Administrator Guide

AWS Supply Chain

AWS Supply Chain: Administrator Guide

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What is AWS Supply Chain?

AWS Supply Chain is a cloud-based supply chain management application that works with your existing solutions such as enterprise resource planning (ERP) and supply chain management systems. Using AWS Supply Chain, you can connect and extract your inventory, supply, and demand related data from existing ERP or supply chain systems into one unified AWS Supply Chain data model.

Browsers supported by AWS Supply Chain

Before you work with AWS Supply Chain, verify that your browser is supported using the following table.

Browser	Supported Versions
Google Chrome	Latest three versions.
Mozilla Firefox ESR	Versions are supported until their Firefox end-of-life date. For details, see the Firefox ESR release calendar.
Mozilla Firefox	Latest three versions.
Microsoft Edge and Edge Chromium	Version 84 and later.
Safari	Safari 10 or later on macOS.

Languages supported by AWS Supply Chain

AWS Supply Chain supports the following languages:

- English (US)
- English (UK)
- German
- Spanish
- French

- Italian
- Portuguese
- Chinese (Simplified)
- Chinese (Traditional)
- Japanese
- Korean

Setting up an AWS account

Use this section to create an AWS account and create an IAM user. For information on best practices to create an AWS account, see Establishing your best practice AWS environment.

Topics

Sign up for an AWS account

If you do not have an AWS account, complete the following steps to create one.

To sign up for an AWS account

1. Open https://portal.aws.amazon.com/billing/signup.
2. Follow the online instructions.

   Part of the sign-up procedure involves receiving a phone call and entering a verification code on the phone keypad.

   When you sign up for an AWS account, an *AWS account root user* is created. The root user has access to all AWS services and resources in the account. As a security best practice, assign administrative access to a user, and use only the root user to perform tasks that require root user access.

AWS 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 https://aws.amazon.com/ and choosing **My Account**.

Create a user with administrative access

After you sign up for an AWS account, secure your AWS account root user, enable AWS IAM Identity Center, and create an administrative user so that you don't use the root user for everyday tasks.

Secure your AWS account root user

1. Sign in to the AWS Management Console as the account owner by choosing **Root user** and entering your AWS account email address. On the next page, enter your password.

   For help signing in by using root user, see Signing in as the root user in the *AWS Sign-In User Guide*.

2. Turn on multi-factor authentication (MFA) for your root user.

   For instructions, see Enable a virtual MFA device for your AWS account root user (console) in the *IAM User Guide*.

Create a user with administrative access

1. Enable IAM Identity Center.

   For instructions, see Enabling AWS IAM Identity Center in the *AWS IAM Identity Center User Guide*.

2. In IAM Identity Center, grant administrative access to a user.

   For a tutorial about using the IAM Identity Center directory as your identity source, see Configure user access with the default IAM Identity Center directory in the *AWS IAM Identity Center User Guide*.

Sign in as the user with administrative access

- To sign in with your IAM Identity Center user, use the sign-in URL that was sent to your email address when you created the IAM Identity Center user.

  For help signing in using an IAM Identity Center user, see Signing in to the AWS access portal in the *AWS Sign-In User Guide*.

Assign access to additional users

1. In IAM Identity Center, create a permission set that follows the best practice of applying least-privilege permissions.

   For instructions, see Create a permission set in the *AWS IAM Identity Center User Guide*.

2. Assign users to a group, and then assign single sign-on access to the group.

   For instructions, see Add groups in the *AWS IAM Identity Center User Guide*.

Prerequisites to use AWS Supply Chain

Before you create an AWS Supply Chain instance, make sure that you complete the following steps:

- You have an AWS account. To create an AWS account, see Setting up an AWS account.
- Make sure IAM Identity Center is enabled. To enable IAM Identity Center, see Enabling IAM Identity Center.
- An IAM Identity Center instance must be activated in the same region where you want to create your AWS Supply Chain instance. AWS Supply Chain is only supported in US East (N. Virginia), US West (Oregon), Europe (Frankfurt), and Europe (Ireland) Region.
- You must have at least have one user in the IAM Identity Center instance to assign as the AWS Supply Chain administrator. You can connect your active directory to IAM Identity Center. For more information, see Connect to a Microsoft AD directory.
- Add any additional users who need access to AWS Supply Chain to IAM Identity Center.
- You need AWS Key Management Service (AWS KMS) to create an instance. AWS Supply Chain uses this AWS KMS key to encrypt all the data that comes into AWS Supply Chain. For information about AWS KMS Keys, see Creating keys.

Getting started with AWS Supply Chain

In this section, you can learn to create an AWS Supply Chain instance, grant user permission roles, log into the AWS Supply Chain web application, and create custom user permission roles. An AWS account can have up to 10 AWS Supply Chain instances in active or initializing state.

Topics

Using the AWS Supply Chain console

> **Note**
>
> If your AWS account is a member account of an AWS organization and includes a Service Control Policy (SCP), make sure the organization's SCP grants the following permissions to the member account. If the following permissions are not included in the organization's SCP policy, AWS Supply Chain instance creation will fail.

To access the AWS Supply Chain console, you must have a minimum set of permissions. These permissions must allow you to list and view details about the AWS Supply Chain resources in your AWS 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 AWS CLI or the AWS API. Instead, allow access to only the actions that match the API operation that they're trying to perform.

To ensure that users and roles can still use the AWS Supply Chain console, also attach the AWS Supply Chain `ConsoleAccess` or `ReadOnly` AWS managed policy to the entities. For more information, see Adding permissions to a user in the *IAM User Guide*.

The following permissions are needed by the Console Admin to create and update AWS Supply Chain instances successfully.

```
{
 "Version": "2012-10-17",
 "Statement": [
  {
   "Action": "scn:*",
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "s3:GetObject",
    "s3:PutObject",
    "s3:ListBucket",
    "s3:CreateBucket",
    "s3:PutBucketVersioning",
    "s3:PutBucketObjectLockConfiguration",
    "s3:PutEncryptionConfiguration",
    "s3:PutBucketPolicy",
    "s3:PutLifecycleConfiguration",
    "s3:PutBucketPublicAccessBlock",
    "s3:DeleteObject",
    "s3:ListAllMyBuckets",
    "s3:PutBucketOwnershipControls",
    "s3:PutBucketNotification",
    "s3:PutAccountPublicAccessBlock",
    "s3:PutBucketLogging",
    "s3:PutBucketTagging"
   ],
   "Resource": "arn:aws:s3:::aws-supply-chain-*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "cloudtrail:CreateTrail",
    "cloudtrail:PutEventSelectors",
    "cloudtrail:GetEventSelectors",
```

```
    "cloudtrail:StartLogging"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "events:DescribeRule",
    "events:PutRule",
    "events:PutTargets"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "chime:CreateAppInstance",
    "chime:DeleteAppInstance",
    "chime:PutAppInstanceRetentionSettings",
    "chime:TagResource"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "cloudwatch:PutMetricData",
    "cloudwatch:Describe*",
    "cloudwatch:Get*",
    "cloudwatch:List*"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "organizations:DescribeOrganization",
    "organizations:EnableAWSServiceAccess"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
```

```
    "kms:CreateGrant",
    "kms:RetireGrant",
    "kms:DescribeKey"
   ],
   "Resource": key_arn,
   "Effect": "Allow"
  },
  {
   "Action": [
    "kms:ListAliases"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "iam:CreateRole",
    "iam:CreatePolicy",
    "iam:GetRole",
    "iam:PutRolePolicy",
    "iam:AttachRolePolicy",
    "iam:CreateServiceLinkedRole"
   ],
   "Resource": "*",
   "Effect": "Allow"
  },
  {
   "Action": [
    "sso:StartPeregrine",
    "sso:DescribeRegisteredRegions",
    "sso:ListDirectoryAssociations",
    "sso:GetPeregrineStatus",
    "sso:GetSSOStatus",
    "sso:ListProfiles",
    "sso:GetProfile",
    "sso:AssociateProfile",
    "sso:AssociateDirectory",
    "sso:RegisterRegion",
    "sso:StartSSO",
    "sso:CreateManagedApplicationInstance",
    "sso:DeleteManagedApplicationInstance",
    "sso:GetManagedApplicationInstance",
    "sso-directory:SearchUsers"
   ],
```

```
    "Resource": "*",
    "Effect": "Allow"
   }
  ]
}
```

key_arn specifies the key you would like to use for the AWS Supply Chain instance. For best practices and to restrict access to only the keys you would like to use for AWS Supply Chain, see Specifying KMS keys in IAM policy statements. To represent all KMS keys, use a wildcard character alone ("*").

Creating an instance

> **Note**
>
> Only the AWS Management Console administrator can create an instance. The AWS Management Console administrator who creates the AWS Supply Chain instance should have all permissions listed under Using the AWS Supply Chain console. This administrator should invite an IAM user as a AWS Supply Chain administrator to manage AWS Supply Chain.

To create an AWS Supply Chain instance, follow these steps.

> **Note**
>
> You can create up to 10 instances within an AWS account. The 10 instances include active and initializing instances. If you've already activated IAM Identity Center (successor to AWS Single Sign-On), you must create your AWS Supply Chain instance in the same AWS Region where you've activated IAM Identity Center. AWS Supply Chain doesn't support IAM Identity Center calls across Regions.

1. Open the AWS Supply Chain console at https://console.aws.amazon.com/scn/home.
2. If necessary, change the AWS Region. In the bar at the top of the console window, open the **Select a Region** list and choose a Region. For more information about Regions, see Regions

and endpoints in the *IAM User Guide*. Also, see Regions and endpoints in the *Amazon Web Services General Reference*.

