetier:Get*</pre>	Grants permission to view free tier usage limits and month to date usage status.
Billing preferences	<pre>account:GetAccount Information billing:Get* consolidatedbillin g:Get* consolidatedbillin g:List* cur:GetClassic* cur:Validate* freetier:Get*</pre>	Grants permission actions required to view all sections on the Billing preferences page. (Note These are permissio ns for the console only. No API access is available for these permissions.
	invoicing:Get*	

Feature name in the Billing and Cost Management console	IAM action	Description
	<pre>billing:Update* freetier:Put* cur:PutClassic* s3:ListAllMyBuckets s3:CreateBucket s3:PutBucketPolicy s3:GetBucketLocation invoicing:Put*</pre>	Grants permission to make the following changes in the Billing preferences page: • Turn credit sharing to RI or Savings Plans discount sharing on or off • Set Free Tier Usage Alert preferences • Set detailed billing reports delivery settings and preferences • Set or update the PDF invoice by email preferenc es • Note billing:Update*, freetier:Put*, cur:PutClassic* are permissions for the console only. No API access is available for these permissions.

Feature name in the Billing and Cost Management console	IAM action	Description
Payment preferences	<pre>account:GetAccount Information billing:Get* payments:GetPaymen tInstrument payments:List* payments:GetPaymen tStatus</pre>	Grants permission to view the Payment preferences page.
	<pre>payments:Update* payments:Make* payments:CreatePay mentInstrument payments:DeletePay mentInstrument</pre>	Grants permission to create or update payment methods. Note payments:Make* is only required if a payment card requires multi-factor authentic ation (MFA).

Feature name in the Billing and Cost Management console	IAM action	Description
	payments:Update*	Grants permission to update payment profiles. (i) Note This is a permissio n for the console only. No API access is available for this permission.
Account	<pre>account:Get* account:List* billing:Get* payments:List*</pre>	Grants permission to view Account settings. Note billing:Get* is a permission for the console only. No API access is available for this permission.

Feature name in the Billing and Cost Management console	IAM action	Description
	account:CloseAccount	Grants permission to close Amazon Web Services accounts.
		(i) Note This is a permissio n for the console only. No API access is available for this permission.
	account:PutAlterna teContact	Grants permission to write alternate contacts for the account.
	account:PutChallen geQuestions	Grants permission to set security challenge questions for the account.
		(i) Note This permission is for the console only. No API access is available for this permission.

Feature name in the Billing and Cost Management console	IAM action	Description
	account:PutContact Information	Grants permission action required to set or write main contact information, including address, for the account.
	<pre>billing:PutContrac tInformation</pre>	Grants permission to set the account contract informati on, if the account is used to service public-sector customers. Information that can be pulled includes end user organization names, contract number, and PO numbers.
		(i) Note This permission is for the console only. No API access is available for this permission.
	billing:Update*	Grants permission action required to turn on or turn off the Activate IAM Access setting on the Account page.

Feature name in the Billing and Cost Management console	IAM action	Description
	payments:Update*	Grants permission to set advance pay, currency preference, billing contact details and address, and payment terms and condition s.

How to use the affected policies tool

(i) Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- aws-portal namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

You can use the **Affected policies** tool in the Billing console to identify IAM policies (excluding SCPs), and reference the IAM actions affected by this migration.

This tool operates within the boundaries of the Amazon account you're signed into, and information regarding other Amazon Organizations accounts are not disclosed.

To use the Affected policies tool

- 1. Sign in to the Amazon Web Services Management Console and open the Amazon Billing and Cost Management console at https://console.amazonaws.cn/costmanagement/.
- 2. Paste the following URL into your browser to access the **Affected policies** tool: <u>https://cn-northwest-1.console.amazonaws.cn/poliden/home</u>.

í) Note

You must have the iam:GetAccountAuthorizationDetails permission to view this page.

- 3. Review the table that lists the IAM policies affected. Use the **Deprecated IAM actions** column to review specific IAM actions referenced in a policy.
- 4. Choose an IAM policy name you wish to edit.
- 5. Once you're redirected to the IAM console, update the affected IAM action with the new action. Don't remove any existing aws-portal or purchase-orders action if you have any.
- 6. Repeat steps 3 to 5 for all listed policies.
- 7. Once all of the policies are resolved, access the **Affected policies** tool to confirm there are no policies listed.

Related resources

For more information about the new fine-grained actions, see the <u>Mapping fine-grained IAM</u> actions reference and <u>Using fine-grained Billing actions</u>.

Use scripts to bulk migrate your policies to use fine-grained IAM actions

1 Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- *aws-portal* namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

To help migrate your IAM policies to use new actions, known as fine-grained actions, you can use scripts from the <u>Amazon Samples</u> website.

You run these scripts from the payer account of your organization to identify the following affected policies in your organization that use the old IAM actions:

- Customer managed IAM policies
- Role, group, and user IAM inline policies
- Service control policies (SCPs) (applies to the payer account only)
- Permission sets

The scripts generate suggestions for new actions that correspond to existing actions that are used in the policy. You then review the suggestions and use the scripts to add the new actions across all affected policies in your organization. You don't need to update Amazon managed policies or Amazon managed SCPs (for example, Amazon Control Tower and Amazon Organizations SCPs).

You use these scripts to:

- Streamline the policy updates to help you manage the affected policies from the payer account.
- Reduce the amount of time that you need to update the policies. You don't need to sign into each member account and manually update the policies.
- Group identical policies from different member accounts together. You can then review and apply the same updates across all identical policies, instead of reviewing them one by one.
- Ensure that user access remains unaffected after Amazon retires the old IAM actions on July 6, 2023.

For more information about policies and service control policies (SCPs), see the following topics:

- Managing IAM policies in the IAM User Guide
- Service control policies (SCPs) in the Amazon Organizations User Guide
- Custom permissions in the IAM Identity Center User Guide

Overview

Follow this topic to complete the following steps:

Topics

- Prerequisites
- Step 1: Set up your environment
- Step 2: Create the CloudFormation StackSet
- Step 3: Identify the affected policies
- Step 4: Review the suggested changes
- Step 5: Update the affected policies
- Step 6: Revert your changes (Optional)
- IAM policy examples

Prerequisites

To get started, you must do the following:

- Download and install Python 3
- Sign in to your payer account and verify that you have an IAM principal that has the following IAM permissions:

```
"iam:GetAccountAuthorizationDetails",
"iam:GetPolicy",
"iam:GetPolicyVersion",
"iam:GetUserPolicy",
"iam:GetGroupPolicy",
"iam:GetRole",
"iam:GetRolePolicy",
"iam:CreatePolicyVersion",
"iam:DeletePolicyVersion",
"iam:ListAttachedRolePolicies",
"iam:ListPolicyVersions",
```

"iam:PutUserPolicy", "iam:PutGroupPolicy", "iam:PutRolePolicy", "iam:SetDefaultPolicyVersion", "organizations:ListAccounts", "organizations:ListPolicies", "organizations:DescribePolicy", "organizations:UpdatePolicy", "organizations:DescribeOrganization", "sso:DescribePermissionSet", "sso:DescribePermissionSetProvisioningStatus", "sso:GetInlinePolicyForPermissionSet", "sso:ListInstances", "sso:ListPermissionSets", "sso:ProvisionPermissionSet", "sso:PutInlinePolicyToPermissionSet", "sts:AssumeRole"

🚯 Tip

To get started, we recommend that you use a subset of an account, such as a test account, to verify that the suggested changes are expected.

You can then run the scripts again for remaining accounts in your organization.

Step 1: Set up your environment

To get started, download the required files from the <u>Amazon Samples</u> website. You then run commands to set up your environment.

To set up your environment

 Clone the repository from the <u>Amazon Samples</u> website. In a command line window, you can use the following command:

```
git clone https://github.com/aws-samples/bulk-policy-migrator-scripts-for-account-
cost-billing-consoles.git
```

2. Navigate to the directory where you downloaded the files. You can use the following command:

cd bulk-policy-migrator-scripts-for-account-cost-billing-consoles

In the repository, you can find the following scripts and resources:

- billing_console_policy_migrator_role.json The CloudFormation template that creates the BillingConsolePolicyMigratorRole IAM role in member accounts of your organization. This role allows the scripts to assume the role, and then read and update the affected policies.
- action_mapping_config.json- Contains the one-to-many mapping of the old actions to the new actions. The scripts use this file to suggest the new actions for each affected policy that contains the old actions.

Each old action corresponds to multiple fine-grained actions. The new actions suggested in the file provide users access to the same Amazon Web Services services before the migration.

 identify_affected_policies.py – Scans and identifies affected policies in your organization. This script generates a affected_policies_and_suggestions.json file that lists the affected policies along with the suggested new actions.

Affected policies that use the same set of old actions are grouped together in the JSON file, so that you can review or update the suggested new actions.

- update_affected_policies.py Updates the affected policies in your organization. The script inputs theaffected_policies_and_suggestions.json file, and then adds the suggested new actions to the policies.
- rollback_affected_policies.py (Optional) Reverts changes made to the affected policies. This script removes the new fine-grained actions from the affected policies.
- 3. Run the following commands to set up and activate the virtual environment.

```
python3 -m venv venv
```

source venv/bin/activate

4. Run the following command to install the Amazon SDK for Python (Boto3) dependency.

```
pip install -r requirements.txt
```

🚯 Note

You must configure your Amazon credentials to use the Amazon Command Line Interface (Amazon CLI). For more information, see Amazon SDK for Python (Boto3).

For more information, see the <u>README.md</u> file.

Step 2: Create the CloudFormation StackSet

Follow this procedure to create a CloudFormation *stack set*. This stack set then creates the BillingConsolePolicyMigratorRole IAM role for all member accounts in your organization.

🚯 Note

You only need to complete this step once from the management account (payer account).

To create the CloudFormation StackSet

- In a text editor, open the billing_console_policy_migrator_role.json file, and replace each instance of <management_account> with the account ID of the payer account (for example, 123456789012).
- 2. Save the file.
- 3. Sign in to the Amazon Web Services Management Console as the payer account.
- 4. In the CloudFormation console, create a stack set with the billing_console_policy_migrator_role.json file that you updated.

For more information, see <u>Creating a stack set on the Amazon CloudFormation console</u> in the *Amazon CloudFormation User Guide*.

After CloudFormation creates the stack set, each member account in your organization has an BillingConsolePolicyMigratorRole IAM role.

The IAM role contains the following permissions:

```
"iam:GetAccountAuthorizationDetails",
```

"iam:GetPolicy",
"iam:GetPolicyVersion",
"iam:GetUserPolicy",
"iam:GetGroupPolicy",
"iam:GetRolePolicy",
"iam:CreatePolicyVersion",
"iam:DeletePolicyVersion",
"iam:ListPolicyVersions",
"iam:PutUserPolicy",
"iam:PutGroupPolicy",
"iam:PutRolePolicy",
"iam:SetDefaultPolicyVersion"

1 Notes

- For each member account, the scripts call the <u>AssumeRole</u> API operation to get temporary credentials to assume the BillingConsolePolicyMigratorRole IAM role.
- The scripts call the ListAccounts API operation to get all member accounts.
- The scripts also call IAM API operations to perform the read and write permissions to the policies.

Step 3: Identify the affected policies

After you create the stack set and downloaded the files, run the identify_affected_policies.py script. This script assumes the BillingConsolePolicyMigratorRole IAM role for each member account, and then identifies the affected policies.

To identify the affected policies

1. Navigate to the directory where you downloaded the scripts.

cd policy_migration_scripts/scripts

2. Run the identify_affected_policies.py script.

You can use the following input parameters:

- Amazon Web Services accounts that you want the script to scan. To specify accounts, use the following input parameters:
 - --all Scans all member accounts in your organization.

python3 identify_affected_policies.py --all

--accounts – Scans a subset of member accounts in your organization.

python3 identify_affected_policies.py --accounts 111122223333, 444455556666, 777788889999

• --exclude-accounts- Excludes specific member accounts in your organization.

```
python3 identify_affected_policies.py --all --exclude-accounts 11111111111,
22222222222, 333333333333
```

 --action-mapping-config-file- (Optional) Specify the path to the action_mapping_config.json file. The script uses this file to generate suggested updates for affected policies. If you don't specify the path, the script uses the action_mapping_config.json file in the folder.

```
python3 identify_affected_policies.py --action-mapping-config-file c:\Users\username
\Desktop\Scripts\action_mapping_config.json --all
```

🚯 Note

You can't specify organizational units (OUs) with this script.

After you run the script, it creates two JSON files in a Affected_Policies_<*Timestamp*> folder:

- affected_policies_and_suggestions.json
- detailed_affected_policies.json

affected_policies_and_suggestions.json

Lists the affected policies with the suggested new actions. Affected policies that use the same set of old actions are grouped together in the file.

- Metadata that provides an overview of the accounts that you specified in the script, including:
 - Accounts scanned and the input parameter used for the identify_affected_policies.py script
 - Number of affected accounts
 - Number of affected policies
 - Number of similar policy groups
- Similar policy groups Includes the list of accounts and policy details, including the following sections:
 - ImpactedPolicies Specifies which policies are affected and included in the group
 - ImpactedPolicyStatements Provides information about the Sid blocks that currently use the old actions in the affected policy. This section includes the old actions and IAM elements, such as Effect, Principal, NotPrincipal, NotAction, and Condition.
- SuggestedPolicyStatementsToAppend Provides the suggested new actions that are added as new SID block.

When you update the policies, this block is appended at the end of the policies.

Example Example affected_policies_and_suggestions.json file

This file groups together policies that are similar based on the following criteria:

- Same old actions used Policies that have the same old actions across all SID blocks.
- Matching details In addition to affected actions, the policies have identical IAM elements, such as:
 - Effect (Allow/Deny)
 - Principal (who is allowed or denied access)
 - NotAction (what actions are not allowed)
 - NotPrincipal (who is explicitly denied access)
 - Resource (which Amazon resources the policy applies to)
 - Condition (any specific conditions under which the policy applies)

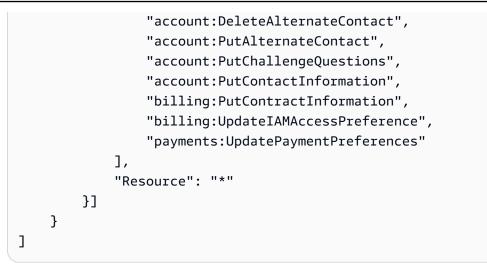
🚯 Note

For more information, see <u>IAM policy examples</u>.

