SecMaster

# User Guide

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# 1 Buying SecMaster

## 1.1 Buying SecMaster

### Scenarios

SecMaster provides the basic, standard, and professional editions for your choice. You can buy one of them on a yearly/monthly or pay-per-use basis. You can purchase a SecMaster edition that best fits your workloads.

NOTE

During the purchase, if you are stuck due to insufficient permission, refer to **Assigning Permissions**.

### Procedure

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** On the **Security Overview** page, click **Buy SecMaster** in the upper right corner.

**Step 5** (Optional) Obtain purchase authorization.

Access authorization is required only when first time you buy the service. SecMaster needs your authorization to obtain the ECS asset details. On the **Access Authorization** slide-out panel displayed, select **Agree** and click **OK**.

**Step 6** On the purchase page, set parameters by referring to **Table 1-1**.

**Table 1-1** Parameters for purchasing SecMaster

| Parameter | Description |
| --- | --- |
| Billing Mode | Select **Yearly/Monthly** or **Pay-per-use** billing mode based on your needs.<br>• Yearly/Monthly billing is a prepaid mode in which you pay for the service before using it. Your bill is settled based on the required period. The longer you use the service, the more discounts you got.<br>• Pay-per-use billing is a postpaid mode in which you pay for what you use. You are billed by second based on the actual usage. Your bill is settled by the hour. With the pay-per-use billing mode, you can easily adapt to resource requirement changes, reducing the risk of over-provisioning of resources or lacking capacity. In this mode, there are no upfront commitments required. |
| Region | Select the region where your cloud resources are located. |
| Edition | SecMaster provides basic, standard, and professional editions for your choice. For details about their differences, see **Edition Differences**. |
| Quota | The maximum number of ECSs you want to protect.<br>The quota must be greater than or equal to the total number of ECSs within your account. This value cannot be changed to a smaller one after your purchase is complete.<br>**NOTE**<br>• The maximum quota is 10,000.<br>• If some of your ECSs are not protected by SecMaster, threats to them cannot be detected in a timely manner, which may result in security risks, such as data leakage. To prevent this, increase the ECS quota upon an increase of the host asset quantity. |
| Large Screen<br>Log Audit<br>Security Analysis<br>SOC | You can enable **Large Screen**, **Log Audit**, **Security Analysis**, and **SOC** function. If you want to purchase value-added package in yearly/monthly billing mode, select a required duration.<br>For details about the value-added package and recommended configurations, see **Value-added Package Specifications**. |
| Tag | TMS's predefined tag function is recommended for adding the same tag to different cloud resources. You can also create tags when purchasing SecMaster. |
| Required Duration | Select the required duration as required. You do not need to configure this parameter in pay-per-use mode.<br>The **Auto-renew** option enables the system to renew your service by the purchased period when the service is about to expire. |

**Step 7** Confirm the product details and click **Next**.

**Step 8** After confirming that the order details are correct, read the *SecMaster Disclaimer*, select "I have read and agree to the SecMaster Disclaimer", and click **Pay Now**.

**Step 9** On the payment page, select a payment method and complete the payment.

**----End**

## Value-added Package Specifications

Based on the standard and professional editions, SecMaster provides the following functions in the value-added package:

- **Large Screen**
  - Function description:

    There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect.
  - Purchase configuration description:

    Make a purchase based on your service needs.
- **Log Audit**
  - Function description:

    It collects varied types of log data and stores the collected data for security analysis. You can set the data collection volume and data retention volume for each day.
  - Purchase configuration description:

    In pay-per-use billing mode, you will be billed based on the actual collection and storage volume. You do not need to configure specifications.

    In yearly/monthly billing mode, you need to specify **New Log** per day based on your estimations on service requirements. SecMaster will automatically allocate package specifications based on the value you provide. For details about the specifications, see **Table 1-2**.

**Table 1-2** Specifications of the security data collection and retention packages

| Package | Recommended Configuration for Yearly/Monthly Subscription | Package Specifications | Applicable Range |
| --- | --- | --- | --- |
| Security Data Collection | The volume of data you expect SecMaster to collect each day.<br>Minimum value: 5 GB. You can estimate the volume by multiplying the number of ECSs you have by 120 MB. Maximum volume for each order: 500 GB.<br>When you make a purchase, SecMaster auto-fills this parameter based on the new log volume you specify. You do not need to configure this parameter separately. | 5 *1 GB | 0 GB to 5 GB (included) |
| | | 5 *2 GB | 5 GB to 0 GB (included) |
| | | 5 *3 GB | 10 GB to 15 GB (included) |
| | | ...<br>The others follow the same rule. A maximum of 500 GB can be purchased through an order. | ...<br>The others follow the same rule. |

| Package | Recommended Configuration for Yearly/Monthly Subscription | Package Specifications | Applicable Range |
| --- | --- | --- | --- |
| Security Data Retention | The volume of data you expect SecMaster to store.<br>The minimum volume is 100 GB. You can estimate the volume by multiplying new log volume per day by seven. The maximum volume for each order is 3,500 GB.<br>When you make a purchase, SecMaster auto-fills this parameter based on the new log volume you specify. You do not need to configure this parameter separately. | 100 *1 GB | 0 GB to 100 GB (included) |
| | | 100 *2 GB | 100 GB to 200 GB (included) |
| | | 100 *3 GB | 200 GB to 300 GB (included) |
| | | ...<br>The others follow the same rule. A maximum of 3,500 GB can be purchased through an order. | ...<br>The others follow the same rule. |

NOTE

- The quotas of security data retention and security data collection packages can be counted together. However, these packages cannot cover what you used before the purchase. Subscriptions to these packages cannot be cancelled.
- For yearly/monthly security data collection and retention packages, data volume in excess of the package quotas will be billed on a pay-per-use basis.
- Pay-per-use resources will not be disabled automatically even if yearly/monthly security data retention and security data collection packages expire. They will always be enabled on a pay-per-use basis.

  For yearly/monthly security data collection package, data volume in excess of the package quota will be billed each day on a pay-per-use basis.

  For example, a user purchases a security data collection package with 5 GB/day/quota for one month. If the user uses 5 GB data collection before 22:00 on the purchase day, and then uses 2 GB data collection 22:00 00 and 24:00, the extra 2 GB will be billed on a pay-per-use basis. Starting from 00:00 on the next day, a 5 GB/day/quota is available to the user again.

- **Security Analysis**
  - Function description:

    Security analysis is the cloud native security information and event management solution SecMaster provides for you. The solution collects

logs, reports alerts, aggregates security data, performs association analysis, and more.

- Purchase configuration description:

  **Table 1-3** lists the free quota of security analysis. You can increase the quota at an extra cost if needed.

  In pay-per-use billing mode, you will be billed based on the actual volume. You do not need to configure specifications.

  In yearly/monthly billing mode, you need to set the data volume as required. For details, see **Table 1-4**.

**Table 1-3** Specifications for free security analysis quota

| Function | | Standard Edition | Professional |
|---|---|---|---|
| Security Analysis | Security data collection | 120 MB/day/quota | 120 MB/day/quota |
| | Security data retention | 120 MB/day/quota | 120 MB/day/quota |
| | Security data export | 120 MB/day/quota | 120 MB/day/quota |
| | Platform security data | 40 MB/day/quota | 40 MB/day/quota |
| | Security Modeling Analysis | × | 120 MB/day/quota |

**Table 1-4** Recommended security analysis configurations

| Value-added Function | Recommended Quantity for Yearly/Monthly Subscription |
|---|---|
| Security Analysis | You can estimate the security analysis data volume based on 120 MB/ECS/day.<br>This estimate volume will be applied to security data collection, security data retention, security data export, platform security data, and security modeling analysis as well. If the quota for security analysis is used up, this function becomes unavailable on that day, but it turns to be available at 00:00 the next day.<br>For example, if this parameter is set to 1 GB/day, each day there will be 1 GB of security data that can be collected, 1 GB of security data stored, 1 GB of security data exported, 1 GB of platform security data reported, and 1 GB of data for security modeling analysis. |

- SOC
  - Function description:

    Once SecMaster detects a threat, Security Orchestration (SOC) starts automated response orchestration and works with related cloud services to block and isolate threat sources. SOC provides quick and effective security event responses.
  - Purchase configuration description:

    Table 1-5 lists the free quota of security orchestration. You can increase the quota at an extra cost if needed.

    In pay-per-use billing mode, you will be billed based on the actual security orchestration operation times. You do not need to configure specifications.

    In yearly/monthly billing mode, you need to set the operation times as required. For details, see Table 1-6.

**Table 1-5** Specifications for free security orchestration quota

| Function | Standard Edition | Professional Edition |
| --- | --- | --- |
| Security Orchestration | x | Operations: 7,000 |

**Table 1-6** Recommended security orchestration configurations

| Value-added Function | Recommended Quantity for Yearly/Monthly Subscription |
| --- | --- |
| SOC | SecMaster supports 10,000 operations per day for each server. Set this parameter as required.<br>If the quota for security orchestration is used up, this function becomes unavailable on that day, but it turns to be available at 00:00 the next day. |

## Verification

After the payment is successful, you can view the SecMaster edition you have purchased on the **Purchased Resources** page on the management console.

## Related Operations

- To change the asset quota, choose **Purchased Resources**, select the target region, and click **Increase Quota**. For details, see **Increasing the Quota**.
- To enable the value-added package function, choose **Purchased Resources** and click **Buy Value-add Pack** in the upper right corner. For details, see **Purchasing Value-Added Packages**.
- If your yearly/monthly edition is about to expire or has expired, you can choose **Purchased Resources**, select the target region, and click **Renew** to make a renewal. For details, see **Renewing Your Subscriptions**.

- If you no longer need the asset quota or value-added package, go to the **Security Overview** page, hover over the edition information in the upper right corner of the page, and click **Unsubscribe** or **Cancel** to unsubscribe from the service. For details, see **Unsubscribing from SecMaster**.

# 1.2 Purchasing Value-Added Packages

## Scenario

In addition to the standard and professional editions, SecMaster also provides value-added features for you to choose. This topic describes how to purchase a value-added package.

NOTE

If you are stuck due to insufficient permission, refer to **Assigning Permissions**.

## Value-added Package Specifications

Based on the standard and professional editions, SecMaster provides the following functions in the value-added package:

- **Large Screen**
  - Function description:

    There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect.
  - Purchase configuration description:

    Make a purchase based on your service needs.
- **Log Audit**
  - Function description:

    It collects varied types of log data and stores the collected data for security analysis. You can set the data collection volume and data retention volume for each day.
  - Purchase configuration description:

    In pay-per-use billing mode, you will be billed based on the actual collection and storage volume. You do not need to configure specifications.

    In yearly/monthly billing mode, you need to specify **New Log** per day based on your estimations on service requirements. SecMaster will automatically allocate package specifications based on the value you provide. For details about the specifications, see **Table 1-7**.

**Table 1-7** Specifications of the security data collection and retention packages

| Package | Recommended Configuration for Yearly/Monthly Subscription | Package Specifications | Applicable Range |
| --- | --- | --- | --- |
| Security Data Collection | The volume of data you expect SecMaster to collect each day.<br>Minimum value: 5 GB. You can estimate the volume by multiplying the number of ECSs you have by 120 MB. Maximum volume for each order: 500 GB.<br>When you make a purchase, SecMaster auto-fills this parameter based on the new log volume you specify. You do not need to configure this parameter separately. | 5 *1 GB | 0 GB to 5 GB (included) |
| | | 5 *2 GB | 5 GB to 0 GB (included) |
| | | 5 *3 GB | 10 GB to 15 GB (included) |
| | | ...<br>The others follow the same rule. A maximum of 500 GB can be purchased through an order. | ...<br>The others follow the same rule. |

| Package | Recommended Configuration for Yearly/Monthly Subscription | Package Specifications | Applicable Range |
| --- | --- | --- | --- |
| Security Data Retention | The volume of data you expect SecMaster to store.<br>The minimum volume is 100 GB. You can estimate the volume by multiplying new log volume per day by seven. The maximum volume for each order is 3,500 GB.<br>When you make a purchase, SecMaster auto-fills this parameter based on the new log volume you specify. You do not need to configure this parameter separately. | 100 *1 GB | 0 GB to 100 GB (included) |
| | | 100 *2 GB | 100 GB to 200 GB (included) |
| | | 100 *3 GB | 200 GB to 300 GB (included) |
| | | ...<br>The others follow the same rule. A maximum of 3,500 GB can be purchased through an order. | ...<br>The others follow the same rule. |

NOTE

- The quotas of security data retention and security data collection packages can be counted together. However, these packages cannot cover what you used before the purchase. Subscriptions to these packages cannot be cancelled.
- For yearly/monthly security data collection and retention packages, data volume in excess of the package quotas will be billed on a pay-per-use basis.
- Pay-per-use resources will not be disabled automatically even if yearly/monthly security data retention and security data collection packages expire. They will always be enabled on a pay-per-use basis.

  For yearly/monthly security data collection package, data volume in excess of the package quota will be billed each day on a pay-per-use basis.

  For example, a user purchases a security data collection package with 5 GB/day/quota for one month. If the user uses 5 GB data collection before 22:00 on the purchase day, and then uses 2 GB data collection 22:00 00 and 24:00, the extra 2 GB will be billed on a pay-per-use basis. Starting from 00:00 on the next day, a 5 GB/day/quota is available to the user again.

- **Security Analysis**
  - Function description:

    Security analysis is the cloud native security information and event management solution SecMaster provides for you. The solution collects

logs, reports alerts, aggregates security data, performs association analysis, and more.

- Purchase configuration description:

  **Table 1-8** lists the free quota of security analysis. You can increase the quota at an extra cost if needed.

  In pay-per-use billing mode, you will be billed based on the actual volume. You do not need to configure specifications.

  In yearly/monthly billing mode, you need to set the data volume as required. For details, see **Table 1-9**.

**Table 1-8** Specifications for free security analysis quota

| Function | | Standard Edition | Professional |
|---|---|---|---|
| Security Analysis | Security data collection | 120 MB/day/quota | 120 MB/day/quota |
| | Security data retention | 120 MB/day/quota | 120 MB/day/quota |
| | Security data export | 120 MB/day/quota | 120 MB/day/quota |
| | Platform security data | 40 MB/day/quota | 40 MB/day/quota |
| | Security Modeling Analysis | × | 120 MB/day/quota |

**Table 1-9** Recommended security analysis configurations

| Value-added Function | Recommended Quantity for Yearly/Monthly Subscription |
|---|---|
| Security Analysis | You can estimate the security analysis data volume based on 120 MB/ECS/day.<br>This estimate volume will be applied to security data collection, security data retention, security data export, platform security data, and security modeling analysis as well. If the quota for security analysis is used up, this function becomes unavailable on that day, but it turns to be available at 00:00 the next day.<br>For example, if this parameter is set to 1 GB/day, each day there will be 1 GB of security data that can be collected, 1 GB of security data stored, 1 GB of security data exported, 1 GB of platform security data reported, and 1 GB of data for security modeling analysis. |

- SOC
  - Function description:

    Once SecMaster detects a threat, Security Orchestration (SOC) starts automated response orchestration and works with related cloud services to block and isolate threat sources. SOC provides quick and effective security event responses.
  - Purchase configuration description:

    **Table 1-10** lists the free quota of security orchestration. You can increase the quota at an extra cost if needed.

    In pay-per-use billing mode, you will be billed based on the actual security orchestration operation times. You do not need to configure specifications.

    In yearly/monthly billing mode, you need to set the operation times as required. For details, see **Table 1-11**.

**Table 1-10** Specifications for free security orchestration quota

| Function | Standard Edition | Professional Edition |
| --- | --- | --- |
| Security Orchestration | x | Operations: 7,000 |

**Table 1-11** Recommended security orchestration configurations

| Value-added Function | Recommended Quantity for Yearly/Monthly Subscription |
| --- | --- |
| SOC | SecMaster supports 10,000 operations per day for each server. Set this parameter as required.<br>If the quota for security orchestration is used up, this function becomes unavailable on that day, but it turns to be available at 00:00 the next day. |

## Limitations and Constraints

- The value-added package is an additional payment item for the standard or professional edition. To use the value-added package, you need to purchase the standard or professional edition first.

## Procedure

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Overview**, or select **Purchased Resources**. On the page displayed, click **Buy Value-added Pack** in the upper right corner.

**Step 5** On the purchase page, configure required parameters.

**Table 1-12** Parameters for purchasing a value-added package

| Parameter | Description |
| --- | --- |
| Billing Mode | Select **Yearly/Monthly** or **Pay-per-use** billing mode based on your needs.<br>• Yearly/Monthly billing is a prepaid mode in which you pay for the service before using it. Your bill is settled based on the required period. The longer you use the service, the more discounts you got.<br>• Pay-per-use billing is a postpaid mode in which you pay for what you use. You are billed by second based on the actual usage. Your bill is settled by the hour. With the pay-per-use billing mode, you can easily adapt to resource requirement changes, reducing the risk of over-provisioning of resources or lacking capacity. In this mode, there are no upfront commitments required. |
| Region | Select your region. |
| Configuration | The configuration of the current SecMaster edition. |
| Large Screen | Make a purchase based on your service needs. |
| Log Audit | Make a purchase based on your service needs.<br>When purchasing a yearly/monthly package, you need to estimate the volume of new logs generated each day and specify **New Log**. SecMaster will automatically specify the security data collection and retention specifications. For details, see **Value-added Package Specifications**. |
| Security Analysis | Make a purchase based on your service needs.<br>If you want to buy a yearly/monthly package, you are advised to estimate the data volume on a basis of 120 MB per day for each server. The data volume you set will be applied to security data collection, security data retention, security data export, platform security data, and security modeling analysis as well.<br>For example, if this parameter is set to 1 GB/day, each day there will be 1 GB of security data that can be collected, 1 GB of security data stored, 1 GB of security data exported, 1 GB of platform security data reported, and 1 GB of data for security modeling analysis. |
| SOC | Make a purchase based on your service needs.<br>If you want to buy a yearly/monthly package, set the number of operations as required. |

| Parameter | Description |
| --- | --- |
| Tag | TMS's predefined tag function is recommended for adding the same tag to different cloud resources. You can also create tags when purchasing SecMaster. |
| Required Duration | Select the required duration as required. You do not need to configure this parameter in pay-per-use mode.<br>The **Auto-renew** option enables the system to renew your service by the purchased period when the service is about to expire. |

**Step 6** Confirm the product details and click **Next**.

**Step 7** After confirming that the order details are correct, read the *SecMaster Disclaimer*, select **I have read and agree to the SecMaster Disclaimer**, and click **Pay Now**.

**Step 8** On the payment page, select a payment method and complete the payment.

**----End**

## Follow-up Operations

- If the large screen function is about to expire or has expired, go to the **Purchased Resources**, locate the target resource, and click **Renew** to extend the validity period. For more details, see **Renewing Your Subscriptions**.
- If you no longer need the value-added package, go to the **Security Overview** page, hover over the edition information in the upper right corner of the page, and click **Unsubscribe** or **Cancel** in the displayed pane. For details, see **Unsubscribing from SecMaster**.

# 1.3 Upgrading the Service Edition

The upgrade method includes version upgrade and quota increase. Select a method as needed.

**Table 1-13** Edition upgrade

| Scenario | Description |
| --- | --- |
| Upgrade the edition | • **Upgrading Basic to Standard or Professional**: If you have enabled the basic edition, you can upgrade to the standard or professional edition.<br>• **Upgrading Standard to Professional**: If you have purchased the standard edition, you can upgrade to the professional edition. |
| Increase the quota | You can increase the quota. For details, see **Increasing the Quota**. |

| Scenario | Description |
| --- | --- |
| Upgrade the edition and increase the quota | **Upgrading Standard to Professional**: If you have purchased the standard edition, you can upgrade it to the professional edition and increase its quota at the same time. |
| **CAUTION**<br>• SecMaster does not support scale-downs.<br>• SecMaster provides basic, standard, and professional editions for your choice. For details about their differences, see **Edition Differences**.<br>• If you are stuck due to insufficient permission, refer to **Assigning Permissions**. | |

## Upgrading Basic to Standard or Professional

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Purchased Resources**. Locate the target region and click **Upgrade**.

**Step 5** On the **Buy SecMaster** page, configure SecMaster parameters.

**Table 1-14** Parameters for upgrading the basic edition

| Parameter | Description |
| --- | --- |
| Current Configuration | The configuration of the current SecMaster edition. |
| Upgrade Method | **Version Upgrade** is selected by default. |
| Optional Version | Select **Standard** or **Professional**. |
| Tag | TMS's predefined tag function is recommended for adding the same tag to different cloud resources. You can also create tags when purchasing SecMaster. |

**Step 6** Confirm the product details and click **Next**.

**Step 7** After confirming that the order details are correct, read the *SecMaster Disclaimer*, select **I have read and agree to the SecMaster Disclaimer**, and click **Pay Now**.

**Step 8** On the payment page, select a payment method and complete the payment.

**----End**

## Upgrading Standard to Professional

**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Purchased Resources**. On the page that is displayed, locate the region where you want to upgrade and click **Upgrade**.

**Step 5** On the **Buy SecMaster** page, configure SecMaster parameters.

**Table 1-15** Parameters for upgrading the standard edition

| Parameter | Description |
| --- | --- |
| Current Configuration | The configuration of the current SecMaster edition. |
| Upgrade Method | Select **Version Upgrade**. You can also select **Increase Quota**. |
| Optional Version | Select **Professional** to upgrade SecMaster to the professional edition. |
| Quota | The total ECS quota must be greater than or equal to the total number of ECSs within your account. This value cannot be changed to a smaller one after your purchase is complete.<br>**NOTE**<br>• The maximum quota is 10,000.<br>• If some of your ECSs are not protected by SecMaster, threats to them cannot be detected in a timely manner, which may result in security risks, such as data leakage. To prevent this, increase the ECS quota upon an increase of the host asset quantity. |
| Tag | TMS's predefined tag function is recommended for adding the same tag to different cloud resources. You can also create tags when purchasing SecMaster. |

**Step 6** Confirm the product details and click **Next**.

**Step 7** After confirming that the order details are correct, read the *SecMaster Disclaimer*, select **I have read and agree to the SecMaster Disclaimer**, and click **Pay Now**.

**Step 8** On the payment page, select a payment method and complete the payment.

**----End**

## Effective Conditions

After completing your payment, you can see your SecMaster edition in the upper right corner of the management console.

### Related Operations

- To change the asset quota, choose **Purchased Resources**, select the target region, and click **Increase Quota**. For details, see **Increasing the Quota**.
- To enable the value-added package function, choose **Purchased Resources** and click **Buy Value-add Pack** in the upper right corner. For details, see **Purchasing Value-Added Packages**.
- If your yearly/monthly edition is about to expire or has expired, you can choose **Purchased Resources**, select the target region, and click **Renew** to make a renewal. For details, see **Renewing Your Subscriptions**.
- If you no longer need the asset quota or value-added package, go to the **Security Overview** page, hover over the edition information in the upper right corner of the page, and click **Unsubscribe** or **Cancel** to unsubscribe from the service. For details, see **Unsubscribing from SecMaster**.

## 1.4 Increasing the Quota

### Scenario

SecMaster allows you to increase **Quota** and change required duration at any time after you make a purchase.

NOTE

If you are stuck due to insufficient permission, refer to **Assigning Permissions**.

### Limitations and Constraints

- The quota is the total number of ECSs you authorize SecMaster to check. The maximum ECS quota cannot exceed 10,000.
- When buying SecMaster, ensure that the total ECS quota is greater than or equal to the total number of ECSs under the current account. Otherwise, threats may not be detected in a timely manner if unauthorized hosts are attacked, increasing risks such as data leakage.

### Procedure

**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Purchased Resources**. On the page that is displayed, locate the region where you want to add quotas and click **Increase Quota**.

**Step 5** On the **Buy SecMaster** page, configure SecMaster parameters.

**Table 1-16** Parameters for increasing ECS quota

| Parameter | Description |
| --- | --- |
| Current Configuration | The configuration of the current SecMaster edition. |
| Upgrade Method | Choose **Increase Quota**. |
| Quota | The total ECS quota must be greater than or equal to the total number of ECSs within your account. This value cannot be changed to a smaller one after your purchase is complete.<br>**NOTE**<br>• The maximum quota is 10,000.<br>• If some of your ECSs are not protected by SecMaster, threats to them cannot be detected in a timely manner, which may result in security risks, such as data leakage. To prevent this, increase the ECS quota upon an increase of the host asset quantity. |
| Tag | TMS's predefined tag function is recommended for adding the same tag to different cloud resources. You can also create tags when purchasing SecMaster. |

**Step 6** Confirm the product details and click **Next**.

**Step 7** After confirming that the order details are correct, read the *SecMaster Disclaimer*, select **I have read and agree to the SecMaster Disclaimer**, and click **Pay Now**.

**Step 8** On the payment page, select a payment method and complete the payment.

**----End**

# 2 Authorizing SecMaster

## Scenario

SecMaster depends on some other cloud services. To better use SecMaster, you can authorize SecMaster to perform some operations on some cloud services on your behalf. For example, you can allow SecMaster to execute scheduling tasks and manage resources.

Your authorization is required first time you try to use SecMaster. The following table lists the permissions you need to assign to SecMaster.

**Table 2-1** Agency permissions

| Permission | Description | Assign To | When to Use |
| --- | --- | --- | --- |
| ECS FullAccess | All permissions for ECS | SecMaster_Agency | Used to work with security groups to block source IP address, execute playbooks that update security groups, and to query ECSs details. |
| WAF FullAccess | Web Application Firewall (WAF) administrator | SecMaster_Agency | Used to work with WAF blacklists and address groups to block malicious source IP addresses and to check websites protected with WAF for baseline settings. |
| SecMaster FullAccess | SecMaster administrator | SecMaster_Agency | Used to perform operations such as alert handling. |
| HSS FullAccess | Host Security Service (HSS) administrator | SecMaster_Agency | Used to execute playbooks related to vulnerability management and host isolation, and to obtain the HSS status for servers during baseline inspections. |

| Permission | Description | Assign To | When to Use |
| --- | --- | --- | --- |
| EPS ReadOnlyAccess | Read-only permissions for EPS. | SecMaster_Agency | Used to execute WAF-related playbooks and workflows. |
| ECS ReadOnlyAccess | Read-only permissions for ECSs. | SecMaster_Agency | Used to query the number of ECSs during subscription and obtain ECS security settings for baseline checks. |
| Anti-DDoS ReadOnlyAccess | Read-only permissions for Anti-DDoS. | SecMaster_Agency | Used to obtain Anti-DDoS asset details for baseline checks. |
| IAM ReadOnlyAccess | Read-only permissions for IAM. | SecMaster_Agency | Used to obtain credential information during playbook and workflow execution. |
| WAF Administrator | WAF administrator, who has all permissions for WAF. | SecMaster_Agency | Used to execute WAF-related playbooks and workflows. |
| SMN FullAccess | All permissions for SMN. | SecMaster_Agency | Used to send playbook execution notifications. |
| RDS ReadOnlyAccess | Read-only permissions for RDS | SecMaster_Agency | Used to execute playbooks related to asset connections. |
| EIP ReadOnlyAccess | Read-only permissions for EIP | SecMaster_Agency | Used to execute asset connection playbooks and obtain EIP configurations for baseline checks. |
| Tenant Guest | Read-only permissions for all cloud services (except IAM) | SecMaster_Agency | Used to execute the HTTP plug-in in playbooks. |
| NAT ReadOnlyAccess | Read-only permissions for NAT Gateway. | SecMaster_Agency | Used to obtain NAT Gateway information for resource management. |
| VPC FullAccess | All permissions for VPC. | SecMaster_Agency | Used to execute asset connection playbooks and isolation workflows, and obtain VPC details for baseline checks. |

| Permission | Description | Assign To | When to Use |
| --- | --- | --- | --- |
| OBS OperateAccess | Allows a user to perform the basic operations, such as viewing the bucket list, obtaining bucket metadata, listing objects in a bucket, querying bucket location, uploading objects, obtaining objects, deleting objects, and obtaining an object ACL. | SecMaster_Agency | Used to execute alert playbooks and obtain OBS asset details for baseline checks. |
| ELB ReadOnlyAccess | Read-only permissions for ELB. | SecMaster_Agency | Used to obtain ELB asset details for baseline checks. |
| CFW FullAccess | All permissions for CFW. | SecMaster_Agency | Used to execute preventive playbooks. |
| RMS ReadOnlyAccess | Read-only permissions for RMS. | SecMaster_Agency | Used by the playbooks of notifying of critical O&M operations. |

## Prerequisites

- The IAM account has been authorized. For details, see **How Do I Grant Permissions to an IAM User?**
- You have purchased SecMaster.