> **Note**
>
> AWS Supply Chain is only supported in US East (N. Virginia), US West (Oregon), Europe (Frankfurt) Asia Pacific (Sydney) Region, and Europe (Ireland) Region.

3. On the AWS Supply Chain dashboard, choose **Create instance**.
4. On the **Instance properties** page, enter the following information:

   - **AWS Region** – Choose the Region where you have activated IAM Identity Center. To change the Region, choose **Select a Region** from the dropdown menu at the top right. You can't change the Region after you create the instance.
   - **Name** – Enter the instance name.
   - (Optional) **Description** – Enter a description for the instance.

5.

> **Note**
>
> AWS Owned key is the recommended default setting for AWS Supply Chain instances. In general, unless you are required to audit or control the encryption key that protects your resources, an AWS owned key is a good choice. AWS owned keys are completely free of charge (no monthly fees or usage fees), they do not count against the AWS KMS quotas for your account, and they're easy to use. You don't need to create or maintain the key or its key policy."

(Optional) Under **AWS KMS Key**, you can either choose to use the default AWS KMS Key or provide your own AWS KMS Key. If you are using your own AWS KMS Key, choose **Customize encryption settings** and under **Choose an AWS KMS Key**, enter your AWS Key and update your AWS KMS policy with the following.

> **Note**
>
> As an application administrator, when you add users to the AWS Supply Chain instance, they have access to the AWS KMS key. You can manage the user permissions to add or remove users. For more information on user permissions, see User permission roles.

Note

Replace *YourAccountNumber* and *Region* with your AWS account and AWS Region

```
{

"Version": "2012-10-17",
"Statement":  [
    {
        "Sid": "Enable IAM User Permissions",
        "Effect": "Allow",
        "Principal":  {
            "AWS": "arn:aws:iam::YourAccountNumber:root"
        },
        "Action": "kms:*",
        "Resource": "*"
    },
    {
        "Sid": "Allow access through SecretManager for all principals in the
account that are authorized to use SecretManager",
        "Effect": "Allow",
        "Principal":  {
            "AWS": "*"
        },
        "Action":  [
            "kms:Encrypt",
            "kms:Decrypt",
            "kms:ReEncrypt*",
            "kms:GenerateDataKey*",
            "kms:CreateGrant",
            "kms:DescribeKey",
            "kms:GenerateDataKeyWithoutPlaintext",
            "kms:ReEncryptFrom",
            "kms:ReEncryptTo"
        ],
        "Resource": "*",
        "Condition":  {
            "StringEquals":  {
                "kms:ViaService": "secretsmanager.Region.amazonaws.com",
```

```
                    "kms:CallerAccount": "YourAccountNumber"
                }
            }
        },
        {
            "Sid": "Allow AWS Supply Chain to access the AWS KMS Key",
            "Effect": "Allow",
            "Principal":  {
                "Service": "scn.Region.amazonaws.com"
            },
            "Action":  [
                "kms:Encrypt",
                "kms:GenerateDataKeyWithoutPlaintext",
                "kms:ReEncryptFrom",
                "kms:ReEncryptTo",
                "kms:Decrypt",
                "kms:GenerateDataKey",
                "kms:DescribeKey",
                "kms:CreateGrant",
                "kms:RetireGrant"
            ],
            "Resource":"*"
        }
    ]
}
```

If you don't have a KMS key, choose **Create** to go to the AWS KMS console, where you can create this key. Use the previous KMS key policy. For detailed information on how to create KMS keys, see Creating keys in the *AWS Key Management Service Developer Guide*.

If you plan to use an S/4 Hana data connection, make sure that the KMS key that you provided has the *aws-supply-chain-access* tag with an associated **Value** of *true*.

6. (Optional) Under **Instance tags**, choose **Add new tag** to assign a tag for your instance. You can use these tags to identify your instance. For information on tags, see Creating tags.
7. Choose **Create instance**.

   It takes approximately 2 to 3 minutes for the AWS Supply Chain instance to be created. Once the instance is created, the **Status** field on the AWS Supply Chain dashboard shows as **Active**.

Choosing an AWS Supply Chain application owner

As an AWS console administrator, you are choosing an AWS Supply Chain application owner to manage the AWS Supply Chain web application access. The AWS Supply Chain application owner can add or remove user permission roles to the AWS Supply Chain web application.

After the instance is created and an identity source is connected, follow these steps to choose an AWS Supply Chain application owner.

1. On the AWS Supply Chain console dashboard, under **Application owner**, choose **Assign application owner**.
2. Under **Select application owner**, select an user who will act as an AWS Supply Chain application owner. You can only search for the username and the users matching the search criteria appears.

   To add more users, choose **Go to IAM Identity Center**. For more information on adding users, see Managing identities in IAM Identity Center and for more information on user permission roles, see User permission roles.

   > **Note**
   >
   > You can only add one user at a time from the AWS Supply Chain Console. You cannot add a group as an application owner in AWS Supply Chain.

3. choose **Send Invite**.

   On the AWS Supply Chain console dashboard, you will see the user listed under **Application owner**.
4. Choose **Manage in AWS Supply Chain** to add and remove users in the AWS Supply Chain web application.

Logging into AWS Supply Chain web application

As an AWS Supply Chain administrator, you should have received an email invite to the AWS Supply Chain web application.

1. You can either choose the link in the email or on the AWS Supply Chain console dashboard, under **Sub-domain**, choose **web URL**.

The **AWS Supply Chain** web application login page appears.

2. Enter the AWS IAM Identity Center user credentials and choose **Sign in**.

> **Note**
>
> You will only be asked to complete profiles for your account and organization when you log in for the first time.

3. On the **Complete your profile** page, enter your **Job Title** and **Time zone**. Choose **Next**.
4. On the **Let's add your organization information** page, enter the **Organization name** and choose **Headquarters location**. Optionally, you can add a company logo. Choose **Next**.
5. On the **Set up your teammates on AWS Supply Chain** page, select the users who you want to have access to the AWS Supply Chain web application. Choose **Invite Users**. For information on AWS Supply Chain user permission roles, see User permission roles.
6. If you want to add users later, you can choose **Skip for now**.

   The **Onboarding complete** page appears.
7. Each user that you added receives an email message with a link that goes to AWS Supply Chain, or you can choose **Copy link** and send the link to the users.
8. Choose **Continue to homepage** to view the AWS Supply Chain dashboard.

Updating your profile

You can update your account and organization profile anytime on the AWS Supply Chain web application.

Updating your account profile

To update your account profile, follow these steps.

1. On the AWS Supply Chain web application dashboard, from the left navigation pane, choose the **Settings** icon.
2. Choose **Account Profile**.

   The **Account Profile** page appears.

3. Update the account information, and choose **Save**.

Updating your organization profile

To update the organization profile, follow these steps.

1. On the AWS Supply Chain web application dashboard, from the left navigation pane, choose the **Settings** icon.
2. Choose **Organization**, and then choose **Organization Profile**.

   The **Organization Profile** page appears.
3. Update the organization **Logo** or **Headquarters location**, and then choose **Save**.

User permission roles

As an AWS Supply Chain administrator, you can either use the default user permission roles or create custom permission roles. AWS Supply Chain has the following default user permission roles:

- **Administrator** – Access to create, view, and manage all data and user permissions.
- **Data Analyst** – Access to create, view, and manage all data connections.
- **Inventory Manager** – Access to create, view, and manage Insights.
- **Demand Planner** – Access to create, view and manage forecasts, overrides, and publish demand plans.
- **Partner Data Manager** – Access to manage and view partners, manage and view data requests, and view sustainability data.
- **Supply Planner** – Access to manage and view supply plans.

> **Note**
>
> As an AWS Supply Chain administrator, before you add users, note the following:
>
> - Each default user permission role is defined with a set of permissions. You can add users to default user permission roles or create custom permission roles.
> - A user can only be assigned to one user permission role.
> - You cannot edit or delete default user permission roles.

- When you edit a custom permission role you created, the permissions for all the users under the custom permission role are updated.
- When you delete a custom permission role you created, all the users under the custom permission role will lose access to AWS Supply Chain.
- Adding groups is not supported in AWS Supply Chain.

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Adding users

As an AWS Supply Chain administrator, you can add users to access the AWS Supply Chain web application. Follow these steps to add an user.

1. On the AWS Supply Chain dashboard, from the left navigation pane, choose the **Settings** icon.
2. Choose **Permissions**, and then choose **Users**.

   The **Manage Users** page appears.
3. Choose **Add New User**.

   The **Add User** page appears.
4. On the **Add user(s)** dropdown menu, select the user, and under **Select role**, select the role for the user.
5. Choose **Add**.

Updating user permissions

To update the user permission role for the current AWS Supply Chain users, follow these steps.

1. On the AWS Supply Chain dashboard, from the left navigation pane, choose the **Settings** icon.
2. Choose **Permissions**, and then choose **Users**.

The **Manage Users** page appears.

3. On the **Manage Users** page, select the user or group that you want to update the user permission role for, and from the **Permissions Role** dropdown menu, select one of the permission roles.

> **Note**
>
> Depending on the role permissions you assign, the AWS Supply Chain dashboard is customized. For more information, see Creating custom user permission roles.

4. Choose **Save**.

Deleting users

As an AWS Supply Chain administrator, you can delete users from the AWS Supply Chain web application. Follow these steps to delete users.