Example Example affected_policies_and_suggestions.json

```
[{
        "AccountsScanned": [
            "11111111111",
            "222222222222"
        ],
        "TotalAffectedAccounts": 2,
        "TotalAffectedPolicies": 2,
        "TotalSimilarPolicyGroups": 2
    },
    {
        "GroupName": "Group1",
        "ImpactedPolicies": [{
                "Account": "111111111111",
                "PolicyType": "UserInlinePolicy",
                "PolicyName": "Inline-Test-Policy-Allow",
                "PolicyIdentifier": "1111111_1-user:Inline-Test-Policy-Allow"
            },
            {
                "Account": "22222222222",
                "PolicyType": "UserInlinePolicy",
                "PolicyName": "Inline-Test-Policy-Allow",
                "PolicyIdentifier": "222222_1-group:Inline-Test-Policy-Allow"
            }
        ],
        "ImpactedPolicyStatements": [
            Ε{
                "Sid": "VisualEditor0",
                "Effect": "Allow",
                "Action": [
                    "aws-portal:ViewAccounts"
                ],
                "Resource": "*"
            }]
        ],
        "SuggestedPolicyStatementsToAppend": [{
            "Sid": "BillingConsolePolicyMigrator0",
```

```
"Effect": "Allow",
        "Action": [
            "account:GetAccountInformation",
            "account:GetAlternateContact",
            "account:GetChallengeQuestions",
            "account:GetContactInformation",
            "billing:GetContractInformation",
            "billing:GetIAMAccessPreference",
            "billing:GetSellerOfRecord",
            "payments:ListPaymentPreferences"
        ],
        "Resource": "*"
    }]
},
{
    "GroupName": "Group2",
    "ImpactedPolicies": [{
            "Account": "111111111111",
            "PolicyType": "UserInlinePolicy",
            "PolicyName": "Inline-Test-Policy-deny",
            "PolicyIdentifier": "1111111_2-user:Inline-Test-Policy-deny"
        },
        {
            "Account": "22222222222",
            "PolicyType": "UserInlinePolicy",
            "PolicyName": "Inline-Test-Policy-deny",
            "PolicyIdentifier": "222222_2-group:Inline-Test-Policy-deny"
        }
    ],
    "ImpactedPolicyStatements": [
        Ε{
            "Sid": "VisualEditor0",
            "Effect": "deny",
            "Action": [
                "aws-portal:ModifyAccount"
            ],
            "Resource": "*"
        }]
    ],
    "SuggestedPolicyStatementsToAppend": [{
        "Sid": "BillingConsolePolicyMigrator1",
        "Effect": "Deny",
        "Action": [
            "account:CloseAccount",
```



detailed_affected_policies.json

Contains the definition of all affected policies that the identify_affected_policies.py script identified for member accounts.

The file groups similar policies together. You can use this file as reference, so that you can review and manage policy changes without needing to sign in to each member account to review the updates for each policy and account individually.

You can search the file for the policy name (for example,

YourCustomerManagedReadOnlyAccessBillingUser) and then review the affected policy definitions.

Example Example: detailed_affected_policies.json

```
[{
    "Account": "1111111111",
    "PolicyType": "CustomerManagedPolicy",
    "PolicyName": "AwsPortalviewAccount",
    "PolicyIdentifier": "arn:aws:iam::1111111111:policy/AwsPortalviewAccount",
    "PolicyDocument": {
        "Version": "2012-10-17",
        "Statement": [{
            "Statement": [{
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
            "aws-portal:ViewAccount"
        ],
        "Resource": "*"
```

```
}]
        }
    },
    {
        "Account": "22222222222",
        "PolicyType": "CustomerManagedPolicy",
        "PolicyName": "AwsPortalviewAccount",
        "PolicyIdentifier": "arn:aws:iam::222222222222:policy/AwsPortalviewAccount",
        "PolicyDocument": {
            "Version": "2012-10-17",
            "Statement": [{
                "Sid": "VisualEditor0",
                "Effect": "Allow",
                "Action": [
                    "aws-portal:ViewAccount"
                ],
                "Resource": "*"
            }]
        }
    },
    {
        "Account": "111111111111",
        "PolicyType": "CustomerManagedPolicy",
        "PolicyName": "AwsPortalModifyAccount",
        "PolicyIdentifier": "arn:aws:iam::1111111111111:policy/
AwsPortalModifyAccount",
        "PolicyDocument": {
            "Version": "2012-10-17",
            "Statement": [{
                "Sid": "VisualEditor0",
                "Effect": "Deny",
                "Action": [
                    "aws-portal:ModifyAccount"
                ],
                "Resource": "*"
            }]
        }
    },
    {
```

```
"Account": "222222222222",
        "PolicyType": "CustomerManagedPolicy",
        "PolicyName": "AwsPortalModifyAccount",
        "PolicyIdentifier": "arn:aws:iam::222222222222:policy/
AwsPortalModifyAccount",
        "PolicyDocument": {
            "Version": "2012-10-17",
            "Statement": [{
                "Sid": "VisualEditor0",
                "Effect": "Deny",
                "Action": [
                     "aws-portal:ModifyAccount"
                ],
                "Resource": "*"
            }]
        }
    }
]
```

Step 4: Review the suggested changes

After the script creates the affected_policies_and_suggestions.json file, review it and make any changes.

To review the affected policies

- 1. In a text editor, open the affected_policies_and_suggestions.json file.
- 2. In the AccountsScanned section, verify that the number of similar groups identified across the scanned accounts is expected.
- 3. Review the suggested fine-grained actions that will be added to the affected policies.
- 4. Update your file as needed and then save it.

Example 1: Update the action_mapping_config.json file

You can update the suggested mappings in the action_mapping_config.json. After you update the file, you can rerun the identify_affected_policies.py script. This script generates updated suggestions for the affected policies.

You can make multiple versions of the action_mapping_config.json file to change the policies for different accounts with different permissions. For example, you might create one file named action_mapping_config_testing.json to migrate permissions for your test accounts and action_mapping_config_production.json for your production accounts.

Example 2: Update the affected_policies_and_suggestions.json file

To make changes to the suggested replacements for a specific affected policy group, you can directly edit the suggested replacements section within the affected_policies_and_suggestions.json file.

Any changes that you make in this section are applied to all policies within that specific affected policy group.

Example 3: Customize a specific policy

If you find that a policy within an affected policy group that needs different changes than the suggested updates, you can do the following:

- Exclude specific accounts from the identify_affected_policies.py script. You can then review those excluded accounts separately.
- Update the affected Sid blocks by removing the affected policies and accounts that need different permissions. Create a JSON block that includes only the specific accounts or excludes them from the current update affected policy run.

When you rerun the identify_affected_policies.py script, only the relevant accounts appear in the updated block. You can then refine the suggested replacements for that specific Sid block.

Step 5: Update the affected policies

After you review and refine the suggested replacements, run the update_affected_policies.py script. The script takes the affected_policies_and_suggestions.json file as input. This script assumes the BillingConsolePolicyMigratorRole IAM role to update the affected policies listed in the affected_policies_and_suggestions.json file.

To update the affected policies

1. If you haven't already, open a command line window for the Amazon CLI.

- 2. Enter the following command to run the update_affected_policies.py script. You can enter the following input parameter:
- The directory path of the affected_policies_and_suggestions.json file that contains a list of the affected policies to be updated. This file is an output of the previous step.

```
python3 update_affected_policies.py --affected-policies-directory
Affected_Policies_<<u>Timestamp></u>
```

The update_affected_policies.py script updates the affected policies within the affected_policies_and_suggestions.json file with the suggested new actions. The script adds a Sid block to the policies, identified as BillingConsolePolicyMigrator#, where # corresponds to an incremental counter (for example, 1, 2, 3).

For example, if there are multiple Sid blocks in the affected policy that use old actions, the script adds multiple Sid blocks that appear as BillingConsolePolicyMigrator# to correspond to each Sid block.

<u> Important</u>

- The script doesn't remove old IAM actions from the policies, and or change existing Sid blocks in the policies. Instead, it creates Sid blocks and appends them to the end of the policy. These new Sid blocks have the suggested new actions from the JSON file. This ensures that the permissions of the original policies aren't changed.
- We recommend that you do not change the name of the BillingConsolePolicyMigrator# Sid blocks in case you need to revert your changes.

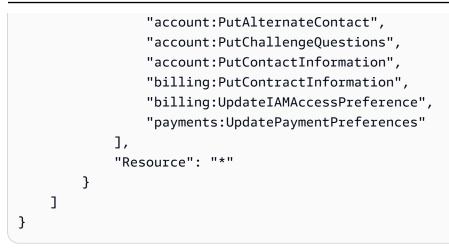
Example Example: Policy with appended Sid blocks

See the appended Sid blocks in the BillingConsolePolicyMigrator1 and BillingConsolePolicyMigrator2 blocks.

```
"Version": "2012-10-17",
"Statement": [{
```

{

```
"Effect": "Allow",
    "Action": [
        "ce:*",
        "aws-portal:ViewAccount"
    ],
    "Resource": "*",
    "Principal": {
        "AWS": "arn:aws:iam::111111111111:BillingRole"
    },
    "Condition": {
        "BoolIfExists": {
            "aws:MultiFactorAuthPresent": "true"
        }
    }
},
{
    "Sid": "BillingConsolePolicyMigrator1",
    "Effect": "Allow",
    "Action": [
        "account:GetAccountInformation",
        "account:GetAlternateContact",
        "account:GetChallengeQuestions",
        "account:GetContactInformation",
        "billing:GetContractInformation",
        "billing:GetIAMAccessPreference",
        "billing:GetSellerOfRecord",
        "payments:ListPaymentPreferences"
    ],
    "Resource": "*",
    "Principal": {
        "AWS": "arn:aws:iam::1111111111111BillingRole"
    },
    "Condition": {
        "BoolIfExists": {
            "aws:MultiFactorAuthPresent": "true"
        }
    }
},
{
    "Sid": "BillingConsolePolicyMigrator2",
    "Effect": "Deny",
    "Action": [
        "account:CloseAccount",
        "account:DeleteAlternateContact",
```



The script generates a status report that contains unsuccessful operations and outputs the JSON file locally.

Example Example: Status report

```
[{
    "Account": "1111111111",
    "PolicyType": "Customer Managed Policy"
    "PolicyName": "AwsPortalViewPaymentMethods",
    "PolicyIdentifier": "identifier",
    "Status": "FAILURE", // FAILURE or SKIPPED
    "ErrorMessage": "Error message details"
}]
```

🔥 Important

- If you re-run the identify_affected_policies.py and update_affected_policies.py scripts, they skip all policies that contain the BillingConsolePolicyMigratorRole#Sid block. The scripts assume that those policies were previously scanned and updated, and that they don't require additional updates. This prevents the script from duplicating the same actions in the policy.
- After you update the affected policies, you can use the new IAM by using the affected policies tool. If you identify any issues, you can use the tool to switch back to the previous actions. You can also use a script to revert your policy updates.

For more information, see <u>How to use the affected policies tool</u> and the <u>Changes to</u> Amazon Billing, Cost Management, and Account Consoles Permissions blog post.

To manage your updates, you can:

- Run the scripts for each account individually.
- Run the script in batches for similar accounts, such as testing, QA, and production accounts.
- Run the script for all accounts.
- Choose a mix between updating some accounts in batches, and then updating others individually.

Step 6: Revert your changes (Optional)

The rollback_affected_policies.py script reverts the changes applied to each affected policy for the specified accounts. The script removes all Sid blocks that the update_affected_policies.py script appended. These Sid blocks have the BillingConsolePolicyMigratorRole# format.

To revert your changes

- 1. If you haven't already, open a command line window for the Amazon CLI.
- 2. Enter the following command to run the rollback_affected_policies.py script. You can enter the following input parameters:
- --accounts
 - Specifies a comma-separated list of the Amazon Web Services account IDs that you want to include in the rollback.
 - The following example scans the policies in the specified Amazon Web Services accounts, and removes any statements with the BillingConsolePolicyMigrator# Sid block.

```
python3 rollback_affected_policies.py --accounts 111122223333, 55555555555,
6666666666666
```

- --all
 - Includes all Amazon Web Services account IDs in your organization.
 - The following example scans all policies in your organization, and removes any statements with the BillingConsolePolicyMigratorRole# Sid block.

python3 rollback_affected_policies.py --all

- --exclude-accounts
 - Specifies a comma-separated list of the Amazon Web Services account IDs that you want to exclude from the rollback.

You can use this parameter only when you also specify the --all parameter.

• The following example scans the policies for all Amazon Web Services accounts in your organization, except for the specified accounts.

```
python3 rollback_affected_policies.py --all --exclude-accounts 77777777777,
888888888888, 999999999999
```

IAM policy examples

Policies are considered similar if they have identical:

- Affected actions across all Sid blocks.
- Details in the following IAM elements:
 - Effect (Allow/Deny)
 - Principal (who is allowed or denied access)
 - NotAction (what actions are not allowed)
 - NotPrincipal (who is explicitly denied access)
 - Resource (which Amazon resources the policy applies to)
 - Condition (any specific conditions under which the policy applies)

The following examples show policies which IAM might or might not consider similar based on the differences between them.

Example Example 1: Policies are considered similar

Each policy type is different, but both policies contain one Sid block with the same affected Action.

Policy 1: Group inline IAM policy

```
{
    "Version": "2012-10-17",
    "Statement": [{
```

```
"Sid": "VisualEditor0",
"Effect": "Allow",
"Action": [
"aws-portal:ViewAccount",
"aws-portal:*Billing"
],
"Resource": "*"
}]
```

Policy 2: Customer managed IAM policy

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:ViewAccount",
            "aws-portal:*Billing"
        ],
        "Resource": "*"
    }]
}
```

Example Example 2: Policies are considered similar

Both policies contain one Sid block with the same affected Action. Policy 2 contains additional actions, but these actions aren't affected.

```
Policy 1
```

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:ViewAccount",
            "aws-portal:*Billing"
    ],
        "Resource": "*"
```

}

}]

Policy 2

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:ViewAccount",
            "aws-portal:*Billing",
            "athena:*"
        ],
        "Resource": "*"
    }]
}
```

Example Example 3: Policies aren't considered similar

Both policies contain one Sid block with the same affected Action. However, policy 2 contains a Condition element that isn't present in policy 1.

Policy 1

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:ViewAccount",
            "aws-portal:*Billing"
        ],
        "Resource": "*"
    }]
}
```

Policy 2

Migrating access control

```
"Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:ViewAccount",
            "aws-portal:*Billing",
            "athena:*"
        ],
        "Resource": "*",
        "Condition": {
            "BoolIfExists": {
                "aws:MultiFactorAuthPresent": "true"
            }
        }
    }]
}
```

Example Example 4: Policies are considered similar

Policy 1 has a single Sid block with an affected Action. Policy 2 has multiple Sid blocks, but the affected Action appears in only one block.