## Procedure

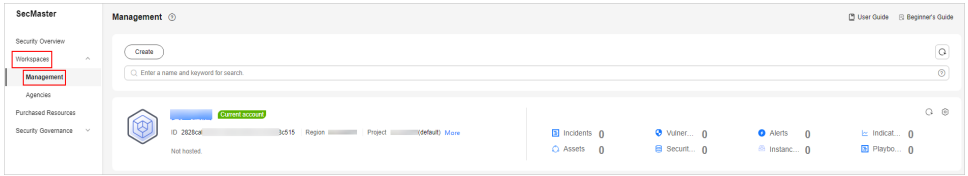
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 2-1** Workspaces > Management



**Step 5** (Optional) In the upper part of the workspace management page, click **Entrusted Service Authorization - Current Tenant**.

The service authorization page is automatically displayed the first time you log in.

**Step 6** On the page for assigning permissions, select all required permissions (which are selected by default), select **Agree to authorize**, and click **Confirm**.

**----End**

# 3 Security Overview

## 3.1 Overview

On the **Security Overview** page, SecMaster displays the overall security assessment result of your assets in real time. SecMaster works together with other cloud security services to centrally display security assessment and monitoring results, as well as your cloud security scores over time.

### Procedure

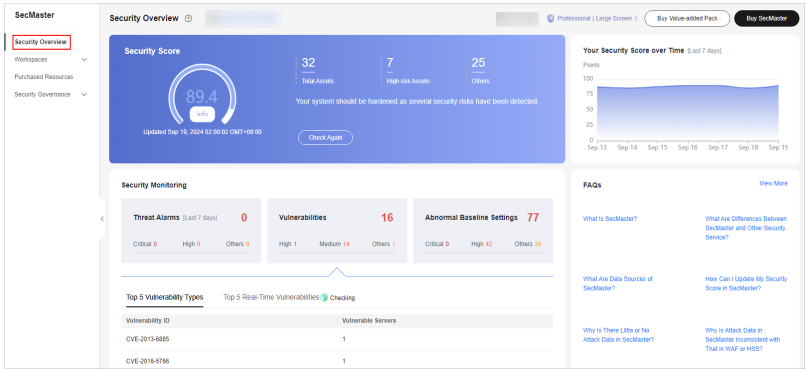
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Overview**.

**Figure 3-1** Security Overview




**Step 5** On the **Security Overview** page, you can view the security overview of your assets and perform related operations. The **Security Overview** page consists of the following modules:

- **Security Score**
- **Security Monitoring**
- **Your Security Score over Time**

The following table describes the reference periods and update frequency of the modules.

**Table 3-1** Security Overview

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Security Score | Real-time | • Automatic update at 02:00 every day<br>• Updated every time you click **Check Again** | The score is calculated based on what security services are enabled, and the levels and numbers of unhandled configuration issues, vulnerabilities, and threats. For details, see **Security Score**. |
| Threat Alarms | Last 7 days | Every 5 minutes | Total number of alerts in all SecMaster workspaces of your account. |
| Vulnerabilities | Last 7 days | Every 5 minutes | Total number of vulnerabilities in all SecMaster workspaces of your account. |
| Abnormal Baseline Settings | Real-time | Every 5 minutes | Total number of abnormal baseline settings in all SecMaster workspaces of your account. |
| Your Security Score over Time | Last 7 days | Every 5 minutes | Security scores in the last seven days. |

**----End**

## Security Score

The security score shows the overall health status of your workloads on the cloud based on the service edition you are using. You can quickly learn about unhandled risks and their threats to your assets.

- The security score is automatically updated at 02:00 every day. You can also click **Check Again** to update it immediately.
- The score ranges from 0 to 100. The higher the security score, the more secure your assets. For details, see **Security Score**.
- Different color blocks in the security score ring chart indicate different severity levels. For example, yellow indicates that your security is medium.

- The security score is updated when you refresh status of the alert incident after risk handling. After you fix the risks, you can click **Check Again** so that SecMaster can check and score your system again.

  NOTE

  After risks are fixed, manually ignore or handle alert incidents and update the alert incident status in the alert list. The risk severity can be down to a proper level accordingly.

- The security score reflects the security situation of your system last time you let SecMaster check the system. To obtain the latest score, click **Check Again**.

## Security Monitoring

The **Security Monitoring** area includes **Threat Alarms**, **Vulnerabilities**, and **Abnormal Baseline Settings**, which sort risks that have not been handled.

**Table 3-2** Security Monitoring parameters

| Parameter | Description |
| --- | --- |
| Threat Alarms | This panel displays the unhandled threat alerts in all workspace of the current account for the **last 7 days**. You can quickly learn of the total number of unhandled threat alerts and the number of vulnerabilities at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **Critical**: There are intrusions to your workloads, and you should view alert details and handle the alert in a timely manner.<br>– **High**: There are abnormal incidents on your workloads, and you should view alert details and handle the alert in a timely manner.<br>– **Others**: There are risky incidents that are marked as medium-risk, low-risk, and informational alerts detected in your systems, and you should view alert details and take necessary actions.<br>• To quickly view details of top 5 threat alerts for the last 7 days, click the **Threat Alarms** panel.<br>– You can view details of those threats, including the threat alert name, severity, asset name, and discovery time.<br>– If no data is available here, no threat alerts are generated for the last 7 days. |

| Parameter | Description |
| --- | --- |
| Vulnerabilities | This panel displays the top five vulnerability types and the total number of unfixed vulnerabilities in your assets in all workspaces of your account for the **last 7 days**. You can quickly learn of the total number of unfixed vulnerabilities and the number of vulnerabilities at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **High**: There are vulnerabilities on your workloads, and you should view vulnerability details and handle them in a timely manner.<br>– **Medium**: There are abnormal incidents on your workloads, and you should view vulnerability details and handle the vulnerability in a timely manner.<br>– **Others**: There are risky incidents that are marked as low-risk or informational in your systems, and you should view vulnerability details and take necessary actions.<br>• When you click the **Top 5 Vulnerability Types** tab, the system displays the five vulnerability types with the most affected servers.<br>– Vulnerability rankings are based on the number of hosts a vulnerability affects. The vulnerability ranked the first affects the most hosts.<br>– The data is displayed in **Top 5 Vulnerability Types** only when the hosts have Host Security Service (HSS) Agent version 2.0 installed. If no data is displayed or you want to view top 5 vulnerability types, upgrade Agent from 1.0 to 2.0.<br>• Click **Top 5 Real-Time Vulnerabilities** tab. The system displays the top 5 vulnerability incidents for the **last 7 days**. You can quickly view vulnerability details.<br>– You can view details such as the vulnerability name, severity, asset name, and discovery time.<br>– If no data is available here, no vulnerabilities are detected on the current day. |

| Parameter | Description |
| --- | --- |
| Abnormal Baseline Settings | This panel displays the total number of compliance violations detected in all workspaces of your account. You can quickly learn of total number of violations and the number of violations at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **Critical**: There are intrusions to your workloads, and you should view details about abnormal baseline settings and handle them in a timely manner.<br>– **High**: There are abnormal incidents on your workloads, and you should view details about compliance risks and handle them in a timely manner.<br>– **Others**: There are risky incidents that are marked as medium-risk, low-risk, and informational alerts detected in your systems, and you should view details about results of compliance checks and take necessary actions.<br>• To quickly view details of top 5 abnormal compliance risks discovered, click the **Abnormal Baseline Settings** panel.<br>– You can view details of the top compliance risks discovered in the latest check, such as check item name, severity, asset name, and discovery time.<br>– If no data is available, no violations are detected. |

### Your Security Score over Time

SecMaster displays your security scores over the **last 7 days**. The statistics are updated every 5 minutes.

## 3.2 Security Score

### Scenario

SecMaster assesses the overall security situation of your cloud assets in real time and scores your assets based on the SecMaster edition you are using.

The security score is automatically updated at 02:00 every day. You can also click **Check Again** to update it immediately.

This topic describes how your security score is calculated.

### Security Score

SecMaster evaluates the over security posture of your assets based on the SecMaster edition you are using.

- There are six risk severity levels, **Secure**, **Informational**, **Low**, **Medium**, **High**, and **Critical**.

- The score ranges from 0 to 100. The higher the security score, the lower the risk severity level.
- The security score starts from **0** and the risk severity level is escalated up from **Secure** to the next level every 20 points. For example, for scores ranging from **40** to **60**, the risk severity is **Medium**.
- The color keys listed on the right of the chart show the names of donut slices. Different color represents different risk severity levels. For example, the yellow slice indicates that your asset risk severity is **Medium**.
- If you have fixed asset risks and refreshed the alert status, you can click **Check Again** to update the security score.

  NOTE

  After risks are fixed, manually ignore or handle alert incidents and update the alert incident status in the alert list. The risk severity can be down to a proper level accordingly.

**Table 3-3** Security score table

| Severity | Security Score | Description |
| --- | --- | --- |
| Secure | 100 | Congratulations. Your assets are secure. |
| Informational | 80 ≤ Security Score < 100 | Your system should be hardened as several security risks have been detected. |
| Low | 60 ≤ Security Score < 80 | Your system should be hardened in a timely manner as too many security risks have been detected. |
| Medium | 40 ≤ Security Score < 60 | Your system should be hardened, or your assets will be vulnerable to attacks. |
| High | 20 ≤ Security Score < 40 | Detected risks should be handled immediately, or your assets will be vulnerable to attacks. |
| Critical | 0≤ Security Score <20 | Detected risks should be handled immediately, or your assets may be attacked. |

## Unscored Check Items

Table 3-4 lists the security check items and corresponding points.

**Table 3-4** Unscored check items

| Category | Unscored Item | Unsocred Point | Suggestion | Maximum Unscored Point |
| --- | --- | --- | --- | --- |
| Enabling of security services | Security-related services not enabled | - | Enable security-related services. | 30 |

| Category | Unscored Item | Unsocred Point | Suggestion | Maximum Unscored Point |
| --- | --- | --- | --- | --- |
| Compliance Check | Critical non-compliance items not fixed | 10 | Fix compliance violations by referring recommended fixes and start a scan again. The security score will be updated. | 20 |
| | High-risk non-compliance items not fixed | 5 | | |
| | Medium-risk non-compliance items not fixed | 2 | | |
| | Low-risk non-compliance items not fixed | 0.1 | | |
| Vulnerabilities | Critical vulnerabilities not fixed | 10 | Fix vulnerabilities by referring corresponding suggestions and start a scan again. The security score will be updated. | 20 |
| | High-risk vulnerabilities not fixed | 5 | | |
| | Medium-risk vulnerabilities not fixed | 2 | | |
| | Low-risk vulnerabilities not fixed | 0.1 | | |
| Threat Alerts | Critical alerts not fixed | 10 | Fix the threats by referring to the suggestions. The security score will be updated accordingly. | 30 |
| | High-risk alerts not fixed | 5 | | |
| | Medium-risk alerts not fixed | 2 | | |
| | Low-risk alerts not fixed | 0.1 | | |

# 4 Workspaces

## 4.1 Workspace Overview

This section describes the definition, types, and basic operations of workspaces.

### What Is a Workspace?

A workspace is the top-level operation platform in SecMaster.

- Workspace management:

  A single workspace can be bound to common projects and regions to support workspace operation modes in different scenarios.
- Workspace hosting: You can create an agency and use it to view the asset risks, alerts, and incidents of multiple workspaces across accounts.

### What Is a Data Space?

A data space is a unit for data grouping, load balancing, and flow control. Data in the same data space shares the same load balancing policy.

### What Is a Data Pipeline?

A data transfer message topic and a storage index form a pipeline.

### General Rules for Workspaces

- Paid SecMaster: A maximum of five workspaces can be created for a single account in a single region.
- Free SecMaster: Only one workspace can be created for a single account in a single region.
- Permanent deletion of workspaces: Workspaces are deleted immediately and cannot be restored.
- Workspace agencies:
  - A maximum of one workspace agency view can be created for an account in a region.

  - A maximum of 100 workspaces can be managed in a workspace agency view in a region for a single account or across several accounts.
  - A maximum of 10 workspaces can be managed in a workspace agency view under a single account in a region.
  - A maximum of 10 agencies can be created under a single account.
- Currently, performing operations in different workspaces in multiple windows of the same browser is not supported.

# 4.2 Creating a Workspace

## Scenario

Workspaces are the root of SecMaster resources. A single workspace can be bound to general projects, regions, and enterprise projects for different application scenarios.

Before using baseline inspection, alert management, security analysis, and security orchestration in SecMaster, you need to create at least one workspace first. You can use workspaces to group your resources by application scenario. This will make security operations more efficient.

This section describes how to create a workspace.

## Limitations and Constraints

- Paid SecMaster: A maximum of five workspaces can be created for a single account in a single region.
- Free SecMaster: Only one workspace can be created for a single account in a single region.

## Procedure

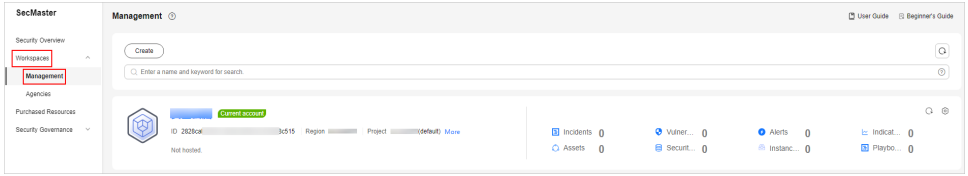
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 4-1** Workspaces > Management




**Step 5** On the **Management** page, click **Create**. The **Create Workspace** slide-out panel is displayed.

**Step 6** Configure workspace parameters by referring to the following table.

**Table 4-1** Parameters for creating a workspace

| Parameter | Description |
| --- | --- |
| Region | Select the region where the workspace to be added is located. |
| Project Type | Select the type of project that the workspace you want to create belongs to. |
| Workspace Name | Create a name for your workspace. The name must meet the following requirements:<br>• Only letters (A to Z and a to z), numbers (0 to 9), and the following special characters are allowed: -_()<br>• A maximum of 64 characters are allowed. |
| Tag | (Optional) Tag of the workspace, which is used to identify the workspace and help you classify and track your workspaces. |
| Description | (Optional) User remarks |

**Step 7** Click **OK**.

**----End**

# 4.3 Managing Workspaces

## 4.3.1 Viewing Workspace Details

### Scenario

This section describes how to view the information about a workspace, including the name, type, and creation time.

NOTE

SecMaster allows you to view the information about all region workspaces on the workspace management page. If the workspace information cannot be viewed and a message is displayed indicating that you have not purchased SecMaster, enable any SecMaster edition.

For example, if you have purchased SecMaster and created workspaces in the **CN-Hong Kong** region, when you switch to the **AP-Bangkok** region, you can still view the workspaces in the **CN-Hong Kong** region on the space management page. If the system displays a message indicating that you have not purchased SecMaster and cannot view the workspace information, enable any SecMaster edition.

### Procedure

**Step 1** Log in to the management console.

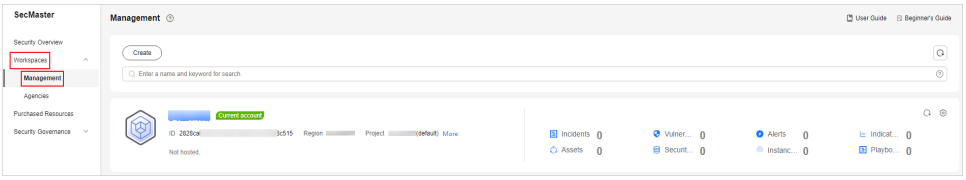
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 4-2** Workspaces > Management




**Step 5** On the **Management** page, view information about existing workspaces.

If there are many workspaces, you can use filters to quickly search for a specific workspace.

**Figure 4-3** Workspace details

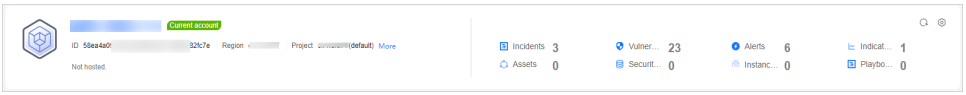



**Table 4-2** Workspace parameters

| Parameter | Description |
| --- | --- |
| Workspace Name | Name of the workspace |
| Workspace Type | Type of the workspace. The options are **Self-owned**, **Managed View**, and **Managed**. |
| ID | ID of the workspace |
| Region | Region to which the workspace belongs |
| Project | Project to which the workspace belongs |
| More | Move the pointer over **More** to view the workspace details. |
| Hosting Status | Whether the workspace is hosted |
| Incidents | Number of incidents in the workspace |
| Vulnerabilities | Number of vulnerabilities in the workspace |
| Alerts | Number of alerts in the workspace |
| Indicators | Number of indicators in the workspace |
| Assets | Number of assets in the workspace |
| Security Analysis | Number of existing data spaces in the workspace |

| Parameter | Description |
| --- | --- |
| Instances | Number of instances in the workspace |
| Playbooks | Number of playbooks in the workspace |

**Step 6** To view details about a workspace, click on the right of the workspace. The workspace details page is displayed.

On the **Basic Information** tab, you can view the workspace information, such as the workspace name, project, and ID. On the **Tag Management** tab, you can manage tags. For details, see **Managing Workspace Tags**.

**----End**

## 4.3.2 Editing a Workspace

### Scenario

You can modify the workspace basic settings, including name, tag, and description.

This section describes how to edit a workspace.

### Procedure

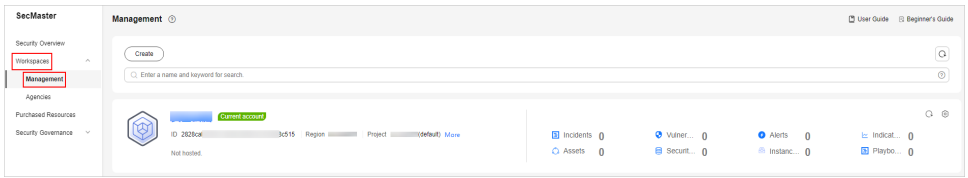
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

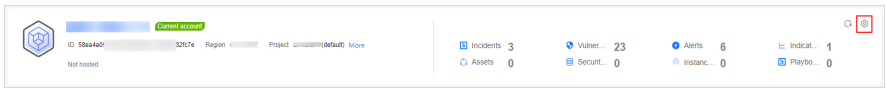
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 4-4** Workspaces > Management




**Step 5** Click in the upper right corner of the target workspace.

**Figure 4-5** Workspace details page




**Step 6** On the **Basic Information** tab page displayed, click **Edit**.

**Step 7** Edit the workspace name or description and click **Save**.

**----End**

## 4.3.3 Managing Workspace Tags

### Scenario

After creating a workspace, you can add, edit, and delete tags configured for the workspace. A tag consists of a key-value pair. Tags are used to identify, and classify workspaces. Workspace tags are used for workspace management only.

If your organization has configured tag policies for SecMaster, add tags to workspaces based on the policies. If a tag does not comply with the tag policies, workspaces may fail to be created. Contact your organization administrator to learn more about tag policies.

This topic describes how to manage tags.

### Limitations and Constraints

A maximum of 20 tags can be added for a workspace.

### Procedure

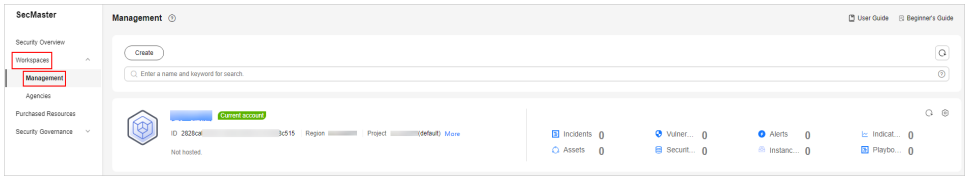
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

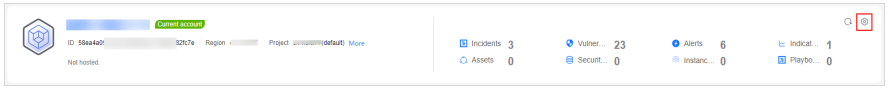
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 4-6** Workspaces > Management




**Step 5** Click in the upper right corner of the target workspace.

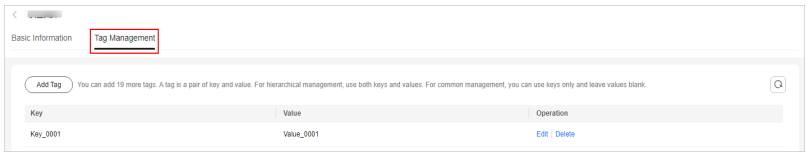
**Figure 4-7** Workspace details page




**Step 6** On the workspace details page, choose **Tag Management**.

**Figure 4-8** Tag Management




**Step 7** On the **Tag Management** page, manage tags.

**Table 4-3** Managing tags

| Operation | Description |
| --- | --- |
| Adding a tag | 1. On the **Tag Management** tab, click **Add Tag**.<br>2. In the displayed **Add Tag** tab, configure the tag key and value.<br>3. Click **OK**. |
| Editing a tag | 1. On the **Tag Management** tab, locate the row that contains the target tag and click **Edit** in the **Operation** column.<br>2. In the displayed **Edit Tag** dialog box, change the tag value.<br>3. Click **OK**. |
| Deleting a tag | On the **Tag Management** tab, locate the row that contains the target tag and click **Delete** in the **Operation** column. In the displayed **Delete Tag** dialog box, click **OK**. |

**----End**

# 4.3.4 Deleting a Workspace

## Scenario

This section describes how to delete a workspace that is no longer needed.

After a workspace is deleted, assets in the workspace will face risks. Deleted workspaces cannot be restored. Exercise caution when performing this operation.

## Limitations and Constraints

- When you delete a workspace, the playbooks, workflows, and engines running in it stop immediately.
- If you select **Permanently delete the workspace**, all content in the workspace will be permanently deleted and cannot be restored.

## Deleting a Workspace

**Step 1** Log in to the management console.

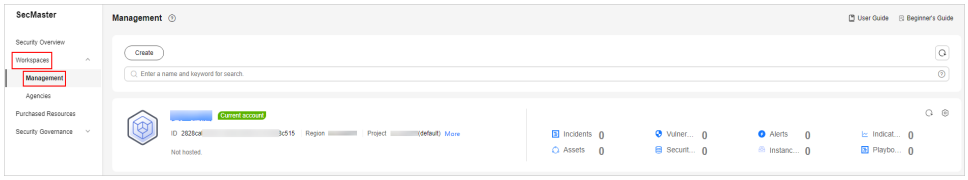
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

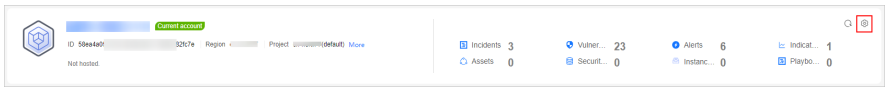
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**.

**Figure 4-9** Workspaces > Management




**Step 5** Click in the upper right corner of the target workspace.

**Figure 4-10** Workspace details page




**Step 6** On the **Basic Information** tab page displayed, click **Delete**.

**Step 7** In the **Delete Workspace** dialog box displayed, confirm the information and select **Permanently delete the workspace**. In the confirmation dialog box, enter **DELETE** and click **OK**.

**CAUTION**

- When you delete a workspace, the playbooks, workflows, and engines running in it stop immediately.
- If you select **Permanently delete the workspace**, all content in the workspace will be permanently deleted and cannot be restored.

**----End**

# 4.4 Workspace Agencies

## 4.4.1 Workspace Agency Overview

A workspace agency allows you to perform cross-account secure operations. You can centrally view asset risks, alerts, and incidents in workspaces of other users.

**Table 4-4** Process

| Step | | Description |
| --- | --- | --- |
| 1 | **Creating an Agency View** | You need to create an agency view to manage the delegation that other users give you for workspace hosting. |
| 2 | **Creating an Agency** | SecMaster allows you to create agencies to authorize other users in the project to manage your workspaces. This way, other users can view asset risks, alerts, and incidents in your workspace and perform security operations for you in a unified manner. |
| 3 | **Authorizing an Agency** | You need to grant permission to other users to manage your workspaces and they need to accept your delegation to attach your workspaces to their workspaces.<br>1. After you create an agency, authorize the user you specified in the agency to manage your workspaces.<br>2. Choose **Workspaces** > **Agencies** > **Managing** and receive workspaces that need to be managed by you centrally.<br>Your workspaces will be attached to a workspace of the agency user for unified management. |

## Limitations and Constraints

- A maximum of one workspace agency view can be created for an account in a region.
- A maximum of 100 workspaces can be managed in a workspace agency view under a single account in a region.
- A maximum of 10 workspaces can be managed in a workspace agency view under a single account in a region.
- A maximum of 50 agencies can be created under a single account.

# 4.4.2 Creating an Agency View

## Scenario

To manage other users' workspaces, you need to create an agency view to bind the workspaces to your workspace.

## Procedure

**Step 1** Log in to the management console.

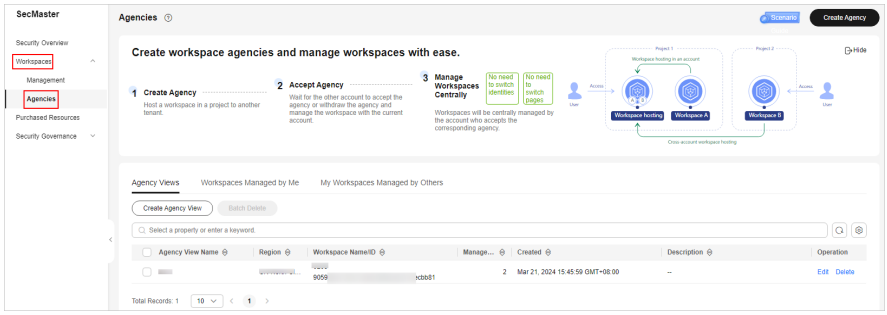
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

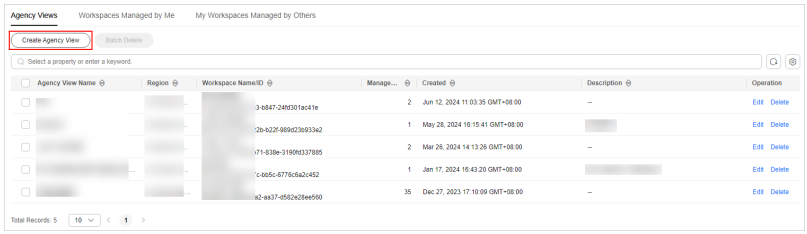
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

**Figure 4-11** Agencies




**Step 5** On the **View** tab, click **Create Agency View**. The **Create Agency View** slide-out panel is displayed.

**Figure 4-12** Creating an agency view




**Step 6** Set parameters required for creating the agency view.

**Table 4-5** Parameters for creating an agency view

| Parameter | Description |
| --- | --- |
| Agency View Name | Name of the view |
| Bind Space Name | The workspace you want to bind to other users' workspaces |
| (Optional) Description | Description of the view |

**Step 7** Click **OK**.

The created agency view is displayed in the **Agency Views** tab.

**----End**

### Related Operations

- Editing an agency view
  a. Locate the row that contains the agency view, and click **Edit** in the **Operation** column.
  b. In the **Edit Agency View** pane that is displayed, modify the agency view parameters and click **OK**.
- Deleting an agency view
  a. Locate the row that contains the agency view, and click **Delete** in the **Operation** column.
  b. In the displayed dialog box, click **Confirm**.

## 4.4.3 Creating an Agency

### Scenario

SecMaster allows you to create agencies to authorize other users in the project to manage your workspaces. This way, other users can view asset risks, alerts, and incidents and perform security operations for you in a unified manner.