1. On the AWS Supply Chain dashboard, from the left navigation pane, choose the **Settings** icon.
2. Choose **Permissions**, and then choose **Users**.

   The **Manage Users** page appears.
3. On the **Manage Users** page, select the user that you want to delete and choose the **Delete** icon.

Creating custom user permission roles

In addition to default user permission roles, you can create custom user permission roles to include multiple permission roles and add specific locations and products. Follow these steps to create new permission roles.

1. On the AWS Supply Chain dashboard, from the left navigation pane, choose the **Settings** icon. Choose **Permissions**, and then choose **Permission Roles**.

   The **Permission Roles** page appears.
2. Choose **Create New Role**.
3. On the **Manage Permission Role** page, under **Role Name**, enter a name.

4. Move the slider to select the user permission role.

   - **Manage** – Assigning users with manage permission can add, edit, and manage information.
   - **View** – Assigning users with view permission can only view the current information.

5.
   > **Note**
   >
   > You can only choose the products and locations under **Location Access** and **Product Access** if your instance is connected to a data source. For example, you can create a custom Admin user just to manage avocados in the Seattle location, or an Insight user just to manage the insights for avocados in the Seattle location.

   Under **Location Access**, search for the Regions as you type in the search bar and select the Regions.

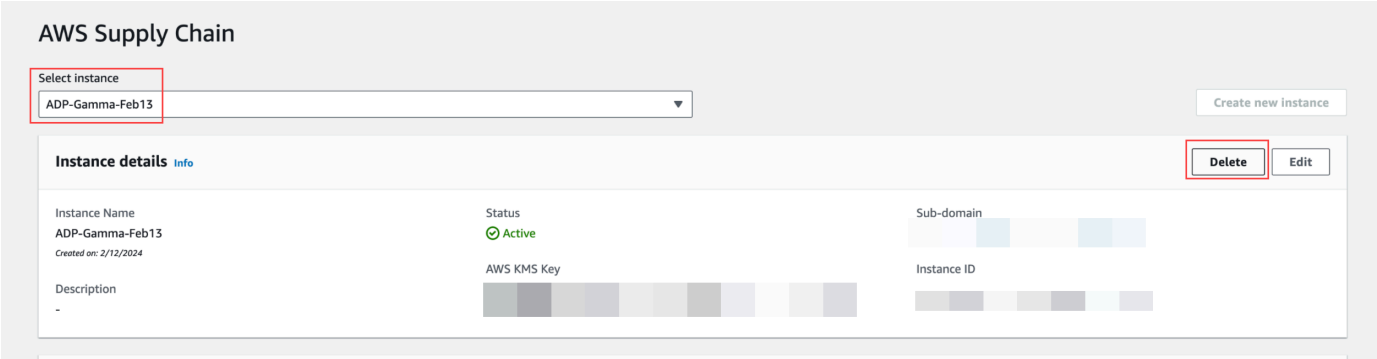
6. Under **Product Access**, search for the products as you type in the search bar and select the products.
7. Choose **Save**.

Deleting an instance

To delete an instance, follow these steps.

> **Note**
>
> When you delete an instance, information from the Amazon S3 bucket is not automatically deleted.

1. Open the AWS Supply Chain console at https://console.aws.amazon.com/scn/home.
2. On the AWS Supply Chain console dashboard, from the dropdown, select the instance that you want to delete.



3. Choose **Delete**.
4. On the **Delete AWS Supply Chain Instance** page, under **Confirmation**, type **`delete`** to confirm that you want to delete the instance.
5. Choose **Delete**. The instance deletion starts and once the instance is deleted, you will see a confirmation message.

> **Note**
>
> After the instance is deleted, information related to Amazon Q in AWS Supply Chain is automatically deleted.

Security in AWS Supply Chain

Cloud security at AWS is the highest priority. As an AWS customer, you benefit from data centers and network architectures that are AWS builds to meet the requirements of the most security-sensitive organizations.

Security is a shared responsibility between you and AWS. The shared responsibility model describes this as security *of* the cloud and security *in* the cloud:

- **Security of the cloud** – AWS is responsible for protecting the infrastructure that runs AWS services in the AWS Cloud. AWS 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 AWS Compliance Programs. To learn about the compliance programs that apply to AWS Supply Chain, see AWS Services in Scope by Compliance Program.
- **Security in the cloud** – The AWS service that you use determines your responsibility. You are also responsible for other factors. include the sensitivity of your data, your requirements, and applicable laws and regulations.

This documentation helps you understand how to apply the shared responsibility model when you use AWS Supply Chain. The following topics show you how to configure AWS Supply Chain to meet your security and compliance objectives. You also learn how to use other AWS services that help you to monitor and secure your AWS Supply Chain resources.

Topics

Data protection in AWS Supply Chain

The AWS shared responsibility model applies to data protection in AWS Supply Chain. As described in this model, AWS is responsible for protecting the global infrastructure that runs all of the AWS 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 AWS services that you use. For more information about data privacy, see the Data Privacy FAQ. For information about data protection in Europe, see the AWS Shared Responsibility Model and GDPR blog post on the *AWS Security Blog*.

For data protection purposes, we recommend that you protect AWS account credentials and set up individual users with AWS IAM Identity Center or AWS 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 AWS resources. We require TLS 1.2 and recommend TLS 1.3.
- Set up API and user activity logging with AWS CloudTrail. For information about using CloudTrail trails to capture AWS activities, see Working with CloudTrail trails in the *AWS CloudTrail User Guide*.
- Use AWS encryption solutions, along with all default security controls within AWS 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 AWS through a command line interface or an API, use a FIPS endpoint. For more information about the available FIPS endpoints, see Federal Information Processing Standard (FIPS) 140-3.

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 AWS Supply Chain or other AWS services using the console, API, AWS CLI, or AWS 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.

Data handled by AWS Supply Chain

To limit the data that can be accessed by authorized users of a specific AWS Supply Chain instance, data held within AWS Supply Chain is segregated by your AWS account ID and your AWS Supply Chain instance ID.

AWS Supply Chain handles a variety of supply chain data such as, user information, information extracted from the data connector, and inventory details.

Opt-out preference

We may use and store Your Content that is processed by AWS Supply Chain, as noted in the AWS Service Terms. If you want to opt-out from AWS Supply Chain to use or store your content, you can create an opt-out policy in AWS Organizations. For more information on creating an opt-out policy, see AI services opt-out policy syntax and examples .

Encryption at rest

Contact data classified as PII, or data that represents customer content including content used in Amazon Q in AWS Supply Chain being stored by AWS Supply Chain, is encrypted at rest (that is, before it is put, stored, or saved to a disk) with a key that is time-limited and specific to the AWS Supply Chain instance.

Amazon S3 server-side encryption is used to encrypt all console and web application data with a AWS Key Management Service data key that is unique to each customer account. For information about AWS KMS keys, see What is AWS Key Management Service? in the AWS Key Management Service Developer Guide.

> **Note**
>
> AWS Supply Chain features Supply Planning and N-Tier Visibility does not support encrypting data-at-rest with the provided KMS-CMK.

Encryption in transit

Data including content used in Amazon Q in AWS Supply Chain exchanged with AWS Supply Chain is protected in transit between the user's web browser and AWS Supply Chain using industry-standard TLS encryption.

Key management

AWS Supply Chain partially supports KMS-CMK.

For information on updating the AWS KMS key in AWS Supply Chain, see Creating an instance.

Inter-network traffic privacy

> **Note**
>
> AWS Supply Chain does not support PrivateLink.

A virtual private cloud (VPC) endpoint for AWS Supply Chain is a logical entity within a VPC that allows connectivity only to AWS Supply Chain. The VPC routes requests to AWS Supply Chain and routes responses back to the VPC. For more information, see VPC Endpoints in the VPC User Guide.

How AWS Supply Chain uses grants in AWS KMS

AWS Supply Chain requires a grant to use your customer managed key.

AWS Supply Chain creates several grants using the AWS KMS key that is passed during the **CreateInstance** operation. AWS Supply Chain creates a grant on your behalf by sending **CreateGrant** requests to AWS KMS. Grants in AWS KMS are used to give AWS Supply Chain access to the AWS KMS key in a customer account.

> **Note**
>
> AWS Supply Chain uses it's own authorization mechanism. Once an user is added to AWS Supply Chain, you cannot deny list the same user using the AWS KMS policy.

AWS Supply Chain uses the grant for the following:

- To send **GenerateDataKey** requests to AWS KMS to **encrypt** the data stored in your instance.
- To send **Decrypt** requests to AWS KMS in order to read your encrypted data associated with the instance.
- To add *DescribeKey*, *CreateGrant*, and *RetireGrant* permissions in order to keep your data secured when sending it to other AWS services like Amazon Forecast.

You can revoke access to the grant, or remove the service's access to the customer managed key at any time. If you do, AWS Supply Chain won't be able to access any of the data encrypted by the customer managed key, which affects operations that are dependent on that data.