Policy 1

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:View*"
        ],
        "Resource": "*"
    }]
}}
```

```
{
    "Version": "2012-10-17",
    "Statement": [{
```

```
"Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "aws-portal:View*"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Allow",
            "Action": [
                "cloudtrail:Get*"
            ],
            "Resource": "*"
        }
    ]
}
```

Example Example 5: Policies aren't considered similar

Policy 1 has a single Sid block with an affected Action. Policy 2 has multiple Sid blocks, and the affected Action appears in multiple blocks.

Policy 1

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "aws-portal:View*"
        ],
        "Resource": "*"
    }]
}
```

Policy 2

{

```
"Version": "2012-10-17",
"Statement": [{
```

```
"Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "aws-portal:View*"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "aws-portal:Modify*"
            ],
            "Resource": "*"
        }
    ]
}
```

Example Example 6: Policies are considered similar

Both policies have multiple Sid blocks, with the same affected Action in each Sid block.

```
{
    "Version": "2012-10-17",
    "Statement": [{
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "aws-portal:*Account",
                "iam:Get*"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "aws-portal:Modify*",
                "iam:Update*"
            ],
            "Resource": "*"
```

] }		}					
}]						
	}						

Policy 2

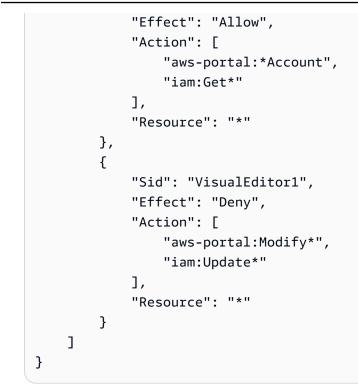
```
{
    "Version": "2012-10-17",
    "Statement": [{
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                 "aws-portal:*Account",
                "athena:Get*"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "aws-portal:Modify*",
                "athena:Update*"
            ],
            "Resource": "*"
        }
    ]
}
```

Example Example 7

The following two policies aren't considered similar.

Policy 1 has a single Sid block with an affected Action. Policy 2 has a Sid block with the same affected Action. However, policy 2 also contains another Sid block with different actions.

```
{
    "Version": "2012-10-17",
    "Statement": [{
        "Sid": "VisualEditor0",
```



```
{
    "Version": "2012-10-17",
    "Statement": [{
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "aws-portal:*Account",
                "athena:Get*"
            ],
            "Resource": "*"
        },
        {
            "Sid": "VisualEditor1",
            "Effect": "Deny",
            "Action": [
                "aws-portal:*Billing",
                "athena:Update*"
            ],
            "Resource": "*"
        }
    ]
}
```

Mapping fine-grained IAM actions reference

🚯 Note

The following Amazon Identity and Access Management (IAM) actions have reached the end of standard support:

- *aws-portal* namespace
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

If you're using Amazon Organizations, you can use the <u>bulk policy migrator scripts</u> or bulk policy migrator to update polices from your payer account. You can also use the <u>old to</u> <u>granular action mapping reference</u> to verify the IAM actions that need to be added. If you have an Amazon Web Services account, or are a part of an Amazon Organizations created on or after November 16, 2023, 11:00 AM (PDT), the fine-grained actions are already in effect in your organization.

You will need to migrate the following IAM actions in your permission policies or service control policies (SCP):

- aws-portal:ViewAccount
- aws-portal:ViewBilling
- aws-portal:ViewPaymentMethods
- aws-portal:ModifyAccount
- aws-portal:ModifyBilling
- aws-portal:ModifyPaymentMethods
- purchase-orders:ViewPurchaseOrders
- purchase-orders:ModifyPurchaseOrders

You can use this topic to view the mapping of the old to new fine-grained actions for each IAM action that we're retiring.

Overview

- Review your affected IAM policies in your Amazon Web Services account. To do so, follow the steps in the Affected policies tool to identify your affected IAM policies. See <u>How to use the</u> <u>affected policies tool</u>.
- 2. Use the IAM console to add the new granular permissions to your policy. For example, if your policy allows the purchase-orders:ModifyPurchaseOrders permission, you will need to add each action in the Mapping for purchase-orders:ModifyPurchaseOrders table.

Old policy

The following policy allows a user to add, delete, or modify any purchase order in the account.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": "purchase-orders:ModifyPurchaseOrders",
            "Resource": "arn:aws:purchase-orders::123456789012:purchase-order/*"
        }
    ]
}
```

New policy

The following policy also allows a user to add, delete, or modify any purchase order in the account. Note that each granular permission appears after the old purchaseorders:ModifyPurchaseOrders permission. These permissions give you more control over what actions you want to allow or deny.

🚺 Tip

We recommend that you keep the old permissions to ensure that you don't lose permissions until this migration is complete.

```
"Version": "2012-10-17",
 "Statement": [
  {
   "Sid": "VisualEditor0",
   "Effect": "Allow",
   "Action": [
    "purchase-orders:ModifyPurchaseOrders",
    "purchase-orders:AddPurchaseOrder",
    "purchase-orders:DeletePurchaseOrder",
    "purchase-orders:UpdatePurchaseOrder",
    "purchase-orders:UpdatePurchaseOrderStatus"
  ],
   "Resource": "arn:aws:purchase-orders::123456789012:purchase-order/*"
 }
]
}
```

3. Save your changes.

1 Notes

- To edit policies manually in the IAM console, see <u>Editing customer managed policies</u> (console) in the *IAM User Guide*.
- To bulk migrate your IAM policies to use fine-grained actions (new actions), see <u>Use</u> scripts to bulk migrate your policies to use fine-grained IAM actions.

Contents

- Mapping for aws-portal:ViewAccount
- Mapping for aws-portal:ViewBilling
- Mapping for aws-portal:ViewPaymentMethods
- <u>Mapping for aws-portal:ModifyAccount</u>
- Mapping for aws-portal:ModifyBilling
- Mapping for aws-portal:ModifyPaymentMethods
- Mapping for purchase-orders:ViewPurchaseOrders
- Mapping for purchase-orders:ModifyPurchaseOrders

Mapping for aws-portal:ViewAccount

New action	Description	Access level
account:GetAccount Information	Grants permission to retrieve the account information for an account	Read
account:GetAlterna teContact	Grants permission to retrieve the alternate contacts for an account	Read
account:GetContact Information	Grants permission to retrieve the primary contact informati on for an account	Read
billing:GetContrac tInformation	Grants permission to view the account's contract informati on including the contract number, end-user organizat ion names, purchase order numbers, and if the account is used to service public-sector customers	Read
billing:GetSellerO fRecord	Grants permission to retrieve the account's default seller of record	Read
payments:ListPayme ntPreferences	Grants permission to get payment preferences (for example, preferred payment currency, preferred payment method)	Read

Mapping for aws-portal:ViewBilling

New action	Description	Access level
account:GetAccount Information	Grants permission to retrieve the account information for an account	Read
billing:GetBilling Data	Grants permission to perform queries on billing information	Read
billing:GetBilling Details	Grants permission to view detailed line item billing information	Read
billing:GetBilling Notifications	Grants permission to view notifications sent by Amazon related to your accounts billing information	Read
billing:GetBilling Preferences	Grants permission to view billing preferences such as Reserved Instances, Savings Plans, and credits sharing	Read
billing:GetContrac tInformation	Grants permission to view the account's contract informati on including the contract number, end-user organizat ion names, purchase order numbers, and if the account is used to service public-sector customers	Read
billing:GetCredits	Grants permission to view credits that have been redeemed	Read

New action	Description	Access level
billing:GetSellerO fRecord	Grants permission to retrieve the account's default seller of record	Read
<pre>ce:DescribeNotific ationSubscription</pre>	Grants permission to view reservation expiration alerts	Read
ce:DescribeReport	Grants permission to view Cost Explorer reports page	Read
ce:GetAnomalies	Grants permission to retrieve anomalies	Read
ce:GetAnomalyMonit ors	Grants permission to query anomaly monitors	Read
ce:GetAnomalySubsc riptions	Grants permission to query anomaly subscriptions	Read
ce:GetCostAndUsage	Grants permission to retrieve the cost and usage metrics for your account	Read
ce:GetCostAndUsage WithResources	Grants permission to retrieve the cost and usage metrics with resources for your account	Read
ce:GetCostCategories	Grants permission to query cost category names and values for a specified time period	Read
ce:GetCostForecast	Grants permission to retrieve a cost forecast for a forecast time period	Read

New action	Description	Access level
ce:GetDimensionVal ues	Grants permission to retrieve all available filter values for a filter for a period of time	Read
ce:GetPreferences	Grants permission to view the Cost Explorer preferences page	Read
ce:GetReservationC overage	Grants permission to retrieve the reservation coverage for your account	Read
ce:GetReservationP urchaseRecommendat ion	Grants permission to retrieve the reservation recommend ations for your account	Read
ce:GetReservationU tilization	Grants permission to retrieve the reservation utilization for your account	Read
ce:GetRightsizingR ecommendation	Grants permission to retrieve the rightsizing recommend ations for your account	Read
ce:GetSavingsPlans Coverage	Grants permission to retrieve the Savings Plans coverage for your account	Read
ce:GetSavingsPlans PurchaseRecommenda tion	Grants permission to retrieve the Savings Plans recommend ations for your account	Read
ce:GetSavingsPlans Utilization	Grants permission to retrieve the Savings Plans utilization for your account	Read

New action	Description	Access level
ce:GetSavingsPlans UtilizationDetails	Grants permission to retrieve the Savings Plans utilization details for your account	Read
ce:GetTags	Grants permission to query tags for a specified time period	Read
ce:GetUsageForecast	Grants permission to retrieve a usage forecast for a forecast time period	Read
ce:ListCostAllocat ionTags	Grants permission to list cost allocation tags	List
ce:ListSavingsPlan sPurchaseRecommend ationGeneration	Grants permission to retrieve a list of your historical recommendation generations	Read
consolidatedbillin g:GetAccountBillin gRole	Grants permission to get account role (payer, linked, regular)	Read
consolidatedbillin g:ListLinkedAccoun ts	Grants permission to get list of member and linked accounts	List
cur:GetClassicReport	Grants permission to get the CSV report for your bill	Read
cur:GetClassicRepo rtPreferences	Grants permission to get the classic report enablement status for usage reports	Read

New action	Description	Access level
cur:ValidateReport Destination	Grants permission to validates if the Amazon S3 bucket exists with appropriate permissions for Amazon CUR delivery	Read
freetier:GetFreeTi erAlertPreference	Grants permission to get Amazon Web Services China Region Free Tier alert preference (by email address)	Read
freetier:GetFreeTi erUsage	Grants permission to get Amazon Web Services China Region Free Tier usage limits and month-to-date (MTD) usage status	Read
invoicing:GetInvoi ceEmailDeliveryPre ferences	Grants permission to get invoice email delivery preferences	Read
invoicing:GetInvoi cePDF	Grants permission to get the invoice PDF	Read
invoicing:ListInvo iceSummaries	Grants permission to get invoice summary informati on for your account or linked account	List
payments:GetPaymen tInstrument	Grants permission to get information about a payment instrument	Read
payments:GetPaymen tStatus	Grants permission to get payment status of invoices	Read

New action	Description	Access level
payments:ListPayme ntPreferences	Grants permission to get payment preferences (for example, preferred payment currency, preferred payment method)	Read

Mapping for aws-portal:ViewPaymentMethods

New action	Description	Access level
account:GetAccount Information	Grants permission to retrieve the account information for an account	Read
invoicing:GetInvoi cePDF	Grants permission to get the invoice PDF	Read
payments:GetPaymen tInstrument	Grants permission to get information about a payment instrument	Read
payments:GetPaymen tStatus	Grants permission to get payment status of invoices	Read
payments:ListPayme ntPreferences	Grants permission to get payment preferences (for example, preferred payment currency, preferred payment method)	List

Mapping for aws-portal:ModifyAccount

New action	Description	Access level
account:CloseAccount	Grants permission to close an account	Write
account:DeleteAlte rnateContact	Grants permission to delete the alternate contacts for an account	Write
account:PutAlterna teContact	Grants permission to modify the alternate contacts for an account	Write
account:PutChallen geQuestions	Grants permission to modify the challenge questions for an account	Write
account:PutContact Information	Grants permission to update the primary contact informati on for an account	Write
billing:PutContrac tInformation	Grants permission to set the account's contract informati on end-user organization names and if the account is used to service public-sector customers	Write
payments:UpdatePay mentPreferences	Grants permission to update payment preferences (for example, preferred payment currency, preferred payment method)	Write

Mapping for aws-portal:ModifyBilling

New action	Description	Access level
billing:PutContrac tInformation	Grants permission to set the account's contract informati on end-user organization names and if the account is used to service public-sector customers	Write
<pre>billing:RedeemCred its</pre>	Grants permission to redeem an Amazon credit	Write
billing:UpdateBill ingPreferences	Grants permission to update billing preferences such as Reserved Instances, Savings Plans, and credits sharing	Write
ce:CreateAnomalyMo nitor	Grants permission to create a new anomaly monitor	Write
<pre>ce:CreateAnomalySu bscription</pre>	Grants permission to create a new anomaly subscription	Write
<pre>ce:CreateNotificat ionSubscription</pre>	Grants permission to create reservation expiration alerts	Write
ce:CreateReport	Grants permission to create Cost Explorer reports	Write
ce:DeleteAnomalyMo nitor	Grants permission to delete an anomaly monitor	Write
<pre>ce:DeleteAnomalySu bscription</pre>	Grants permission to delete an anomaly subscription	Write
<pre>ce:DeleteNotificat ionSubscription</pre>	Grants permission to delete reservation expiration alerts	Write

New action	Description	Access level
ce:DeleteReport	Grants permission to delete Cost Explorer reports	Write
ce:ProvideAnomalyF eedback	Grants permission to provide feedback on detected anomalies	Write
ce:StartSavingsPla nsPurchaseRecommen dationGeneration	Grants permission to request a Savings Plans recommend ation generation	Write
ce:UpdateAnomalyMo nitor	Grants permission to update an existing anomaly monitor	Write
ce:UpdateAnomalySu bscription	Grants permission to update an existing anomaly subscript ion	Write
ce:UpdateCostAlloc ationTagsStatus	Grants permission to update existing cost allocation tags status	Write
<pre>ce:UpdateNotificat ionSubscription</pre>	Grants permission to update reservation expiration alerts	Write
ce:UpdatePreferences	Grants permission to edit the Cost Explorer preferences page	Write
cur:PutClassicRepo rtPreferences	Grants permission to enable classic reports	Write
freetier:PutFreeTi erAlertPreference	Grants permission to set Amazon Web Services China Region Free Tier alert preference (by email address)	Write

New action	Description	Access level
invoicing:PutInvoi ceEmailDeliveryPre ferences	Grants permission to update invoice email delivery preferences	Write
<pre>payments:CreatePay mentInstrument</pre>	Grants permission to create a payment instrument	Write
<pre>payments:DeletePay mentInstrument</pre>	Grants permission to delete a payment instrument	Write
payments:MakePayment	Grants permission to make a payment, authenticate a payment, verify a payment method, and generate a funding request document for Advance Pay	Write
payments:UpdatePay mentPreferences	Grants permission to update payment preferences (for example, preferred payment currency, preferred payment method)	Write

Mapping for aws-portal:ModifyPaymentMethods

New action	Description	Access level
account:GetAccount Information	Grants permission to retrieve the account information for an account	Read
payments:DeletePay mentInstrument	Grants permission to delete a payment instrument	Write

New action	Description	Access level
<pre>payments:CreatePay mentInstrument</pre>	Grants permission to create a payment instrument	Write
payments:MakePayment	Grants permission to make a payment, authenticate a payment, verify a payment method, and generate a funding request document for Advance Pay	Write
payments:UpdatePay mentPreferences	Grants permission to update payment preferences (for example, preferred payment currency, preferred payment method)	Write

Mapping for purchase-orders:ViewPurchaseOrders

New action	Description	Access level
invoicing:GetInvoi cePDF	Grants permission to get invoice PDF	Get
payments:ListPayme ntPreferences	Grants permission to get payment preferences (for example, preferred payment currency, preferred payment method)	List
purchase-orders:Ge tPurchaseOrder	Grants permission to get a purchase order	Read
purchase-orders:Li stPurchaseOrderInv oices	Grants permission to view purchase orders and details	List

New action	Description	Access level
purchase-orders:Li stPurchaseOrders	Grants permission to get all available purchase orders	List

Mapping for purchase-orders:ModifyPurchaseOrders

New action	Description	Access level
purchase-orders:Ad dPurchaseOrder	Grants permission to add a purchase order	Write
purchase-orders:De letePurchaseOrder	Grants permission to delete a purchase order.	Write
purchase-orders:Up datePurchaseOrder	Grants permission to update an existing purchase order	Write
purchase-orders:Up datePurchaseOrderS tatus	Grants permission to set purchase order status	Write

Amazon managed policies

Managed policies are standalone identity-based policies that you can attach to multiple users, groups, and roles in your Amazon account. You can use Amazon managed policies to control access in Billing.

An Amazon managed policy is a standalone policy that's created and administered by Amazon. Amazon managed policies are designed to provide permissions for many common use cases. Amazon managed policies make it easier for you to assign appropriate permissions to users, groups, and roles than if you had to write the policies yourself.

You can't change the permissions defined in Amazon managed policies. Amazon occasionally updates the permissions that are defined in an Amazon managed policy. When this occurs, the update affects all principal entities (users, groups, and roles) that the policy is attached to.

Billing provides several Amazon managed policies for common use cases.

Topics

- AWSPurchaseOrdersServiceRolePolicy
- AWSBillingReadOnlyAccess
- Billing
- <u>AWSAccountActivityAccess</u>
- <u>AWSPriceListServiceFullAccess</u>
- Updates to Amazon managed policies for Amazon Billing

AWSPurchaseOrdersServiceRolePolicy

This managed policy grants full access to the Billing and Cost Management console and to the purchase orders console. The policy allows the user to view, create, update, and delete the account's purchase orders.