### Limitations and Constraints

If you select **Organization** for **Initiated By**, there are some limitations you need to know:

- If you select all accounts under all organizations for the agency, the agency works for workspaces of new accounts of an organization.
- If you select all accounts of a specific organization for the agency, it takes a while for workspaces of new accounts of the organization to be synchronized in the agency.

### Prerequisites

- An agency view has been created by the agency user. For details about how to create an agency view, see **Creating an Agency View**.
- You have authorized the workspaces to access the cloud service data.

### Procedure

**Step 1** Log in to the management console.

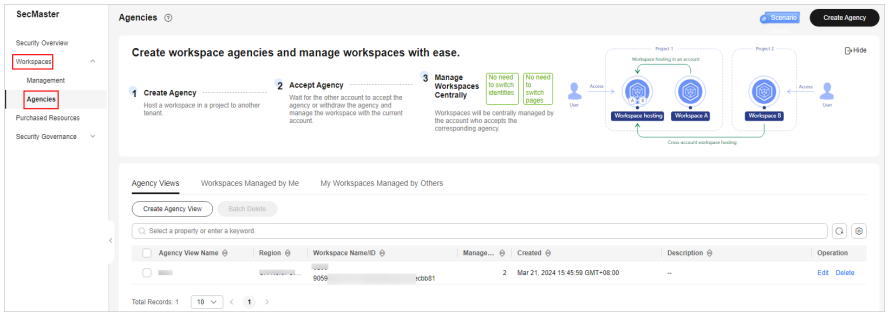
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

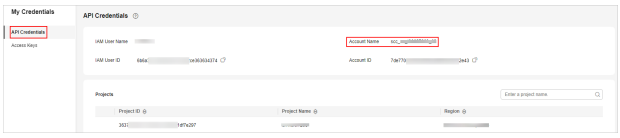
**Figure 4-13** Agencies




**Step 5** Click **Create Agency** in the upper right corner of the page.

**Step 6** On the **Create Agency** slide-out is displayed, configure agency parameters.

**Table 4-6** Parameters for creating an agency

| Parameter | | Description |
| --- | --- | --- |
| Initiated By | | Agency creator. |
| Agency Created By | Workspace | A workspace to be managed by this agency. |
| Agency Accepted By | Account | Account name of the user who delegate the management permission to this agency. Take the following steps to obtain the account name:<br>1. Log in to the management console, hover the mouse over the username in the upper right corner, and select **My Credentials** from the drop-down list. The **API Credentials** page is displayed by default.<br>2. On the **API Credentials** page, obtain the **Account Name**.<br>**Figure 4-14** Account Name<br>  |
| | Agency View | An existing agency view. |
| Agency Details | Agency Name | Name of the agency |
| | Agency Duration | How long the agency works |

| Parameter | | Description |
| --- | --- | --- |
| | Agency Status | Agency permission policy.<br>You can query the meaning of a policy in IAM. To view the meaning, perform the following steps:<br>1. Log in to the management console, hover the mouse over the username in the upper right corner, and select **Identity and Access Management** from the drop-down list. The IAM users page is displayed.<br>2. In the navigation pane on the left, choose **Permissions** > **Policies**. On the **Policies** page, enter the policy name in the search box.<br>View the meaning and scope of the policy. |
| | Description | Description of the agency |

**Step 7** Click **Confirm**.

**----End**

## Follow-up Operations

You need to wait for agency user's acceptance of your delegation. As an agency user, you need to accept the delegation from other users. For details, see **Authorizing an Agency**.

# 4.4.4 Authorizing an Agency

## Scenario

As an agency user, you need to accept the authorization to access the workspaces. The accepted workspaces will be attached to your workspaces.

## Prerequisites

An agency has been created. For details, see **Creating an Agency**.

## Procedure

**Step 1** Log in to the management console.

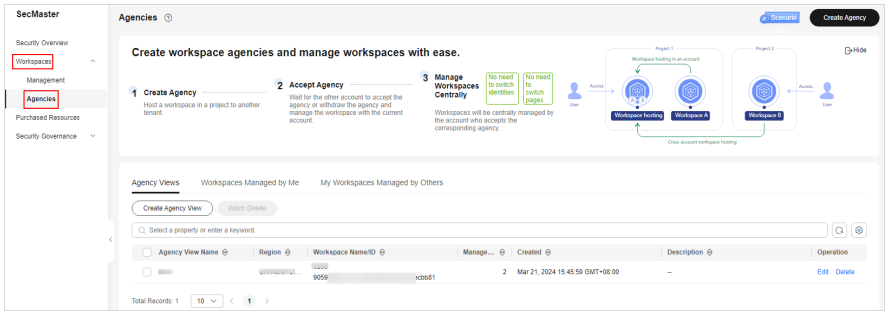
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

**Figure 4-15** Agencies




**Step 5** On the **Agencies** page, click the **Workspaces Managed by Me** tab. In the row containing the workspace you want to manage, click **Accept** in the **Operation** column.

NOTE

If the system displays a message indicating that you are not authorized when you try to accept an agency, get authorization by referring to **Authorizing SecMaster** first.

**Step 6** In the displayed dialog box, click **Confirm**.

**----End**

## Follow-up Operations

Choose **Workspaces** > **Management**, click the name of the created agency view. You can view details about workspaces managed in the agency view.

# 4.4.5 Managing Agencies

## Scenario

On the **Agencies** page, you can manage agency views, workspaces you are managing for others, and agencies managing your workspaces.

- **Agency Views**: On this tab, you can view all agency views you create and their details.
- **Workspaces Managed by Me**: On this tab, you can view workspaces managed in the agency view you create.
- **My Workspaces Managed by Others**: On this tab, you can view which agency views are managing workspaces you create.

## Agency Views

**Step 1** Log in to the management console.

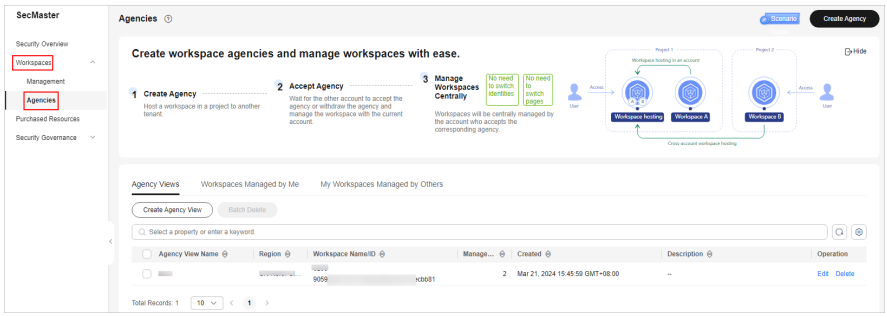
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

**Figure 4-16** Agencies




**Step 5** On the **Agencies** page, click the **Agency Views** tab.

**Step 6** On the **Agency Views** tab, manage your agency views.

- Viewing agency views

  **Table 4-7** Agency view information

| Parameter | Description |
| --- | --- |
| Agency View Name | Name of an agency view |
| Region | Region where the agency view is located. |
| Workspace Name/ID | Name and ID of a workspace bound to an agency view<br>You can click the name of a bound workspace to access the workspace. |
| Managed Workspaces | Number of workspaces in an agency view |
| Created | Time when an agency view is created |
| Description | Description of an agency view |
| Operation | You can edit or delete an agency view. |

- Editing an agency view
  a. Locate the row that contains the agency view, and click **Edit** in the **Operation** column.
  b. On the **Edit Agency View** slide-out panel, modify the parameters and click **OK**.
- Deleting an agency view
  a. Locate the row that contains the agency view, and click **Delete** in the **Operation** column.

     To delete multiple agency views, select them in the agency view list and click **Batch Delete** above the list.
  b. In the displayed dialog box, click **OK**.

**----End**

## Workspaces Managed by Me

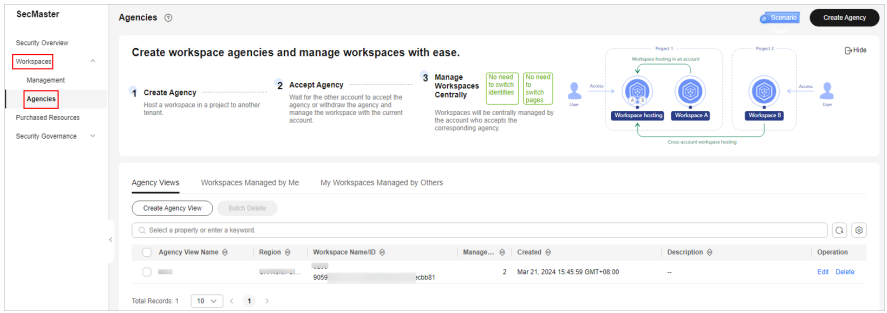
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

**Figure 4-17** Agencies




**Step 5** On the **Agencies** page, click the **Workspaces Managed by Me** tab.

**Step 6** View and manage workspaces managed by you.

- Viewing workspaces managed by you

**Table 4-8** Workspace parameters

| Parameter | Description |
| --- | --- |
| Agency Name | Name of an agency view. |
| Name/ID | Name and ID of the workspace managed in your agency view. |
| Initiation Mode | Creator of the agency |
| Agency Status | Delegation status |
| Selected Status | Whether the delegation is selected |
| Agency Duration | How long an agency works |
| Agency Started | Time the agency starts working. |
| Agency Policy | Permissions granted to an agency. |
| Operation | You can accept or delete agency tasks managed by yourself. |

- Managing workspaces managed by you

**Table 4-9** Managing workspaces managed by you

| Operation | Description |
| --- | --- |
| Accepting a workspace agency | 1. Locate the row that contains the workspace agency, and click **Accept** in the **Operation** column.<br>To accept multiple workspace agencies, select them in the list and click **Accept** above the list.<br>2. In the displayed dialog box, click **Confirm**. |
| Rejecting a workspace agency | 1. Locate the row that contains the workspace agency, and click **Reject** in the **Operation** column.<br>To reject multiple workspace agencies, select them in the list and click **Reject** above the list.<br>2. In the displayed dialog box, click **Confirm**. |
| Releasing a workspace agency | 1. Locate the row that contains the workspace agency, click **More** in the **Operation** column, and select **Release**.<br>To release multiple workspace agencies, select them in the list and click **Release** above the list.<br>2. In the displayed dialog box, click **Confirm**. |
| Deleting a workspace agency | 1. Locate the row that contains the workspace agency, click **More** in the **Operation** column, and select **Delete**.<br>To delete multiple workspace agencies, select them in the list and click **Delete** above the list.<br>2. In the displayed dialog box, click **Confirm**. |

**----End**

## My Workspaces Managed by Others

**Step 1** Log in to the management console.

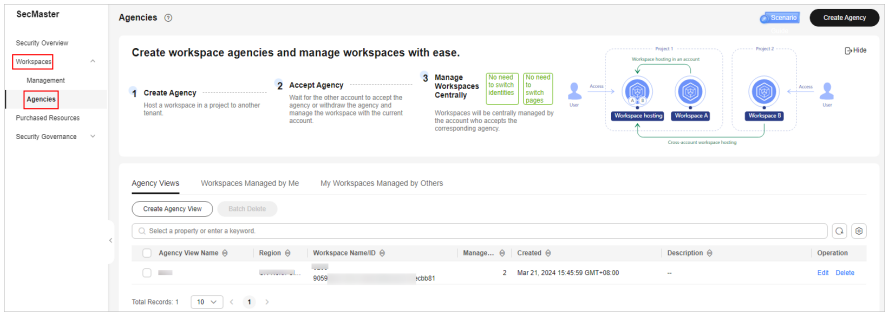
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Agencies**.

**Figure 4-18** Agencies




**Step 5** On the **Agencies** page, click the **My Workspaces Managed by Others** tab.

**Step 6** On the **My Workspaces Managed by Others** tab, view and manage the workspaces that are managed by others.

- Viewing your workspaces managed by others

  **Table 4-10** Viewing your workspaces managed by others

| Parameter | Description |
| --- | --- |
| Agency Name | Name of an agency view |
| Name/ID | Name and ID of your workspace |
| Agency Account | Account username who accepts the workspace agency |
| Initiation Mode | Creator of the agency |
| Agency View Name | Name of the agency view |
| Agency Duration | How long an agency works |
| Agency Status | Delegation status |
| Agency Started | Time the agency starts working. |
| Agency Policy | Permissions granted to a workspace agency |
| Operation | Through this column, you can modify or delete a workspace agency. |

- Managing your workspaces managed by others

**Table 4-11** Viewing your workspaces managed by others

| Operation | Description |
| --- | --- |
| Modifying an accepted workspace agency | 1. Locate the row that contains the workspace agency, and click **Modify** in the **Operation** column.<br>2. In the displayed dialog box, modify the agency information.<br>3. Click **Confirm**. |
| Withdrawing an accepted workspace agency | 1. Locate the row that contains the workspace agency, and click **Withdraw** in the **Operation** column.<br>To recall multiple workspace agencies, select them in the list and click **Recall** above the list.<br>2. In the displayed dialog box, click **Confirm**. |
| Reapplying for a workspace agency | If your workspace agency is rejected by others, you can send the workspace agency request again and ask others to accept it.<br>1. Locate the row that contains the workspace agency, click **More** in the **Operation** column, and select **Reapply**.<br>2. In the displayed dialog box, click **Confirm**. |
| Releasing a workspace agency | 1. Locate the row that contains the workspace agency, click **More** in the **Operation** column, and select **Release**.<br>To release multiple workspace agencies, select them in the list and click **Release** above the list.<br>2. In the displayed dialog box, click **Confirm**. |
| Deleting a workspace agency | 1. Locate the row that contains the workspace agency, click **More** in the **Operation** column, and select **Delete**.<br>To delete multiple workspace agencies, select them in the list and click **Delete** above the list.<br>2. In the displayed dialog box, click **Confirm**. |

**----End**

# 5 Viewing Purchased Resources

## Scenario

You can view resources purchased by the current account on the **Purchased Resources** page and manage them centrally.

## Procedure

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Purchased Resources**.

**Step 5** View details on the purchased resource page.

**Table 5-1** Parameters for purchased resources

| Parameter | Description |
| --- | --- |
| Buy Value-added Pack | To get a value-added package, click **Buy Value-added Pack** and complete the purchase as prompted. |
| Buy SecMaster | To buy SecMaster, click **Buy SecMaster** and complete the purchase as prompted. |
| Total/Subscribed Regions | Regions where SecMaster has been enabled for the current account and the total number of regions where SecMaster is rolled out. |
| Upgradeable | Number of resources that can be upgraded in all regions under the current account. |
| Versions About to Expire | The number of SecMaster editions and value-added packages that are about to expire in all regions under the current account. |

| Parameter | Description |
| --- | --- |
| Total Quota | The total quota purchased by the current account in all regions. |
| Purchased Resources | Details about SecMaster resources you purchased in each region.<br>• If there are many editions or regions, you can use filters to search for a specific resource by region, edition, or order number.<br>• You can upgrade, renew, and increase quotas for SecMaster in a specified region. |

**----End**

# 6 Security Governance

## 6.1 Security Governance Overview

### What Is Security Governance?

Security Governance is an automatic security assessment and compliance governance platform. It provides the unified cloud service cybersecurity & compliance standard (3CS). It offers security governance templates to help you comply with PCI DSS, ISO 27701, ISO 27001, and more. It automatically checks your services against preset compliance policies, intuitively presents your service compliance status, and allows you to quickly download compliance reports.

NOTE

Before using security governance in SecMaster, you need to **submit a service ticket** to enable the service.

### Features

Security Governance provides you with security governance templates and checks your services based on regulation terms in the compliance packs.

- Compliance Pack

  Huawei's security governance templates include detailed terms, scan policies, compliance evaluation items, and improvement suggestions from Huawei experts, covering PCI DSS, ISO27701, ISO27001, privacy protection, and other standards. You can subscribe to and unsubscribe from compliance packs and view results.
- Policy Check

  The compliance status of cloud assets is checked periodically through code-based scanning. You can view compliance risks on the dashboard, and obtain corresponding improvement suggestions from our experts.
- Compliance Evaluation

  Security Governance integrates regulatory clauses and standard requirements into compliance pack check items. You complete evaluation of your services using the compliance pack, and view evaluation results. You can also view

historical results, upload and download evidence, and take actions based on suggestions from our experts.

- Result Display

  Security Governance displays the evaluation results and compliance status on the dashboard, including the compliance rates of the compliance packs you subscribed to, and the compliance rate of each term the regulations and standards, each security, as well as the policy check results.

### Advantages

- Compliance as a Service

  Security Governance provides the unified Cloud Service Cybersecurity & Compliance Standard (3CS). It integrates regulatory clauses and standard requirements into your business and information technologies by providing various 3CS-based security governance templates.

- Improved Efficiency

  Security Governance opens security governance templates for you to be compliant with PCI DSS, ISO 27701, and ISO 27001, providing compliance policies and evaluation items. With your authorization, Security Governance automatically scans your cloud assets against compliance policies, and the service evaluation items help you quickly manage the compliance status. You can download compliance reports in few clicks.

- Intuitive Display

  Security Governance presents both the overall compliance information and requirement-specific compliance status on the dashboard. You can easily identify potential problems and take actions based on expert suggestions.

## 6.2 Security Compliance Pack Description

Security Governance provides security compliance packs. You can select the required security compliance pack by following the guide provided therein.

- **Security Standard**

### Security Standard

Security Governance provides the following compliance packs listed in **Table 6-1** for you to comply with various privacy protection laws. You can refer to the guidelines and subscribe to compliance packs as you need.

**Table 6-1** Security standards compliance packs

| Pack | Description | Applicable Region | Category | Domain | Guidelines |
| --- | --- | --- | --- | --- | --- |
| PCI DSS | This compliance pack provides check items and guidelines to help you evaluate your data security management. It also suggests improvements based on the internationally recognized Payment Card Industry Data Security Standard (PCI DSS) Version 3.2.1 May 2018 to help you comply with the terms. | Global | Industry standards | Data security | 1. Applicable to entities that handle payment cards. These entities include merchants, processing organizations, receipt organizations, card issuing organizations, and service providers.<br>2. Applicable to entities that store, process, or transmit cardholder data, such as main account information (PAN, usually a bank card number), cardholder name, card validity period, and business code, or sensitive verification data, such as full track data, credit card security code, and PIN.<br>3. Applicable to entities that need to detect data security risks and obtain risk control measures.<br>Subscribe to this pack if your entity meets any of the preceding descriptions. |

| Pack | Description | Applicable Region | Category | Domain | Guidelines |
| --- | --- | --- | --- | --- | --- |
| ISO/IEC 27001:2013 | This compliance pack provides check items and guidelines to help you evaluate your data security management. It also suggests improvements based on ISO 27001:2013 – Information Security Management Systems to help you comply with the terms. | Global | International standards | Information security | ISO 27001 is a globally recognized standard for information security. It adopts a process-based approach for establishing, implementing, operating, monitoring, maintaining, and improving your information security management system.<br>Subscribe to this pack to identify and manage the security risks of information you hold. |

| Pack | Description | Applicable Region | Category | Domain | Guidelines |
| --- | --- | --- | --- | --- | --- |
| ISO/IEC 27701:2019 | This compliance pack provides check items and guidelines to help you evaluate your data security management. It also suggests improvements based on ISO 27701:2019 – Privacy Information Management Systems to help you comply with the terms. | Global | International standards | Privacy protection | 1. Applicable to entities that are responsible for Personally Identifiable Information (PII) as it poses privacy requirements on how to collect, use, transmit, store, and delete data. PII (also referred to as "personal data" in this pack) includes name, phone number, email address, and ID card information.<br>2. Applicable to entities that work as PII controllers (also referred to as "data controllers" in this pack) and/or PII processors (also referred to as "data processors"). PII controllers are privacy stakeholders who determine the purposes and methods of PII processing, while PII processors are privacy stakeholders who process the data based on these purposes and methods.<br>3. Applicable to entities that need to detect privacy protection risks and obtain risk control measures<br>Subscribe to this pack if your entity meets any of the preceding descriptions. |

# 6.3 Procedure

Table 6-2 shows the process of using SecMaster security governance.

**Table 6-2** Procedure

| Step | Description |
| --- | --- |
| Authorizing access to cloud resources | Before using the security governance, you need to grant the permission to access your cloud service resources. After the permission is granted, you can use policy scanning to quickly identify the security compliance of cloud assets. |
| Subscribing to compliance packs | SecMaster provides different security compliance packs. You can select the required security compliance pack. |
| Self-evaluation | After subscribing to a security compliance pack, you use evaluate your compliance by referring to the terms in the compliance pack. |
| Viewing the result | After policy scanning or self-assessment, you can view the security governance status.<br>• Security Compliance Overview: View the compliance overview of laws and regulations, standards, compliance statuses under each security compliance pack, and policy scanning overview.<br>• Viewing the Governance Result: View the overall and detailed compliance status with each security compliance pack.<br>• Viewing the Policy Scanning Result: View the policy scanning result and its details. |

# 6.4 Authorizing Service

## Scenario

Before using the security governance, you need to grant the permission to access your cloud service resources. After the permission is granted, you can use policy scanning to quickly identify the security compliance of cloud assets.

Authorizing SecMaster to access your cloud assets.

### Procedure

**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

**Step 5** On the **Subscriptions** page, click **Authorize** in the **Authorize Service** process. The service authorization dialog box is displayed.

**Step 6** In the displayed dialog box, click **Agree to authorize**.

**----End**

## 6.5 Subscribing to Compliance Packs

### Scenario

A compliance pack is an open security governance template. It includes original standards and regulation terms, check policies, compliance evaluation items, and improvement suggestions from our experts, covering PCI DSS, ISO 27701, ISO 27001, privacy laws, and other regulations and standards.

This topic describes how to subscribe to a security compliance pack.

### Prerequisites

Service authorization has been completed. If the service is not authorized, authorize it first. For details, see **Authorizing Service**.

### Procedure

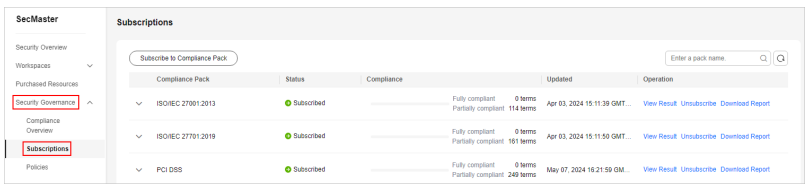
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

**Figure 6-1** Subscriptions page



**Step 5** Click **Subscribe to Compliance Pack** in the subscription list page.

If you subscribe for the first time, click **Subscribe** in the **Subscribe to Compliance Pack** page.

**Step 6** On the **Subscribe to Compliance Packs** page, select a security compliance pack and click **Subscribe** in the lower right corner to confirm the subscription.

For details about the security compliance pack, see **Security Compliance Pack Description**.

**Step 7** In the dialog box that is displayed, click **OK** to return to the subscription list page and view details about the compliance pack.

To evaluate immediately, click **Evaluate** in the displayed dialog box. For details, see **User Self-Assessment**.

**----End**

# 6.6 User Self-Assessment

## Scenario

After subscribing to the security compliance pack, you can assess security based on international standards.

## Prerequisites

You have subscribed to the security compliance pack. For details, see **Subscribing to Compliance Packs**.

## Procedure

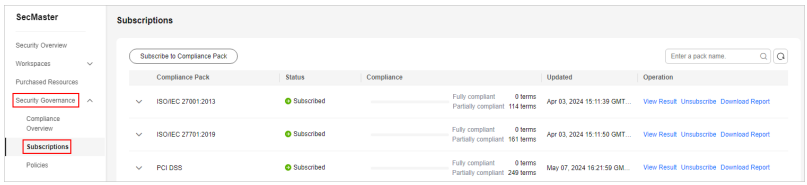
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

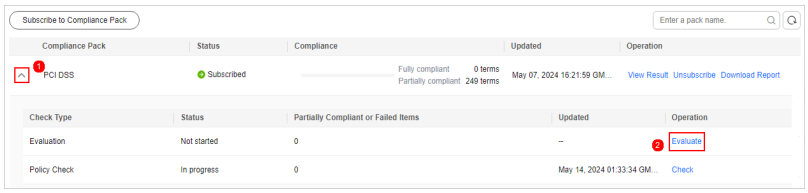
**Figure 6-2** Subscriptions page




**Step 5** Click  on the left of the compliance pack to be self-assessed to expand the compliance pack information. In the Tenant Self-Assessment area, click **Evaluate** in the **Operation** column. The evaluation page is displayed.

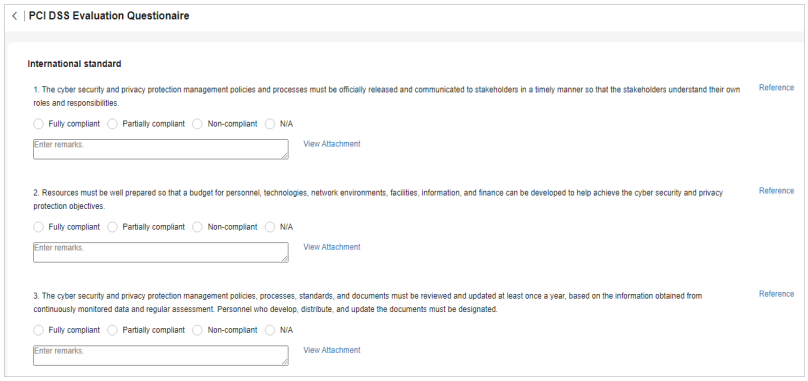
  

**Figure 6-3** Evaluated by customers




**Step 6** On the **Evaluation** page, perform self-assessment on each check item.

**Figure 6-4** Evaluation page




- To upload an attachment, click **View Attachment** > **Upload Attachment** and upload related credential information.
- During the evaluation, click **Reference** on the right of the evaluation item to view basic information, related terms, and historical records of the check item.

**Step 7** After the evaluation is complete, click **Submit** in the lower right corner.

**----End**

# 6.7 Security Compliance Overview

## Scenario

After subscribing to a security compliance pack, you can view the compliance overview, standard term compliance overview, and policy scanning overview of the subscribed security compliance pack on the **Dashboard** page.

## Prerequisites

You have subscribed to the security compliance pack. For details, see **Subscribing to Compliance Packs**.

## View the compliance with laws and regulations and standard clauses.

**Step 1** Log in to the management console.

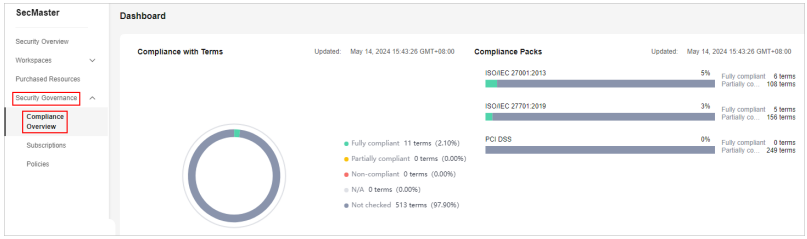
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

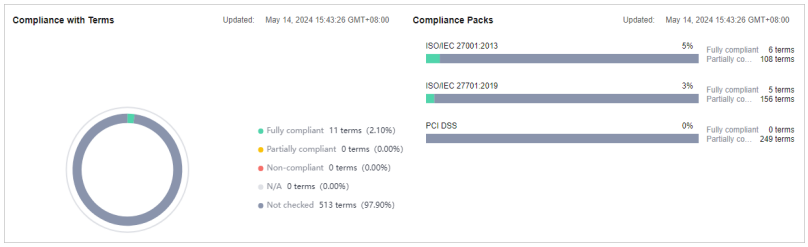
**Step 4** In the navigation pane on the left, choose **Security Governance** > **Compliance Overview**. The **Compliance Overview** page is displayed.