Monitoring your encryption for AWS Supply Chain

The following examples are AWS CloudTrail events for `Encrypt`, `GenerateDataKey`, and `Decrypt` to monitor KMS operations called by AWS Supply Chain to access data encrypted by your customer managed key:

Encrypt


```
            {
    "eventVersion": "1.08",
    "userIdentity": {
        "type": "AWSService",
        "invokedBy": "scn.amazonaws.com"
    },
    "eventTime": "2024-03-06T22:39:32Z",
    "eventSource": "kms.amazonaws.com",
    "eventName": "Encrypt",
    "awsRegion": "us-east-1",
    "sourceIPAddress": "172.12.34.56"
    "userAgent": "Example/Desktop/1.0 (V1; OS)",
    "requestParameters": {
        "encryptionAlgorithm": "SYMMETRIC_DEFAULT",
        "keyId": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample"
    },
    "responseElements": null,
    "requestID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "eventID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "readOnly": true,
    "resources": [
        {
            "accountId": account ID,
            "type": "AWS::KMS::Key",
            "ARN": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample"
        }
    ],
    "eventType": "AwsApiCall",
```

```
    "managementEvent": true,
    "recipientAccountId": "112233445566",
    "sharedEventID": "fdf9ee0f-e43f-4e43-beac-df69067edb8b",
    "eventCategory": "Management"
}
```

GenerateDataKey

```
            {
    "eventVersion": "1.08",
    "userIdentity": {
        "type": "AWSService",
        "invokedBy": "scn.amazonaws.com"
    },
     "eventTime": "2024-03-06T22:39:32Z",
    "eventSource": "kms.amazonaws.com",
    "eventName": "GenerateDataKey",
    "awsRegion": "us-east-1",
    "sourceIPAddress": "172.12.34.56"
    "userAgent": "Example/Desktop/1.0 (V1; OS)",
    "requestParameters": {
        "encryptionContext": {
            "aws:s3:arn": "arn:aws:s3:::test/rawEvent/bf6666c1-111-48aaca-b6b0-
dsadsadsa3432423/noFlowName/scn.data.inboundorder/20240306_223934_536"
        },
        "keyId": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample",
        "keySpec": "AES_222"
    },
    "responseElements": null,
    "requestID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "eventID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "readOnly": true,
    "resources": [
        {
            "accountId": account ID,
            "type": "AWS::KMS::Key",
            "ARN": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample"
        }
    ],
```

```
    "eventType": "AwsApiCall",
    "managementEvent": true,
    "recipientAccountId": "112233445566",
    "sharedEventID": "fdf9ee0f-e43f-4e43-beac-df69067edb8b",
    "eventCategory": "Management"
}
```

Decrypt

```
            {
    "eventVersion": "1.08",
    "userIdentity": {
        "type": "AWSService",
        "invokedBy": "scn.amazonaws.com"
    },
     "eventTime": "2024-03-06T22:39:32Z",
    "eventSource": "kms.amazonaws.com",
    "eventName": "Decrypt",
    "awsRegion": "us-east-1",
    "sourceIPAddress": "172.12.34.56"
    "userAgent": "Example/Desktop/1.0 (V1; OS)",
    "requestParameters": {
        "keyId": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample",
        "encryptionAlgorithm": "SYMMETRIC_DEFAULT"
    },
    "responseElements": null,
    "requestID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "eventID": "12a345n4-78a4-8888-0000-a000-6q000yy666rr",
    "readOnly": true,
    "resources": [
        {
            "accountId": account ID,
            "type": "AWS::KMS::Key",
            "ARN": "arn:aws:kms:us-
east-1:123456789:key/1234abcd-11ab-22bc-33ef-123456sample"
        }
    ],
    "eventType": "AwsApiCall",
    "managementEvent": true,
    "recipientAccountId": "112233445566",
```

```
    "sharedEventID": "fdf9ee0f-e43f-4e43-beac-df69067edb8b",
    "eventCategory": "Management"
}
```

Access AWS Supply Chain using an interface endpoint (AWS PrivateLink)

You can use AWS PrivateLink to create a private connection between your VPC and AWS Supply Chain. You can access AWS Supply Chain as if it were in your VPC, without the use of an internet gateway, NAT device, VPN connection, or AWS Direct Connect connection. Instances in your VPC don't need public IP addresses to access AWS Supply Chain.

You establish this private connection by creating an *interface endpoint*, powered by AWS 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 AWS Supply Chain.

For more information, see Access AWS services through AWS PrivateLink in the *AWS PrivateLink Guide*.

Considerations for AWS Supply Chain

Before you set up an interface endpoint for AWS Supply Chain, review Considerations in the *AWS PrivateLink Guide*.

AWS Supply Chain supports making calls to all of its API actions through the interface endpoint.

Create an interface endpoint for AWS Supply Chain

You can create an interface endpoint for AWS Supply Chain using either the Amazon VPC console or the AWS Command Line Interface (AWS CLI). For more information, see Create an interface endpoint in the *AWS PrivateLink Guide*.

Create an interface endpoint for AWS Supply Chain using the following service name:

```
com.amazonaws.region.scn
```

If you enable private DNS for the interface endpoint, you can make API requests to AWS Supply Chain using its default Regional DNS name. For example, *scn.region*.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 AWS Supply Chain through the interface endpoint. To control the access allowed to AWS Supply Chain 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 (AWS 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 Control access to services using endpoint policies in the *AWS PrivateLink Guide*.

Example: VPC endpoint policy for AWS Supply Chain actions

The following is an example of a custom endpoint policy. When you attach this policy to your interface endpoint, it grants access to the listed AWS Supply Chain actions for all principals on all resources.

```
{
   "Statement": [
      {
         "Principal": "*",
         "Effect": "Allow",
         "Action": [

            "scn:action-1",
            "scn:action-2",
            "scn:action-3"

         ],
         "Resource":"*"
      }
   ]
```

```
}
```

IAM for AWS Supply Chain

AWS Identity and Access Management (IAM) is an AWS service that helps an administrator securely control access to AWS resources. IAM administrators control who can be *authenticated* (signed in) and *authorized* (have permissions) to use AWS Supply Chain resources. IAM is an AWS service that you can use with no additional charge.

Topics

Audience

How you use AWS Identity and Access Management (IAM) differs, depending on the work that you do in AWS Supply Chain.

Service user – If you use the AWS Supply Chain service to do your job, then your administrator provides you with the credentials and permissions that you need. As you use more AWS Supply Chain 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 AWS Supply Chain, see Troubleshooting AWS Supply Chain identity and access.

Service administrator – If you're in charge of AWS Supply Chain resources at your company, you probably have full access to AWS Supply Chain. It's your job to determine which AWS Supply Chain 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 AWS Supply Chain, see How AWS Supply Chain 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 AWS Supply Chain. To view example AWS Supply Chain

identity-based policies that you can use in IAM, see Identity-based policy examples for AWS Supply Chain.

Authenticating with identities

Authentication is how you sign in to AWS using your identity credentials. You must be *authenticated* (signed in to AWS) as the AWS account root user, as an IAM user, or by assuming an IAM role.

You can sign in to AWS as a federated identity by using credentials provided through an identity source. AWS IAM Identity Center (IAM Identity Center) users, your company's single sign-on authentication, and your Google or Facebook credentials are examples of federated identities. When you sign in as a federated identity, your administrator previously set up identity federation using IAM roles. When you access AWS by using federation, you are indirectly assuming a role.

Depending on the type of user you are, you can sign in to the AWS Management Console or the AWS access portal. For more information about signing in to AWS, see How to sign in to your AWS account in the *AWS Sign-In User Guide*.

If you access AWS programmatically, AWS 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 AWS tools, you must sign requests yourself. For more information about using the recommended method to sign requests yourself, see AWS Signature Version 4 for API requests in the *IAM User Guide*.

Regardless of the authentication method that you use, you might be required to provide additional security information. For example, AWS recommends that you use multi-factor authentication (MFA) to increase the security of your account. To learn more, see Multi-factor authentication in the *AWS IAM Identity Center User Guide* and AWS Multi-factor authentication in IAM in the *IAM User Guide*.

AWS account root user

When you create an AWS account, you begin with one sign-in identity that has complete access to all AWS services and resources in the account. This identity is called the AWS account *root user* and is accessed by signing in with the email address and password that you used to create the account. We strongly recommend that you 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 Tasks that require root user credentials 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 AWS services by using temporary credentials.

A *federated identity* is a user from your enterprise user directory, a web identity provider, the AWS Directory Service, the Identity Center directory, or any user that accesses AWS services by using credentials provided through an identity source. When federated identities access AWS accounts, they assume roles, and the roles provide temporary credentials.

For centralized access management, we recommend that you use AWS IAM Identity Center. You can create users and groups in IAM Identity Center, or you can connect and synchronize to a set of users and groups in your own identity source for use across all your AWS accounts and applications. For information about IAM Identity Center, see What is IAM Identity Center? in the *AWS IAM Identity Center User Guide*.

IAM users and groups

An *IAM user* is an identity within your AWS 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 Rotate access keys regularly for use cases that require long-term credentials in the *IAM User Guide*.

An *IAM group* 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 Use cases for IAM users in the *IAM User Guide*.

IAM roles

An *IAM role* is an identity within your AWS 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 AWS Management Console, you can switch from a user to an IAM role (console). You can assume a

role by calling an AWS CLI or AWS API operation or by using a custom URL. For more information about methods for using roles, see Methods to assume a role 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 Create a role for a third-party identity provider (federation) in the *IAM User Guide*. If you use IAM Identity Center, you configure a permission set. To control what your identities can access after they authenticate, IAM Identity Center correlates the permission set to a role in IAM. For information about permissions sets, see Permission sets in the *AWS IAM Identity Center 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 AWS 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 AWS services use features in other AWS 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 AWS, 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 AWS service, combined with the requesting AWS service to make requests to downstream services. FAS requests are only made when a service receives a request that requires interactions with other AWS services or resources to complete. In this case, you must have permissions to perform both actions. For policy details when making FAS requests, see Forward access sessions.
  - **Service role** – A service role is an IAM role 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 Create a role to delegate permissions to an AWS service in the *IAM User Guide*.