```
{
   "Version":"2012-10-17",
   "Statement":[
      {
         "Effect":"Allow",
         "Action":[
            "account:GetAccountInformation",
            "account:GetContactInformation",
            "aws-portal:*Billing",
            "consolidatedbilling:GetAccountBillingRole",
            "invoicing:GetInvoicePDF",
            "invoicing:ListInvoiceUnits",
            "payments:GetPaymentInstrument",
            "payments:ListPaymentPreferences",
            "purchase-orders:AddPurchaseOrder",
            "purchase-orders:DeletePurchaseOrder",
            "purchase-orders:GetPurchaseOrder",
            "purchase-orders:ListPurchaseOrderInvoices",
            "purchase-orders:ListPurchaseOrders",
            "purchase-orders:ListTagsForResource",
            "purchase-orders:ModifyPurchaseOrders",
            "purchase-orders:TagResource",
            "purchase-orders:UntagResource",
            "purchase-orders:UpdatePurchaseOrder",
            "purchase-orders:UpdatePurchaseOrderStatus",
            "purchase-orders:ViewPurchaseOrders",
```

```
"tax:ListTaxRegistrations"
],
"Resource":"*"
}
]
}
```

AWSBillingReadOnlyAccess

This managed policy grants users read-only access to features in the Amazon Billing and Cost Management console.

Permissions details

This policy includes the following permissions:

- account Retrieve information about their Amazon account.
- aws-portal Grants users overall viewing permission to the Billing and Cost Management console pages.
- billing Retrieve comprehensive access to Amazon billing information, such as billing preference, active contracts, credits or discounts applied, IAM preferences, seller of record, and a list of billing reports.
- budgets Retrieve information about actions set for the Amazon Budgets feature.
- ce Retrieve cost and usage information, tags, and dimension values to view the Amazon Cost Explorer feature.
- consolidatedbilling Retrieve roles and details about the Amazon Web Services accounts configured using the consolidated billing feature.
- cur Retrieve information about their Amazon Cost and Usage Report data.
- freetier Retrieve information about Amazon Web Services China Region Free Tier alert and usage preferences.
- invoicing Retrieve information about their invoice preferences.
- mapcredits Retrieve spends and credits related to the Migration Acceleration Program (MAP)
 2.0 agreement.
- payments Retrieve financing, payment status, and payment instrument information.
- purchase-orders Retrieve information about invoices associated with their purchase orders.
- sustainability Retrieve carbon footprint information based on their Amazon usage.

• tax – Retrieve registered tax information from tax settings.

```
{
      "Version": "2012-10-17",
      "Statement": [
            {
                "Sid": "VisualEditor0",
                "Effect": "Allow",
                "Action": [
                    "account:GetAccountInformation",
                    "aws-portal:ViewBilling",
                    "billing:GetBillingData",
                    "billing:GetBillingDetails",
                    "billing:GetBillingNotifications",
                    "billing:GetBillingPreferences",
                    "billing:GetContractInformation",
                    "billing:GetCredits",
                    "billing:GetIAMAccessPreference",
                    "billing:GetSellerOfRecord",
                    "billing:ListBillingViews",
                    "budgets:DescribeBudgetActionsForBudget",
                    "budgets:DescribeBudgetAction",
                    "budgets:DescribeBudgetActionsForAccount",
                    "budgets:DescribeBudgetActionHistories",
                    "budgets:ViewBudget",
                    "ce:DescribeCostCategoryDefinition",
                    "ce:GetCostAndUsage",
                    "ce:GetDimensionValues",
                    "ce:GetTags",
                    "ce:ListCostCategoryDefinitions",
                    "ce:ListCostAllocationTags",
                    "ce:ListCostAllocationTagBackfillHistory",
                    "ce:ListTagsForResource",
                    "consolidatedbilling:GetAccountBillingRole",
                    "consolidatedbilling:ListLinkedAccounts",
                    "cur:DescribeReportDefinitions",
                    "cur:GetClassicReport",
                    "cur:GetClassicReportPreferences",
                    "cur:GetUsageReport",
                    "freetier:GetFreeTierAlertPreference",
                    "freetier:GetFreeTierUsage",
                    "invoicing:BatchGetInvoiceProfile",
```



Billing

This managed policy grants users permission to view and edit the Amazon Billing and Cost Management console. This includes viewing account usage, modifying budgets and payment methods.

```
{
    "Version": "2012-10-17",
    "Statement": [
      {
        "Sid": "VisualEditor0",
        "Effect": "Allow",
        "Action": [
            "account:GetAccountInformation",
            "aws-portal:*Billing",
            "aws-portal:*PaymentMethods",
            "aws-portal:*Usage",
            "billing:CreateBillingView",
            "billing:DeleteBillingView",
            "billing:GetBillingData",
            "billing:GetBillingDetails",
            "billing:GetBillingNotifications",
            "billing:GetBillingPreferences",
            "billing:GetBillingView",
            "billing:GetContractInformation",
            "billing:GetCredits",
            "billing:GetIAMAccessPreference",
            "billing:GetSellerOfRecord",
            "billing:ListBillingViews",
            "billing:PutContractInformation",
            "billing:RedeemCredits",
            "billing:GetResourcePolicy",
            "billing:ListSourceViewsForBillingView",
            "billing:ListTagsForResource",
            "billing:TagResource",
            "billing:UntagResource",
            "billing:UpdateBillingPreferences",
            "billing:UpdateBillingView",
            "billing:UpdateIAMAccessPreference",
            "budgets:CreateBudgetAction",
            "budgets:DeleteBudgetAction",
            "budgets:DescribeBudgetActionsForBudget",
            "budgets:DescribeBudgetAction",
```

"budgets:DescribeBudgetActionsForAccount", "budgets:DescribeBudgetActionHistories", "budgets:ExecuteBudgetAction", "budgets:ModifyBudget", "budgets:UpdateBudgetAction", "budgets:ViewBudget", "ce:CreateNotificationSubscription", "ce:CreateReport", "ce:CreateCostCategoryDefinition", "ce:DeleteNotificationSubscription", "ce:DeleteCostCategoryDefinition", "ce:DescribeCostCategoryDefinition", "ce:DeleteReport", "ce:GetCostAndUsage", "ce:GetDimensionValues", "ce:GetTags", "ce:ListCostAllocationTags", "ce:ListCostAllocationTagBackfillHistory", "ce:ListCostCategoryDefinitions", "ce:ListTagsForResource", "ce:StartCostAllocationTagBackfill", "ce:UpdateCostAllocationTagsStatus", "ce:UpdateNotificationSubscription", "ce:TagResource", "ce:UpdatePreferences", "ce:UpdateReport", "ce:UntagResource", "ce:UpdateCostCategoryDefinition", "consolidatedbilling:GetAccountBillingRole", "consolidatedbilling:ListLinkedAccounts", "cur:DeleteReportDefinition", "cur:DescribeReportDefinitions", "cur:GetClassicReport", "cur:GetClassicReportPreferences", "cur:GetUsageReport", "cur:ModifyReportDefinition", "cur:PutClassicReportPreferences", "cur:PutReportDefinition", "cur:ValidateReportDestination", "freetier:GetFreeTierAlertPreference", "freetier:GetFreeTierUsage", "freetier:PutFreeTierAlertPreference", "invoicing:BatchGetInvoiceProfile", "invoicing:CreateInvoiceUnit",

"invoicing:DeleteInvoiceUnit", "invoicing:GetInvoiceEmailDeliveryPreferences", "invoicing:GetInvoicePDF", "invoicing:GetInvoiceUnit", "invoicing:ListInvoiceSummaries", "invoicing:ListInvoiceUnits", "invoicing:ListTagsForResource", "invoicing:PutInvoiceEmailDeliveryPreferences", "invoicing:TagResource", "invoicing:UntagResource", "invoicing:UpdateInvoiceUnit", "mapcredits:ListAssociatedPrograms", "mapcredits:ListQuarterCredits", "mapcredits:ListQuarterSpend", "mapcredits:GetUniqueQuarterSpendSum", "payments:CreateFinancingApplication", "payments:CreatePaymentInstrument", "payments:DeletePaymentInstrument", "payments:GetFinancingApplication", "payments:GetFinancingLine", "payments:GetFinancingLineWithdrawal", "payments:GetFinancingOption", "payments:GetPaymentInstrument", "payments:GetPaymentStatus", "payments:ListFinancingApplications", "payments:ListFinancingLines", "payments:ListFinancingLineWithdrawals", "payments:ListPaymentInstruments", "payments:ListPaymentPreferences", "payments:ListPaymentProgramOptions", "payments:ListPaymentProgramStatus", "payments:ListTagsForResource", "payments:MakePayment", "payments:TagResource", "payments:UntagResource", "payments:UpdateFinancingApplication", "payments:UpdatePaymentInstrument", "payments:UpdatePaymentPreferences", "pricing:DescribeServices", "purchase-orders:AddPurchaseOrder", "purchase-orders:DeletePurchaseOrder", "purchase-orders:GetPurchaseOrder", "purchase-orders:ListPurchaseOrderInvoices", "purchase-orders:ListPurchaseOrders",



AWSAccountActivityAccess

This managed policy grants users permission to view the **Account activity** page.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
            "account:GetRegionOptStatus",
            "account:GetAlternateContact",
            "account:GetContactInformation",
            "account:GetContactInformatinformatinf
```



AWSPriceListServiceFullAccess

This managed policy grants users full access to the Amazon Price List Service.