**Figure 6-5** Compliance overview page




**Step 5** On the **Compliance Overview** page, view the **Compliance with Terms**.

**Figure 6-6** Compliance with Terms




**----End**

## Viewing Policy Check Results

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

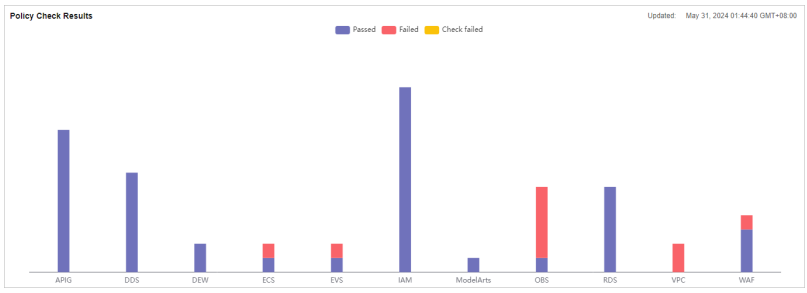
**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

**Step 5** On the **Compliance Overview** page, view the **Policy Check**.

**Figure 6-7** Policy check results




**----End**

# 6.8 Evaluation Result

## Scenario

After you subscribe to the security compliance pack, SecMaster automatically scans your system based on the security compliance pack. After the scanning, you can view the overall compliance status and improvement suggestions.

## Prerequisites

You have subscribed to the security compliance packs. For details, see **Subscribing to Compliance Packs**.

## Procedure

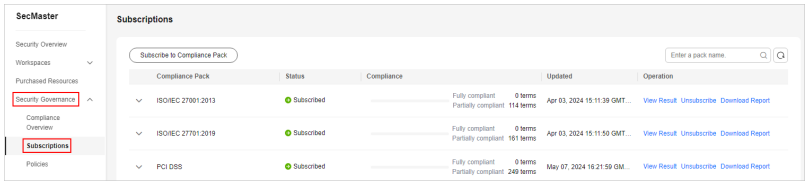
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

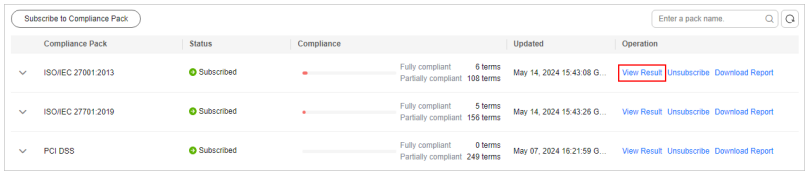
**Figure 6-8** Subscriptions page




**Step 5** Click **View Result** in the **Operation** column. The **Evaluation Result** page is displayed.

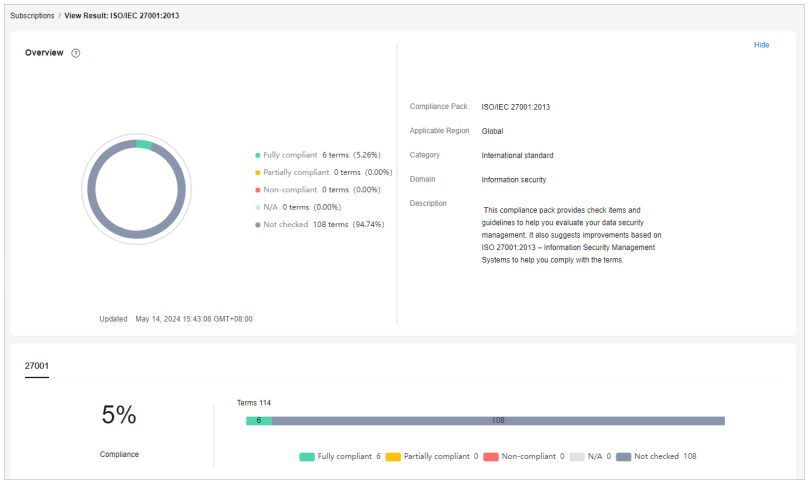
  

**Figure 6-9** View Result




**Step 6** View the evaluation results.

**Figure 6-10** Result page

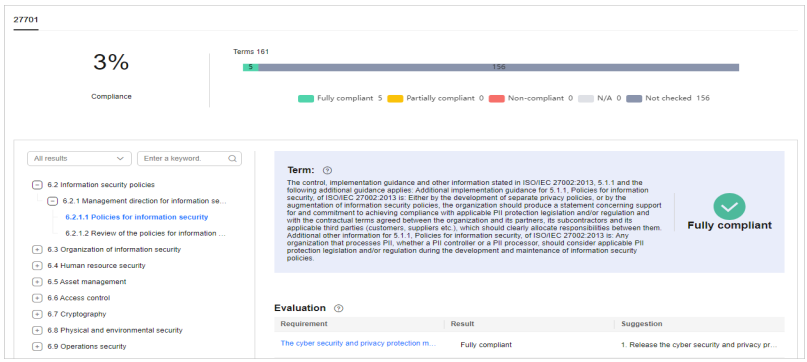



- View the overall compliance of the currently subscribed security compliance pack.
- To view the details of a term, select the clause in the navigation tree on the left. The details of the term are displayed on the right, including the term content, compliance status, and improvement suggestions.

  To view the basic information and historical records of the term, click the term name. The detailed information about the term is displayed on the right.
- To perform a self-evaluation on a specified term, perform the following steps:

  a. In the navigation pane on the left, select the terms to be self-evaluated.

  **Figure 6-11** Selecting terms

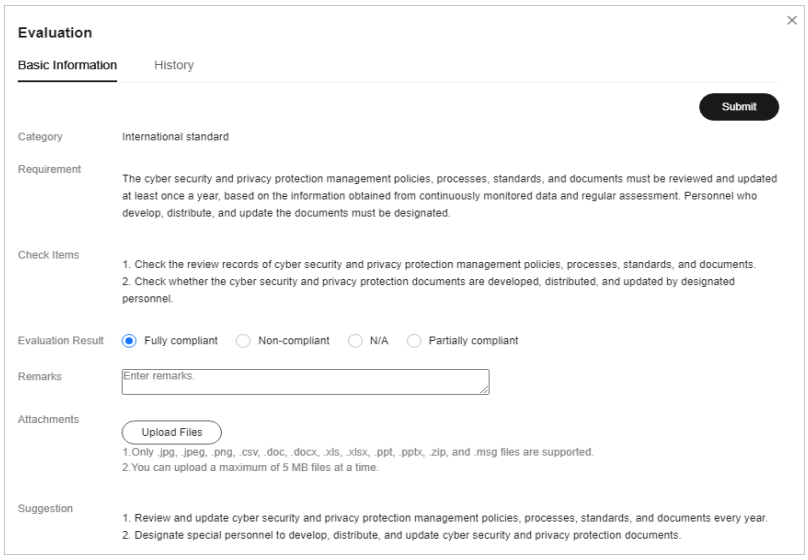
  
  

  b. Click the name of a check item. On the displayed page, click **Edit** and enter the compliance status and evaluation remarks.

  If related credentials are available, click **Upload Files**.

**Figure 6-12** Evaluated by customers




c. After the evaluation is complete, click **Submit** in the upper right corner to complete the evaluation of a single check item.

**----End**

# 6.9 Policy Check Result

## Scenario

On the **Policy Check** page, you can view the overall check result of subscribed security compliance packs and the check result of each cloud service.

NOTE

The policy check is automatically performed at 01:30 every day and the check result is generated.

## Prerequisites

You have subscribed to the security compliance packs. For details, see **Subscribing to Compliance Packs**.

## Procedure

**Step 1** Log in to the management console.

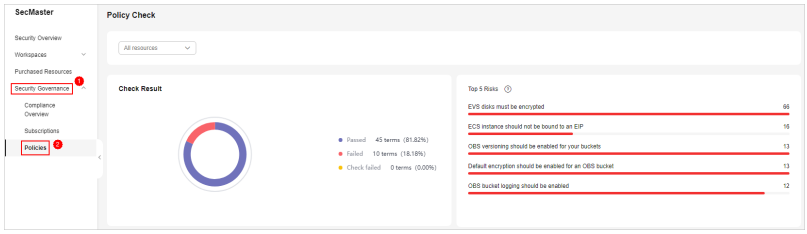
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Policies**. The **Policy Check** page is displayed.

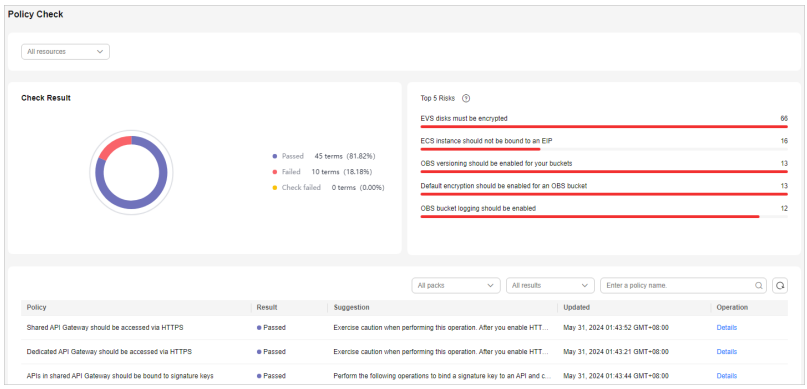
  

**Figure 6-13** Policy Check page



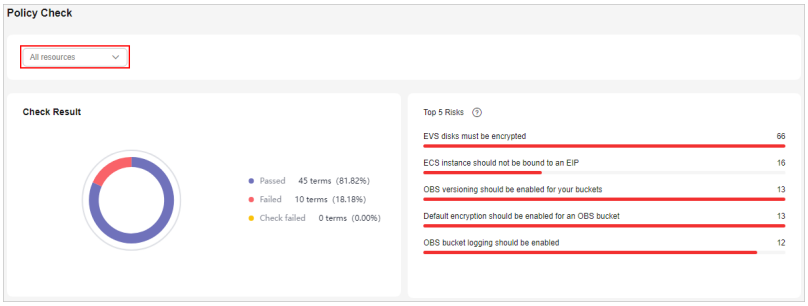

**Step 5** View policy check result.

**Figure 6-14** Policy check




- By default, the check status of all resource policies displayed.
  - Check result: overall pass rate, passed policies, failed policies, and check failures.
  - Top 5 risks: Top 5 policies with the most failures.
- To view the check result of all policies of a resource, select the resource from the filter box in the upper part.

  **Figure 6-15** Selecting a resource

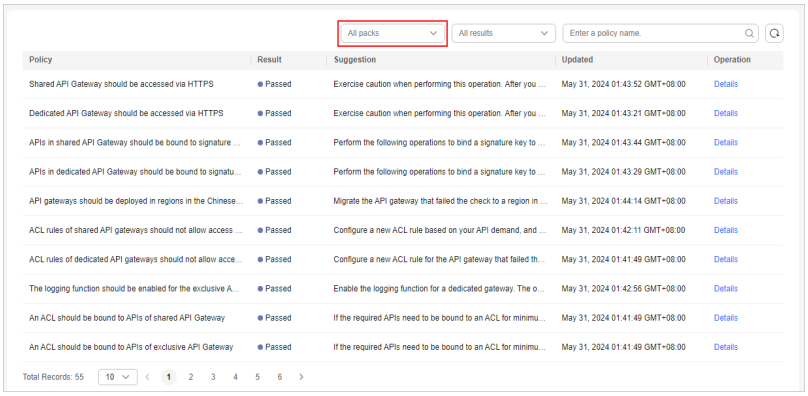
  
  

- To view the scanning status of all resources in a policy, select the corresponding compliance pack in the upper part of the table.

  You can also filter the results by result type or policy name.

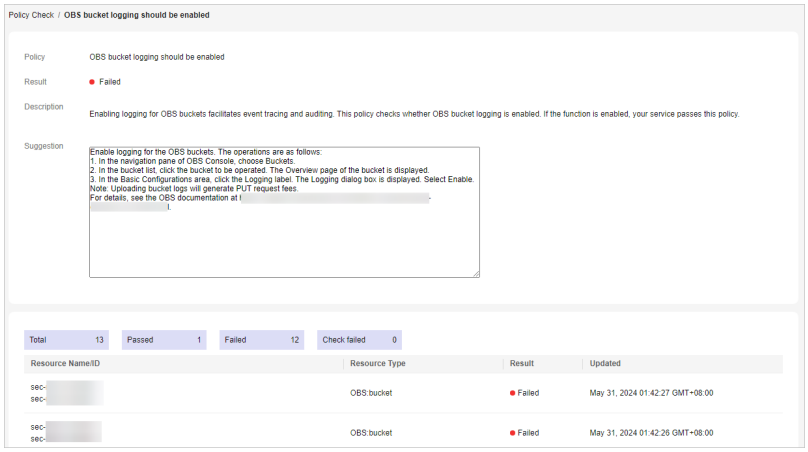
**Figure 6-16** Selecting a compliance pack




- To view the check result of a policy over a resource, select the corresponding resource from the filter box in the upper part, and then select the corresponding compliance pack in the upper part of the table.

**Step 6** In the policy table, click **Details** in the **Operation** column of a policy to go to the policy check result page and view improvement suggestions.

**Figure 6-17** Details of a check




**NOTE**

SecMaster automatically scans the resources at 01:30 a.m. every day and generates the scanning results.

**----End**

# 6.10 Downloading a Compliance Report

## Scenario

Security Governance provides security compliance reports. You can download the reports to learn of how well your services comply with mainstream security standards.

### Prerequisites

You have subscribed to the security compliance packs. For details, see **Subscribing to Compliance Packs**.

### Procedure

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

**Step 5** On the **Subscriptions** page, click **Download Report** in the **Operation** column.

The system will download the specified compliance report to a local path.

**----End**

## 6.11 Unsubscribing from a Compliance Pack

### Scenario

If you need to cancel the subscription to a compliance pack, you can unsubscribe from it on the **Subscriptions** page.

### Prerequisites

You have subscribed to the security compliance packs. For details, see **Subscribing to Compliance Packs**.

### Procedure

**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Security Governance** > **Subscriptions**. The **Subscriptions** page is displayed.

**Step 5** On the **Subscriptions** page, locate the row that contains the security compliance pack to be unsubscribed from, click **Unsubscribe** in the **Operation** column.

**Step 6** In the displayed dialog box, click **OK**.

NOTE

Your service compliance data related to this pack will be deleted and cannot be restored. Exercise caution when performing this operation.

**----End**

# 7 Security Situation

## 7.1 Situation Overview

The **Situation Overview** page displays the overall security assessment status of resources in the current workspace in real time. You will view the security assessment results, security monitoring details, and security trend of your assets.

### Procedure

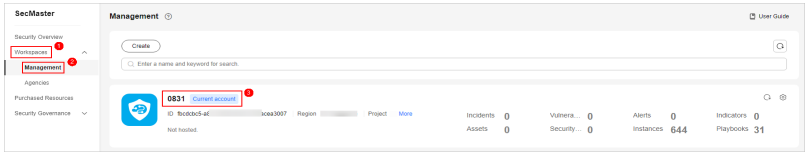
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

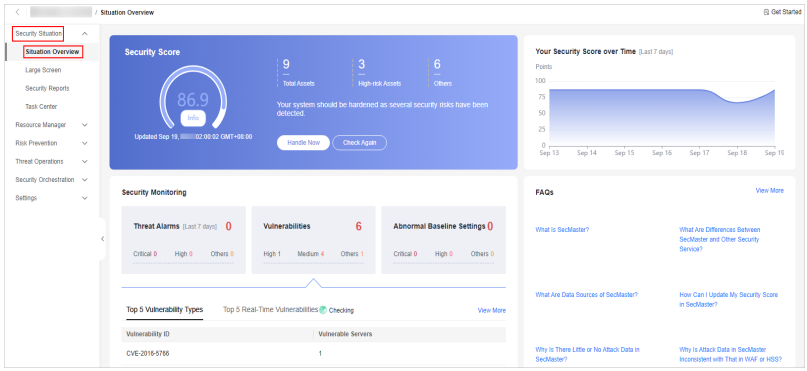
**Figure 7-1** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Situation Overview**.

**Figure 7-2** Situation Overview




**Step 6** On the **Security Overview** page, you can view the security overview of your assets and perform related operations. The **Situation Overview** page consists of the following modules:

- **Security Score**
- **Security Monitoring**
- **Your Security Score over Time**

The following table describes the reference periods and update frequency of the modules.

**Table 7-1** Situation Overview

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Security Score | Real-time | • Automatic update at 02:00 every day<br>• Updated every time you click **Check Again** | The score is calculated based on what security services are enabled, and the levels and numbers of unhandled configuration issues, vulnerabilities, and threats. For details, see **Security Scores and Unscored Items**. |
| Threat Alarms | Last 7 days | Every 5 minutes | Total number of alerts on the **Threat Operations** > **Alerts** page in a workspace. |
| Vulnerabilities | Last 7 days | Every 5 minutes | Total number of vulnerabilities on the **Risk Prevention** > **Vulnerabilities** in a workspace. |
| Abnormal Baseline Settings | Real-time | Every 5 minutes | Total number of issues on the **Risk Prevention** > **Baseline Inspection** page in a workspace. |

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Your Security Score over Time | Last 7 days | Every 5 minutes | Security scores in the last seven days. |

**----End**

## Security Score

The security score shows the overall health status of your workloads on the cloud based on the service edition you are using. You can quickly learn about unhandled risks and their threats to your assets.

- The security score is automatically updated at 02:00 every day. You can also click **Check Again** to update it immediately.
- The score ranges from 0 to 100. The higher the security score, the more secure your assets. For details, see **Security Scores and Unscored Items**.
- Different color blocks in the security score ring chart indicate different severity levels. For example, yellow indicates that your security is medium.
- Click **Handle Now**. The **Risks** pane is displayed on the right. You can handle risks by referring to the corresponding guidance.
  - The **Risks** slide-out panel lists all threats that you should handle in a timely manner. These threats are included in the **Threat Alarms**, **Vulnerabilities**, and **Abnormal Baseline Settings** areas.
  - The **Risks** pane displays the latest check results of the last scan. The **Alerts**, **Vulnerabilities**, and **Abnormal Baseline Settings** pages show check results of all previous scans. So, you will find the threat number on the **Risks** pane is less than that on those pages. You can click **Handle** for an alert on the **Risks** pane to go to the corresponding page quickly.
  - **Handling detected security risks:**
    i. In the **Security Score** area, click **Handle Now**.
    ii. On the **Risks** slide-out panel displayed, click **Handle**.
    iii. On the page displayed, handle risk alerts, vulnerabilities, or baseline inspection items.
- The security score is updated when you refresh status of the alert incident after risk handling. After you fix the risks, you can click **Check Again** so that SecMaster can check and score your system again.

  NOTE

  After risks are fixed, manually ignore or handle alert incidents and update the alert incident status in the alert list. The risk severity can be down to a proper level accordingly.
- The security score reflects the security situation of your system last time you let SecMaster check the system. To obtain the latest score, click **Check Again**.

## Security Scores and Unscored Items

SecMaster assesses the overall security situation of your cloud assets in real time and scores your assets.

This section describes how your security score is calculated.

- Security Score

  SecMaster evaluates the overall security situation of your assets.

  - There are six risk severity levels, **Secure**, **Informational**, **Low**, **Medium**, **High**, and **Critical**.
  - The score ranges from 0 to 100. The higher the security score, the lower the risk severity level.
  - The security score starts from **0** and the risk severity level is escalated up from **Secure** to the next level every 20 points. For example, for scores ranging from **40** to **60**, the risk severity is **Medium**.
  - The color keys listed on the right of the chart show the names of donut slices. Different color represents different risk severity levels. For example, the yellow slice indicates that your asset risk severity is **Medium**.
  - If you have fixed asset risks and refreshed the alert status, you can click **Check Again** to update the security score.

    NOTE

    After risks are fixed, manually ignore or handle alert incidents and update the alert incident status in the alert list. The risk severity can be down to a proper level accordingly.

**Table 7-2** Security score table

| Severity | Security Score | Description |
| --- | --- | --- |
| Secure | 100 | Congratulations. Your assets are secure. |
| Informational | 80 ≤ Security Score < 100 | Your system should be hardened as several security risks have been detected. |
| Low | 60 ≤ Security Score < 80 | Your system should be hardened in a timely manner as too many security risks have been detected. |
| Medium | 40 ≤ Security Score < 60 | Your system should be hardened, or your assets will be vulnerable to attacks. |
| High | 20 ≤ Security Score < 40 | Detected risks should be handled immediately, or your assets will be vulnerable to attacks. |
| Critical | 0≤ Security Score <20 | Detected risks should be handled immediately, or your assets may be attacked. |

- Unscored Check Items

  Table 7-3 lists the security check items and corresponding points.

  **Table 7-3** Unscored check items

| Category | Unscored Item | Unsocred Point | Suggestion | Maximum Unscored Point |
| --- | --- | --- | --- | --- |
| Enabling of security services | Security-related services not enabled | - | Enable security-related services. | 30 |
| Compliance Check | Critical non-compliance items not fixed | 10 | Fix compliance violations by referring recommended fixes and start a scan again. The security score will be updated. | 20 |
| | High-risk non-compliance items not fixed | 5 | | |
| | Medium-risk non-compliance items not fixed | 2 | | |
| | Low-risk non-compliance items not fixed | 0.1 | | |
| Vulnerabilities | Critical vulnerabilities not fixed | 10 | Fix vulnerabilities by referring corresponding suggestions and start a scan again. The security score will be updated. | 20 |
| | High-risk vulnerabilities not fixed | 5 | | |
| | Medium-risk vulnerabilities not fixed | 2 | | |
| | Low-risk vulnerabilities not fixed | 0.1 | | |
| Threat Alerts | Critical alerts not fixed | 10 | Fix the threats by referring to the suggestions. The security score will be updated accordingly. | 30 |
| | High-risk alerts not fixed | 5 | | |
| | Medium-risk alerts not fixed | 2 | | |

| Category | Unscored Item | Unsocred Point | Suggestion | Maximum Unscored Point |
|---|---|---|---|---|
| | Low-risk alerts not fixed | 0.1 | | |

## Security Monitoring

The **Security Monitoring** area includes **Threat Alarms**, **Vulnerabilities**, and **Abnormal Baseline Settings**, which sort risks that have not been handled.

**Table 7-4** Security Monitoring parameters

| Parameter | Description |
|---|---|
| Threat Alarms | This panel displays the unhandled threat alerts in a workspace for the last 7 days. You can quickly learn of the total number of unhandled threat alerts and the number of vulnerabilities at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **Critical**: There are intrusions to your workloads, and you should view alert details and handle the alert in a timely manner.<br>– **High**: There are abnormal incidents on your workloads, and you should view alert details and handle the alert in a timely manner.<br>– **Others**: There are risky incidents that are marked as medium-risk, low-risk, and informational alerts detected in your systems, and you should view alert details and take necessary actions.<br>• To quickly view details of top 5 threat alerts for the last 7 days, click the **Threat Alarms** panel.<br>– You can view details of those threats, including the threat alert name, severity, asset name, and discovery time.<br>– If no data is available here, no threat alerts are generated for the last 7 days.<br>– You can click **View More** to go to the **Alerts** page and view more alerts. You can also customize filter criteria to query alert information. For details about how to view threat alerts, see **Viewing Alerts**. |

| Parameter | Description |
| --- | --- |
| Vulnerabilities | This panel displays the top five vulnerability types and the total number of unfixed vulnerabilities in your assets in a workspace for the last 7 days. You can quickly learn of the total number of unfixed vulnerabilities and the number of vulnerabilities at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **High**: There are vulnerabilities on your workloads, and you should view vulnerability details and handle them in a timely manner.<br>– **Medium**: There are abnormal incidents on your workloads, and you should view vulnerability details and handle the vulnerability in a timely manner.<br>– **Others**: There are risky incidents that are marked as low-risk or informational in your systems, and you should view vulnerability details and take necessary actions.<br>• When you click the **Top 5 Vulnerability Types** tab, the system displays the five vulnerability types with the most affected servers.<br>– Vulnerability rankings are based on the number of hosts a vulnerability affects. The vulnerability ranked the first affects the most hosts.<br>– The data is displayed in **Top 5 Vulnerability Types** only when the hosts have Host Security Service (HSS) Agent version 2.0 installed. If no data is displayed or you want to view top 5 vulnerability types, upgrade Agent from 1.0 to 2.0.<br>• Click **Top 5 Real-Time Vulnerabilities** tab. The system displays the top 5 vulnerability incidents for the last 7 days. You can quickly view vulnerability details.<br>– You can view details such as the vulnerability name, severity, asset name, and discovery time.<br>– If no data is available here, no vulnerabilities are detected on the current day.<br>– You can click **View More** to go to the **Vulnerabilities** page and view more vulnerabilities. You can also customize filter criteria to query vulnerability information. For details, see **Viewing Vulnerability Details**. |

| Parameter | Description |
| --- | --- |
| Abnormal Baseline Settings | This panel displays the total number of compliance violations detected in a workspace. You can quickly learn of total number of violations and the number of violations at each severity level. The statistics are updated every 5 minutes.<br>• Risk severity levels:<br>– **Critical**: There are intrusions to your workloads, and you should view details about compliance risks and handle them in a timely manner.<br>– **High**: There are abnormal incidents on your workloads, and you should view details about compliance risks and handle them in a timely manner.<br>– **Others**: There are risky incidents that are marked as medium-risk, low-risk, and informational alerts detected in your systems, and you should view details about compliance risks and take necessary actions.<br>• To quickly view details of top 5 abnormal compliance risks discovered, click the **Abnormal Baseline Settings** panel.<br>– You can view details of the top compliance risks discovered in the latest check, such as check item name, severity, asset name, and discovery time.<br>– If no data is available, no compliance violations are detected.<br>– You can click **View More** to go to the **Baseline Inspection** page and view more compliance risks. You can also customize filter criteria to make an advanced search. For details, see **Viewing Check Results**. |

### Your Security Score over Time

SecMaster displays your security scores **over the last 7 days**. The statistics are updated every 5 minutes.

# 7.2 Large Screen

## 7.2.1 Overall Situation Screen

### Scenarios

There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect. It is not ideal to just zoom in the console. Now, SecMaster **Large Screen** is a good choice for you to display the service console on bigger screens for a better visual effect.

By default, SecMaster provides a large screen for comprehensive situation awareness by displaying the attack history, attack status, and attack trend. This allows you to manage security incidents before, when, and after they happen.

## Prerequisites

You have enabled **Large Screen**. For details, see **Purchasing Value-Added Packages**.

## Procedure

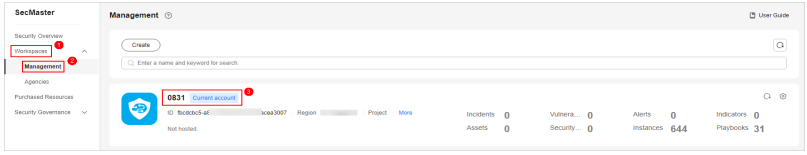
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

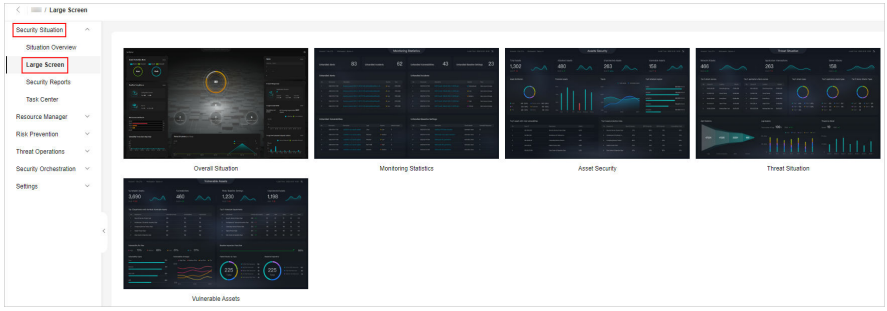
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-3** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Large Screen**.

**Figure 7-4** Large Screen




**Step 6** Click **Play** in the lower right corner of the overall situation screen to access the page.

This screen includes many graphs. More details are provided below.