- **Service-linked role** – A service-linked role is a type of service role that is linked to an AWS service. The service can assume the role to perform an action on your behalf. Service-linked roles appear in your AWS 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 AWS CLI or AWS API requests. This is preferable to storing access keys within the EC2 instance. To assign an AWS 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 Use an IAM role to grant permissions to applications running on Amazon EC2 instances in the *IAM User Guide*.

Managing access using policies

You control access in AWS by creating policies and attaching them to AWS identities or resources. A policy is an object in AWS that, when associated with an identity or resource, defines their permissions. AWS 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 AWS as JSON documents. For more information about the structure and contents of JSON policy documents, see Overview of JSON policies in the *IAM User Guide*.

Administrators can use AWS 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 AWS Management Console, the AWS CLI, or the AWS 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 Define custom IAM permissions with customer managed policies 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 AWS account. Managed policies include AWS managed policies and customer managed policies. To learn how to choose between a managed policy or an inline policy, see Choose between managed 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 specify a principal in a resource-based policy. Principals can include accounts, users, roles, federated users, or AWS services.

Resource-based policies are inline policies that are located in that service. You can't use AWS 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, AWS WAF, and Amazon VPC are examples of services that support ACLs. To learn more about ACLs, see Access control list (ACL) overview in the *Amazon Simple Storage Service Developer Guide*.

Other policy types

AWS 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 AWS Organizations. AWS Organizations is a service for grouping and centrally managing multiple AWS 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 AWS account root user. For more information about Organizations and SCPs, see Service control policies in the *AWS 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 AWS account root user, regardless of whether they belong to your organization. For more information about Organizations and RCPs, including a list of AWS services that support RCPs, see Resource control policies (RCPs) in the *AWS 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 Session policies 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 AWS determines whether to allow a request when multiple policy types are involved, see Policy evaluation logic in the *IAM User Guide*.

How AWS Supply Chain works with IAM

Before you use IAM to manage access to AWS Supply Chain, learn what IAM features are available to use with AWS Supply Chain.

IAM features you can use with AWS Supply Chain

IAM feature	AWS Supply Chain support
Identity-based policies	Yes
Resource-based policies	No
Policy actions	Yes
Policy resources	Yes
Policy condition keys	Yes
Temporary credentials	Yes
Forward access sessions (FAS)	Yes
Service roles	Yes
Service-linked roles	No

To get a high-level view of how AWS Supply Chain and other AWS services work with most IAM features, see AWS services that work with IAM in the *IAM User Guide*.

Identity-based policies for AWS Supply Chain

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 Define custom IAM permissions with customer managed policies 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 IAM JSON policy elements reference in the *IAM User Guide*.

Identity-based policy examples for AWS Supply Chain

To view examples of AWS Supply Chain identity-based policies, see Identity-based policy examples for AWS Supply Chain.

Resource-based policies within AWS Supply Chain

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 specify a principal in a resource-based policy. Principals can include accounts, users, roles, federated users, or AWS 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 AWS 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 Cross account resource access in IAM in the *IAM User Guide*.

Policy actions for AWS Supply Chain

Supports policy actions: Yes

Administrators can use AWS 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 AWS 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.

Policy actions in AWS Supply Chain use the following prefix before the action:

```
scn
```

To specify multiple actions in a single statement, separate them with commas.

```
"Action": [
      "scn:action1",
      "scn:action2"
         ]
```

To view examples of AWS Supply Chain identity-based policies, see Identity-based policy examples for AWS Supply Chain.

Policy resources for AWS Supply Chain

Supports policy resources: Yes

Administrators can use AWS 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 Amazon Resource Name (ARN). 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 view examples of AWS Supply Chain identity-based policies, see Identity-based policy examples for AWS Supply Chain.

Policy condition keys for AWS Supply Chain

Supports service-specific policy condition keys: Yes

Administrators can use AWS 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 condition operators, 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, AWS evaluates them using a logical `AND` operation. If you specify multiple values for a single condition key, AWS 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*.

AWS supports global condition keys and service-specific condition keys. To see all AWS global condition keys, see AWS global condition context keys in the *IAM User Guide*.

To view examples of AWS Supply Chain identity-based policies, see Identity-based policy examples for AWS Supply Chain.

Using temporary credentials with AWS Supply Chain

Supports temporary credentials: Yes

Some AWS services don't work when you sign in using temporary credentials. For additional information, including which AWS services work with temporary credentials, see AWS services that work with IAM in the *IAM User Guide*.

You are using temporary credentials if you sign in to the AWS Management Console using any method except a user name and password. For example, when you access AWS 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 Switch from a user to an IAM role (console) in the *IAM User Guide*.

You can manually create temporary credentials using the AWS CLI or AWS API. You can then use those temporary credentials to access AWS. AWS 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 AWS Supply Chain

Supports forward access sessions (FAS): Yes

When you use an IAM user or role to perform actions in AWS, 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 AWS service, combined with the requesting AWS service to make requests to downstream services. FAS requests are only made when a service receives a request that requires interactions with other AWS services or resources to complete. In this case, you must have permissions to perform both actions. For policy details when making FAS requests, see Forward access sessions.

Service roles for AWS Supply Chain

Supports service roles: Yes

A service role is an IAM role 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 Create a role to delegate permissions to an AWS service in the *IAM User Guide*.

> **Warning**
>
> Changing the permissions for a service role might break AWS Supply Chain functionality. Edit service roles only when AWS Supply Chain provides guidance to do so.

Service-linked roles for AWS Supply Chain

Supports service-linked roles: No

A service-linked role is a type of service role that is linked to an AWS service. The service can assume the role to perform an action on your behalf. Service-linked roles appear in your AWS 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 AWS services that work with IAM. 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 examples for AWS Supply Chain

By default, users and roles don't have permission to create or modify AWS Supply Chain resources. They also can't perform tasks by using the AWS Management Console, AWS Command Line Interface (AWS CLI), or AWS 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 Creating IAM policies in the IAM User Guide.

Topics

Policy best practices

Identity-based policies determine whether someone can create, access, or delete AWS Supply Chain resources in your account. These actions can incur costs for your AWS account. When you create or edit identity-based policies, follow these guidelines and recommendations:

- **Get started with AWS managed policies and move toward least-privilege permissions** – To get started granting permissions to your users and workloads, use the *AWS managed policies* that grant permissions for many common use cases. They are available in your AWS account. We recommend that you reduce permissions further by defining AWS customer managed policies that are specific to your use cases. For more information, see AWS managed policies or AWS 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 Policies and permissions in IAM 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 AWS service, such as AWS CloudFormation. For more information, see IAM JSON policy elements: Condition 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 Validate policies with IAM Access Analyzer 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 AWS 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 Secure API access with MFA in the *IAM User Guide*.

For more information about best practices in IAM, see Security best practices in IAM in the *IAM User Guide*.

Troubleshooting AWS Supply Chain identity and access

Use the following information to help you diagnose and fix common issues that you might encounter when working with AWS Supply Chain and IAM.

Topics

- I'm not authorized to perform an action in AWS Supply Chain
- I'm not authorized to perform iam:PassRole
- I want to allow people outside of my AWS account to access my AWS Supply Chain resources

I'm not authorized to perform an action in AWS Supply Chain

If the AWS Management Console that you're not authorized to perform an action, then you must contact your administrator for assistance. Your administrator is the person that provided you with your user name and password.

The following example error occurs when the `mateojackson` IAM user tries to use the console to view details about a fictional *`my-example-widget`* resource but doesn't have the fictional `scn:GetWidget` permissions.

```
User: arn:aws:iam::123456789012:user/mateojackson is not authorized to perform:
 scn:GetWidget on resource: my-example-widget
```

In this case, Mateo asks his administrator to update his policies to allow him to access the *my-example-widget* resource using the `scn:GetWidget` action.

I'm 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 AWS Supply Chain.

Some AWS 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 AWS Supply Chain. 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: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 AWS administrator. Your administrator is the person who provided you with your sign-in credentials.

I want to allow people outside of my AWS account to access my AWS Supply Chain 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 AWS Supply Chain supports these features, see How AWS Supply Chain works with IAM.

- To learn how to provide access to your resources across AWS accounts that you own, see Providing access to an IAM user in another AWS account that you own in the *IAM User Guide*.
- To learn how to provide access to your resources to third-party AWS accounts, see Providing access to AWS accounts owned by third parties in the *IAM User Guide*.
- To learn how to provide access through identity federation, see Providing access to externally 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*.

AWS managed policies for AWS Supply Chain

An AWS managed policy is a standalone policy that is created and administered by AWS. AWS managed policies are designed to provide permissions for many common use cases so that you can start assigning permissions to users, groups, and roles.

Keep in mind that AWS managed policies might not grant least-privilege permissions for your specific use cases because they're available for all AWS customers to use. We recommend that you reduce permissions further by defining customer managed policies that are specific to your use cases.

You cannot change the permissions defined in AWS managed policies. If AWS updates the permissions defined in an AWS managed policy, the update affects all principal identities (users, groups, and roles) that the policy is attached to. AWS is most likely to update an AWS managed policy when a new AWS service is launched or new API operations become available for existing services.

For more information, see AWS managed policies in the *IAM User Guide*.