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "AWSPriceListServiceFullAccess",
            "Effect": "Allow",
            "Action": [
               "pricing:*"
        ],
        "Resource": "*"
        }
   ]
}
```

Updates to Amazon managed policies for Amazon Billing

View details about updates to Amazon managed policies for Amazon Billing since this service began tracking these changes. For automatic alerts about changes to this page, subscribe to the RSS feed on the Amazon Billing Document history page.

Change	Description	Date
Billing and AWSBillin gReadOnlyAccess – Update to existing policies	We added the following MAP 2.0 permissions to Billing and AWSBillingReadOnly Access :	March 27, 2025

Change	Description	Date
	 mapcredits:ListAss ociatedPrograms mapcredits:ListQua rterCredits mapcredits:ListQua rterSpend mapcredits:GetUniq ueQuarterSpendSum 	
Billing – Update to existing policies	<pre>We added the following invoicing permissions to Billing: • billing:CreateBill ingView • billing:DeleteBill ingView • billing:GetBilling View • billing:GetResourc ePolicy • billing:ListSource ViewsForBillingVie w • billing:ListTagsFo rResource • billing:TagResource • billing:UntagResou rce • billing:UpdateBill ingView</pre>	January 17, 2025

Change	Description	Date
Change AWSPurchaseOrdersS erviceRolePolicy, Billing, and AWSBillingReadOnlyAccess – Update to existing policies	We added the following invoicing permission to	Date December 1, 2024
	 invoicing:DeleteIn voiceUnit 	

Change	Description	Date
	 invoicing:GetInvoi ceUnit 	
	 invoicing:ListInvo iceUnits 	
	 invoicing:ListTags ForResource 	
	 invoicing:TagResou rce 	
	 invoicing:UntagRes ource 	
	 invoicing:UpdateIn voiceUnit 	

Change	Description	Date
Billing and AWSBillin gReadOnlyAccess – Update to existing policies	We added the following payments permissions to Billing:	November 12, 2024
	 payments:GetFinanc ingOption 	
	 payments:CreateFin ancingApplication 	
	 payments:UpdateFin ancingApplication 	
	 payments:GetFinanc ingApplication 	
	 payments:ListFinan cingApplications 	
	 payments:ListFinan cingLines 	
	 payments:GetFinanc ingLine 	
	 payments:ListFinan cingLines 	
	 payments:GetFinanc ingLineWithdrawal 	
	 payments:ListFinan cingLineWithdrawal s 	
	 payments:ListPayme ntProgramStatus 	
	 payments:ListPayme ntProgramOptions 	
	We added the following payments permissions to	

Change	Description	Date
	<pre>AWSBillingReadOnly Access : • payments:GetFinanc ingOption • payments:GetFinanc ingApplication • payments:ListFinan cingApplications • payments:GetFinanc ingLine • payments:SetFinan cingLinessingLineWithdrawal • payments:ListFinan cingLineWithdrawal s • payments:ListFinan cingLineWithdrawal s • payments:ListPayme ntProgramStatus • payments:ListPayme ntProgramOptions</pre>	
AWSPriceListServiceFullAcce ss_ – Updated policy	We added the documentation for AWSPriceListServic eFullAccess policy for the Amazon Price List Service. The policy was initially launched in 2017. We updated Sid": "AWSPrice ListServiceFullAcc ess to the existing policy.	July 2, 2024

Change	Description	Date
Billing and AWSBillin gReadOnlyAccess – Update to existing policies	<pre>We added the following cost allocation tag-related permissions to Billing: • payments:ListTagsF orResource • payments:TagResour ce • payments:UntagReso urce • payments:ListPayme ntInstruments • payments:UpdatePay mentInstrument</pre>	May 31, 2024
	<pre>We added the following tag-related permission to AWSBillingReadOnly Access : • payments:ListTagsF orResource • payments:ListPayme ntInstruments</pre>	

Change	Description	Date
Billing and AWSBillin gReadOnlyAccess – Update to existing policies	<pre>We added the following cost allocation tag-related permissions to Billing: • ce:ListCostAllocat ionTagBackfillHist ory • ce:StartCostAlloca tionTagBackfill • ce:GetTags • ce:GetTags • ce:GetDimensionVal ues</pre>	March 25, 2024
	<pre>We added the following cost allocation tag-related permission to AWSBillin gReadOnlyAccess : • ce:ListCostAllocat ionTagBackfillHist ory • ce:GetTags • ce:GetDimensionVal ues</pre>	

Change	Description	Date
Billing and AWSBillin gReadOnlyAccess – Update to existing policies	<pre>We added the following cost allocation tag-related permissions to Billing: • ce:ListCostAllocat ionTags • ce:UpdateCostAlloc ationTagsStatus</pre>	July 26, 2023
	<pre>permission to AWSBillin gReadOnlyAccess : • ce:ListCostAllocat ionTags</pre>	

Change	Description	Date
AWSPurchaseOrdersS erviceRolePolicy, Billing, and AWSBillingReadOnlyAccess Update to existing policies	<pre>We added the following purchase order tag-related permissions to Billing and AWSPurchaseOrdersS erviceRolePolicy : purchase-orders:Li stTagsForResource purchase-orders:Ta gResource purchase-orders:Un tagResource We added the following tag-related permission to AWSBillingReadOnly Access : purchase-orders:Li stTagsForResource </pre>	July 17, 2023
AWSPurchaseOrdersS erviceRolePolicy, Billing, and AWSBillingReadOnlyAccess – Update to existing policies AWSAccountActivityAccess – New Amazon managed policy documented for Amazon Billing	Added updated action set across all policies.	March 06, 2023
AWSPurchaseOrdersS erviceRolePolicy – Update to an existing policy	Amazon Billing removed unnecessary permissions.	November 18, 2021

Change	Description	Date
Amazon Billing started tracking changes	Amazon Billing started tracking changes for its Amazon managed policies.	November 18, 2021

Troubleshooting Amazon Billing identity and access

Use the following information to help you diagnose and fix common issues that you might encounter when working with Billing and IAM.

Topics

- I am not authorized to perform an action in Billing
- I am not authorized to perform iam:PassRole
- I want to view my access keys
- I'm an administrator and want to allow others to access Billing
- I want to allow people outside of my Amazon Web Services account to access my Billing resources

I am not authorized to perform an action in Billing

If the Amazon Web Services Management Console tells you that you're not authorized to perform an action, then you must contact your administrator for assistance. Your administrator is the person who provided you with your sign-in credentials.

The following example error occurs when the mateojackson user tries to use the console to view details about a fictional *my-example-widget* resource but does not have the fictional billing: *GetWidget* permissions.

```
User: arn:aws-cn:iam::123456789012:user/mateojackson is not authorized to perform:
    billing:GetWidget on resource: my-example-widget
```

In this case, Mateo asks his administrator to update his policies to allow him to access the *myexample-widget* resource using the billing: *GetWidget* action.

I am not authorized to perform iam:PassRole

If you receive an error that you're not authorized to perform the iam: PassRole action, your policies must be updated to allow you to pass a role to Billing.

Some Amazon Web Services services allow you to pass an existing role to that service instead of creating a new service role or service-linked role. To do this, you must have permissions to pass the role to the service.

The following example error occurs when an IAM user named marymajor tries to use the console to perform an action in Billing. However, the action requires the service to have permissions that are granted by a service role. Mary does not have permissions to pass the role to the service.