**----End**

## Security Score

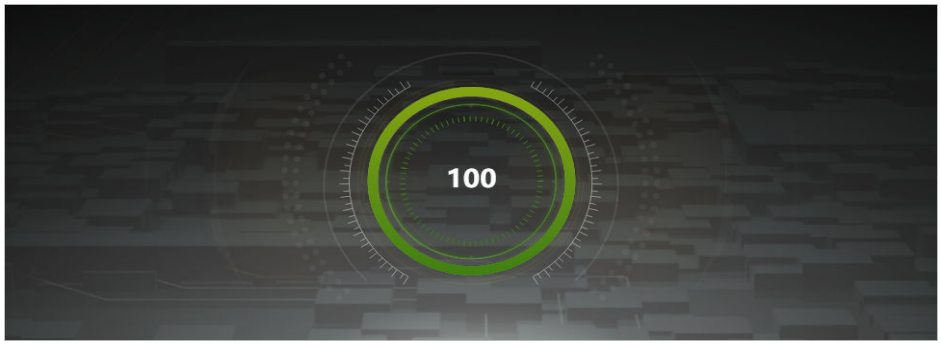
The security score of the current assets is displayed.

**Table 7-5** Security Score

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Security Score | Real-time | • Automatic update at 02:00 every day<br>• Updated about 5 minutes after you click **Check Again** in the **Security Score** panel on the **Situation Overview** page in a workspace. | The score is calculated based on what security services are enabled, and the levels and numbers of unhandled configuration issues, vulnerabilities, and threats. Each calculation item is assigned a weight.<br>• There are six risk severity levels, **Secure**, **Informational**, **Low**, **Medium**, **High**, and **Critical**.<br>• The score ranges from 0 to 100. The higher the security score, the lower the risk severity level.<br>• The security score starts from **0** and the risk severity level is escalated up from **Secure** to the next level every 20 points. For example, for scores ranging from **40** to **60**, the risk severity is **Medium**.<br>• The color keys listed on the right of the chart show the names of donut slices. Different color represents different risk severity levels. For example, the yellow slice indicates that your asset risk severity is **Medium**. |

**Figure 7-5** Security Score




## Alert Statistics

The alert statistics of interconnected services are displayed, as shown in **Figure 7-6**.

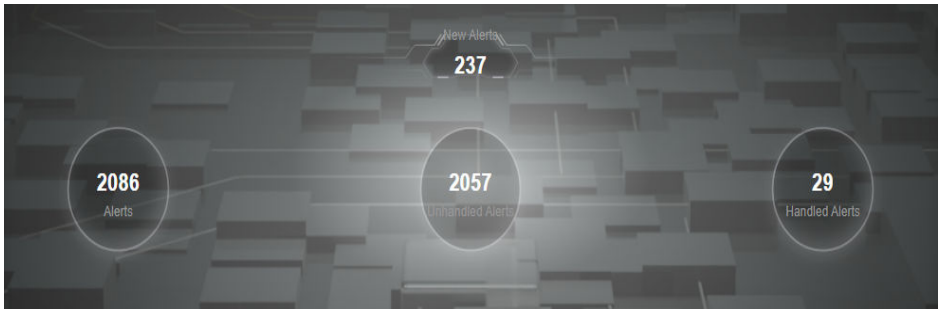
  

To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace.

**Table 7-6** Alert statistics

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| New Alerts | Today | 5 minutes | Number of new alerts generated on the current day. |
| Threat Alerts | Last 7 days | 5 minutes | Number of new alerts generated in the last seven days. |
| Unhandled Alerts | Last 7 days | 5 minutes | Number of alerts that have not been cleared in the last seven days. |
| Handled Alerts | Last 7 days | 5 minutes | Number of alerts that have been cleared in the last seven days. |

**Figure 7-6** Alert Statistics




## Asset Protection

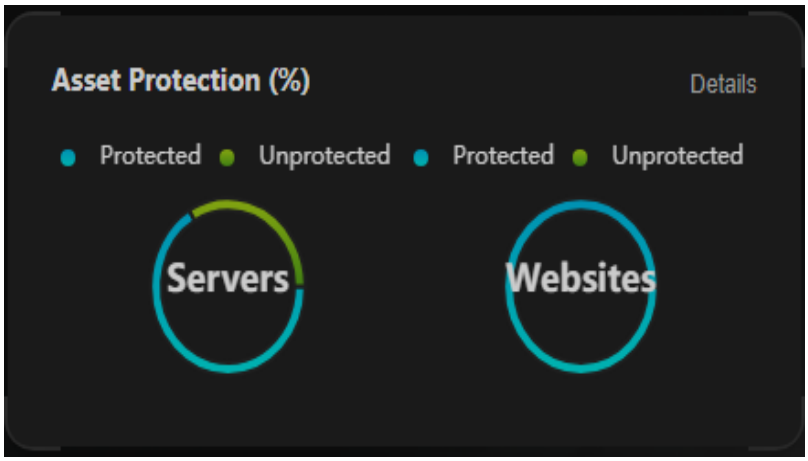
The protection status of servers and websites is displayed, including the proportion of protected and unprotected assets. You can hover the cursor over a module to view the number of protected/unprotected assets.

**Table 7-7** Asset protection rate

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Asset Protection (%) | Last 7 days | 5 minutes | The protection status of servers and websites is displayed, including the proportion of protected and unprotected assets.<br>• **Servers**: numbers of ECSs protected and not protected by HSS<br>• **Websites**: Numbers of websites protected and not protected by WAF |

**Figure 7-7** Asset protection rate




## Baseline Inspection

The fixing status of the baseline configuration and vulnerabilities of your assets, distribution of risky resources, and vulnerability fixing trend within seven days are displayed, as shown in **Figure 7-8**.

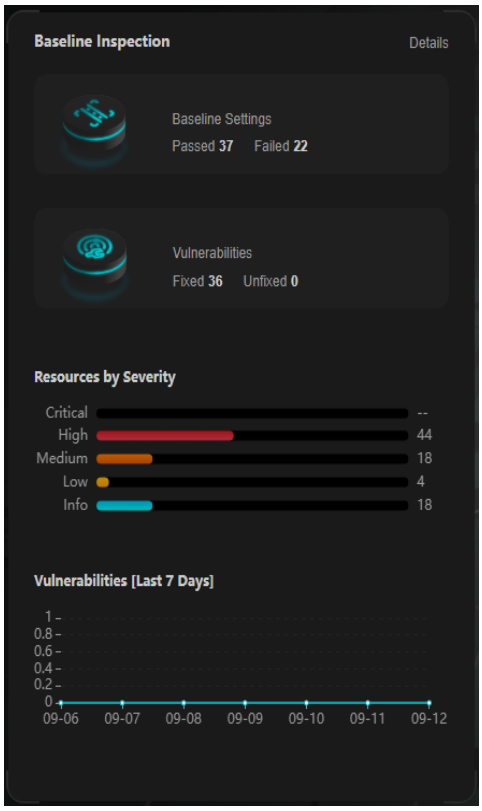
- To view details about the baseline data, choose **Risk Prevention** > **Baseline Inspection** in the current workspace.
- To view details about the vulnerability data, choose **Risk Prevention** > **Vulnerabilities** in the current workspace.

**Table 7-8** Baseline inspection

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Baseline Settings | Real-time | 5 minutes | Numbers of baseline settings that passed and failed the last baseline inspection. |
| Vulnerabilities | Last 7 days | 5 minutes | Numbers of fixed and unfixed vulnerabilities in the last seven days. |
| Resources by Severity | Real-time | 5 minutes | Numbers of unsafe resources at different severities in the last baseline inspection. **Severity**: **Critical**, **High**, **Medium**, **Low**, and **Info**. |
| Vulnerabilities | Last 7 days | 5 minutes | New vulnerabilities by the day for the last seven days and vulnerability distribution. |

**Figure 7-8** Baseline Inspection




## Recent Threats

The numbers of threatened assets and security logs reported every day in the last seven days are displayed.

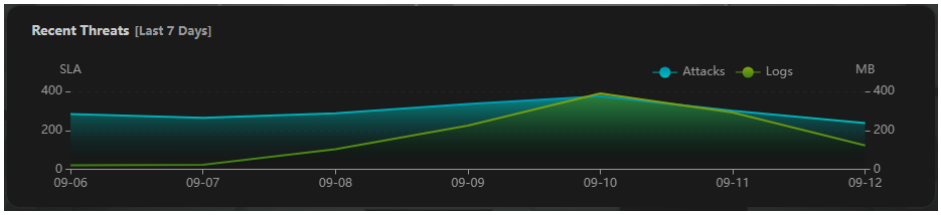
  

The x-axis indicates time, the y-axis on the left indicates the number of threatened assets, and the y-axis on the right indicates the number of logs. Hover the cursor over a date to view the number of threatened assets of that day.

**Table 7-9** Recent threats

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Attacks | Last 7 days | 5 minutes | Number of alerts reported every day in the last seven days.<br>To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace. |
| Logs | Last 7 days | 5 minutes | Number of security logs reported every day in the last seven days. |

**Figure 7-9** Recent threats




## To-Dos

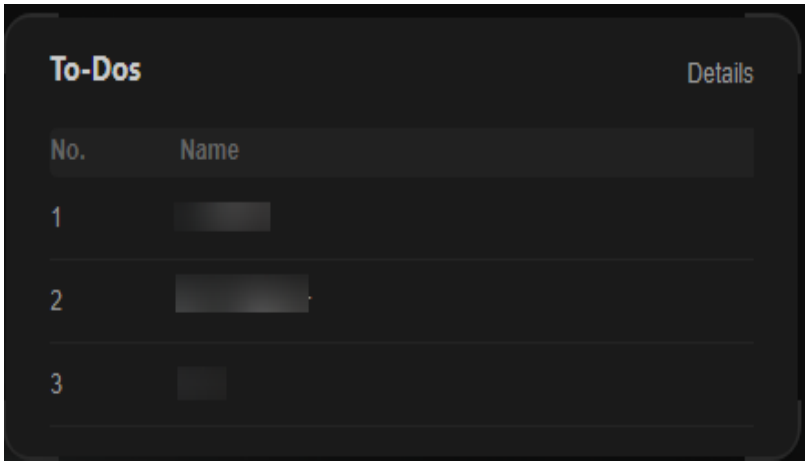
The to-do items in the current workspace are displayed.

**Table 7-10** To-dos

| Parameter | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- |
| To-Dos | Real-time | 5 minutes | To-do items on the **Security Situation** > **Task Center** in the current workspace. |

**Figure 7-10** To-Dos




## Resolved Issues

The alert handling status, SLA and MTTR fulfillment rate in the last seven days, and automatic incident handling statistics in the last seven days are displayed.

To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace.

**Table 7-11** Resolved issues

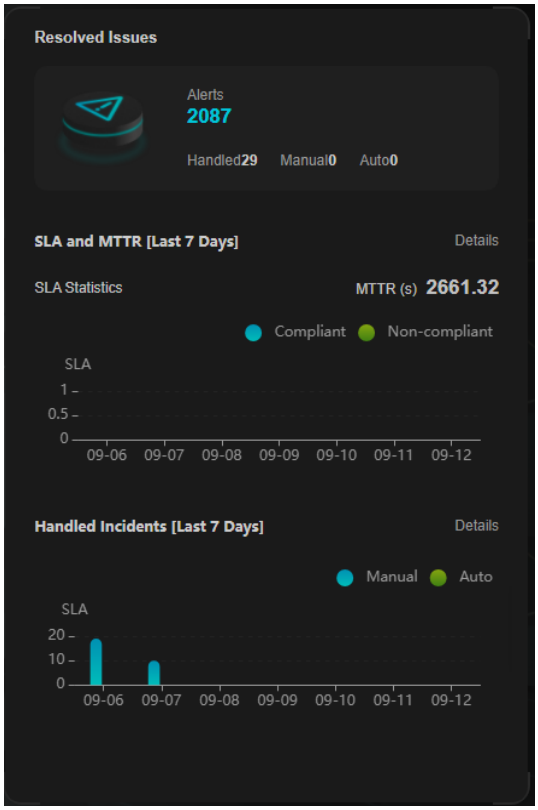
| Parameter | | Reference Period | Update Frequency | Description |
|---|---|---|---|---|
| Alerts | Alerts | Last 7 days | 5 minutes | Number of new alerts generated in the last seven days. |
| | Handled | | | Number of alerts that have been cleared in the last seven days. |
| | Manual | | | Number of alerts that were handled within the SLA time in the last seven days.<br>Alerts handled as planned and earlier than planned are counted. |
| | Auto | | | Number of alerts that were automatically handled by SecMaster playbooks over the past seven days.<br>To determine how an alert was handled, check whether the value of **close_comment** is **ClosedByCSB** or **ClosedBySecMaster** in the alert details. If it is, the alert was automatically handled. If it is not, the alert was manually handled. |

| Parameter | | Reference Period | Update Frequency | Description |
| --- | --- | --- | --- | --- |
| SLA and MTTR [Last 7 Days] | SLA Statistics | Last 7 days | 5 minutes | Alert handling timeliness in the last seven days. The formula is as follows:<br>For an alert with Service-Level Agreement (SLA) specified, if Alert closure time - Alert generation time ≤ SLA, it indicates the alert was handled in a timely manner. Otherwise, the alert fails to meet SLA requirements.<br>• Compliant: The alert closure time is the same as or earlier than planned.<br>• Non-compliant: The alert closure time is later than planned. |
| | MTTR | | | Average alert closure time in the last seven days. The formula is as follows:<br>Mean Time To Repair (MTTR) = Total processing time of each alert/Total number of alerts. Processing time of each alert = Closure time – Creation time. |
| Handled Alerts [Last 7 Days] | | Last 7 days | 5 minutes | Total number of alerts handled in the last seven days.<br>• **Manual**: Number of alerts manually closed on the **Alerts** page.<br>• **Auto**: Number of alerts automatically closed by SecMaster playbooks.<br>To determine how an alert was handled, check whether the value of **close_comment** is **ClosedByCSB** or **ClosedBySecMaster** in the alert details. If it is, the alert was automatically handled. If it is not, the alert was manually handled. |

**Figure 7-11** Resolved issues




## 7.2.2 Security Response Screen

### Scenarios

There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect. It is not ideal to just zoom in the console. Now, SecMaster **Large Screen** is a good choice for you to display the service console on bigger screens for a better visual effect.

By default, SecMaster provides a **Security Response** screen. You can view the overview of unhandled alerts, incidents, vulnerabilities, and baseline settings on one screen.

### Prerequisites

You have enabled **Large Screen**. For details, see **Purchasing Value-Added Packages**.

### Procedure

**Step 1** Log in to the management console.

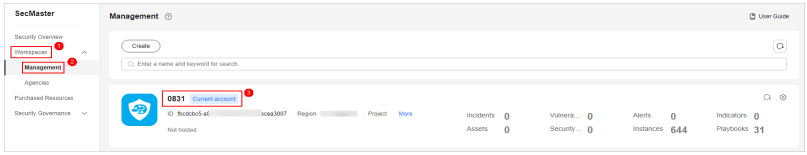
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

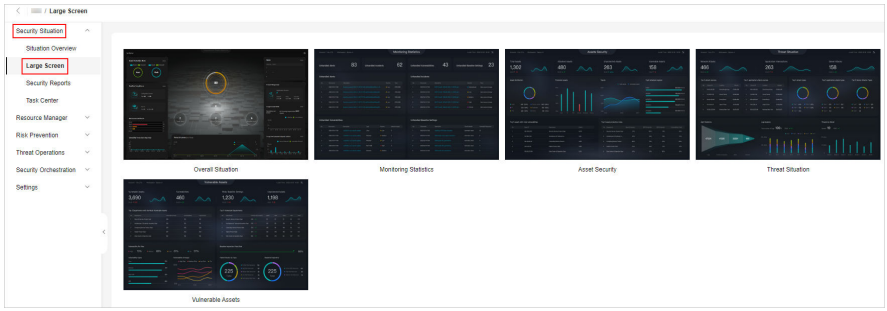
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-12** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Large Screen**.

**Figure 7-13** Large Screen




**Step 6** Click **Play** in the lower right corner of the monitoring statistics screen to access the page.

This screen includes many graphs. More details are provided below.

**----End**

## Monitoring Statistics Overview

This screen displays the total number of unhandled alerts, incidents, vulnerabilities, and unsafe baseline settings.

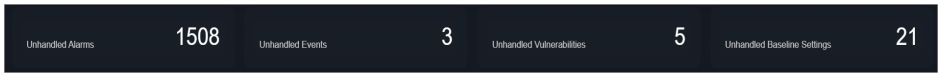
**Table 7-12** Security Response Overview

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Alerts | Last 7 days | 5 minutes | Number of alerts to be handled in the last seven days.<br>To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace. |

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Incidents | Last 7 days | 5 minutes | Number of open or blocked incidents in the last seven days.<br>To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace. |
| Unhandled Vulnerabilities | Real-time | 5 minutes | The number of unfixed vulnerabilities.<br>To view details about the vulnerability data, choose **Risk Prevention** > **Vulnerabilities** in the current workspace. |
| Unhandled Baseline Settings | Real-time | 5 minutes | The number of items failed to pass the baseline inspection.<br>To view details about the baseline data, choose **Risk Prevention** > **Baseline Inspection** in the current workspace. |

**Figure 7-14** Monitoring Statistics Overview




## Unhandled Alerts

The table lists information about top 5 unhandled threat alerts, including the alert discovery time, alert description, alert severity, and alert type.

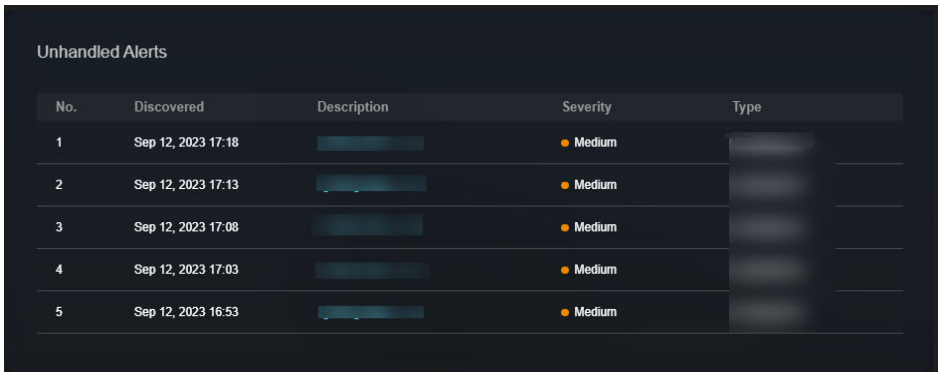
These top 5 alerts are sorted by generation time with the latest one placed at the top.

**Table 7-13** Unhandled Alerts

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Alerts | Last 7 days | 5 minutes | Number of alerts that have not been handled for the last seven days.<br>To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace. |

**Figure 7-15** Unhandled Alerts




## Unhandled Incidents

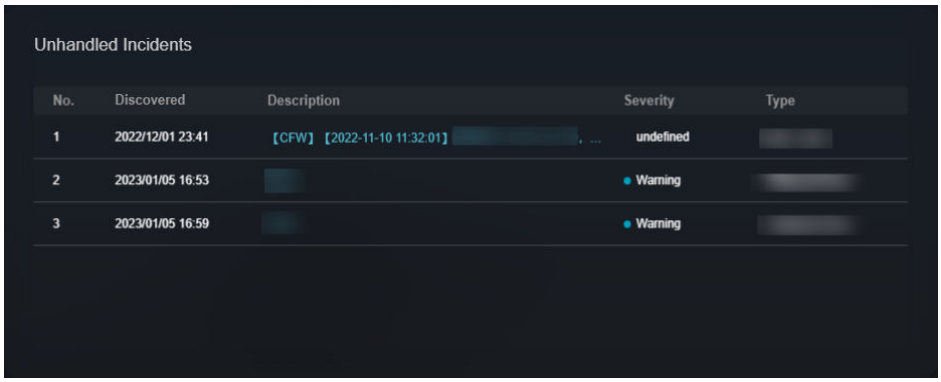
The table lists information about the top 5 unhandled incidents, including the incident discovery time, description, severity, and type.

These top 5 incidents are sorted by generation time with the latest one placed at the top.

**Table 7-14** Unhandled Incidents

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Incidents | Last 7 days | 5 minutes | Number of incidents that have not been closed in the last seven days.<br>To view details about the alert statistics, choose **Threat Operations** > **Alerts** in the current workspace. |

**Figure 7-16** Unhandled Incidents




## Unhandled Vulnerabilities

The table lists information about the top 5 unhandled vulnerabilities, including the discovery time, description, type, severity, and number of affected assets.

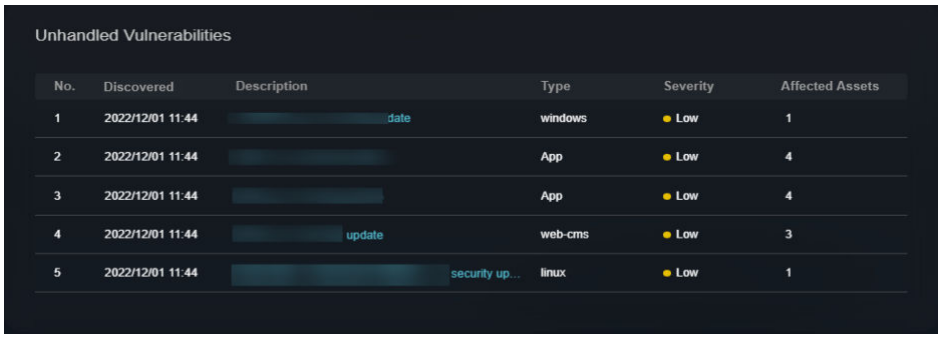
  

These top 5 vulnerabilities are sorted by discovery time with the latest one placed at the top.

**Table 7-15** Unhandled Vulnerabilities

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Vulnerabilities | Last 7 days | 5 minutes | The number of unfixed vulnerabilities.<br>To view details about the vulnerability data, choose **Risk Prevention** > **Vulnerabilities** in the current workspace. |

**Figure 7-17** Unhandled Vulnerabilities




## Unhandled Baseline Settings

This table lists information about the top 5 unhandled unsafe baseline settings, including the discovery time, description, check method, and total number of vulnerable resources.

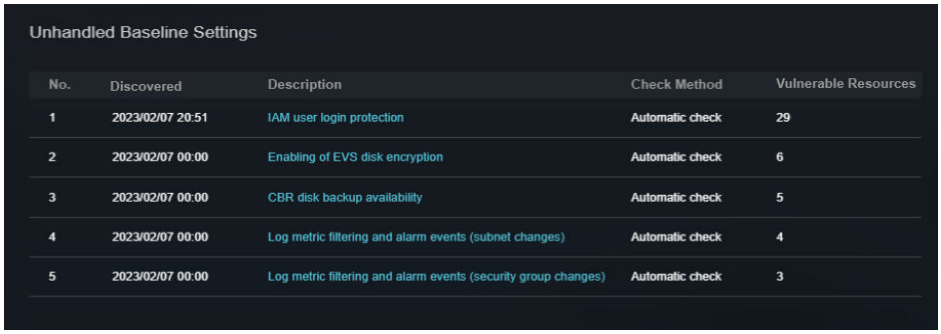
These top 5 unhandled baseline settings are sorted by discovery time with the latest one placed at the top.

**Table 7-16** Unhandled Baseline Settings

| Parameter | Statistics Cycle | Update Frequency | Description |
| --- | --- | --- | --- |
| Unhandled Baseline Settings | Last 7 days | 5 minutes | The number of items failed to pass the baseline inspection.<br>To view details about the baseline data, choose **Risk Prevention** > **Baseline Inspection** in the current workspace. |

**Figure 7-18** Unhandled Baseline Settings




## 7.2.3 Asset Security Screen

### Scenarios

There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect. It is not ideal to just zoom in the console. Now, SecMaster **Large Screen** is a good choice for you to display the service console on bigger screens for a better visual effect.

By default, SecMaster provides an asset screen for you. With this screen, you will learn about overall information about your assets at a glance, including how many assets you have, how many of them have been attacked, and how many of them are unprotected.

### Prerequisites

You have enabled **Large Screen**. For details, see **Purchasing Value-Added Packages**.

### Procedure

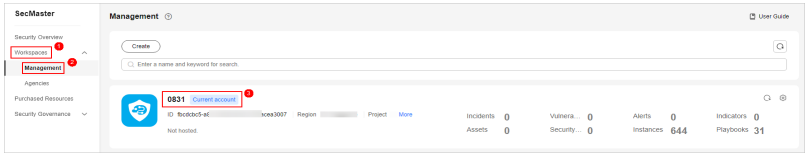
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

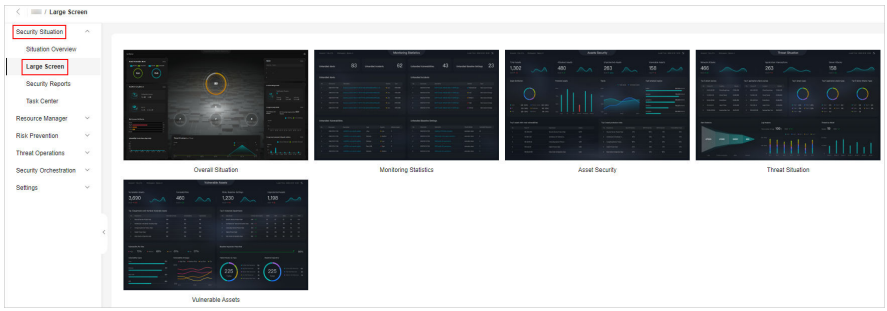
**Figure 7-19** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Situation** > **Large Screen**.

**Figure 7-20** Large Screen




**Step 6** Click **Play** in the lower right corner of the asset security image to access the screen.

This screen includes many graphs. More details are provided below.

**----End**

## Asset Security Screen Overview

On this screen, you can view the total numbers of assets, attacked assets, unprotected assets, vulnerabilities, and assets with unsafe settings in the current workspace.

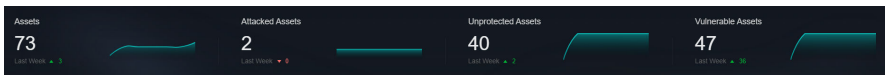
**Table 7-17** Asset Security Screen

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Assets | Real-time | Hourly | Total number of assets managed in **Resource Manager**. |
| Attacked Assets | Last 7 days | Hourly | Number of assets affected by alerts aggregated in **Alerts** under **Threat Operations** in the current workspace. |

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Unprotected Assets | Real-time | Hourly | Number of assets for which security protection is not enabled, for example, ECSs for which HSS is not enabled and EIPs for which DDoS is not enabled. You will learn of how many assets with **Protection Status** marked as **Unprotected** in **Resource Manager**.<br>In **Resource Manager**, the protection status for assets is as follows:<br>• **Protected**: The security product required for an asset is enabled for the asset.<br>• **Unprotected**: The security product required for an asset has not been purchased or enabled for the asset. If you want to protect target assets, purchase corresponding security products and enable protection. For example, if you want to protect ECSs, purchase HSS and enable HSS for each ECS.<br>• **--**: The required security product is not supported in the current region. |
| Assets with Vulnerabilities or Unsafe Settings | Real-time | Hourly | These assets include assets affected by vulnerabilities and assets have unsafe settings discovered during baseline inspection. The duplicated assets are counted only once.<br>The vulnerability data comes from **Risk Prevention** > **Vulnerabilities**, and the baseline inspection data comes from **Risk Prevention** > **Baseline Inspection** > **Resources to Check**. |

**Figure 7-21** Asset Security Screen




## Asset Distribution

In this area, you can view assets by type, asset protection rate, asset change trend, and distribution of the five assets attacked most.

**Table 7-18** Asset Distribution

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Assets by Type | Real-time | Hourly | Number of different types of assets in **Resource Manager**. |
| Protection by Asset Type (%) | Real-time | Hourly | Percentage of protection for different types of assets.<br>Protection rate of a certain type of assets = Protected assets/Total number of assets of this type. |
| Asset Changes | Last 7 days | Hourly | Statistics on the total number of assets, and the number of assets with vulnerabilities and unsafe settings in the last seven days. |
| Top 5 Attacked Assets | Last 7 days | Hourly | Top 5 attacked assets in the last seven days and the number of attacks.<br>The data comes from **Threat Operations** > **Alerts**. You can view details on this page. |

**Figure 7-22** Asset Distribution


## Top 5 Assets with the Most Vulnerabilities and Top 5 Departments with the Highest Protection Rate

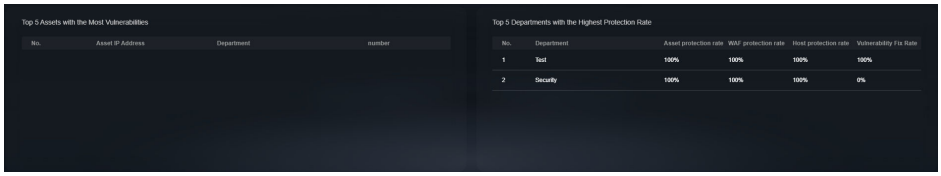
In this area, you will see the five assets with the most vulnerabilities and the five departments with the highest protection rate.