AWS managed policy: AWSSupplyChainFederationAdminAccess

AWSSupplyChainFederationAdminAccess provides AWS Supply Chain federated users access to the AWS Supply Chain application, including the required permissions to perform actions within the

AWS Supply Chain application. The policy provides administrative permissions over IAM Identity Center users and groups and is attached to a role created by AWS Supply Chain for you. You shouldn't attach the AWSSupplyChainFederationAdminAccess policy to any other IAM entities.

Although this policy provides all access to AWS Supply Chain through the scn:* permissions, the AWS Supply Chain role determines your permissions. The AWS Supply Chain role only includes the required permissions, and don't have permissions to the admin APIs.

Permissions details

This policy includes the following permissions:

- `Chime` – Provides access to create or delete users under an Amazon Chime AppInstance; Provides access to manage channel, channel members, and moderators; Provides access to send messages to channel. Chime operations are scoped to app instances tagged with "SCNInstanceId".
- `AWS IAM Identity Center (AWS SSO)` – Provides permissions required to associate and disassociate user profiles, list profiles association, list application assignments, describe application, describe instance, and get application assignment configuration in IAM Identity Center.
- `AppFlow` – Provides access to create, update, and delete connection profiles; Provides access to create, update, delete, start, and stop flows; Provides access to tag and untag flows and describe flow records.
- `Amazon S3` – Provides access to list all buckets. Provides GetBucketLocation, GetBucketPolicy, PutObject, GetObject, and ListBucket access to buckets with resource arn arn:aws:s3:::aws-supply-chain-data-*.
- `SecretsManager` – Provides access to creating secrets and updating secret policy.
- `KMS` – Provides Amazon AppFlow service the access to list keys and key alias. Provides DescribeKey, CreateGrant and ListGrants permissions to KMS keys tagged with key-value aws-suply-chain-access : true; Provides access to create secrets and update secret policy.

  The permissions (*kms:ListKeys*, *kms:ListAliases*, *kms:GenerateDataKey*, and *kms:Decrypt)* are not restricted to Amazon AppFlow and these permissions can be granted to any AWS KMS Key in your account.

To view the permissions of this policy, see AWSSupplyChainFederationAdminAccess in the AWS Management Console.

AWS Supply Chain updates to AWS managed policies

The following table lists details about updates to AWS managed policies for AWS Supply Chain since this service began to track these changes. For automatic alerts about changes to this page, subscribe to the RSS feed on the AWS Supply Chain Document history page.

Change	Description	Date
AWSSupplyChainFederationAdminAccess – Updated policy	AWS Supply Chain updated the managed policy to allow federated users access to ListApplicationAssignments, DescribeApplication, DescribeInstance, and GetApplicationAssignmentConfiguration operations in IAM Identity Center.	December 10, 2024
AWSSupplyChainFederationAdminAccess – Updated policy	AWS Supply Chain updated the managed policy to allow federated users access to ListProfileAssociations operations in IAM Identity Center.	November 01, 2023
AWSSupplyChainFederationAdminAccess – Updated policy	AWS Supply Chain updated the managed policy to allow federated users access to the PutObject and GetObject operations on the dedicated S3 bucket with resource arn	September 21, 2023

Change	Description	Date
	arn:aws:s3:::aws-supply-chain-data-*.	
AWSSupplyChainFederationAdminAccess – New policy	AWS Supply Chain added a new policy to allow federated users to access the AWS Supply Chain application. This includes permissions necessary to perform actions within the AWS Supply Chain application.	March 01, 2023
AWS Supply Chain started tracking changes	AWS Supply Chain started tracking changes for its AWS managed policies.	March 01, 2023

Compliance validation for AWS Supply Chain

Third-party auditors assess the security and compliance of AWS Supply Chain as part of multiple AWS compliance programs. These include SOC, PCI, FedRAMP, HIPAA, and others.

For a list of AWS services that fall within the scope of specific compliance programs, see AWS Services in Scope by Compliance Program. For general information, see AWS Compliance Programs.

You can download third-party audit reports with AWS Artifact. For more information, see Downloading Reports in AWS Artifact.

Your compliance responsibility when you use AWS Supply Chain is determined by the sensitivity of your data, your company's compliance objectives, and applicable laws and regulations. AWS provides the following resources to help with compliance:

- Security and Compliance Quick Start Guides – These deployment guides discuss architectural considerations and provide steps to take when you deploy security-focused and compliance-focused baseline AWS environments.
- Architecting for HIPAA Security and Compliance Whitepaper – This whitepaper describes how companies can use AWS to create HIPAA-compliant applications.

- AWS Compliance Resources – This collection of workbooks and guides might apply to your industry and location.
- Evaluating Resources with Rules in the *AWS Config Developer Guide* – This guide assesses how well your resource configurations comply with internal practices, industry guidelines, and regulations.
- AWS Security Hub – This AWS service provides a comprehensive view of your security state within AWS to help you check your compliance with security industry standards and best practices.

Resilience in AWS Supply Chain

The AWS global infrastructure is built around AWS Regions and Availability Zones. AWS Regions provide multiple physically separated and isolated Availability Zones. These 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 AWS Regions and Availability Zones, see AWS Global Infrastructure.

In addition to the AWS global infrastructure, AWS Supply Chain offers several features to help support your data resiliency and backup needs.

Logging and Monitoring AWS Supply Chain

Logging and Monitoring is an important part of maintaining the reliability, availability, and performance of AWS Supply Chain and your other AWS solutions. AWS provides the AWS CloudTrail monitoring tool to watch AWS Supply Chain, report when something is wrong, and take automatic actions when appropriate.

> **Note**
>
> APIs called only from the AWS Supply Chain console are captured in AWS CloudTrail.

AWS CloudTrail captures API calls and related events made by or on behalf of your AWS account and delivers the log files to an Amazon S3 bucket that you specify. You can identify which users and accounts called AWS, the source IP address from which the calls were made, and when the

calls occurred. You can view the AWS Supply Chain events under *scn.amazonaws.com*. For more information, see the AWS CloudTrail User Guide.

Note

Note the following with AWS Supply Chain:

- When you invite users that don't have access to AWS Supply Chain, these users don't receive information in the notifications that they receive from the web application. Invited users receive an email notification with a link to the web application. They can only log in and view the content in the notification if they have the required user permissions.
- All users with or without user permissions to a particular Insight can view the Insights chat messages.
- As an application admin, when you are add users to the AWS Supply Chain instance, they have access to the AWS KMS key. You can manage the user permissions to add or remove users. For more information on user permissions, see User permission roles.

AWS Supply Chain data events in CloudTrail

Note

The web application APIs listed under ??? are listed in the data events in CloudTrail.

Data events provide information about the resource operations performed on or in a resource (for example, reading or writing to an Amazon S3 object). These are also known as data plane operations. Data events are often high-volume activities. By default, CloudTrail doesn't log data events. The CloudTrail **Event history** doesn't record data events.

Additional charges apply for data events. For more information about CloudTrail pricing, see AWS CloudTrail Pricing.

You can log data events for the AWS Supply Chain resource types by using the CloudTrail console, AWS CLI, or CloudTrail API operations.

- To log data events using the CloudTrail console, create a trail or event data store to log data events, or update an existing trail or event data store to log data events.

1. Choose **Data events** to log data events.
2. From the **Data event type** list, choose the resource type for which you want to log data events.
3. Choose the log selector template you want to use. You can log all data events for the resource type, log all `readOnly` events, log all `writeOnly` events, or create a custom log selector template to filter on the `readOnly`, `eventName`, and `resources.ARN` fields.

- To log data events using the AWS CLI, configure the `--advanced-event-selectors` parameter to set the `eventCategory` field equal to `Data` and the `resources.type` field equal to the resource type value . You can add conditions to filter on the values of the `readOnly`, `eventName`, and `resources.ARN` fields.
  - To configure a trail to log data events, run the put-event-selectors command. For more information, see Logging data events for trails with the AWS CLI.
  - To configure an event data store to log data events, run the create-event-data-store command to create a new event data store to log data events, or run the update-event-data-store command to update an existing event data store. For more information, see Logging data events for event data stores with the AWS CLI.

*You can configure advanced event selectors to filter on the `eventName`, `readOnly`, and `resources.ARN` fields to log only those events that are important to you. For more information about these fields, see AdvancedFieldSelector.

AWS Supply Chain management events in CloudTrail

Management events provide information about management operations that are performed on resources in your AWS account. These are also known as control plane operations. By default, CloudTrail logs management events.

AWS Supply Chain logs all control plane operations to CloudTrail as management events.

AWS Supply Chain web application APIs

The APIs listed in this section are called by AWS Supply Chain applications on behalf of federated users. These APIs are not visible in the CloudTrail logs and are not captured in the *Service Authorization Reference* document, see AWS Supply Chain. Access to these APIs are controlled by AWS Supply Chain applications based on federated user role permissions. You shouldn't try to control access to these APIs to prevent distrupting the AWS Supply Chain applications.