```
User: arn:aws-cn:iam::123456789012:user/marymajor is not authorized to perform: iam:PassRole
```

In this case, Mary's policies must be updated to allow her to perform the iam: PassRole action.

If you need help, contact your Amazon administrator. Your administrator is the person who provided you with your sign-in credentials.

I want to view my access keys

After you create your IAM user access keys, you can view your access key ID at any time. However, you can't view your secret access key again. If you lose your secret key, you must create a new access key pair.

Access keys consist of two parts: an access key ID (for example, AKIAIOSFODNN7EXAMPLE) and a secret access key (for example, wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY). Like a user name and password, you must use both the access key ID and secret access key together to authenticate your requests. Manage your access keys as securely as you do your user name and password.

A Important

Do not provide your access keys to a third party, even to help <u>find your canonical user ID</u>. By doing this, you might give someone permanent access to your Amazon Web Services account. When you create an access key pair, you are prompted to save the access key ID and secret access key in a secure location. The secret access key is available only at the time you create it. If you lose your secret access key, you must add new access keys to your IAM user. You can have a maximum of two access keys. If you already have two, you must delete one key pair before creating a new one. To view instructions, see Managing access keys in the *IAM User Guide*.

I'm an administrator and want to allow others to access Billing

To allow others to access Billing, you must grant permission to the people or applications that need access. If you are using Amazon IAM Identity Center to manage people and applications, you assign permission sets to users or groups to define their level of access. Permission sets automatically create and assign IAM policies to IAM roles that are associated with the person or application. For more information, see <u>Permission sets</u> in the *Amazon IAM Identity Center User Guide*.

If you are not using IAM Identity Center, you must create IAM entities (users or roles) for the people or applications that need access. You must then attach a policy to the entity that grants them the correct permissions in Billing. After the permissions are granted, provide the credentials to the user or application developer. They will use those credentials to access Amazon. To learn more about creating IAM users, groups, policies, and permissions, see <u>IAM Identities</u> and <u>Policies and permissions in IAM</u> in the *IAM User Guide*.

I want to allow people outside of my Amazon Web Services account to access my Billing resources

You can create a role that users in other accounts or people outside of your organization can use to access your resources. You can specify who is trusted to assume the role. For services that support resource-based policies or access control lists (ACLs), you can use those policies to grant people access to your resources.

To learn more, consult the following:

- To learn whether Billing supports these features, see <u>How Amazon Billing works with IAM</u>.
- To learn how to provide access to your resources across Amazon Web Services accounts that you own, see <u>Providing access to an IAM user in another Amazon Web Services account that you own</u> in the *IAM User Guide*.
- To learn how to provide access to your resources to third-party Amazon Web Services accounts, see <u>Providing access to Amazon Web Services accounts owned by third parties</u> in the *IAM User Guide*.

- To learn how to provide access through identity federation, see <u>Providing access to externally</u> authenticated users (identity federation) in the *IAM User Guide*.
- To learn the difference between using roles and resource-based policies for cross-account access, see Cross account resource access in IAM in the *IAM User Guide*.

Logging and monitoring in Amazon Billing and Cost Management

Monitoring is an important part of maintaining the reliability, availability, and performance of your Amazon account. There are several tools available to monitor your Billing and Cost Management usage.

Amazon Cost and Usage Reports

Amazon Cost and Usage Reports tracks your Amazon usage and provides estimated charges associated with your account. Each report contains line items for each unique combination of Amazon products, usage type, and operation that you use in your Amazon account. You can customize the Amazon Cost and Usage Reports to aggregate the information either by the hour or by the day.

For more information about Amazon Cost and Usage Reports, see the <u>Cost and Usage Report Guide</u>.

Amazon CloudTrail

Billing and Cost Management is integrated with Amazon CloudTrail, a service that provides a record of actions taken by a user, role, or an Amazon service in Billing and Cost Management. CloudTrail captures all write and modify API calls for Billing and Cost Management as events, including calls from the Billing and Cost Management console and from code calls to the Billing and Cost Management APIs.

For more information about Amazon CloudTrail, see the <u>Logging Billing and Cost Management API</u> calls with Amazon CloudTrail.

Logging Billing and Cost Management API calls with Amazon CloudTrail

Billing and Cost Management is integrated with Amazon CloudTrail, a service that provides a record of actions taken by a user, role, or an Amazon service in Billing and Cost Management. CloudTrail captures API calls for Billing and Cost Management as events, including calls from the Billing and Cost Management console and from code calls to the Billing and Cost Management APIs. For a full list of CloudTrail events related to Billing, see Amazon Billing CloudTrail events.

If you create a trail, you can enable continuous delivery of CloudTrail events to an Amazon S3 bucket, including events for Billing and Cost Management. If you don't configure a trail, you can still view the most recent events in the CloudTrail console in **Event history**. Using the information collected by CloudTrail, you can determine the request that was made to Billing and Cost Management, the IP address from which the request was made, who made the request, when it was made, and additional details.

To learn more about CloudTrail, including how to configure and enable it, see the <u>Amazon</u> <u>CloudTrail User Guide</u>.

Amazon Billing CloudTrail events

This section shows a full list of the CloudTrail events related to Billing and Cost Management.

Event name	Definition	Event source
AddPurcha seOrder	Logs the creation of a purchase order.	purchase- orders.am azonaws.com
AcceptFxP aymentCur rencyTerm sAndCondi tions	Logs the acceptance of the terms and conditions of paying in a currency other than USD.	billingco nsole.ama zonaws.com
CloseAccount	Logs the closing of an account.	billingco nsole.ama zonaws.com
CreateCus tomerVeri ficationD etails	(For customers with an India billing or contact address only)Logs the creation of the customer verification details of the account.	<pre>customer- verificat ion.amazo naws.com</pre>

Event name	Definition	Event source
CreateOri gamiRepor tPreference	Logs the creation of the cost and usage report; management account only.	billingco nsole.ama zonaws.com
DeletePur chaseOrder	Logs the deletion of a purchase order.	purchase- orders.am azonaws.com
DeleteOri gamiRepor tPreferen ces	Logs the deletion of the cost and usage report; management account only.	billingco nsole.ama zonaws.com
DownloadC ommercial Invoice	Logs the download of a commercial invoice.	billingco nsole.ama zonaws.com
DownloadE CSVForBil lingPeriod	Logs the download of the eCSV file (monthly usage report) for a specific billing period.	billingco nsole.ama zonaws.com
DownloadR egistrati onDocument	Logs the download of the tax registration document.	billingco nsole.ama zonaws.com
EnableBil lingAlerts	Logs the opt-in of receiving CloudWatch billing alerts for estimated charges.	billingco nsole.ama zonaws.com
FindECSVF orBilling Period	Logs the retrieval of the ECSV file for a specific billing period.	billingco nsole.ama zonaws.com
GetAccoun tEDPStatus	Logs the retrieval of the account's EDP status.	billingco nsole.ama zonaws.com

Amazon Billing

Event name	Definition	Event source
GetAddresses	Logs the access to tax address, billing address, and contact address of an account.	billingco nsole.ama zonaws.com
GetAllAcc ounts	Logs the access to all member account numbers of the management account.	billingco nsole.ama zonaws.com
GetBillsF orBilling Period	Logs the access of the account's usage and charges for a specific billing period.	billingco nsole.ama zonaws.com
GetBillsF orLinkedA ccount	Logs the access of a management account retrievin g the usage and charges of one of the member accounts in the consolidated billing family for a specific billing period.	billingco nsole.ama zonaws.com
GetCommer cialInvoi cesForBil lingPeriod	Logs the access to the account's commercial invoices metadata for the specific billing period.	billingco nsole.ama zonaws.com
GetConsol idatedBil lingFamil ySummary	Logs the access of the management account retrievin g the summary of the entire consolidated billing family.	billingco nsole.ama zonaws.com
GetCustom erVerific ationElig ibility	(For customers with an India billing or contact address only)Logs the retrieval of the customer verification eligibility of the account.	<pre>customer- verificat ion.amazo naws.com</pre>

Event name	Definition	Event source
GetCustom erVerific ationDeta	(For customers with an India billing or contact address only)	customer- verificat ion.amazo
ils	Logs the retrieval of the customer verification details of the account.	naws.com
GetLinked AccountNa mes	Logs the retrieval from a management account of the member account names belonging to its consolidated billing family for a specific billing period.	billingco nsole.ama zonaws.com
GetPurcha seOrder	Logs the retrieval of a purchase order.	purchase- orders.am azonaws.com
GetSuppor tedCountr yCodes	Logs the access to all country codes supported by tax console.	billingco nsole.ama zonaws.com
GetTotal	Logs the retrieval of the account's total charges.	billingco nsole.ama zonaws.com
GetTotalA mountForF orecast	Logs the access to the forecasted charges for the specific billing period.	billingco nsole.ama zonaws.com
ListCostA llocation Tags	Logs the retrieval and listing of cost allocation tags.	billingco nsole.ama zonaws.com
ListPurch aseOrders	Logs the retrieval and listing of purchase orders.	purchase- orders.am azonaws.com
ListPurch aseOrderI nvoices	Logs of the retrieval and list of invoices associated to a purchase order.	purchase- orders.am azonaws.com

Event name	Definition	Event source
ListTagsF orResource	Lists the tags associated with a resource. For payments, this action refers to a payment method. For purchase-orders , this action refers to a purchase order.	purchase- orders.am azonaws.com
RedeemPro moCode	Logs the redemption of promotional credits for an account.	billingco nsole.ama zonaws.com
SetAccoun tContract Metadata	Logs the creation, deletion, or update of the necessary contract information for public sector customers.	billingco nsole.ama zonaws.com
SetAccoun tPreferen ces	Logs the updates of the account name, email, and password.	billingco nsole.ama zonaws.com
SetAdditi onalConta cts	Logs the creation, deletion, or update of the alternate contacts for billing, operations, and security communications.	billingco nsole.ama zonaws.com
SetContac tAddress	Logs the creation, deletion, or update of the account owner contact information, including the address and phone number.	billingco nsole.ama zonaws.com
SetCreate dByOptIn	Logs the opt-in of the awscreatedby cost allocatio n tag preference.	billingco nsole.ama zonaws.com
SetCredit Sharing	Logs the history of the credit sharing preference for the management account.	billingco nsole.ama zonaws.com
SetFreeti erBudgets Preference	Logs the preference (opt-in or opt-out) of receiving Free Tier usage alerts.	billingco nsole.ama zonaws.com

Event name	Definition	Event source
SetFxPaym entCurrency	Logs the creation, deletion, or update of the preferred currency used to pay your invoice.	billingco nsole.ama zonaws.com
SetIAMAcc essPrefer ence	Logs the creation, deletion, or update of the IAM users ability to access to the billing console. This setting is only for customers with root access.	billingco nsole.ama zonaws.com
SetPANInf ormation	Logs the creating, deletion, or update of PAN information under Amazon India.	billingco nsole.ama zonaws.com
SetPayInf ormation	Logs the payment method history (invoice or credit/ debit card) for the account.	billingco nsole.ama zonaws.com
SetRISharing	Logs the history of the RI/Savings Plans sharing preference for the management account.	billingco nsole.ama zonaws.com
SetSecuri tyQuestions	Logs the creation, deletion, or update of the security challenge questions to help Amazon identify you as the owner of the account.	billingco nsole.ama zonaws.com
SetTagKey sState	Logs the active or inactive state of a particular cost allocation tag.	billingco nsole.ama zonaws.com
TagResource	Logs the tagging of a resource. For payments, this action refers to a payment method. For purchase-orders , this action refers to a purchase order.	purchase- orders.am azonaws.com
UntagReso urce	Logs the deletion of tags from a resource. For payments, this action refers to a payment method. For purchase-orders , this action refers to a purchase order.	purchase- orders.am azonaws.com

Event name	Definition	Event source
UpdateCus tomerVeri ficationD etails	(For customers with an India billing or contact address only)Logs the update of the customer verification details of the account.	customer- verificat ion.amazo naws.com
UpdateOri gamiRepor tPreference	Logs the update of the cost and usage report; management account only.	billingco nsole.ama zonaws.com
UpdatePur chaseOrder	Logs the update of a purchase order.	purchase- orders.am azonaws.com
UpdatePur chaseOrde rStatus	Logs the update of a purchase order status.	purchase- orders.am azonaws.com
ValidateA ddress	Logs the validation of the tax address of an account.	billingco nsole.ama zonaws.com

Payments CloudTrail events

This section shows a full list of the CloudTrail events for the **Payments** feature in the Amazon Billing console. These CloudTrail events use payments.amazonaws.com instead of billingconsole.amazonaws.com.

Event name	Definition
Financing _AcceptFi nancingAp plicationTerms	Logs the acceptance of terms in a financing application.

Event name	Definition
Financing _CreateFi nancingAp plication	Logs the creation of a financing application.
Financing _GetFinan cingApplication	Logs the access of a financing application.
Financing _GetFinan cingAppli cationDocument	Logs the access of a document associated with a financing applicati on.
Financing _GetFinan cingLine	Logs the access of a financing line.
Financing _GetFinan cingLineW ithdrawal	Logs the access of a financing line withdrawal.
Financing _GetFinan cingLineW ithdrawal Document	Logs the access of a document associated with a financing line withdrawal.
Financing _GetFinan cingLineW ithdrawal Statements	Logs the access of statements associated with a financing line withdrawal.

Amazon Billing

Event name	Definition
Financing _GetFinan cingOption	Logs the access of a financing option.
Financing _ListFina ncingAppl ications	Logs the list of financing application metadata.
Financing _ListFina ncingLines	Logs the list of financing line metadata.
Financing _ListFina ncingLine Withdrawals	Logs the list of financing line withdrawal metadata.
Financing _UpdateFi nancingAp plication	Logs the update of a financing application.
Instrumen ts_Authenticate	Logs the payment instrument authentication.
Instrumen ts_Create	Logs the creation of payment instruments.
Instrumen ts_Delete	Logs the deletion of payment instruments.
Instruments_Get	Logs the access of payment instruments.
Instruments_List	Logs the list of payment instrument metadata.

Event name	Definition
Instrumen ts_StartCreate	Logs the operations before payment instrument creation.
Instrumen ts_Update	Logs the update of payment instruments.
ListTagsF orResource	Logs the list of tags associated with a payments resource.
Policy_Ge tPaymentI nstrument Eligibility	Logs the access of payment instrument eligibility.
Preferenc es_BatchG etPayment Profiles	Logs the access of payment profiles.
Preferenc es_Create PaymentProfile	Logs the creation of payment profiles.
Preferenc es_Delete PaymentProfile	Logs the deletion of payment profiles.
Preferenc es_ListPa ymentProfiles	Logs the list of payment profiles metadata.
Preferenc es_Update PaymentProfile	Logs the update of payment profiles.

Event name	Definition
Programs_ ListPayme ntProgramOptions	Logs the list of payment program options.
Programs_ ListPayme ntProgramStatus	Logs the list of payment program eligiblity and enrolment status.
TagResource	Logs the tagging of a payments resource.
TermsAndC onditions _AcceptTe rmsAndCon ditionsFo rProgramB yAccountId	Logs the accepted payments terms and conditions.
TermsAndC onditions _GetAccep tedTermsA ndConditi onsForPro gramByAccountId	Logs the access of accepted terms and conditions.
TermsAndC onditions _GetRecom mendedTer msAndCond itionsForProgram	Logs the access of recommended terms and conditions.
UntagResource	Logs the deletion of tags from a payments resource.

Tax settings CloudTrail events

This section shows a full list of the CloudTrail events for the **Tax settings** feature in the Amazon Billing console. These CloudTrail events use taxconsole.amazonaws.com or tax.amazonaws.com instead of billingconsole.amazonaws.com.

Event name	Definition	Event source
BatchGetT axExempti ons	Logs the access to US tax exemptions of an account, and any linked accounts.	taxconsol e.amazon. com
CreateCus tomerCase	Logs the creation of a customer support case to validate US tax exemption for an account.	taxconsol e.amazon. com
DownloadT axInvoice	Logs the download of a tax invoice.	taxconsol e.amazon. com
GetTaxExe mptionTypes	Logs the access to all supported US exemption types by tax console.	taxconsol e.amazon. com
GetTaxInh eritance	Logs the access to tax inheritance preference (turning on or off) of an account.	taxconsol e.amazon. com
GetTaxInv oicesMeta data	Logs the retrieval of tax invoices metadata.	taxconsol e.amazon. com
GetTaxReg istration	Logs the access to the tax registration number of an account.	taxconsol e.amazon. com

CloudTrail events for Tax settings console

Event name	Definition	Event source
PreviewTa xRegistra tionChange	Logs the preview of tax registration changes before confirmation.	taxconsol e.amazon. com
SetTaxInh eritance	Logs the preference (opt-in or opt-out) of tax inheritance.	taxconsol e.amazon. com

CloudTrail events for Tax settings API

Event name	Definition	Event source
BatchDele teTaxRegi stration	Logs the batch deletion of the tax registration for multiple accounts.	tax.amazo naws.com
BatchGetT axExempti ons	Logs the access to tax exemptions of one or multiple accounts.	tax.amazo naws.com
BatchPutT axRegistr ation	Logs the settings of the tax registration of multiple accounts.	tax.amazo naws.com
DeleteTax Registrat ion	Logs the deletion of the tax registration number for an account.	tax.amazo naws.com
GetTaxExe mptionTypes	Logs the access to all supported tax exemption types by the tax console.	tax.amazo naws.com
GetTaxInh eritance	Logs the access to tax inheritance preference (turning on or off) of an account.	tax.amazo naws.com
GetTaxReg istration	Logs the access to the tax registration of an account.	tax.amazo naws.com

Event name	Definition	Event source
GetTaxReg istration Document	Logs retrieving the tax registration document of an account.	tax.amazo naws.com
ListTaxEx emptions	Logs the access to tax exemptions of the Amazon organization accounts.	tax.amazo naws.com
ListTaxRe gistrations	Logs the access to tax registration details of all member accounts of the management account.	tax.amazo naws.com
PutTaxExe mption	Logs setting tax exemption of one or multiple accounts.	tax.amazo naws.com
PutTaxInh eritance	Logs setting the preference (opt in or opt out) of tax inheritance.	tax.amazo naws.com
PutTaxReg istration	Logs the settings of the tax registration of an account.	tax.amazo naws.com

Invoicing CloudTrail events

This section shows a full list of the CloudTrail events for the **Invoicing** feature in the Amazon Billing console. These CloudTrail events use invoicing.amazonaws.com.

Event name	Definition
CreateInvoiceUnit	Logs the creation of an invoice unit.
DeleteInvoiceUnit	Logs the deletion of an invoice unit.
GetInvoic eProfiles	Logs the access of an account's invoice profile.
GetInvoiceUnit	Logs the access of an invoice unit.
ListInvoiceUnits	Logs the retrieval and listing of invoice units.

Event name	Definition
UpdateInvoiceUnit	Logs the update of an invoice unit.

Billing and Cost Management information in CloudTrail

CloudTrail is enabled on your Amazon account when you create the account. When supported event activity occurs in Billing and Cost Management, that activity is recorded in a CloudTrail event along with other Amazon service events in **Event history**. You can view, search, and download recent events in your Amazon account. For more information, see <u>Viewing Events with CloudTrail</u> <u>Event History</u> in the *Amazon CloudTrail User Guide*.

For an ongoing record of events in your Amazon account, including events for Billing and Cost Management, create a trail. A trail enables CloudTrail to deliver log files to an Amazon S3 bucket. By default, when you create a trail in the console, the trail applies to all Amazon Regions. The trail logs events from all Regions in the Amazon partition and delivers the log files to the Amazon S3 bucket that you specify. Additionally, you can configure other Amazon services to further analyze and act upon the event data collected in CloudTrail logs.

For more information, see the following:

- Overview for Creating a Trail
- CloudTrail Supported Services and Integrations
- Configuring Amazon SNS Notifications for CloudTrail
- <u>Receiving CloudTrail Log Files from Multiple Regions</u> and <u>Receiving CloudTrail Log Files from</u> <u>Multiple Accounts</u>

Every event or log entry contains information about who generated the request. The identity information helps you determine the following:

- Whether the request was made with root or IAM user credentials.
- Whether the request was made with temporary security credentials for a role or federated user.
- Whether the request was made by another Amazon service.

For more information, see the CloudTrail userIdentity Element in the Amazon CloudTrail User Guide.

CloudTrail log entry examples

The following examples are provided for specific Billing and Cost Management CloudTrail log entry scenarios.

Topics

- Billing and Cost Management log file entries
- Tax console
- Payments

Billing and Cost Management log file entries

A *trail* is a configuration that enables delivery of events as log files to an Amazon S3 bucket that you specify. CloudTrail log files contain one or more log entries. An event represents a single request from any source and includes information about the requested action, the date and time of the action, request parameters, and so on. CloudTrail log files are not an ordered stack trace of the public API calls, so they don't appear in any specific order.

The following example shows a CloudTrail log entry that demonstrates the SetContactAddress action.

```
{
        "eventVersion": "1.05",
        "userIdentity": {
            "accountId": "111122223333",
            "accessKeyId": "AIDACKCEVSQ6C2EXAMPLE"
        },
        "eventTime": "2018-05-30T16:44:04Z",
        "eventSource": "billingconsole.amazonaws.com",
        "eventName": "SetContactAddress",
        "awsRegion": "us-east-1",
        "sourceIPAddress": "100.100.10.10",
        "requestParameters": {
            "website": "https://amazon.com",
            "city": "Seattle",
            "postalCode": "98108",
            "fullName": "Jane Doe",
            "districtOrCounty": null,
            "phoneNumber": "206-555-0100",
            "countryCode": "US",
            "addressLine1": "Nowhere Estates",
```

```
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```

```
"addressLine2": "100 Main Street",
    "company": "AnyCompany",
    "state": "Washington",
    "addressLine3": "Anytown, USA",
    "secondaryPhone": "206-555-0101"
    },
    "responseElements": null,
    "eventID": "5923c499-063e-44ac-80fb-b40example9f",
    "readOnly": false,
    "eventType": "AwsConsoleAction",
    "recipientAccountId": "1111-2222-3333"
}
```

Tax console

The following example shows a CloudTrail log entry that uses the CreateCustomerCase action.

```
{
   "eventVersion":"1.05",
   "userIdentity":{
      "accountId":"111122223333",
      "accessKeyId":"AIDACKCEVSQ6C2EXAMPLE"
   },
   "eventTime":"2018-05-30T16:44:04Z",
   "eventSource":"taxconsole.amazonaws.com",
   "eventName":"CreateCustomerCase",
   "awsRegion":"us-east-1",
   "sourceIPAddress":"100.100.10.10",
   "requestParameters":{
      "state":"NJ",
      "exemptionType":"501C",
      "exemptionCertificateList":[
         {
            "documentName":"ExemptionCertificate.png"
         }
      ٦
   },
   "responseElements":{
      "caseId":"case-111122223333-iris-2022-3cd52e8dbf262242"
   },
   "eventID": "5923c499-063e-44ac-80fb-b40example9f",
   "readOnly":false,
   "eventType":"AwsConsoleAction",
   "recipientAccountId":"1111-2222-3333"
```

}

Payments

The following example shows a CloudTrail log entry that uses the Instruments_Create action.

```
{
    "eventVersion": "1.08",
    "userIdentity": {
        "type": "Root",
        "principalId": "111122223333",
        "arn": "arn:aws:iam::111122223333:<iam>",
        "accountId": "111122223333",
        "accessKeyId": "AIDACKCEVSQ6C2EXAMPLE",
        "sessionContext": {
            "sessionIssuer": {},
            "webIdFederationData": {},
            "attributes": {
                "creationDate": "2024-05-01T00:00:00Z",
                "mfaAuthenticated": "false"
            }
        }
    },
    "eventTime": "2024-05-01T00:00:00Z",
    "eventSource": "payments.amazonaws.com",
    "eventName": "Instruments_Create",
    "awsRegion": "us-east-1",
    "sourceIPAddress": "100.100.10.10",
    "userAgent": "AWS",
    "requestParameters": {
        "accountId": "111122223333",
        "paymentMethod": "CreditCard",
        "address": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "accountHolderName": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "cardNumber": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "cvv2": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "expirationMonth": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "expirationYear": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "tags": {
            "Department": "Finance"
        }
    },
    "responseElements": {
```

```
"paymentInstrumentArn": "arn:aws:payments::111122223333:payment-
instrument:4251d66c-1b05-46ea-890c-6b4acf6b24ab",
        "paymentInstrumentId": "111122223333",
        "paymentMethod": "CreditCard",
        "consent": "NotProvided",
        "creationDate": "2024-05-01T00:00:00Z",
        "address": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "accountHolderName": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "expirationMonth": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "expirationYear": "HIDDEN_DUE_TO_SECURITY_REASONS",
        "issuer": "Visa",
        "tail": "HIDDEN_DUE_TO_SECURITY_REASONS"
    },
    "requestID": "7c7df9c2-c381-4880-a879-2b9037ce0573",
    "eventID": "c251942f-6559-43d2-9dcd-2053d2a77de3",
    "readOnly": true,
    "eventType": "AwsApiCall",
    "managementEvent": true,
    "recipientAccountId": "111122223333",
    "eventCategory": "Management",
    "sessionCredentialFromConsole": "true"
}
```

Compliance validation for Amazon Billing and Cost Management

Third-party auditors assess the security and compliance of Amazon services as part of multiple Amazon compliance programs. Billing and Cost Management is not in scope of any Amazon compliance programs.