**Table 7-19** Top 5 Assets with the Most Vulnerabilities and Top 5 Departments with the Highest Protection Rate

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Assets with the Most Vulnerabilities | Real-time | Hourly | Top 5 assets with the most vulnerabilities in different departments.<br>This data is generated based on the assets affected by vulnerabilities in **Risk Prevention** > **Vulnerabilities**. Note that the assets must have department details provided, or the affected assets may fail to be counted toward this data. |
| Top 5 Departments with the Highest Protection Rate | Real-time | Hourly | This graphs list the 5 departments that have the highest protection rate, in descending order.<br>Note that the assets on **Resource Manager** must have department details provided, or the assets cannot be counted toward this rate. |

**Figure 7-23** Top 5 Assets with the Most Vulnerabilities and Top 5 Departments with the Highest Protection Rate




# 7.2.4 Threat Situation Screen

## Scenarios

There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big screens to achieve better demonstration effect. It is not ideal to just zoom in the console. Now, SecMaster **Large Screen** is a good choice for you to display the service console on bigger screens for a better visual effect.

By default, SecMaster provides a threat situation screen, which shows how many network attacks, application-layer attacks, and server-layer attacks against your assets over the last seven days.

## Prerequisites

You have enabled **Large Screen**. For details, see **Purchasing Value-Added Packages**.

## Procedure

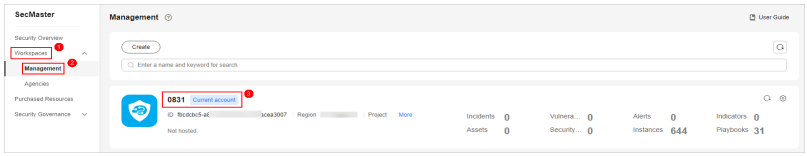
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

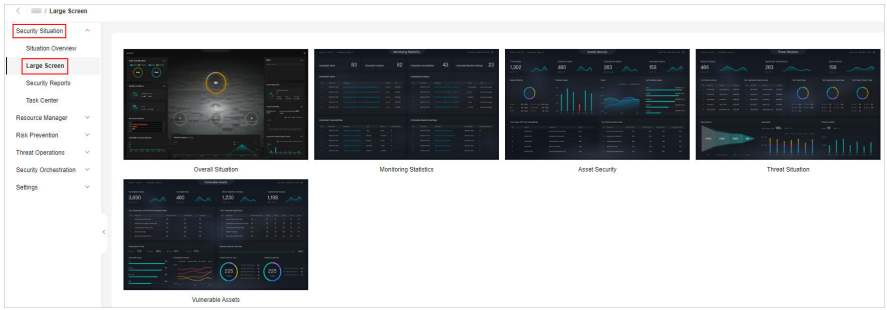
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-24** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Large Screen**.

**Figure 7-25** Large Screen




**Step 6** Click **Play** in the lower right corner of the **Threat Situation** image to access the screen.

This screen includes many graphs. More details are provided below.

**----End**

## Threat Situation screen

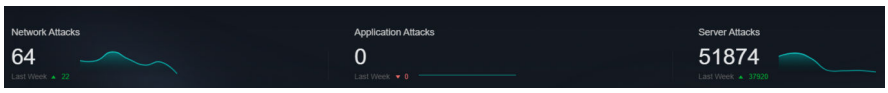
This area displays the number of attacks by types, including network, application, and server attacks.

**Table 7-20** Threat Situation screen

| Parameter | | Statistical Period | Update Frequency | Description |
|---|---|---|---|---|
| Network Attacks | *Occurrences* | Last 7 days | Hourly | The number of attacks against EIPs in the last seven days. |
| | Last Week | | | Difference between the number of attacks against EIPs for the current 7-day statistical cycle and that for the previous 7-day statistical cycle. |
| Application Attacks | *Occurrences* | Last 7 days | Hourly | The number of attacks against protected websites in the last seven days. |
| | Last Week | | | Difference between the number of attacks against websites for the current 7-day statistical cycle and that for the previous 7-day statistical cycle. |
| Server Attacks | *Occurrences* | Last 7 days | Hourly | The number of attacks against protected ECSs in the last seven days. |
| | Last Week | | | Difference between the number of attacks against ECSs for the current 7-day statistical cycle and that for the previous 7-day statistical cycle. |

**Figure 7-26** Threat Situation screen




## Attack Source Distribution

This graph displays the five attack sources who launched the most attacks against the network and application layers. You will see attacked asset details, including IP addresses, departments, and quantity.

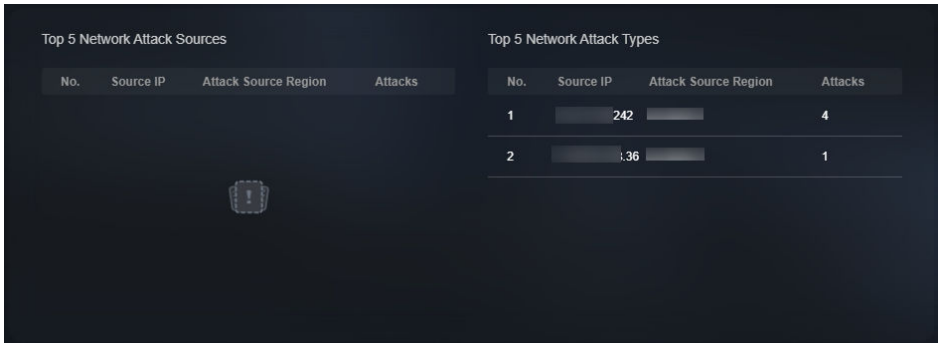
**Table 7-21** Attack source distribution

| Parameter | Statistical Period | Update Frequency | Description |
|---|---|---|---|
| Top 5 Network Attack Source Distribution | Last 7 days | Hourly | The five sources that have launched the most attacks against EIPs for the last seven days, displayed in a descending order by attack quantity. |

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Application Attack Source Types | Last 7 days | Hourly | The five sources that have launched the most attacks against websites for the last seven days, displayed in a descending order by attack quantity. |

**Figure 7-27** Attack source distribution




## Attacks by Type

This graph shows top 5 network attack types, top 5 application attack types, and server attack types.

**Table 7-22** Attacks by Type

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Network Attack Types | Last 7 days | Hourly | The five attack types with the most attacks against EIPs detected for the last seven days, displayed in a descending order by attack quantity.<br>If there is no network attack or no corresponding data table, the default types with zero attacks are displayed. |
| Top 5 Application Attack Types | Last 7 days | Hourly | The five attack types with the most attacks against websites detected for the last seven days, displayed in a descending order by attack quantity.<br>If there is no application attack or no corresponding data table, the default types with zero attacks are displayed. |

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Server Attack Types | Last 7 days | Hourly | The five attack types with the most attacks against ECSs detected for the last seven days, displayed in a descending order by attack quantity.<br>If there is no ECS attack or no corresponding data table, the default types with zero attacks are displayed.<br>The asset statistics come from the **Alerts** page under **Threat Operations** in the current workspace. |

**Figure 7-28** Attack type distribution


## Threat Situation Statistics

This graph shows the statistics about alerts, logs, and threat detection models in the current account.

**Table 7-23** Threat Situation Statistics

| Parameter | | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- | --- |
| Alert Statistics | Logs | Last 7 days | Hourly | Total number of network, application, and server access logs for the last seven days. |
| | Threats | | | Total number of threats identified for protected networks, applications, and servers for the last seven days. |
| | Alerts | | | This number reflects alerts collected in **Threat Operations** > **Alerts** for the last seven days. |

| Parameter | | Statistical Period | Update Frequency | Description |
|---|---|---|---|---|
| | Incidents | | | This number reflects incidents collected in **Threat Operations** > **Incidents** for the last seven days. |
| Log Analysis | Log volume | Last 7 days | Hourly | Total volume of network, application, and server access logs for the last seven days, in MB. |
| | PoP | | | Difference between the total volume of network, application, and server access logs for the current 7-day statistical cycle and that for the previous 7-day statistical cycle.<br>Calculation method: [(Number of logs for the current statistical cycle – Number of logs for the previous statistical cycle)/Number of logs for the previous statistical cycle] x 100%. |
| | Statistical trend chart | | | Total volume of network, application, and server access logs for the last seven days, in MB. |
| Threats by Model | Models | Real-time | Hourly | The number includes the models in **Threat Operations** > **Intelligent Modeling**. |
| | Statistical table | Last 7 days | Hourly | Number of threats detected by each type of threat detection model.<br>If there is no threat detection model, four default types with zero threats detected are displayed. |

**Figure 7-29** Threat situation statistics


## 7.2.5 Venerability Situation Screen

### Scenarios

There are always such scenarios as presentation, reporting, or real-time monitoring where you need to present the analysis results of SecMaster on big

screens to achieve better demonstration effect. It is not ideal to just zoom in the console. Now, SecMaster **Large Screen** is a good choice for you to display the service console on bigger screens for a better visual effect.

By default, SecMaster provides a vulnerability situation screen. With this screen, you can view the overview of vulnerable assets, asset vulnerabilities, unsafe baseline settings, and unprotected assets.

## Prerequisites

You have enabled **Large Screen**. For details, see **Purchasing Value-Added Packages**.

## Procedure

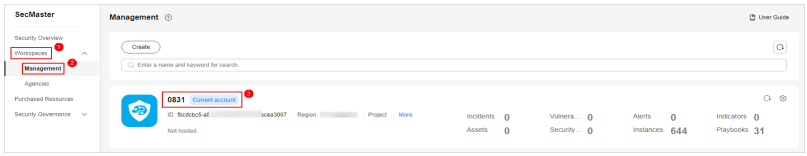
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

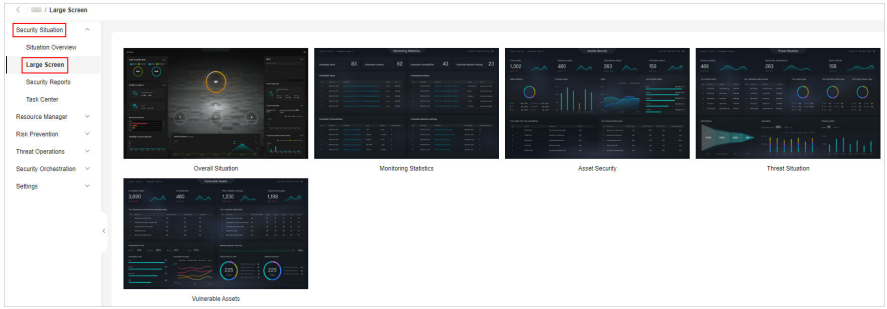
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-30** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Large Screen**.

**Figure 7-31** Large Screen




**Step 6** Click **Play** in the lower right corner of the vulnerable assets image to access the screen.

This screen includes many graphs. More details are provided below.

**----End**

## Vulnerable Assets Overview

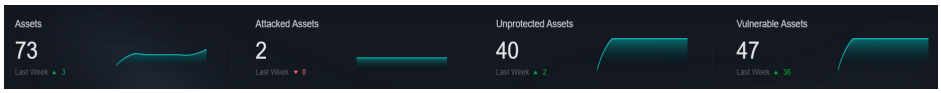
This graph displays the total numbers of vulnerable assets, vulnerabilities, unsafe baseline settings, and unprotected assets.

Vulnerable assets refer to assets with unhandled vulnerabilities or unsafe baseline settings and assets that are not under protection at the current time.

**Table 7-24** Vulnerable Assets Overview

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Vulnerable Assets | Real-time | Hourly | The number of assets with vulnerabilities or risky baseline settings. |
| Vulnerabilities | Real-time | Hourly | Vulnerabilities collected in **Vulnerabilities**. |
| Risky Baseline Settings | Real-time | Hourly | Data reported by Baseline Inspection in SecMaster. |
| Unprotected Assets | Real-time | Hourly | Number of assets for which you need to enable security protection, for example, ECSs for which HSS is not enabled and EIPs for which DDoS mitigation is not enabled. |

**Figure 7-32** Vulnerable Assets Screen




## Top 5 Departments with the Most Vulnerabilities

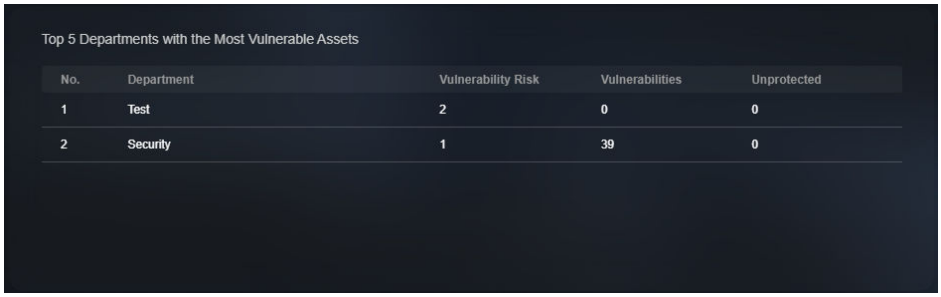
This graph shows the five departments with the most vulnerabilities. You will view the details of these departments, including the department name, number of vulnerable assets, number of unfixed vulnerabilities, and number of unprotected assets.

**Table 7-25** Vulnerable departments

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Vulnerable Departments | Real-time | Hourly | The five departments have the most vulnerable assets, assets affected by vulnerabilities, and unprotected assets.<br>Vulnerable assets include assets affected by vulnerabilities in **Risk Prevention** > **Vulnerabilities**, and assets that fail any check in **Risk Prevention** > **Baseline Inspection**, and assets that are not protected in **Resource Manager**. Note that the assets in **Resource Manager** must have department details provided, or they cannot be counted in calculation. |

**Figure 7-33** Top 5 Vulnerable Departments




## Top 5 Department with the Most Unprotected Assets

This graph displays the 5 departments with the most failed protection policies. You can view the details about these departments, including the department name and what protection policies they failed, such as DBSS, WAF, Anti-DDoS, HSS, and CFW

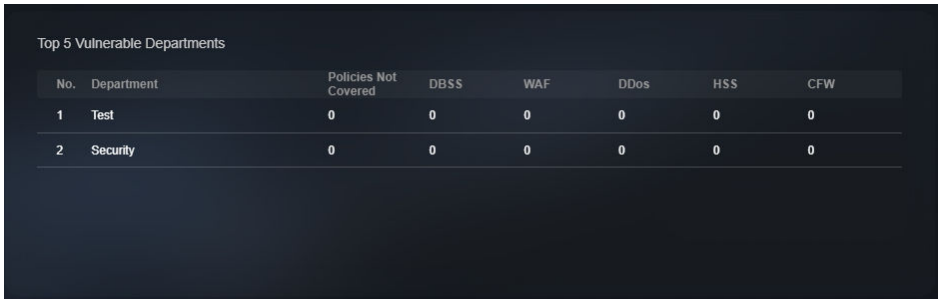
The graph displays the five departments with the most unprotected assets.

**Table 7-26** Department with the most unprotected assets

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Top 5 Department with the Most Unprotected Assets | Real-time | Hourly | The five departments with the most unprotected assets. |

**Figure 7-34** Top 5 Department with the Most Unprotected Assets



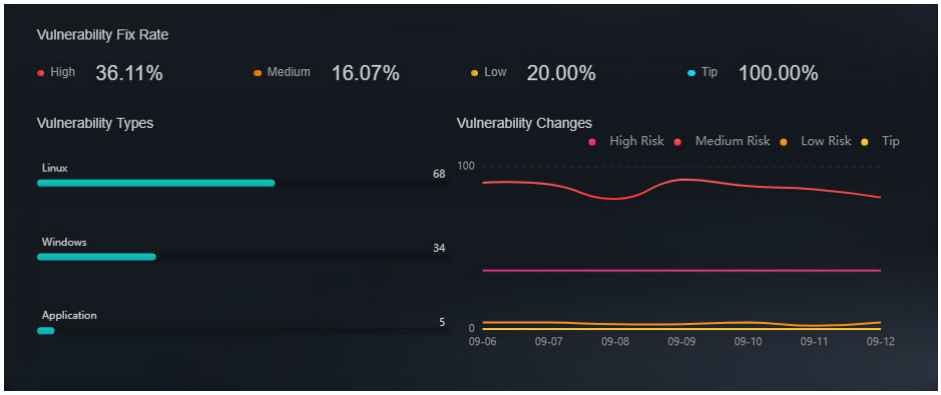

## Vulnerability Fix Rate

This graph shows the vulnerability fix rate, top 5 vulnerability types, and vulnerability trend changes.

**Table 7-27** Vulnerability fix rate

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Vulnerability Fix Rate | Real-time | Hourly | Vulnerability fixing rate = (Number of fixed vulnerabilities/Total number of vulnerabilities) x 100%.<br>If no vulnerability exists, 100% is displayed. |
| Vulnerability Types | Real-time | Hourly | Vulnerabilities are displayed by vulnerability type. |
| Vulnerability Changes | Last 7 days | Hourly | Vulnerabilities in the last seven days are classified and counted by severity. |

**Figure 7-35** Vulnerability fixing rate



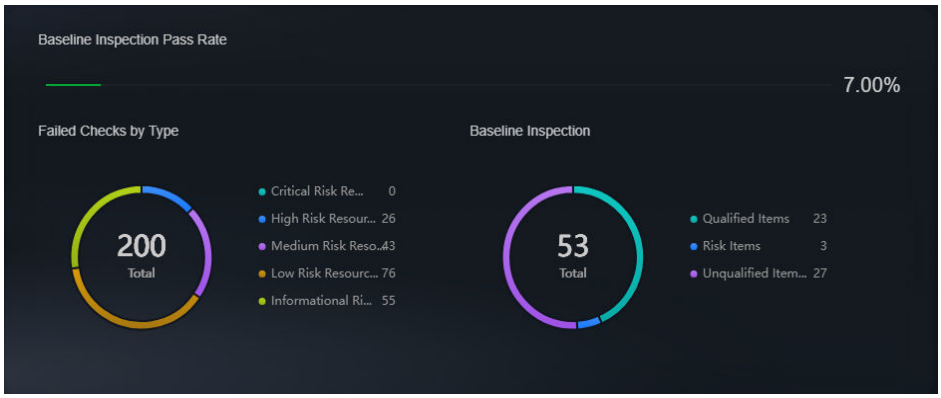
### Baseline Inspection Pass Rate

You can learn about baseline inspection results at a glance, including the pass rate, what resources have failed the inspection, failed checks, resource types, and the number of total check items.

**Table 7-28** Baseline Inspection Pass Rate

| Parameter | Statistical Period | Update Frequency | Description |
| --- | --- | --- | --- |
| Baseline Inspection Pass Rate | Real-time | Hourly | Baseline check pass rate = (Number of passed baseline check items/Total number of check items) x 100%. |
| Failed Checks By Type | Real-time | Hourly | Failed baseline check items are displayed by risk severity. |
| Baseline Inspection | Real-time | Hourly | This graph shows how many qualified, risky, and unqualified settings, respectively, discovered by baseline inspection. |

**Figure 7-36** Baseline Inspection Pass Rate




# 7.3 Security Reports

## 7.3.1 Creating and Copying a Security Report

### Scenario

SecMaster provides you with security reports. You can create a security report template so that you can learn of your resource security status in a timely manner.

This section describes how to create a security report and how to quickly create a security report by copying an existing template.

## Limitations and Constraints

A maximum of 10 security reports (including daily, weekly, and monthly reports) can be created in a single workspace of a single account.

## Prerequisites

You have purchased the SecMaster professional edition and the edition is within the validity period.

## Creating a Report

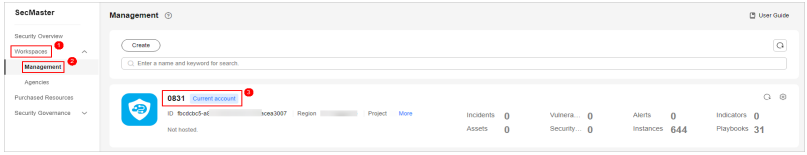
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

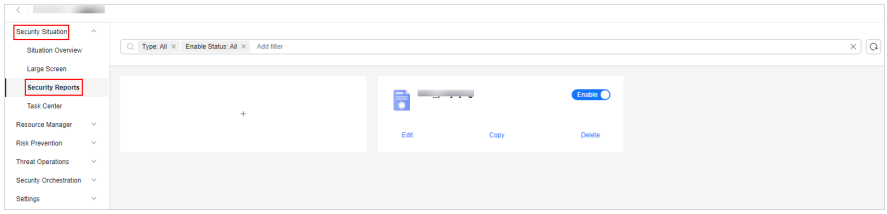
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-37** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Security Reports**.

**Figure 7-38** Security Reports




**Step 6** On the **Reports** page, click to go to the basic configuration page.

**Step 7** Configure basic information of the report.

**Table 7-29** Report parameters

| Parameter | Description |
| --- | --- |
| Report Name | Name of the report you want to create. |

| Parameter | Description |
| --- | --- |
| Schedule | Select a report type.<br>• **Daily**: SecMaster collects security information from 00:00:00 to 23:59:59 of the previous day by default.<br>• **Weekly**: SecMaster collects statistics on security information from 00:00:00 on Monday to 23:59:59 on Sunday of the previous week.<br>• **Monthly**: SecMaster collects statistics on security information from 00:00:00 on the first day to 23:59:59 on the last day of the previous month.<br>• **Custom**: Customize a time range. |
| Data Scope | This field displays the data scope based on **Schedule** you specified.<br>If you select **Daily**. **Weekly**, or **Monthly** for **Schedule**, the system displays the report data scope accordingly. |
| Schedule | If you select **Daily**, **Weekly**, or **Monthly** for **Schedule**, you still need to set when you want SecMaster to send reports.<br>• **Daily**: By default, SecMaster sends a report that includes security information generated from 00:00:00 to 23:59:59 on the previous day every day at the time you specify.<br>• **Weekly**: Set the time when the weekly report is sent. By default, the system sends a report for the data from 00:00:00 last Monday to 23:59:59 last Sunday.<br>• **Monthly**: By default, the system sends a report that includes the security information for the previous month on a monthly basis at the time you specify. |
| Send Interval | If you select **Custom** for **Schedule**, you need to set an interval to let SecMaster send reports. |
| Send Rule | If you select **Custom** for **Schedule**, you need to set when to send the report and the data scope.<br>You can set up to five rules for sending reports. |
| Report Format | Format of the security report. The options are HTML, JPG, and PDF. |
| Email Subject | Set the subject of the email for sending the report. |
| Recipient Email | Add the email address of each recipient.<br>• You can add up to 100 email addresses.<br>• Separate multiple email addresses with semicolons (;). Example: test01@example.com;test02@example.com |

| Parameter | Description |
| --- | --- |
| (Optional) Copy To | Add the email address of each recipient you want to copy the report to.<br>• You can add up to 100 email addresses.<br>• Separate multiple email addresses with semicolons (;). Example: test03@example.com;test04@example.com |
| (Optional) Remarks | Remarks for the security report. |

**Step 8** Click **Next: Report Choose** in the upper right corner.

**Step 9** On the **Report Selection** page, select a report from the left. After selecting, you can preview the report layout in the right pane.

You need to select the corresponding report layout based on what you select for **Schedule**.

- To download a report, click in the upper left corner of the report preview page. In the dialog box displayed, select a report format and click **OK**.

  The system then automatically downloads the report for you.
- To view a report in full screen, click in the upper left corner of the report preview page.

**Step 10** Click **Complete** in the lower right corner. On the displayed **Security Reports** page, view the created report.

**----End**

## Copying a Report

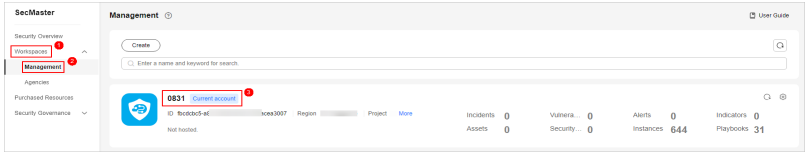
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

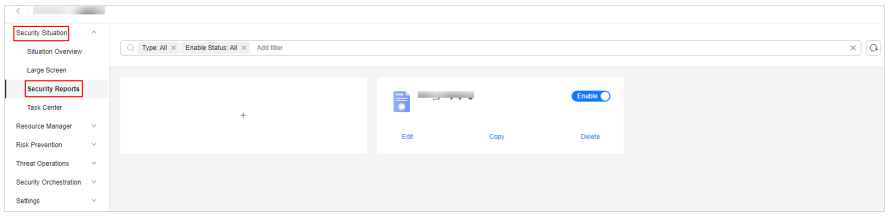
**Figure 7-39** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Security Reports**.

**Figure 7-40** Security Reports




**Step 6** Select a report template and click **Copy**.

**Step 7** Edit basic information of the report.

**Step 8** Click **Next: Report Choose**. The report configuration page is displayed.

- To download a report, click in the upper left corner of the report preview page. In the dialog box displayed, select a report format and click **OK**.

  The system then automatically downloads the report for you.

- To view a report in full screen, click in the upper left corner of the report preview page.

**Step 9** Click **Complete** in the lower right corner. On the displayed **Security Reports** page, view the newly created report.

**----End**

## 7.3.2 Viewing a Security Report

### Scenario

This section describes how to view a created security report and its displayed information.

### Procedure

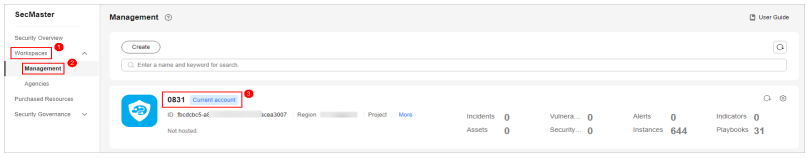
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

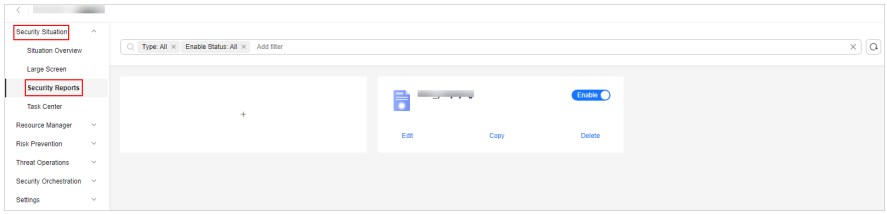
**Figure 7-41** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Security Reports**.

**Figure 7-42** Security Reports




**Step 6** Select the target report and click the report icon. The report details page is displayed.

On the report details page, you can preview details about the current security report.