User roles

The following APIs are used for managing users, user roles, user notifications, and chat messages in AWS Supply Chain.

```
scn:AddMembersToResourceBasedChat
scn:AssignGalaxyRoleToUser
scn:AssociateUser
scn:BatchGetUsers
scn:BatchMarkNotificationAsDelivered
scn:CreateRole
scn:DeleteRole
scn:DescribeChatForUser
scn:GetAccessDetailConfig
scn:GetChatPreferencesForUser
scn:GetMessagingSessionConnectionDetails
scn:GetNotificationsPreference
scn:GetOrCreateChimeUser
scn:GetOrCreateResourceBasedChat
scn:GetOrCreateUserBasedChat
scn:GetOrganizationInfo
scn:GetResourceBasedChatArn
scn:GetUserDetails
scn:ListChatMembers
scn:ListChatMessages
scn:ListChatModerators
scn:ListChats
scn:ListRoles
scn:ListUserNotifications
scn:ListUsersWithRole
scn:MarkNotificationAsDelivered
scn:MarkNotificationAsRead
scn:RemoveMemberFromResourceBasedChat
scn:RemoveUser
scn:SearchChimeUsers
scn:SearchUsers
scn:SendChatMessage
scn:SetNotificationsPreference
scn:UpdateChatPreferencesForUser
scn:UpdateChatReadMarker
scn:UpdateOrganizationInfo
```

```
scn:UpdateRole
scn:UpdateUser
```

Data lake

The following APIs are used for creating and managing data flows and connections in data lake.

```
scn:CreateConnection
scn:CreateDataflow
scn:CreateDeleteDataByPartitionJob
scn:CreateExtractFlows
scn:CreatePresignedUrl
scn:CreateSampleParsingJob
scn:CreateSapODataConnection
scn:CreateUpdateDatasetSchemaJob
scn:DeleteConnection
scn:DeleteDataflow
scn:DeleteExtractFlows
scn:DeleteSapODataConnection
scn:describeDatasetGroup
scn:DescribeDataset
scn:DescribeJob
scn:GetConnection
scn:GetCreateExtractFlowsStatus
scn:GetDataflow
scn:ListConnections
scn:ListCustomerFiles
scn:ListDataflows
scn:ListDataflowStats
scn:ListDatasets
scn:UpdateConnection
scn:UpdateDataflow
scn:UpdateExtractFlow
```

Insights

The following APIs are used by the Insights application to manage filters, watchlists, and view inventory changes.

```
scn:AddModeratorToResourceBasedChat
scn:ComputePostRebalancedQuantities
scn:ComputePostRebalancedQuantitiesV1
scn:CreateInsightFilter
scn:CreateInsightSubscription
scn:DeleteInsightFilter
scn:DeleteInsightSubscription
scn:GetInsightLineItem
scn:GetInsightSubscription
scn:GetInstanceAttribute
scn:GetInstanceRequiredDatasetAvailabilityStatus
scn:GetKpiData
scn:GetModelEndpointStatus
scn:GetPIVForProduct
scn:GetPIVForSite
scn:GetPIVForSiteAndProduct
scn:GetPIVForSitesAndProducts
scn:GetProducts
scn:GetProductSummaryAggregates
scn:GetSites
scn:GetSiteSummaryAggregates
scn:IsUserAuthorizedForInsightLineItem
scn:ListCustomAttributeValues
scn:ListGeographiesAsGalaxyAdmin
scn:ListInsightFilters
scn:ListInsightLineItems
scn:ListInsightSubscriptions
scn:ListInventoryQuantityAggregates
scn:ListInventoryRisksBySiteAndProduct
scn:ListInventorySummariesBySite
scn:ListPIVProductsBySite
scn:ListProductHierarchiesAsGalaxyAdmin
scn:ListProducts
scn:ListProductsAsGalaxyAdmin
scn:ListSites
scn:ListUsers
```

```
scn:PotentiallyComputeThenListRebalancingOptionsForInsightLineItem
scn:RegisterInstanceAttribute
scn:UpdateInsightFilter
scn:UpdateInsightLineItemStatus
scn:UpdateInsightSubscription
scn:UpdateRebalancingOptionStatus
scn:UpdateRebalancingOptionStatusV1
```

Demand Planning

The following APIs are used in AWS Supply Chain to create and manage forecasts, demand plans, or workbooks.

```
scn:AssociateDatasetWithWorkbook
scn:CreateBaselineForecast
scn:CreateDemandPlan
scn:CreateDemandPlanningCycle
scn:CreateDemandPlanningDatasetExportJob
scn:CreateDerivedForecast
scn:CreateWorkbook
scn:DeleteDemandForecastConfig
scn:DeleteDemandPlanningCycle
scn:DeleteDerivedForecast
scn:DeleteWorkbook
scn:DescribeBaselineForecast
scn:DescribeDemandPlanningCycleAccuracyJob
scn:DescribeDerivedForecast
scn:DescribePlanningCycle
scn:DescribeWorkbook
scn:DisassociatePlanningCycle
scn:GetDemandForecastConfig
scn:GetDemandPlan
scn:GetDemandPlanningCycle
scn:GetDemandPlanningCycleAccuracy
scn:GetDemandPlanningDatasetJob
scn:ListDemandPlans
scn:ListDerivedForecasts
scn:ListForecastingJobs
scn:ListPlanningCycles
```

```
scn:ListWorkbooks
scn:PublishDemandPlan
scn:PutDemandForecastConfig
scn:StartDemandPlanningCycleAccuracyJob
scn:StartForecastingJob
scn:UpdateDemandPlan
scn:UpdateDemandPlanningCycleMetadata
scn:UpdateWorkbook
```

Supply Planning

The following APIs are used in AWS Supply Chain to create and manage supply plans.

```
scn:CreateReplenishmentPipeline
scn:GetReplenishmentPipeline
scn:UpdateReplenishmentPipeline
scn:ListReplenishmentPipelinesByInstance
scn:GetInstanceReplenishmentConfig
scn:CreateBacktest
scn:CreateReplenishmentReviewInstanceConfig
scn:GetReplenishmentReviewInstanceConfig
scn:ListReplenishmentVendors
scn:GetExceptionsSupplyInsightsStatistics
scn:GetPorSupplyInsightsStatistics
scn:GetPlanToPOConversionAnalytics
scn:GetPurchasePlanStatistics
scn:ListPlanExceptions
scn:ListPurchaseOrderRequestLines
scn:UpdatePurchaseOrderRequestLines
scn:ListBomPurchasePlans
scn:ListBomProductionPlans
scn:ListBomTransferPlans
scn:ListBomInsights
scn:ListBomProcesses
scn:ExportBomPlans
scn:GetBomPlanSummary
scn:GetDashboardAnalytics
scn:GetPurchaseOrderRequestExplanation
scn:ListBomSupplyPlan
```

```
scn:GetBomPlanRecordDetails
scn:GetBomPlanSummaryAnalytics
scn:ListBomPurchaseOrders
scn:ListBomTransferOrders
scn:ListBomProductionOrders
scn:ExportAllExplodedBoms
scn:ExportBillOfMaterials
scn:ExportInventoryPolicy
scn:ExportProductionProcess
scn:ExportSourcingRule
scn:ExportTransportationLane
scn:ExportVendorLeadTime
scn:ImportBillOfMaterials
scn:ImportInventoryPolicy
scn:ImportProductionProcess
scn:ImportSourcingRule
scn:ImportTransportationLane
scn:ImportVendorLeadTime
```

Amazon Q in AWS Supply Chain

The following APIs are used in Amazon Q in AWS Supply Chain.

```
scn:GetQMessage
scn:ListQMessages
scn:PutQMessageFeedback
scn:SendQMessage
scn:GetQEnablementStatus
scn:UpdateQEnablementStatus
```

Managing AWS Supply Chain events using Amazon EventBridge

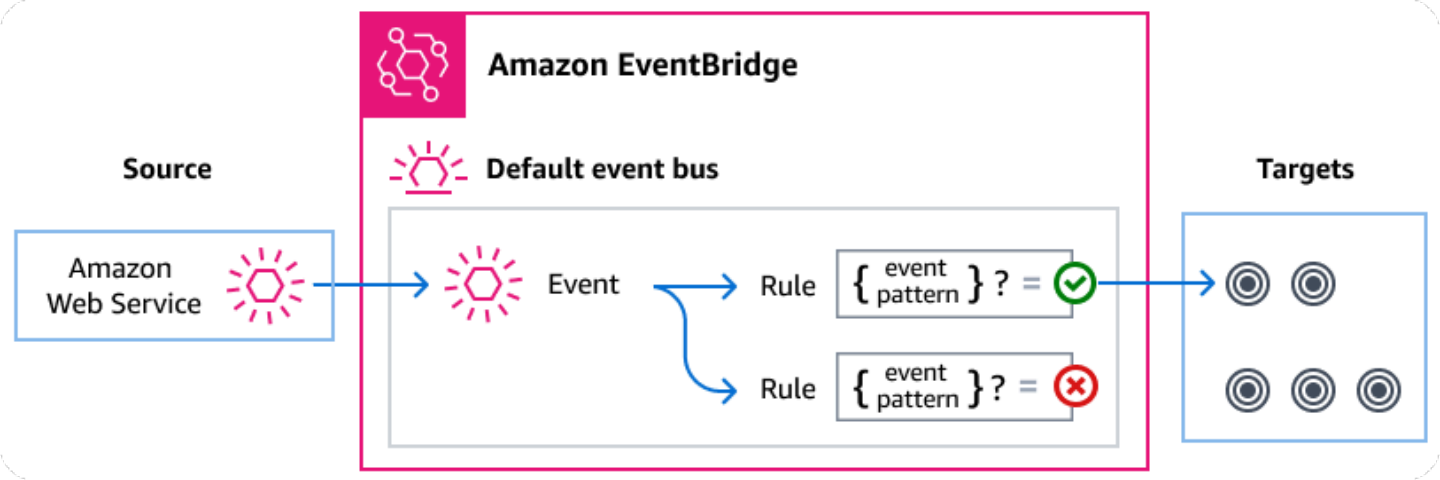
Using EventBridge, you can automate other services to respond to the execution status changes of a Step Functions Standard Workflow.