For a list of Amazon services in scope of specific compliance programs, see <u>Amazon Services in</u> <u>Scope by Compliance Program</u>. For general information, see <u>Amazon Compliance Programs</u>.

You can download third-party audit reports using Amazon Artifact. For more information, see Downloading Reports in Amazon Artifact.

Your compliance responsibility when using Billing and Cost Management is determined by the sensitivity of your data, your company's compliance objectives, and applicable laws and regulations. Amazon provides the following resources to help with compliance:

- <u>Security and Compliance Quick Start GuidesSecurity and Compliance Quick Start Guides</u> These deployment guides discuss architectural considerations and provide steps for deploying securityand compliance-focused baseline environments on Amazon.
- <u>Amazon Compliance Resources</u> This collection of workbooks and guides might apply to your industry and location.
- Evaluating Resources with Rules in the Amazon Config Developer Guide The Amazon Config service assesses how well your resource configurations comply with internal practices, industry guidelines, and regulations.
- <u>Amazon Security Hub</u> This Amazon service provides a comprehensive view of your security state within Amazon that helps you check your compliance with security industry standards and best practices.

Resilience in Amazon Billing and Cost Management

The Amazon global infrastructure is built around Amazon Regions and Availability Zones. Amazon Regions provide multiple physically separated and isolated Availability Zones, which are connected with low-latency, high-throughput, and highly redundant networking. With Availability Zones, you can design and operate applications and databases that automatically fail over between zones without interruption. Availability Zones are more highly available, fault tolerant, and scalable than traditional single or multiple data center infrastructures.

For more information about Amazon Regions and Availability Zones, see <u>Amazon Global</u> <u>Infrastructure</u>.

Infrastructure security in Amazon Billing and Cost Management

As a managed service, Amazon Billing and Cost Management is protected by Amazon global network security. For information about Amazon security services and how Amazon protects infrastructure, see <u>Amazon Cloud Security</u>. To design your Amazon environment using the best practices for infrastructure security, see <u>Infrastructure Protection</u> in *Security Pillar Amazon Well-Architected Framework*.

You use Amazon published API calls to access Billing and Cost Management through the network. Clients must support the following:

• Transport Layer Security (TLS). We require TLS 1.2 and recommend TLS 1.3.

 Cipher suites with perfect forward secrecy (PFS) such as DHE (Ephemeral Diffie-Hellman) or ECDHE (Elliptic Curve Ephemeral Diffie-Hellman). Most modern systems such as Java 7 and later support these modes.

Additionally, requests must be signed by using an access key ID and a secret access key that is associated with an IAM principal. Or you can use the <u>Amazon Security Token Service</u> (Amazon STS) to generate temporary security credentials to sign requests.

Access Amazon Billing and Cost Management using an interface endpoint (Amazon PrivateLink)

You can use Amazon PrivateLink to create a private connection between your VPC and Amazon Billing and Cost Management. You can access Billing and Cost Management as if it were in your VPC, without the use of an internet gateway, NAT device, VPN connection, or Amazon Direct Connect connection. Instances in your VPC don't need public IP addresses to access Billing and Cost Management.

You establish this private connection by creating an *interface endpoint*, powered by Amazon PrivateLink. We create an endpoint network interface in each subnet that you enable for the interface endpoint. These are requester-managed network interfaces that serve as the entry point for traffic destined for Billing and Cost Management.

For more information, see <u>Access Amazon Web Services services through Amazon PrivateLink</u> in the *Amazon PrivateLink Guide*.

For a complete list of service names, see <u>Amazon services that integrate with Amazon PrivateLink</u>.

Considerations for Billing and Cost Management

Before you set up an interface endpoint for Billing and Cost Management, review <u>Considerations</u> in the *Amazon PrivateLink Guide*.

Billing and Cost Management supports making calls to all of its API actions through the interface endpoint.

VPC endpoint policies are not supported for Billing and Cost Management. By default, full access to Billing and Cost Management is allowed through the interface endpoint. Alternatively, you can associate a security group with the endpoint network interfaces to control traffic to Billing and Cost Management through the interface endpoint.

Create an interface endpoint for Billing and Cost Management

You can create an interface endpoint for Billing and Cost Management using either the Amazon VPC console or the Amazon Command Line Interface (Amazon CLI). For more information, see Create an interface endpoint in the Amazon PrivateLink Guide.

Create an interface endpoint for Billing and Cost Management using the following service name:

```
com.amazonaws.region.service-name
```

If you enable private DNS for the interface endpoint, you can make API requests to Billing and Cost Management using its default Regional DNS name. For example, service-name.us-east-1.amazonaws.com.

Create an endpoint policy for your interface endpoint

An endpoint policy is an IAM resource that you can attach to an interface endpoint. The default endpoint policy allows full access to Billing and Cost Management through the interface endpoint. To control the access allowed to Billing and Cost Management from your VPC, attach a custom endpoint policy to the interface endpoint.

An endpoint policy specifies the following information:

- The principals that can perform actions (Amazon Web Services accounts, IAM users, and IAM roles).
- The actions that can be performed.
- The resources on which the actions can be performed.

For more information, see <u>Control access to services using endpoint policies</u> in the Amazon *PrivateLink Guide*.

Example: VPC endpoint policy for Amazon Price List API

The following is an example of a custom endpoint policy. When you attach this policy to your interface endpoint, all users that have access to the endpoint are can access Amazon Price List API.

```
{
    "Statement": [
        {
```

```
"Action": "pricing:*",
"Effect": "Allow",
"Principal": "*",
"Resource": "*"
}
]
}
```

To use the bulk file download for Price List API through Amazon PrivateLink, you must also enable Amazon S3 access through Amazon PrivateLink. For more information, see <u>Amazon PrivateLink for</u> <u>Amazon S3</u> in the *Amazon S3 User Guide*.

Quotas and restrictions

You can use the following tables to find the current quotas, restrictions, and naming constraints within the Amazon Billing and Cost Management console.

1 Notes

- To learn more about quotas and restrictions for Amazon Cost Management, see <u>Quotas</u> and restrictions in the Amazon Cost Management User Guide.
- For more information about other Amazon Web Services service quotas, see <u>Amazon</u> <u>service quotas</u> in the *Amazon Web Services General Reference*.

Topics

- <u>Cost categories</u>
- Purchase orders
- Advance Pay
- Cost allocation tags
- Amazon Price List
- Payment methods
- Amazon invoice configuration

Cost categories

See the following quotas and restrictions for cost categories.

Description	Quotas and restrictions
The total number of cost categories for a management account.	50
The number of cost category rules for a cost category (API).	500

Description	Quotas and restrictions
The number of cost category rules for a cost category (UI).	100
Cost category names.	Names must be uniqueCase sensitive
Cost category value names.	Names don't have to be unique
The type and number of characters allowed in a cost category name and value name.	 Numbers: 0-9 Unicode letters Space, if it's not used at the beginning or end of the name The following symbols: underscore (_) or en dash (-)
The number of split charge rules for a cost category.	10

Purchase orders

See the following quotas and restrictions for purchase orders.

Description	Quotas and restrictions
The type of characters that you can use in a purchase order ID.	 A-Z and a-z Space The following symbols::/=+-%@
The number of characters allowed in a purchase order ID.	100
The number of contacts allowed for a purchase order.	20

Description	Quotas and restrictions
The number of tags allowed for a purchase order.	50
The number of line items allowed for a purchase order.	100

Advance Pay

See the following quotas and restrictions for Advance Pay.

Description	Quotas and restrictions
User entity	Amazon Inc. or Amazon Europe
Currency	USD
Fund usage after funds are added to your Advance Pay.	 Funds can only be used to pay for eligible Amazon charges. Non-eligible charges (for example, Amazon Web Services Marketpla ce invoices) are charged using the default payment method at the time of Advance Pay registration. Advance Pay funds added in Amazon Europe can only be used to pay Amazon Europe invoices. Funds can't be withdrawn, refunded, or transferred. Funds can't be converted to other currencie s.
If there are unused funds in your Advance Pay.	 You can't change your seller on record. You can't change your preferred currency. You can't change your default payment method.

Cost allocation tags

🚯 Note

Tags that are automatically activated don't count towards your cost allocation tag quota, such as the awsApplication tag.

See the following quotas and restrictions for cost allocation tags.

Description	Quotas and restrictions
The maximum number of active cost allocatio n tag keys for each payer account.	500
The number of cost allocation tags that can be activated or deactivated for one request, by using the API or the console.	20

Amazon Price List

Some Price List Query API and Price List Bulk API operations are throttled by using a token bucket scheme to maintain service availability. These quotas are per Amazon Web Services account on a per Region basis. The following table shows the quotas for each API operation.

Price List Query API

API operation	Token bucket size	Refill rate per second
DescribeServices	10	5
GetAttributeValues	10	5
GetProducts	10	5

Price List Bulk API

API operation	Token bucket size	Refill rate per second
DescribeServices	10	5
GetPriceListFileUrl	10	5
ListPriceLists	10	5

Payment methods

See the following quotas and restrictions for payments.

Description C	Quotas and restrictions
n • • • • • • • •	 This feature supports the following payment methods: Credit cards Bank accounts (ACH) This feature doesn't support the following payment methods: Advance pay Net Banking China bank redirect PIX United Payments Interface (UPI) Pay by invoice

Amazon invoice configuration

See the following quotas and restrictions for Invoice configuration.

Description	Quotas and restrictions
The number of invoice units for a payer account.	500
The type of characters allowed in an invoice unit name.	 The name must be between 1-50 characters. Letters: A-Z and a-z Numbers: 0-9 Space The following symbols: hyphen (-), underscore (_)

User Guide

Document history

The following table describes the documentation for this release of the Amazon Billing User Guide.

Change	Description	Date
<u>Updated documentation to</u> align with Customer Carbon Footprint Tool model 2.0	Updated the methodology documentation and created new sections for System boundary, Input data, and Allocation approach.	April 23, 2025
Updated documentation for Amazon managed policies	Billing and AWSBillin gReadOnlyAccess – Updated existing managed policies to add Migration Acceleration Program 2.0 credits console permissions.	March 27, 2025
Added documentation for backup payment methods	Added new documentation for the backup payment methods feature.	February 20, 2025
Updated documentation for Amazon managed policies	Billing – Updated existing managed policies to add Billing View permissions.	January 17, 2025
<u>New documentation for</u> <u>Amazon invoice configuration</u>	Added documentation for Amazon invoice configura tion. Updated existing managed policies Billing, AWSPurchaseOrdersS erviceRolePolicy , and AWSBillingReadOnly Access to add permissions to manage flexible invoicing.	December 1, 2024

New documentation for Amazon PrivateLink	Added documentation for Amazon PrivateLink.	November 13, 2024
<u>Added documentation for</u> <u>Amazon Financing</u>	Added new documenta tion for Amazon Financing. Updated existing managed policies Billing and AWSBillingReadOnly Access to add permissions for Amazon Financing.	November 12, 2024
Updated documentation for Amazon managed policies	Added documentation for AWSPriceListServic eFullAccess – Added documentation for the AWSPriceListServic eFullAccess policy to provide full access to the Amazon Price List Service. Updated Sid": "AWSPrice ListServiceFullAcc ess to existing policy.	June 24, 2024
Added documentation for payment access using tags	Added new page for managing payment access using tags. Updated existing managed policies Billing and AWSBillingReadOnly Access to add permissions to manage payments using tags.	May 31, 2024
Updated documentation for Amazon managed policies	Billing and AWSBillin gReadOnlyAccess – Updated existing policies to add permissions for the cost allocation tag backfill feature.	March 27, 2024

<u>Updated documentation</u>	For Amazon India accounts, you can use a Unified Payment Interface (UPI) payment method to pay your Amazon bills.	March 14, 2024
<u>Updated documentation for</u> <u>Amazon managed policies</u>	Billing and AWSBillin gReadOnlyAccess – Updated existing policies to add permissions for the Amazon Migration Accelerat ion Program.	January 18, 2024
<u>Updated documentation</u>	We updated the Billing and AWSBillingReadOnly Access managed policies with additional cur, sustainability , ce, budgets, pricing, and support actions.	January 17, 2024
Updated documentation	You can save your credit or debit card details for Amazon Web Services accounts with Amazon Web Services India Private Limited.	December 18, 2023
Updated documentation	You can view your cost categories by using different cost types.	December 14, 2023

<u>Updated documentation</u>	For an overview of your Amazon cloud financial management data, use the Amazon Billing and Cost Management widgets on the Billing and Cost Management home page.	November 26, 2023
	 See the following updates: Using the Amazon Billing and Cost Management home page Understanding the differences between Amazon Billing data and Amazon Cost Explorer data 	
Updated documentation	Learn about the Free Tier API:	November 26, 2023
	See the following updates:Amazon Billing and Cost	
	Management API Reference	