**----End**

## Content in the Daily Report Template

**Table 7-30** Content in the daily report template

| Parameter | Description |
| --- | --- |
| Data Scope | The default data scope of a daily report is from 00:00:00 to 23:59:59 on the previous day. |
| Security Score | SecMaster evaluates and scores your asset security for the previous day (from 00:00:00 to 23:59:59) so that you can quickly learn of the overall security posture of assets. This score varies depending on the SecMaster edition you are using. |
| Baseline Inspection | Displays the statistics of the latest baseline check, including the following information:<br>• The number of baseline check items<br>• Number of failed compliance check items in the latest baseline check |
| Security Vulnerabilities | Displays the vulnerability statistics of the accessed cloud services **on the previous day**, including the following information:<br>• Number of vulnerabilities<br>• Number of unfixed vulnerabilities |

| Parameter | Description |
| --- | --- |
| Policy Coverage | Displays the coverage of current security products, including the following information:<br>• Number of instances protected by security products (= Number of protected ECSs + Number of websites protected with WAF instances)<br>• HSS coverage (= Number of protected ECSs/Total number of ECSs)<br>• Number of protected cloud servers<br>• Protected websites |
| Asset Security | Displays the current asset security status, including the following information:<br>• Total number of current assets<br>• Number of vulnerable assets |
| Security Analysis | Displays the security analysis statistics of **the previous day**, including the following information:<br>• Total traffic of security logs on the previous day<br>• Number of security log models |
| Security Response (Overview) | Displays the security response statistics for **the previous day**, including the following information:<br>• Number of security alerts handled<br>• Number of confirmed intrusion incidents<br>• Number of executed automatic response playbooks<br>• Percentage of alerts handled by automatic playbooks<br>• Average MTTR<br>• Number of confirmed high-risk intrusion incidents |
| Asset risks | Displays the asset security status for **the previous day**, including the following information:<br>• Number of attacked assets<br>• Number of unprotected assets<br>• Number of vulnerable assets<br>• Asset change trend over the last seven days as of the previous day<br>• Asset protection rate |

| Parameter | Description |
| --- | --- |
| Threat posture | Displays the threat posture of assets **on the previous day**, including the following information:<br>• Number of DDoS attacks<br>• Number of network attacks<br>• Number of application attacks<br>• Number of server attacks<br>• DDoS inspection findings<br>• Network and server attack changes<br>• WAF inspection findings<br>• Top 5 network attack types<br>• Top 5 application attack type statistics<br>• Top 5 server attack type statistics<br>• Top 5 application attack sources distribution<br>• Top 5 attacked application distribution<br>• Top 5 server alert distribution<br>• Top 5 network attack sources distribution<br>• HSS inspection findings |
| Log analysis | Displays the log analysis results for **the previous day**, including the following information:<br>• Number of log sources on the previous day<br>• Number of log indexes on the previous day<br>• Total number of logs received on the previous day<br>• Log volume stored on the previous day<br>• Log change trend over the last seven days as of the previous day<br>• Access traffic statistics of top 5 log sources over the last seven days as of the previous day<br>• Number of alerts generated by top 10 models on the previous day |

| Parameter | Description |
| --- | --- |
| Security Response (Details) | Displays the security response information for **the previous day**, including the following information:<br>● Number of alerts handled on the previous day<br>● Number of incidents handled on the previous day<br>● Number of vulnerabilities fixed on the previous day<br>● Number of unsafe baseline settings fixed on the previous day<br>● Threat alert distribution and quantity on the previous day<br>● Top 5 intrusion incidents by type on the previous day<br>● Top 5 emergency responses on the previous day<br>● Top 20 threat alerts handled on the previous day |
| External Security Info | Displays information about external security hotspots for **the previous day**. |

## Content in the Weekly Report Template

**Table 7-31** Content in the **Weekly** Report Template

| Parameter | Description |
| --- | --- |
| Data Scope | SecMaster collects security information from 00:00:00 on Monday to 23:59:59 on Sunday of the previous week. |
| Security Score | SecMaster evaluates and scores your asset security for the last day of the previous week so that you can quickly learn of the overall security posture of assets. This score varies depending on the SecMaster edition you are using. |
| Baseline Inspection | Displays the statistics of the latest baseline check in the previous week, including the following information:<br>● The number of baseline check items<br>● Number of compliance check items in the latest baseline check |
| Security vulnerabilities | Displays the vulnerability statistics of the accessed cloud services **for the last week**, including the following information:<br>● Number of vulnerabilities.<br>● Number of unfixed vulnerabilities |

| Parameter | Description |
| --- | --- |
| Policy Coverage | Displays the latest asset security information on the last day of the previous week, including the following information:<br>• Number of instances protected by security products (= Number of protected ECSs + Number of websites protected with WAF instances)<br>• HSS coverage (= Number of protected ECSs/Total number of ECSs)<br>• Number of protected cloud servers<br>• Protected websites |
| Asset security | Displays the latest asset security information on the last day in the last week, including the following information:<br>• Total number of assets<br>• Number of vulnerable assets |
| Security analysis | Displays the security analysis statistics, including the following information:<br>• Total security log traffic of last week<br>• Number of security log models on the last day of the last week |
| Security Response (Overview) | Displays the security response information for the previous week, including the following information:<br>• Number of security alerts handled over the previous week<br>• Number of confirmed intrusion incidents over the previous week<br>• Number of executed automatic response playbooks<br>• Percentage of alerts handled by automatic playbooks<br>• Average MTTR<br>• Number of confirmed high-risk intrusion incidents |
| Asset risks | Displays the latest asset security information on the last day of the previous week, including the following information:<br>• Week-over-week changes on attacked asset quantity in monthly reports<br>• Week-over-week changes on unprotected asset quantity in monthly reports<br>• Week-over-week changes on vulnerable asset quantity in monthly reports<br>• Asset changes over the previous week<br>• Asset protection (%) |

| Parameter | Description |
| --- | --- |
| Threat posture | Displays the latest threat posture n on the last day of the previous week, including the following information:<br>• Number of DDoS attacks<br>• Number of network attacks<br>• Number of application attacks<br>• Number of server attacks<br>• DDoS inspection findings<br>• Network attack changes<br>• WAF inspection findings<br>• Top 5 network attack types<br>• Top 5 application attack types<br>• Top 5 server attack types<br>• Top 5 application attack sources distribution<br>• Top 5 attacked application distribution<br>• Top HSS alert distribution<br>• Top 5 network attack sources distribution<br>• HSS inspection findings |
| Log analysis | Displays the log analysis results for **the previous week**, including the following information:<br>• Number of log sources<br>• Number of log indexes<br>• Total number of received logs<br>• Log storage<br>• Log volume changes<br>• Top 5 log source access statistics<br>• Number of alerts generated by top 10 models on the previous day |
| Security Response (Details) | Displays the security response information for **the previous week**, including the following information:<br>• Number of handled alerts<br>• Number of handled incidents<br>• Number of fixed vulnerabilities<br>• Number of fixed baseline settings<br>• Threat alert distribution and quantity<br>• Top 5 intrusion incidents by type<br>• Top 5 emergency responses<br>• Top 20 threat alert handling |
| External Security Info | This part includes information about external security hotspots. |

## Content in the Monthly Report Template

**Table 7-32** Content in the monthly report template

| Parameter | Description |
| --- | --- |
| Data Scope | By default, a monthly report includes security information for the previous month. |
| Security Score | SecMaster evaluates and scores your asset security for the last day of the previous month so that you can quickly learn of the overall security posture of assets. This score varies depending on the SecMaster edition you are using. |
| Baseline Inspection | Displays the statistics of the latest baseline check in the previous month, including the following information:<br>● The number of baseline check items<br>● Number of compliance check items in the latest baseline check |
| Security Vulnerabilities | Displays the vulnerability statistics of the accessed cloud services on the last data of the previous month, including the following information:<br>● Number of vulnerabilities<br>● Number of unfixed vulnerabilities |
| Policy Coverage | Displays the latest asset security information on the last day of the last month, including the following information:<br>● Number of instances protected by security products (= Number of protected ECSs + Number of websites protected with WAF instances)<br>● HSS coverage (= Number of protected ECSs/Total number of ECSs)<br>● Number of protected cloud servers<br>● Protected websites |
| Asset Security | Displays the latest asset security information on the last day of the last month, including the following information:<br>● Total number of assets<br>● Number of vulnerable assets |

| Parameter | Description |
| --- | --- |
| Security analysis | Displays the security analysis statistics, including the following information:<br>● Total security log traffic of the last month<br>● Number of security log models on the last day of the last month |
| Security Response (Overview) | Displays the security response information for the previous month, including the following information:<br>● Number of security alerts handled over the previous month<br>● Number of confirmed intrusion incidents<br>● Number of executed automatic response playbooks<br>● Percentage of alerts handled by automatic playbooks<br>● Average MTTR<br>● Number of confirmed high-risk intrusion incidents |
| Asset risks | Displays the latest asset security information on the last day of the last month, including the following information:<br>● Attacked asset quantity changes compared to the previous month<br>● Unprotected asset quantity changes compared to the previous month<br>● Vulnerable asset quantity changes compared to the previous month<br>● Asset changes over the previous month<br>● Asset protection (%) |

| Parameter | Description |
| --- | --- |
| Threat posture | Displays the latest threat posture n on the last day of the previous month, including the following information:<br>• Number of DDoS attacks<br>• Number of network attacks<br>• Number of application attacks<br>• Number of server attacks<br>• DDoS inspection findings<br>• Network attack changes<br>• WAF inspection findings<br>• Top 5 network attack types<br>• Top 5 application attack types<br>• Top 5 server attack types<br>• Top 5 application attack sources distribution<br>• Top 5 attacked application distribution<br>• Top HSS alert distribution<br>• Top 5 network attack sources distribution<br>• HSS inspection findings |
| Log analysis | Displays the log analysis results for the previous month, including the following information:<br>• Number of log sources<br>• Number of log indexes<br>• Total number of received logs<br>• Log storage<br>• Log volume changes<br>• Top 5 log source access statistics<br>• Number of alerts generated by top 10 models on the previous day |
| Security Response (Details) | Displays the security response information for the previous month, including the following information:<br>• Number of handled alerts<br>• Number of handled incidents<br>• Fixed vulnerabilities<br>• Number of fixed baseline settings<br>• Threat alerts by severity<br>• Top 5 intrusion incidents by type<br>• Top 5 emergency responses<br>• Top 20 threat alert handling |

| Parameter | Description |
| --- | --- |
| External Security Info | This part includes information about external security hotspots. |

## 7.3.3 Downloading a Security Report

### Scenario

You can use custom layouts to generate security reports. Such reports are downloadable.

This topic describes how to download a report.

### Procedure

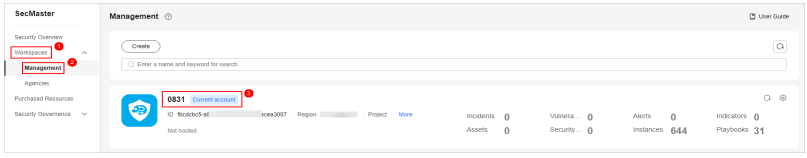
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

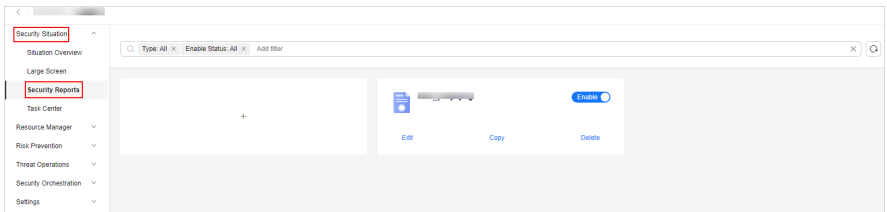
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-43** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Security Reports**.

**Figure 7-44** Security Reports




**Step 6** Locate a report template and click **Edit**.

You can also download the report. For details, see **Creating and Copying a Security Report**.

**Step 7** Click **Next: Report Choose** in the upper right corner. The **Report Selection** page is displayed.

**Step 8** On the report selection page, click in the upper left corner of the preview page on the right.

To change the report schedule, edit it in the upper right corner of the preview page on the right.

**Step 9** In the displayed dialog box, select a report format, and click **OK**.

The system automatically downloads the report to the local PC.

**----End**

# 7.3.4 Managing Security Reports

## Scenario

This section describes how to manage security reports, including enabling, disabling, editing, and deleting security reports.

## Procedure

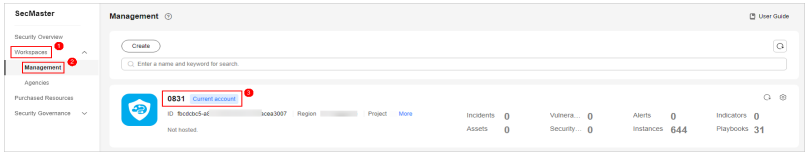
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

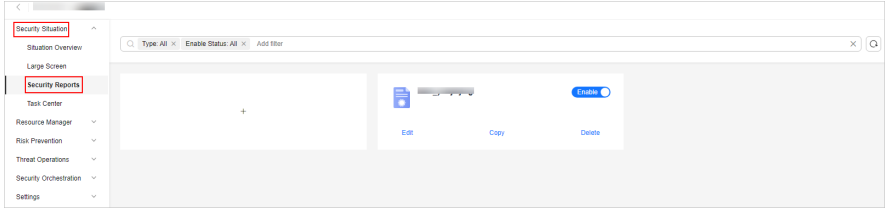
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-45** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Security Reports**.

**Figure 7-46** Security Reports




**Step 6** Manage security reports.

**Table 7-33** Managing security reports

| Operation | Step |
| --- | --- |
| Enabling/disabling a security report | On the **Reports** page, locate the desired report and toggle the slider on or off.<br>• If the slider is toggled on, the security report is enabled.<br>• If the slider is toggled off, the security report is disabled. |
| Editing a Security Report | 1. On the **Reports** page, locate the desired report and click **Edit**.<br>2. (Optional) Edit basic report information.<br>3. Click **Next: Report Choose**. The **Report Selection** page is displayed.<br>4. (Optional) Select the report layout.<br>5. Click **Complete** in the lower right corner. |
| Deleting a Security Report | 1. On the **Reports** page, locate the desired report and click **Delete**.<br>2. In the **Warning** dialog box displayed, click **OK**. |

**----End**

# 7.4 Task Center

## 7.4.1 Viewing To-Do Tasks

### Scenario

The to-do list displays the tasks that you need to process. This section describes how to view the to-do list.

### Procedure

**Step 1** Log in to the management console.

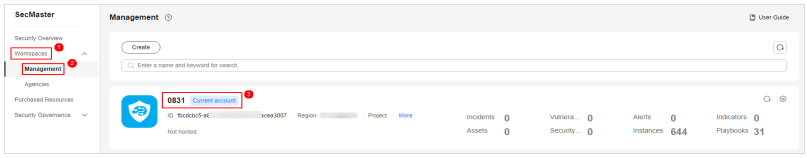
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

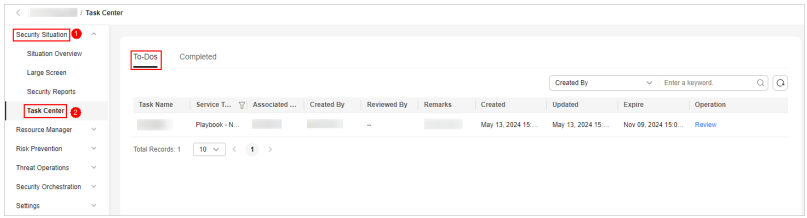
  

**Figure 7-47** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Task Center**.

**Figure 7-48** To-Dos




**Step 6** On the **To-Dos** tab page displayed, view details about the to-do tasks.

**Table 7-34** To-do task parameters

| Parameter | Description |
| --- | --- |
| Task Name | Name of a task. |
| Service Type | Type of a task.<br>• Workflow release<br>• Playbook release<br>• Playbook - Node Review |
| Associated Object | Name of the corresponding playbook or process. |
| Created By | Indicates the user who creates a task. |
| Reviewed By | Reviewer of the playbook/process |
| Remarks | Remarks of a task. |
| Created | Time when the playbook or process is created. |
| Updated | Last update time of the playbook or process. |
| Expired | Time the task expires. |
| Operation | Approve the to-do task. |

**----End**

# 7.4.2 Handling a To-Do Task

## Scenario

When a playbook or process task reaches a node, the task needs to be suspended manually so that the playbook or process task can continue.

Process to-do tasks.

## Prerequisites

A playbook task has been triggered, and manual actions are required for completing the task.

## Procedure

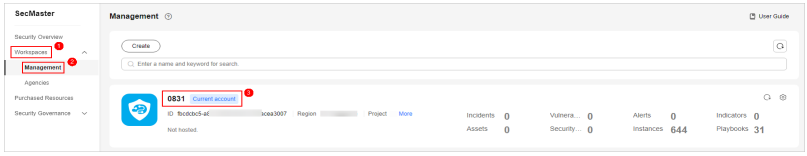
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

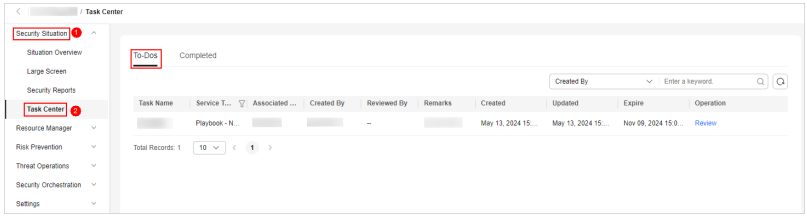
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-49** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Task Center**.

**Figure 7-50** To-Dos




**Step 6** In the row containing the target to-do task, click **Approve** in the **Operation** column.

The approval mode varies according to the service type.

- Playbook release: The **Playbook Release** page is displayed on the right. Enter review comments and approve the playbook as prompted.
- Process release: The **Process Release** page is displayed on the right. Enter the **Comment** and approve the application as prompted.

- Playbook-Node Review: The **Playbook-Node Review** page is displayed on the right. You can select **Continue** or **Terminate**.

**----End**

# 7.4.3 Viewing Completed Tasks

## Scenario

This section walks you through how to view tasks you have handled in SecMaster.

## Procedure

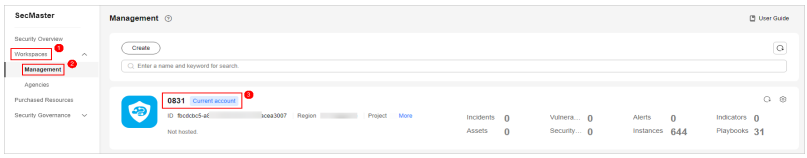
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

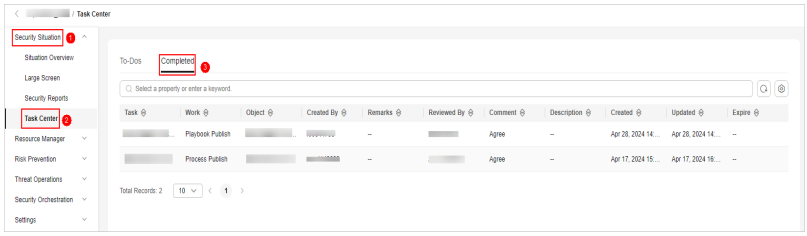
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 7-51** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Situation** > **Task Center**. On the displayed page, click the **Completed** tab.

**Figure 7-52** Completed




**Step 6** View details about handled tasks in the task list.

If there are many completed tasks, you can select a filter, enter a keyword in the search box, and press **Enter** to quickly find the one you want.

**Table 7-35** Completed task parameters

| Parameter | Description |
| --- | --- |
| Task | Name of a task. |

| Parameter | Description |
| --- | --- |
| Work | Type of a task.<br>• Workflow release<br>• Playbook release<br>• Playbook - Node review |
| Object | Name of the corresponding playbook or workflow. |
| Created By | User who creates the task. |
| Remarks | Remarks of the task. |
| Reviewed By | Reviewer of the playbook/workflow |
| Comment | Review comment of the task. |
| Description | Description of the task. |
| Created | Time when the playbook or workflow was created. |
| Updated | Last time the playbook or workflow was updated. |
| Expired | Time the task expires. |

**----End**

# 8 Resource Manager

## 8.1 Overview

SecMaster automatically discovers and manages all assets on and off the cloud and displays the real-time security status of your assets.

On the **Resource Manager** page, you can view the security status statistics of all resources under your account, including the resource name, service, and security status. This helps you quickly locate security risks and find solutions.

### Asset Source and Corresponding Security Products

**Table 8-1** Asset source and corresponding security products

| Parameter | Source | Security Product |
| --- | --- | --- |
| Servers | Elastic Cloud Server (ECS) | Host Security Service (HSS) |
| Website | Web Application Firewall (WAF) | Web Application Firewall (WAF) |
| Database | Relational Database Service (RDS) | Database Security Service (DBSS) |
| VPC | Virtual Private Cloud (VPC) | Cloud Firewall (CFW) |
| EIP | Elastic IP (EIP) | CNAD Basic (Anti-DDoS) |
| Device | On-premises devices | -- |

| Parameter | Source | Security Product |
| --- | --- | --- |
| **NOTE**<br>After the asset information is synchronized to SecMaster, the protection status of assets will be displayed on the SecMaster console. The protection status is as follows:<br>• If **Protection Status** for an asset is **Protected**, the corresponding security product has been enabled for the asset.<br>• If **Protection Status** for an asset is **Unprotected**, the corresponding security product has not been purchased or enabled for the asset. If you want to protect target assets, purchase corresponding security products and enable protection. For example, if you want to protect ECSs, purchase HSS and enable HSS for each ECS.<br>For details about security products, see **HSS Operation Guide**, **WAF Operation Guide**, **DBSS Operation Guide**, **CFW Operation Guide**, and **Anti-DDoS Operation Guide**.<br>• If **protection status** for an asset is **--**, the corresponding security product is not supported in the current region. | | |

### Limitations and Constraints

After asset subscription, you can click **System Synchronize Assets** on the **Resource Manager** page to synchronize asset information again. The basic edition allows you to synchronize assets one time per day, and the standard or professional edition allows you to synchronize assets 20 times per day. If you exceed this threshold, the system displays error message "**Insufficient resource synchronization quota.**". In this case, synchronize assets again the next day.

## 8.2 Configuring the Asset Subscription

### Scenario

SecMaster can synchronize asset information only in the workspace where asset subscription is enabled. After the subscription, the resource information will be displayed synchronously within one minute. Then, resource information will be automatically synchronized every night.

This section describes how to make a subscription to resources.

NOTE

- SecMaster automatically synchronizes all asset data within a region to the first workspace in the region. For non-first workspaces, you need to configure log access manually.
- Only cloud resources can be subscribed to and synchronized to SecMaster. Subscribing to resource information to multiple workspaces in a region is not recommended.

### Procedure

**Step 1** Log in to the management console.

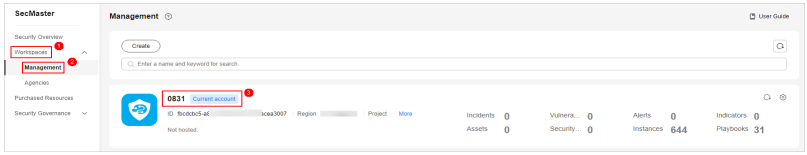
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

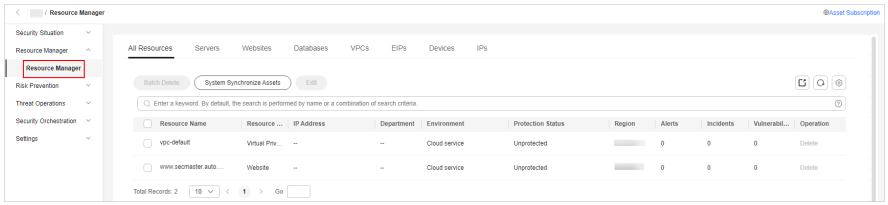
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 8-1** Workspace management page




**Step 5** In the navigation pane on the left, choose **Resource Manager** > **Resource Manager**.

**Figure 8-2** Resource Manager




**Step 6** On the **Resource Manager** page, click **Asset Subscription** in the upper right corner.

**Step 7** On the **Asset Subscription** page sliding out from the right, locate the row that contains the region where the target resource is located, and enable subscription.

**Step 8** Click **OK**.

After the subscription, the resource information will be displayed within one minute.

After asset subscription, you can click **System Synchronize Assets** on the **Resource Manager** page to synchronize asset information again. The basic edition allows you to synchronize assets one time per day, and the standard or professional edition allows you to synchronize assets 20 times per day. If you exceed this threshold, the system displays error message "**Insufficient resource synchronization quota.**". In this case, synchronize assets again the next day.

**----End**

# 8.3 Viewing Resource Information

## Scenario

On the **Resource Manager** page, you can view the name, type, and protection status of resources you have.

## Prerequisites

- You have completed asset subscriptions. For details, see **Configuring the Asset Subscription**.
- You have purchased the SecMaster standard or professional edition.

## Procedure

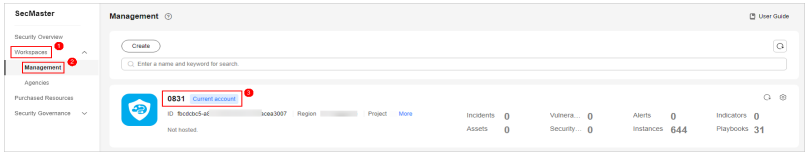
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

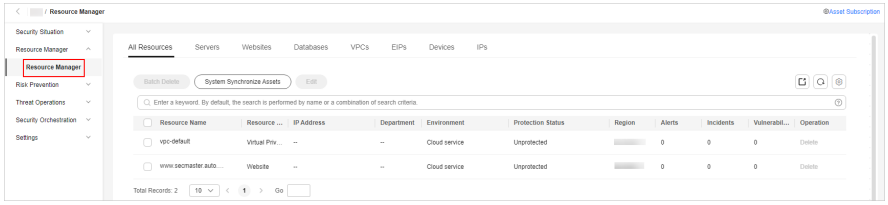
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 8-3** Workspace management page




**Step 5** In the navigation pane on the left, choose **Resource Manager** > **Resource Manager**.

**Figure 8-4** Resource Manager




**Step 6** (Optional) Complete the asset subscription first. If you have done this once, skip this step.

SecMaster can synchronize resource information only in the workspace where asset subscription is enabled. After the subscription, the resource information will be displayed in SecMaster within one minute.

**NOTE**

Only cloud resources can be subscribed to and synchronized to SecMaster. Subscribing to resource information to multiple workspaces in a region is not recommended.

1. On the **Resource Manager** page, click **Asset Subscription** in the upper right corner.
2. On the **Asset Subscription** page sliding from the right, locate the row that contains the region where the target resource is located, and enable subscription.

3. Click **OK**.

   After the subscription, the resource information will be displayed in SecMaster within one minute.

   After asset subscription, you can click **System Synchronize Assets** on the **Resource Manager** page to synchronize asset information again. The basic edition allows you to synchronize assets one time per day, and the standard or professional edition allows you to synchronize assets 20 times per day. If you exceed this threshold, the system displays error message "**Insufficient resource synchronization quota.**". In this case, synchronize assets again the next day.

**Step 7** On the displayed page, view the resource details.

- You can view resource information by resource type. For example, you can select the **Servers** tab to view details about servers you have.
- If there are many resources displayed, use filters to search for a specific resource.

  To view the asset information of an enterprise project, select the enterprise project name to filter.
- You can view the total number of assets below the asset list. You can view a maximum of 10,000 asset records page by page. To view more than 10,000 asset records, optimize the filter criteria.
- To view more details about an asset, check its asset type. Then, go to the corresponding resource tab and click the resource name of the asset to go to its details page.

  For example, to view details about a server, select the **Servers** tab. On the displayed tab, click the resource name of the target server to go to its details page.
  - On the asset details page, you can view the environment, asset, and network details related to the asset.
  - Edit the owner, service system, and department of the resource. You can also bind the resources to or unbind the resources from an owner, service system, or department.

**Table 8-2** Asset source and corresponding security products

| Parameter | Source | Security Product |
| --- | --- | --- |
| Servers | Elastic Cloud Server (ECS) | Host Security Service (HSS) |
| Website | Web Application Firewall (WAF) | Web Application Firewall (WAF) |
| Database | Relational Database Service (RDS) | Database Security Service (DBSS) |
| VPC | Virtual Private Cloud (VPC) | Cloud Firewall (CFW) |
| EIP | Elastic IP (EIP) | CNAD Basic (Anti-DDoS) |
| Device | On-premises devices | -- |

| Parameter | Source | Security Product |
| --- | --- | --- |
| **NOTE**<br>After the asset information is synchronized to SecMaster, the protection status of assets will be displayed on the SecMaster console. The protection status is as follows:<br>• If **Protection Status** for an asset is **Protected**, the corresponding security product has been enabled for the asset.<br>• If **Protection Status** for an asset is **Unprotected**, the corresponding security product has not been purchased or enabled for the asset. If you want to protect target assets, purchase corresponding security products and enable protection. For example, if you want to protect ECSs, purchase HSS and enable HSS for each ECS.<br>For details about security products, see **HSS Operation Guide**, **WAF Operation Guide**, **DBSS Operation Guide**, **CFW Operation Guide**, and **Anti-DDoS Operation Guide**.<br>• If **protection status** for an asset is **--**, the corresponding security product is not supported in the current region. | | |

**----End**

## Related Operations

On the **Resource Manager** page, you can edit the department, service system, and owner of a resource. Perform the following steps:

1. Select the resources you want to edit click **Batch Edit** in the upper left corner of the resource list.
2. In the displayed box, edit resource details.
3. Click **OK**.