Amazon EventBridge is a serverless service that uses events to connect application components together, making it easier for you to build scalable event-driven applications. Event-driven

architecture is a style of building loosely-coupled software systems that work together by emitting and responding to events. Events represent a change in a resource or environment.

Here's how it works:

As with many AWS services, AWS Supply Chain generates and sends events to the EventBridge default event bus. (The default event bus is automatically provisioned in every AWS account.) An event bus is a router that receives events and delivers them to zero or more destinations, or *targets*. Rules you specify for the event bus evaluate events as they arrive. Each rule checks whether an event matches the rule's *event pattern*. If the event does match, the event bus sends the event to the specified target(s).



Topics

- AWS Supply Chain events
- Delivering AWS Supply Chain events using EventBridge rules
- AWS Supply Chain events detail reference

AWS Supply Chain events

AWS Supply Chain sends the following events to the default EventBridge event bus automatically. Events that match a rule's event pattern are delivered to the specified targets on a basis. Events might be delivered out of order.

For more information, see EventBridge events in the *Amazon EventBridge User Guide.*

Event detail type	Description
AWS Supply Chain Data Integration Status Change	Displays the status for each ingested file into AWS Supply Chain.

Delivering AWS Supply Chain events using EventBridge rules

To have the EventBridge default event bus send AWS Supply Chain events to a target, you must create a rule. Each rule contains an event pattern, which EventBridge matches against each event received on the event bus. If the event data matches the specified event pattern, EventBridge delivers that event to the rule's target(s).

For comprehensive instructions on creating event bus rules, see Creating rules that react to events in the *EventBridge User Guide*.

Creating event pattern that match AWS Supply Chain events

Each event pattern is a JSON object that contains:

- A `source` attribute that identifies the service sending the event. For AWS Supply Chain events, the source is `aws.supplychain`.
- (Optional): A `detail-type` attribute that contains an array of the event types to match.
- (Optional): A `detail` attribute containing any other event data on which to match.

For example, the following event pattern matches against all `AWS Supply Chain Data Integration Status Change` events from AWS Supply Chain:

```
{
  "source": ["aws.supplychain"],
  "detail-type": ["AWS Supply Chain Data Integration Status Change"]
}
```

For more information on writing event patterns, see Event patterns in the *EventBridge User Guide*.

AWS Supply Chain events detail reference

All events from AWS services have a common set of fields containing metadata about the event, such as the AWS service that is the source of the event, the time the event was generated, the

account and region in which the event took place, and others. For definitions of these general fields, see Event structure reference in the *Amazon EventBridge User Guide*.

In addition, each event has a `detail` field that contains data specific to that particular event. The reference below defines the detail fields for the various AWS Supply Chain events.

When using EventBridge to select and manage AWS Supply Chain events, it's useful to keep the following in mind:

- The `source` field for all events from AWS Supply Chain is set to `aws.supplychain`.
- The `detail-type` field specifies the event type.

  For example, `AWS Supply Chain Data Integration Status Change`.
- The `detail` field contains the data that is specific to that particular event.

For information on constructing event patterns that enable rules to match AWS Supply Chain events, see Event patterns in the *Amazon EventBridge User Guide*.

For more information on events and how EventBridge processes them, see Amazon EventBridge events in the *Amazon EventBridge User Guide*.

AWS Supply Chain Data Integration Status Change

Below is an example for the `AWS Supply Chain Data Integration Status Change event` event.

```
{
    "version": "0",
    "id": "instanceID",
    "detail-type": "AWS Supply Chain Data Integration Status Change",
    "source": "aws.supplychain",
    "account": "acccountID",
    "time": "2024-03-30T12:26:13Z",
    "region": "us-east-1",
    "resources": [],
    "detail": {
        "version": "1.0",
        "instanceId": "instanceID",
        "flowArn": "arn:aws:scn:region:acccountID:instance/instanceID/data-integration-
flows/flowname",
```

```
        "flowExecutionId": "flowExecutionId",
        "status": "IN_PROGRESS",
        "startTime": "2024-03-30T12:26:13Z",
        "endTime": "",
        "message": "",
        "sourceType": "S3",
        "sourceInfo": {
            "s3Source": {
                "bucketName": "aws-supply-chain-data-instanceID",
                "key": "flowname"
            }
        }
    }
}
```

endTime is only available when the *status* is failure or success.

Quotas for AWS Supply Chain

Your AWS account has default quotas, formerly referred to as limits, for each AWS service. Unless otherwise noted, each quota is Region-specific. You can request to increase quotas for resources that are set to your account level. For more information on account level quotas, see the table below .

To view the quotas for AWS Supply Chain, open the Service Quotas console. In the navigation pane, choose **AWS services** and select **AWS Supply Chain**.

To request a quota increase, see Requesting a Quota Increase in the *Service Quotas User Guide*. If the quota isn't yet available in Service Quotas, use the limit increase form.

Your AWS account has the following quotas related to AWS Supply Chain.

Resource	Default	Adjustable
Number of instances **Note** You can create upto 10 instances within an AWS account.	10	No
Number of Amazon S3 buckets	100	No
Active and pending invitations within an AWS account	30	Yes
Data requests within an AWS account	4,000	Yes
Insights line items per watchlist	1,000	No

Resource	Default	Adjustable
Insights watchlists per instance within an AWS account	1,000	Yes
Insights watchlists per user within an AWS account	100	Yes
Data integration flows per instance within an AWS account	100	No

Frequently asked questions (FAQs)

The following information can help you troubleshoot common issues in enabling IAM Identity Center.

Question	Answer
Why is IAM Identity Center integration required?	IAM Identity Center is the feature within IAM that manages the synchronization of identity sources. IAM Identity Center is the identity source for the AWS Supply Chain instance. You need to configure IAM Identity Center to setup the AWS Console and the AWS Supply Chain web application. For more information on IAM Identity Center, see Enabling AWS IAM Identity Center in the *AWS IAM Identity Center User Guide*.
Why use an IAM Identity Center organization instance for AWS Supply Chain?	By creating an organization instance, you can enable IAM Identity Center access across AWS accounts. For example, if your IAM Identity Center is not enabled in the same AWS account as the AWS Supply Chain instance account. For more information on benefits on creating an organization IAM Identity Center instance, see Organization instances of IAM Identity Center in the *AWS IAM Identity Center User Guide*.
Why are delegated administrator privileges required for AWS Supply Chain?	It is not required to have an delegated administrator to use AWS Supply Chain but it's a best practice for an AWS Organization setup to restrict access to the *management account* for the organization and manage IAM Identity Center. For more information, see Delegated adminsitrotor for AWS Organizations..

Question	Answer
	While creating an organization instance, make sure the account that will be used to create an AWS Supply Chain instance is part of the same organization as the IAM Identity Center account. Make sure the required permissio ns are enabled to create an instance and you can create an AWS Supply Chain instance in the same region as the IAM Identity Center account. For information on required permissions to create a AWS Supply Chain instance, see Getting started with AWS Supply Chain.

AWS support

If you are an administrator and need to contact support for AWS Supply Chain, choose one of the following options:

- If you have an Support account, go to Support Center and submit a ticket.
- Open the AWS Management Console and choose **AWS Supply Chain**, **Support**, **Create case**.

It's helpful to provide the following information:

- Your AWS Supply Chain instance ID/ARN.
- Your AWS Region.
- A detailed description of your issue.

Document history for the AWS Supply Chain Administrator Guide

The following table describes the documentation releases for AWS Supply Chain.

Change	Description	Date
Updated AWS managed policy	AWS Supply Chain updated the managed policy to allow federated users access to ListApplicationAssignments, DescribeApplication, DescribeInstance, and GetApplicationAssignmentConfiguration operations in IAM Identity Center.	December 10, 2024
KMS policy update	Updated the KMS policy to allow AWS Supply Chain to access your AWS KMS key.	March 18, 2024
PrivateLink support	You can access AWS Supply Chain using an interface endpoint (AWS PrivateLink).	February 26, 2024
Adding Groups	Users must be part of an IAM Identity Center group to access AWS Supply Chain.	November 14, 2023
Updated AWS managed policy	AWS Supply Chain updated the managed policy to allow federated users access to ListProfileAssociations operations in IAM Identity Center.	November 1, 2023

Updated AWS managed policy	AWS Supply Chain updated the managed policy to allow federated users access to the PutObject and GetObject operations on the dedicated Amazon S3 bucket with resource arn arn:aws:s3:::aws-supply- chain-data-*.	September 21, 2023
Updated information on regions support	AWS Supply Chain Demand Planning is now also supported in Asia Pacific (Sydney) Region.	September 12, 2023
Use AWS Console to opt-in and opt-out AWS Supply Chain	AWS Supply Chain users can now use the AWS Console to opt-in and opt-out AWS Supply Chain to use or store Your Content on AWS Organizations.	September 7, 2023
Updated information on regions support	AWS Supply Chain is now also supported in Asia Pacific (Sydney) Region, and Europe (Ireland) Region.	July 19, 2023
Updated information on how to contact AWS Support and create an instance	AWS Supply Chain users can now contact AWS Support for help and updated the content on how to create an instance.	April 3, 2023

Added AWS managed policy	AWS Supply Chain added a new policy to allow federated users access to the AWS Supply Chain application, including the permissions necessary to perform actions within the AWS Supply Chain application.	March 1, 2023
Initial release	Initial release of the AWS Supply Chain Administrator Guide.	November 29, 2022