• Using the Free Tier API

Updated documentation	The awsApplication user-defined cost allocatio n tag is automatically added and activated for your applications that you create in Amazon Service Catalog AppRegistry. See the following updates: • <u>User-defined cost allocation</u> <u>tags</u> • <u>Activating user-defined cost</u> <u>allocation tags</u> • <u>Quotas and restrictions</u>	November 14, 2023
Updated documentation for payments	Updated information about verifying your credit card payment method.	November 8, 2023
Updates for Amazon Web Services India Private Limited customer verification	Amazon India customers can verify their identity information when signing up for an Amazon Web Services account.	October 27, 2023
<u>Updated documentation</u>	You can use the Billing preferences page to activate or deactivate credit sharing, and discount sharing for Reserved Instances and Savings Plans for member accounts in Amazon Organizations.	October 19, 2023

<u>Updated documentation for</u> <u>Amazon Price List</u>	Updated documentation, including example Amazon CLI commands, definitions, and notifications for the Amazon Price List Bulk API and Amazon Price List Query API.	October 3, 2023
Updated documentation for the Amazon Price List Query API	Added support for the Amazon Price List Query API in the China (Ningxia) Region.	September 28, 2023
Updates to payment methods	For Amazon Web Services accounts in Amazon Europe, you can link and verify your bank account in the Billing console.	September 15, 2023
Updated documentation	To ensure that your invoices are issued correctly, you can use the monthly billing checklist topic to review your billing information.	September 1, 2023

Updated documentation	New documentation to migrate to IAM fine-grained actions	August 23, 2023
	To migrate your policies to the new IAM fine-grained actions, see the following topics:	
	 Migrating access control for Amazon Billing How to use the affected 	
	 <u>policies tool</u> <u>Use scripts to bulk migrate</u> your policies to use fine- grained IAM actions <u>Mapping fine-grained IAM</u> actions reference 	
<u>Update for cost allocation</u> <u>tags</u>	You can use the Last updated date and Last used month fields to learn when your cost allocation tags were last updated or used.	August 23, 2023
<u>Updated Amazon managed</u> policies	Billing and AWSBillin gReadOnlyAccess – Updated existing policies to add permissions for cost allocation tags.	July 26, 2023
<u>Updates to the payments</u> <u>documentation</u>	You can use the table on the Payments page to view credit memos that were partially applied.	July 25, 2023

Updated documentation for Amazon managed policies	AWSPurchaseOrdersS erviceRolePolicy , Billing, and AWSBillin gReadOnlyAccess – Updated existing policies to add permissions for purchase order tags.	July 17, 2023
Updated documentation for the Account page	Updated documentation for the Amazon Billing console.	June 22, 2023
Updated documentation	Added tag support for purchase orders	June 19, 2023
	You can add tags to your purchase orders. For more information, see the following topics:	
	 Adding a purchase order Editing your purchase orders Use tags to manage access to purchase orders 	
	Purchase orders quotas	
Updates to payment methods	Added a new feature to manage PIX payment methods in Brazil.	June 6, 2023
<u>Consolidated billing for</u> <u>Amazon EMEA</u>	Added the consolidated billing feature for accounts that are invoiced through the Amazon Web Services EMEA SARL (Amazon Europe) entity.	June 6, 2023

Added support for shorter PDF invoices	Added documentation for how to request shorter PDF invoices.	May 30, 2023
Added new cost category dimension	Added the Usage Type dimension for Amazon Billing.	May 16, 2023
<u>CSV download</u>	Added a CSV download option for Customer Carbon Footprint Tool.	April 19, 2023
<u>New and updated managed</u> policies	AWSPurchaseOrdersS erviceRolePolicy , Billing, and AWSBillin gReadOnlyAccess – Updated existing policies. AWSAccountActivity Access – New Amazon managed policy documented for Amazon Billing	March 6, 2023
<u>New Customer Carbon</u> Footprint Tool	Added a new Customer Carbon Footprint Tool feature to view estimates of the carbon emissions associated with your Amazon products and services.	February 28, 2022
New payment profiles	Added a new payment profiles feature to assign automatic payment methods to invoices.	February 17, 2022
AWSPurchaseOrdersS erviceRolePolicy – Update to an existing policy	Amazon Billing removed unnecessary permissions.	November 18, 2021

Amazon Billing started tracking changes for Amazon managed policies	Amazon Billing started tracking changes for its Amazon managed policies.	November 18, 2021
<u>New Amazon Cost</u> <u>Management guide</u>	Split the Billing and Cost Management user guide and aligned the feature details into the Billing guide and Amazon Cost Managemen t guide to align with the console.	October 20, 2021
<u>New Amazon Cost Anomaly</u> <u>Detection</u>	Added a new Amazon Cost Anomaly Detection feature that uses machine learning to continuously monitor your cost and usage to detect unusual spends.	December 16, 2020
<u>New Purchase Order</u> <u>Management</u>	Added a new purchase order feature to configure how your purchases are reflected on your invoices.	October 15, 2020
<u>New Budgets Actions</u>	Added a new Amazon Budgets actions feature to run an action on your behalf when a budget exceeds a certain cost or usage threshold.	October 15, 2020
New	Added a new feature to map Amazon costs into meaningfu l categories.	April 20, 2020

<u>New Heritage Tax feature</u>	Added a new feature that enables you to use your tax registration information with your linked accounts.	March 19, 2020
<u>New china bank redirect</u> payment method	Added a new payment method that allows China CNY customers using Amazon to pay their overdue payments using China Bank Redirect.	February 20, 2020
<u>New security chapter</u>	Added a new security chapter that provides informati on about various security controls. Former "Controlling Access" chapter contents have been migrated here.	February 6, 2020
New Amazon Cost and Usage Reports user guide	Migrated and reorganized all Amazon Cost and Usage Reports content to a separate user guide.	January 21, 2020
New reporting method using Amazon Budgets	Added a new reporting functionality using Amazon Budgets reports.	June 27, 2019
Added normalized units to Cost Explorer	Cost Explorer reports now include normalized units.	February 5, 2019
Credit application changes	Amazon changed how they apply credits.	January 17, 2019
New payment behavior	Amazon India customers can now enable the auto-charge ability for their payments.	December 20, 2018

<u>New Amazon Price List</u> <u>Service endpoint</u>	Added a new endpoint for Amazon Price List Service.	December 17, 2018
Updated the Cost Explorer UI	Updated the Cost Explorer UI.	November 15, 2018
Integrated Amazon Athena into Amazon Cost and Usage Reports	Added the ability to upload the data from an Amazon Cost and Usage Reports into Athena.	November 15, 2018
Added Budgets history	Added the ability to see the history of a budget.	November 13, 2018
Expanded budget services	Expanded RI budgets to Amazon OpenSearch Service.	November 8, 2018
Added a new payment method	Added the SEPA Direct Debit payment method.	October 25, 2018
Added On-Demand capacity reservations	Added documentation about Amazon Cost and Usage Reports line items that apply to capacity reservations.	October 25, 2018
Redesigned Amazon Budgets experience	Updated the Amazon Budgets UI and workflow.	October 23, 2018
New Reserved Instance recommendation columns	Added new columns to the Cost Explorer RI recommend ations.	October 18, 2018
New Amazon CloudTrail actions	More actions added to CloudTrail logging.	October 18, 2018
Added a new Reserved Instance report	Expanded RI reports to Amazon OpenSearch Service.	October 10, 2018

New Amazon Cost and Usage Reports columns	New columns added to the Amazon Cost and Usage Reports.	September 27, 2018
Cost Explorer walkthrough	Cost Explorer now provides a walkthrough for the most common functionality.	September 24, 2018
Added CloudTrail events	Added additional CloudTrail events.	August 13, 2018
Added a new payment method	Added the ACH Direct Debit payment method.	July 24, 2018
<u>Updated the Amazon free tier</u> <u>widget</u>	Updated the Amazon Free Tier Widget.	July 19, 2018
Added RI purchase recommendations for additional services	Added RI purchase recommendations for additional services in Cost Explorer.	July 11, 2018
Added RI purchase recommendations for linked accounts	Added RI purchase recommendations for linked accounts in Cost Explorer.	June 27, 2018
<u>Added support for Amazon</u> <u>Cost and Usage Reports data</u> <u>refreshes</u>	Amazon Cost and Usage Reports can now update after finalization if Amazon applies refunds, credits, or support fees to an account.	June 20, 2018
Added CloudTrail support	Added support for CloudTrail event logging.	June 7, 2018
Added Amazon CloudForm ation for Budgets	Added Budgets templates for Amazon CloudFormation.	May 22, 2018

Updated RI allocation behavior for linked accounts	Updated the RI allocation behavior size-flexible RI for linked accounts.	May 9, 2018
RI coverage alerts	Added RI coverage alerts.	May 8, 2018
Unblend linked account bills	Linked account bills no longer show the blended rate for the organization.	May 7, 2018
Updated Amazon tax settings	Added the ability to bulk edit tax settings.	April 25, 2018
Added Amazon RDS recommendations to Cost Explorer	Added Amazon RDS Recommendations to Cost Explorer.	April 19, 2018
Added a new Cost Explorer dimension and Amazon Cost and Usage Reports line item	Added a new Cost Explorer dimension and Amazon Cost and Usage Reports line item.	March 27, 2018
Added purchase recommend ations to the Cost Explorer API	Added access to the Amazon EC2 Reserved Instance (RI) purchase recommendations via the Cost Explorer API.	March 20, 2018
Added RI coverage for Amazon RDS, Amazon Redshift, and ElastiCache	Reserved Instance (RI) coverage for Amazon RDS, Amazon Redshift, and ElastiCache .	March 13, 2018
Added RI coverage to the Cost Explorer API	Added GetReserv ationCoverage to the Cost Explorer API.	February 22, 2018
Added Amazon free tier alerts	Added Amazon Free Tier alerts that enable you stay under the free tier limits.	December 13, 2017

RI recommendations	Added RI recommendations based on previous usage.	November 20, 2017
Cost Explorer API	Activated API access Cost Explorer.	November 20, 2017
RI utilization alerts for additional services	Added notifications for additional services.	November 10, 2017
Added RI reports	Expanded RI reports to Amazon RDS, Redshift, and ElastiCache.	November 10, 2017
Discount sharing preferences	Updated preferences so that Amazon credits and RI discount sharing can be turned off.	November 6, 2017
New Amazon S3 console	Updated for the new Amazon S3 console.	September 15, 2017
<u>RI utilization alerts</u>	Added notifications for when RI utilization drops below a preset percentage-based threshold.	August 21, 2017
Updated Cost Explorer UI	Released a new Cost Explorer UI.	August 16, 2017
<u>Amazon Web Services</u> <u>Marketplace data integration</u>	Added Amazon Web Services Marketplace so that customers can see their data reflected in all billing artifacts , including the Bills page, Cost Explorer, and more.	August 10, 2017
Consolidated billing with organizations	Updated the consolidated billing with organizations behavior.	June 20, 2017

<u>Linked account access and</u> <u>usage type groups in Amazon</u> <u>Budgets</u>	Added support for creating cost and usage budgets based on specific usage types and usage type groups, and extended budget creation capabilities to all account types.	June 19, 2017
Regional offer files	The Amazon Price List API now offers regional offer files for each service.	April 20, 2017
Added Cost Explorer advanced options	You can now filter Cost Explorer reports by additiona l advanced options, such as refunds, credits, RI upfront fees, RI recurring charges, and support charges.	March 22, 2017
Added a Cost Explorer report	You can now track your Reserved Instance (RI) coverage in Cost Explorer.	March 20, 2017
<u>Added Cost Explorer filters</u>	You can now filter Cost Explorer reports by tenancy, platform, and the Amazon EC2 Spot and Scheduled Reserved Instance purchase options.	March 20, 2017
Cost Explorer and Budgets for Amazon India	Amazon India users can now use Cost Explorer and Budgets.	March 6, 2017

Added grouping for Cost Explorer usage types	Cost Explorer supports grouping for both cost and usage data, enabling customers to identify their cost drivers by cross-ref erencing their cost and usage charts.	February 24, 2017
Added a Cost Explorer report	You can now track your monthly Amazon EC2 Reserved Instance (RI) utilizati on in Cost Explorer.	December 16, 2016
Added a Cost Explorer report	You can now track your daily Amazon EC2 Reserved Instance (RI) utilization in Cost Explorer.	December 15, 2016
Added Amazon generated cost allocation tags	You can now activate the Amazon generated tag createdBy to track who created an Amazon resource.	December 12, 2016
Added Cost Explorer advanced options	You can now exclude tagged resources from your Cost Explorer reports.	November 18, 2016
QuickSight integration for Amazon Cost and Usage Reports	Amazon Cost and Usage Reports now provide customized queries for uploading your data into QuickSight.	November 15, 2016
Expanded Amazon Budgets functionality	You can now use Amazon Budgets to track usage data.	October 20, 2016

Expanded Cost Explorer functionality	You can now use Cost Explorer to visualize your costs by usage type groups.	September 15, 2016
Improved Amazon Redshift integration for Amazon Cost and Usage Reports	Amazon Cost and Usage Reports now provide customized queries for uploading your data into Amazon Redshift.	August 18, 2016
<u>Amazon Cost and Usage</u> <u>Reports</u>	You can now create and download Amazon Cost and Usage Reports.	December 16, 2015
<u>Amazon price list API</u>	You can now download offer files that list the products, prices, and restrictions for a single Amazon service.	December 9, 2015
Cost Explorer report manager	You can now save Cost Explorer queries.	November 12, 2015
Amazon free tier tracking	You can now track how much of your free tier limit you've used.	August 12, 2015
Budgets and forecasting	You can now manage your Amazon usage and costs using Amazon Budgets and cost forecasts.	June 29, 2015
<u>Amazon Web Services India</u> <u>Private Limited</u>	You can now manage your account settings and payment methods for an Amazon Web Services India Private Limited (Amazon India) account.	June 1, 2015

Expanded Cost Explorer functionality	You can now use Cost Explorer to visualize your costs by Availability Zone, API operation, purchase option, or multiple cost allocation tags.	February 19, 2015
Preferred payment currencies	You can now change the currency associated with your credit card.	February 16, 2015
Expanded Cost Explorer functionality	You can now use Cost Explorer to visualize your costs by Amazon EC2 instance type or region.	January 5, 2015
Avoiding unexpected charges	Revised and expanded Avoiding Unexpected Charges and Using the Free Tier.	August 19, 2014
IAM user permissions	You can now enable Amazon Identity and Access Management (IAM) users and federated users to access and manage your account settings, view your bills, and perform cost managemen t. For example, you can grant people in your finance department full access to the financial setup and control of your Amazon account, without having to give them access to your production Amazon environment.	July 7, 2014

Cost Explorer launched	Cost Explorer provides a visualization of your Amazon costs that enables you to analyze your costs in multiple ways.	April 8, 2014
<u>Version 2.0 published</u>	The Amazon Billing and Cost Management User Guide has been reorganized and rewritten to use the new Billing and Cost Management console.	October 25, 2013