# 8.4 Importing and Exporting Assets

## Scenario

SecMaster allows you to import assets outside the cloud. After the import, the security status of the assets can be displayed. You can also export asset information.

This section describes how to import and export assets.

## Prerequisites

You have purchased the SecMaster standard or professional edition.

## Limitations and Constraints

- Only .xlsx files no larger than 5 MB can be imported.
- A maximum of 9,999 resource records can be exported.

## Importing Assets

**Step 1** Log in to the management console.

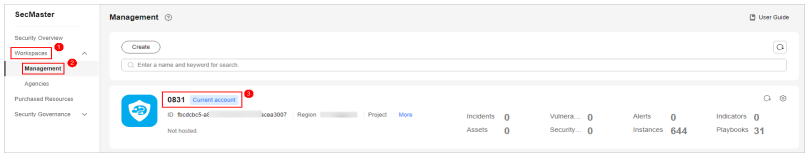
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

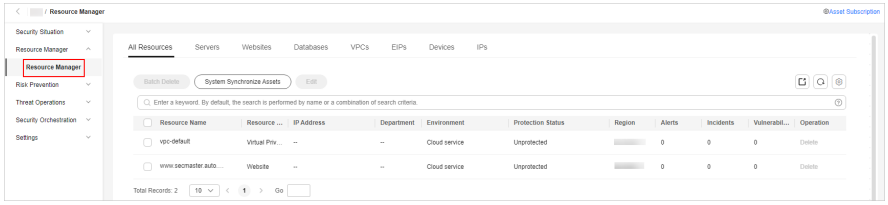
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 8-5** Workspace management page




**Step 5** In the navigation pane on the left, choose **Resource Manager** > **Resource Manager**.

**Figure 8-6** Resource Manager




**Step 6** On the **Resource Manager** page, click a tab corresponding to the type of the resources you want to import. For example, if you want to import servers, click the **Servers** tab.

**Step 7** In the upper left corner of the asset list, click **Import**.

**Step 8** In the **Import** dialog box, click **Download Template**. Then, fill information about the resource to be imported in the template.

**Step 9** After the template is completed, click **Select File** in the **Import** dialog box and select the Excel file you want to import.

**Step 10** Click **OK**.

**----End**

## Exporting Assets

**Step 1** Log in to the management console.

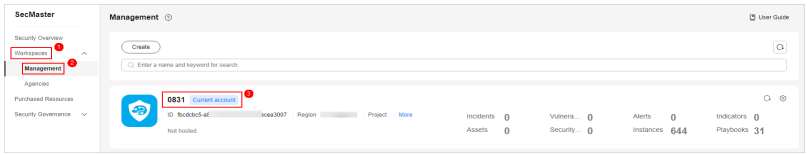
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

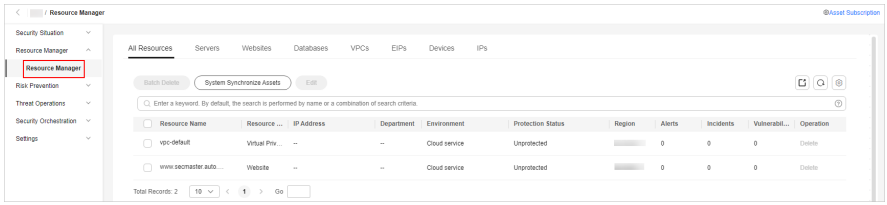
  

**Figure 8-7** Workspace management page




**Step 5** In the navigation pane on the left, choose **Resource Manager** > **Resource Manager**.

**Figure 8-8** Resource Manager




**Step 6** On the asset management page, click the corresponding asset tab. For example, if you want to export servers, click the **Servers** tab.

**Step 7** On the asset page, select the assets to be exported and click in the upper right corner of the list.

**Step 8** In the **Export** dialog box, set asset parameters.

**Table 8-3** Exporting assets

| Parameter | Description |
| --- | --- |
| Format | By default, the asset list is exported into an Excel. |
| Columns | Select the parameters to be exported. |

**Step 9** Click **OK**.

The system automatically downloads the Excel to your local PC.

**----End**

# 8.5 Editing and Deleting Resources

## Scenario

On the **Resource Manager** page, you can edit the department, service system, and owner of a resource. You can also delete resources you imported into SecMaster.

This topic describes how to edit or delete a resource from SecMaster.

## Prerequisites

You have purchased the SecMaster standard or professional edition.

## Limitations and Constraints

Only assets imported outside the cloud can be deleted.

## Procedure

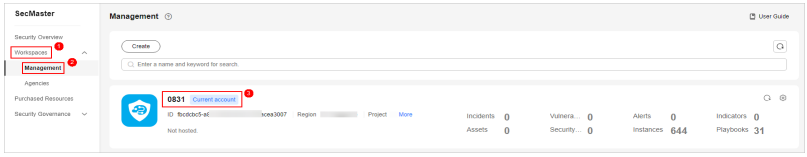
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

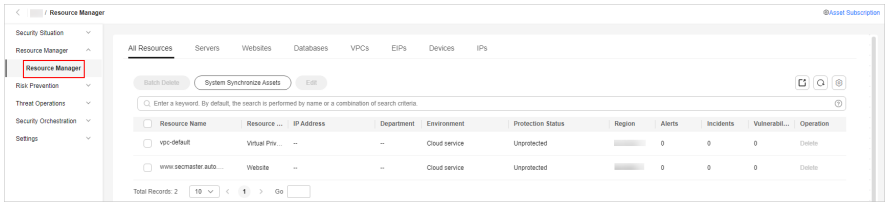
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 8-9** Workspace management page




**Step 5** In the navigation pane on the left, choose **Resource Manager** > **Resource Manager**.

**Figure 8-10** Resource Manager




**Step 6** Edit or delete the resource.

**Table 8-4** Parameters for resource edit or deletion

| Operation | Procedure |
| --- | --- |
| Batch Edit | 1. On the **Resource Manager** page, select the resources you want to edit and click **Batch Edit** in the upper left corner of the resource list.<br>To edit a resource of a certain type, click the corresponding resource type tab. For example, if you want to edit servers, click the **Servers** tab.<br>2. In the displayed box, you can edit the department, service system, and owner of the resource.<br>3. Click **OK**. |

| Operation | Procedure |
| --- | --- |
| Batch Delete | 1. On the **Resource Manager** page, click the corresponding resource type tab. For example, if you want to delete servers, click the **Servers** tab.<br>2. On the displayed page, select the resources you want to delete and click **Batch Delete** above the list.<br>The system will delete all selected resources. |

**----End**

# 9 Risk Prevention

## 9.1 Baseline Inspection

### 9.1.1 Baseline Inspection Overview

SecMaster can scan cloud services for risks in key configuration items, report scan results by category, generate alerts for incidents, and provide hardening suggestions and guidelines.

SecMaster can check key cloud service configurations for your workloads on the cloud based on preconfigured security standards, **Cloud Security Compliance Check 1.0**, **DJCP 2.0 Level 3 Requirements**, **Network Security**, and **Huawei Cloud Security Configuration**. In addition, you can add custom check items and compliance packs to make custom checks to meet your own needs.

#### Limitations and Constraints

The SecMaster basic and standard editions do not support custom check items or compliance packs.

#### Baseline Check Methods

- Automated baseline checks

  By default, SecMaster performs a check every three days. From 00:00 to 06:00, SecMaster checks all assets in the current region under your account based on compliance pack **Cloud Security Compliance Check 1.0**.

  You can specify a schedule and start time to let SecMaster perform baseline inspection. For details, see **Creating a Custom Check Plan**.

- Manual baseline checks

  There are some manual check items included in baseline inspection. After you finish a manual check, report the check results to SecMaster. The pass rate is calculated based on results from both manual and automatic checks. For automatic check items, you can manually start specific checks.

### Process

**Table 9-1** Process

| No. | Operation | Description |
| --- | --- | --- |
| 1 | (Optional) **Creating a Custom Baseline Check Plan** | SecMaster uses the default check plan to check all assets.<br>• Default plan: SecMaster checks your assets under your account in the current region every three days from 00:00 to 06:00.<br>• Custom plans: SecMaster performs baseline inspections based on the compliance packs and time you specify in the custom check plans. |
| 2 | (Optional) **Starting an Immediate Baseline Check** | The baseline inspection supports periodic and immediate checks.<br>• Periodic check: The system automatically executes the default check plan or the check plans you configure.<br>• Immediate check: You can add or modify a custom check plan and start the check plan immediately. In this way, you can check whether the servers have certain unsafe configurations in real time. |
| 3 | **Viewing Baseline Inspection Results** | You can view the baseline inspection results after each manual check or automated check. You can quickly learn affected assets and details about the baseline inspection items. |
| 4 | **Handling Baseline Inspection Results** | You can handle risky items based on the rectification suggestions. |

## 9.1.2 Creating a Custom Check Plan

### Scenarios

SecMaster can check whether your assets have risks based on baseline check plans. By default, every three days SecMaster automatically performs a baseline check on all assets in the current region under your account from 00:00 to 06:00 in accordance with compliance pack *Cloud Security Compliance Check 1.0*. You can also specify custom check periods and time.

This document describes how to create a custom baseline check plan.

### Limitations and Constraints

- A compliance pack can be added to only one check plan.

- Check items in compliance pack **DJCP Level 3 Requirements** are manual check items. So, SecMaster does not support check plans that contain this package.
- The default check plan can be enabled or disabled only. No changes on its compliance packs or execution time can be made.

## Procedure

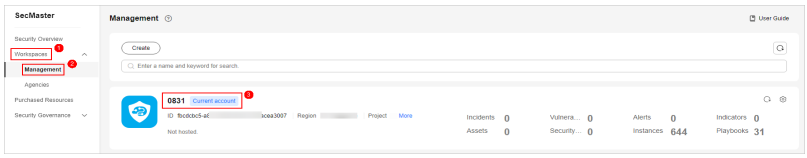
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

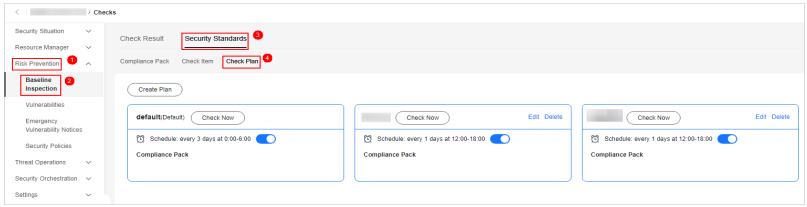
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-1** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Plan** tab.

**Figure 9-2** Check Plan tab




**Step 6** On the **Check Plan** tab, click **Create Plan**. The pane for creating a plan is displayed on the right.

**Step 7** Configure the check plan.

**Table 9-2** Parameters for creating a check plan

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Name | Custom plan name. |

| Parameter | | Description |
| --- | --- | --- |
| | Schedule | Select how often and when the check plan is executed.<br>• Schedule: every day, every 3 days, every 7 days, every 15 days, or every 30 days<br>• Check start time: 00:00-06:00, 06:00-12:00, 12:00-18:00, or 18:00-24:00 |
| Select Compliance Pack | | Select the compliance pack you want to use. |

**Step 8** Click **OK**.

After the check plan is created, SecMaster performs cloud service baseline scanning at the specified time. You can choose **Risk Prevention** > **Baseline Inspection** to view the scan result.

**----End**

## Related Operations

You can view, edit, enable, disable, or delete a custom check plan.

- Viewing a check plan
  a. In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the **Baseline Inspection** page, click the **Security Standards** tab. Then, click the **Check Plan** tab.
  b. On the **Check Plan** page, view what check plans you already have.
- Editing a custom check plan

  Only custom check plans can be edited.
  a. In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the **Baseline Inspection** page, click the **Security Standards** tab. Then, click the **Check Plan** tab.
  b. In the upper right corner of the check plan box, click **Edit**. The pane for editing the check plan is displayed on the right.
  c. Edit settings and click **OK**.
- Deleting a custom check plan

  Only custom check plans can be deleted.
  a. In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the **Baseline Inspection** page, click the **Security Standards** tab. Then, click the **Check Plan** tab.
  b. In the upper right corner of the check plan box, click **Delete**.
  c. In the displayed dialog box, click **OK**.
- Disabling or enabling a check plan
  a. In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the **Baseline Inspection** page, click the **Security Standards** tab. Then, click the **Check Plan** tab.

b. Toggle on or off the status button in the box where the target plan is located.

## 9.1.3 Starting an Immediate Baseline Check

### Scenarios

To learn about the latest status of the cloud service baseline configurations, execute or let SecMaster execute a check plan. Then you can view which configurations are unsafe in the check results. The baseline inspection supports periodic and immediate checks.

- Periodic check: SecMaster periodically executes the default check plan or the check plans you configure.
- Immediate check: You can start check items in all security standards or a specific check plan anytime.

This topic describes how to start an immediate baseline inspection. You can select the following check types:

- **Immediate Check on All Compliance Packs**: Check the compliance of all automatic check items in in-use compliance packs.
- **Starting a Check Based on a Check Plan**: Check the compliance of the check items in the compliance pack configured in a selected check plan.
- **Immediate Checks on Certain Check Items**: check the selected check items.

### Limitations and Constraints

- An immediate check task can be executed only once within 10 minutes.
- A periodic check can be manually started only once within 10 minutes.

### Immediate Check on All Compliance Packs

This part describes how to start an immediate check for automatic check items in in-use compliance packs.

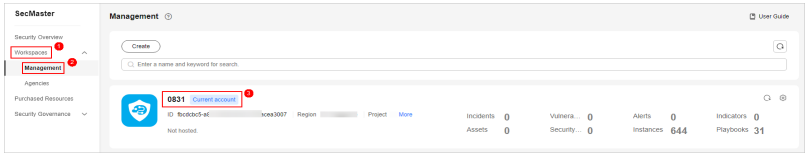
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

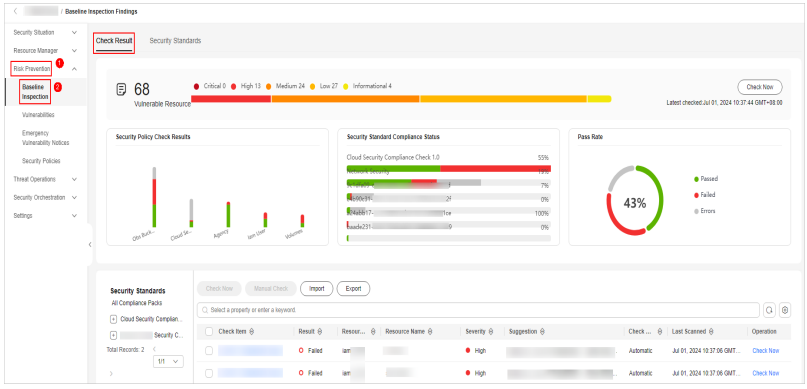
**Figure 9-3** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-4** Accessing the check result page



**Step 6** On the **Check Result** tab, click **Check Now**. In the dialog box displayed, click **OK**.

Refresh the page. To check whether the displayed result is the latest, click **View Details** in the **Operation** column and check the time in **Latest Check**.

**----End**

## Starting a Check Based on a Check Plan

This part describes how to immediately execute a check plan. Once a check plan is kicked off, SecMaster immediately executes each check item included in compliance packs in the check plan.

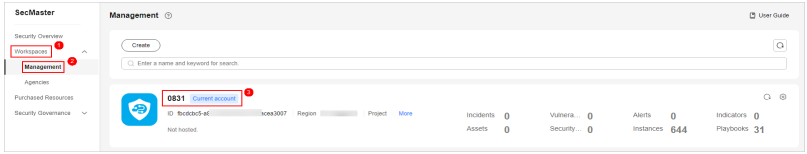
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

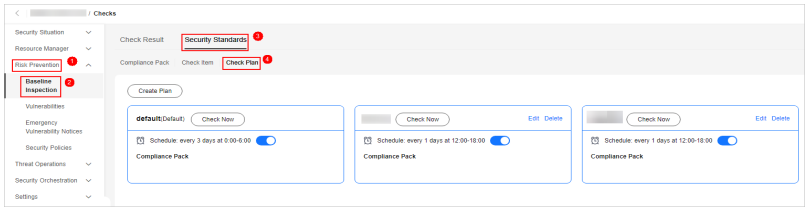
**Figure 9-5** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Plan** tab.

**Figure 9-6** Check Plan tab



**Step 6** In a check plan box, click **Check Now**.

SecMaster immediately executes the selected baseline check plan.

**----End**

## Immediate Checks on Certain Check Items

This part describes how to start an immediate check on certain check items.

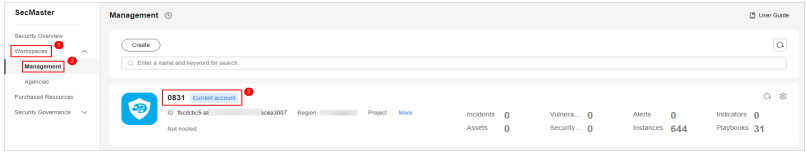
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

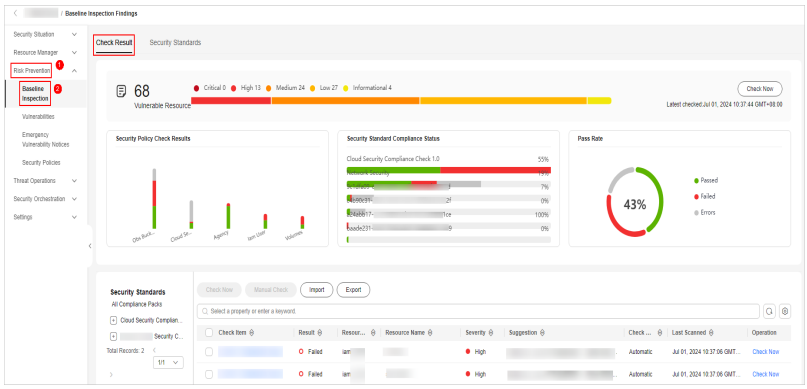
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-7** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-8** Accessing the check result page



**Step 6** Check one or more check items immediately.

- Check on a single check item

a. In the check item list in the lower part of the **Check Result** tab, locate the target automatic check item and click **Check Now** in the **Operation** column.

b. In the displayed dialog box, click **OK**.

   Refresh the page and check the details next to **Last checked** and ensure that the latest scan result is displayed.

- Checks on some check items

a. In the check item list in the lower part of the check result tab, select multiple auto check items and click **Check Now** in the upper left corner above the check item list.

b. In the displayed dialog box, click **OK**.

   Refresh the page and check the details next to **Last checked** and ensure that the latest scan result is displayed.

**----End**

# 9.1.4 Viewing Check Results

## Scenarios

After a check plan is set, you can perform an immediate check on the **Baseline Inspection** page. It takes about 10 minutes for the check results to be displayed on the result page. For details about how to perform an immediate check, see **Starting an Immediate Baseline Check**.

If you do not perform an immediate check, the system performs the check at the specified time according to the check plan. For example, the system performs the check every three days by default, and the check is performed from 00:00 to 06:00 each time. You can view the check results on the **Check Result** page.

This topic describes where to view results of a baseline check plan.

## Prerequisites

- Cloud service baseline scanning has been performed.

## Procedure

**Step 1** Log in to the management console.

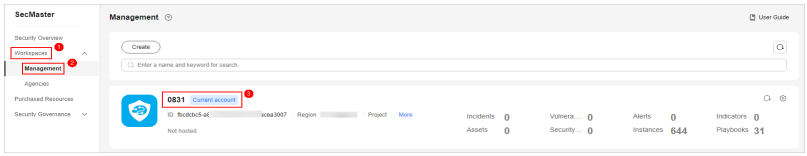
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-9** Workspace management page

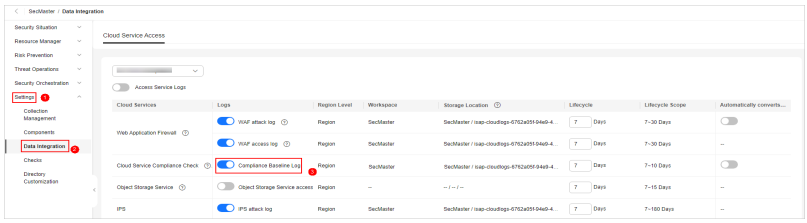


**Step 5** (Optional) In the navigation pane on the left, choose **Settings** > **Data Integration**. On the displayed page, locate the row that contains **Cloud Service Compliance Check** and enable **Compliance Baseline Log** in the **Logs** column.

SecMaster synchronizes all security data within a region to the first workspace in the region. For the non-first workspaces, you need to configure log access manually.

This topic describes how to enable log access to SecMaster manually.

**Figure 9-10** Compliance baseline log

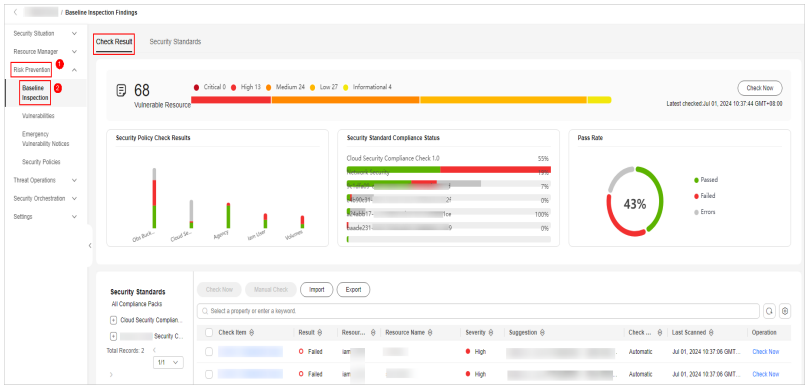


After the setting is complete, you can start an immediate check on the **Baseline Inspection** page. It takes about 10 minutes for the check results to be displayed on the result page. For details about how to perform an immediate check, see **Starting an Immediate Baseline Check**.

If you do not perform an immediate check, the system performs the check at the specified time according to the check plan. For example, the system performs the check every three days by default, and the check is performed from 00:00 to 06:00 each time. You can view the check results on the **Check Result** page.

**Step 6** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-11** Accessing the check result page



**Step 7** On the **Check Result** tab, view the check results of check items. For details about parameters, see **Table 9-3**.

**Figure 9-12** Viewing check results

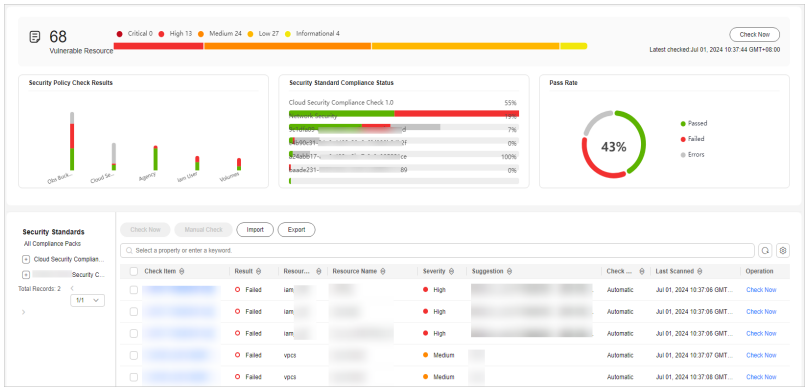



**Table 9-3** Check result parameters

| Parameter | Description |
| --- | --- |
| Risks By Severity | Risks found in the last baseline check are listed by severity as well as the corresponding resource quantity.<br>**Severity**: **Critical**, **High**, **Medium**, **Low**, and **Info**. |
| Security Policy Check Results | This graph shows how many failed and passed check items your cloud services have in the last baseline check. |
| Security Standard Compliance Status | This part shows how well your workloads comply with each security standard. You will see a percentage of passed check items in total check items for each standard. |
| Pass Rate | Rate of the passed check items in the latest baseline check.<br>Overall pass rate = Passed check items/Total check items. All check items in security standards used for the check plan executed are considered when the pass rate is calculated.<br>The check result can be **Passed**, **Failed**, or **Errors**. |

| Parameter | Description |
| --- | --- |
| Security Standards and the check result list | All security standards and check results are displayed.<br>• To view the check results of a specific compliance pack, click the security standard on the left. The check result details will be displayed on the right.<br>• To search for a specific check item from a large number of check items, select a filter and press **Enter**.<br>• To display certain columns only, click the setting button in the upper right corner of the check result list and complete the settings (for example, whether to wrap lines and whether to fix the operation column).<br>• To view details about a check item, click the name of the check item to go to its details page.<br>On the check item details page, view details about description, check process, check result, and checked resources. |

**----End**

## 9.1.5 Handling Check Results

This section describes how to handle check results. You may need to carry out any of the following:

- **Handling Unsafe Settings**: Rectify the risky check items based on the check result.
- **Check Result Feedback**: For manual check items you performed offline, report the check result to SecMaster. The pass rate is calculated based on results from both manual and automatic checks.
- **Ignoring a Check Item**: If you have custom requirements for a check item, ignore the check item. For example, SecMaster checks whether the session timeout duration is set to 15 minutes, while you need to set it to 20 minutes. In this situation, ignore this check item so that SecMaster no longer executes this check.
- **Importing Check Results**: Export the online check result to a local PC.
- **Exporting Check Results**: Import offline check results to the SecMaster baseline inspection page.

### Limitations and Constraints

When you import check results, note the following restrictions:

- Only .xlsx files can be imported.
- Each time only one file can be imported. Maximum file size: 500 KB and 500 records.
- Duplicate data will be removed and will not be imported repeatedly.

## Prerequisites

- The cloud service baseline has been scanned.

## Handling Unsafe Settings

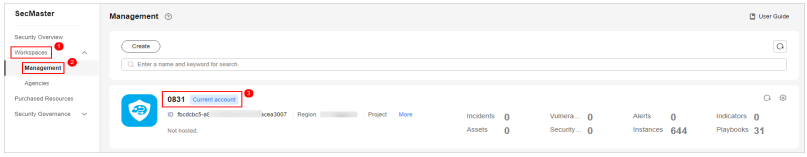
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

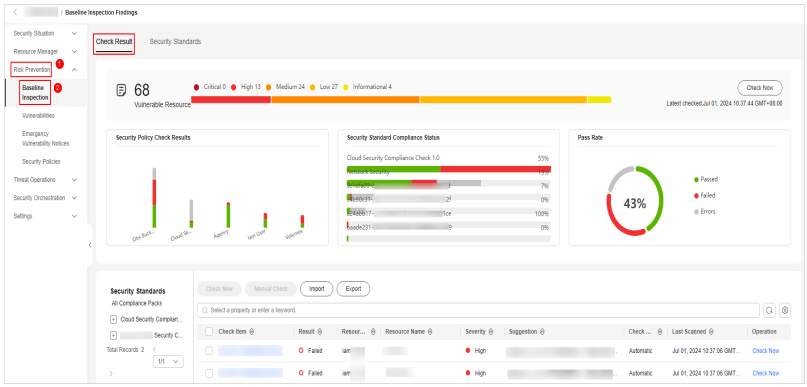
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-13** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-14** Accessing the check result page




**Step 6** In the check result list in the lower part of the check result page, click the name of the target check item to go to its details page.

**Step 7** View the description of the check item and rectify the fault based on the suggestions in the **Recommendation** column

After all unsafe configurations are rectified, click **Check Now** to verify that all risky items have been rectified.

**----End**

## Check Result Feedback

For manual check items you performed offline, report check results to SecMaster. The pass rate is calculated based on results from both manual and automatic checks.

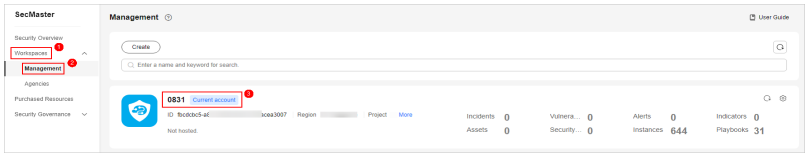
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

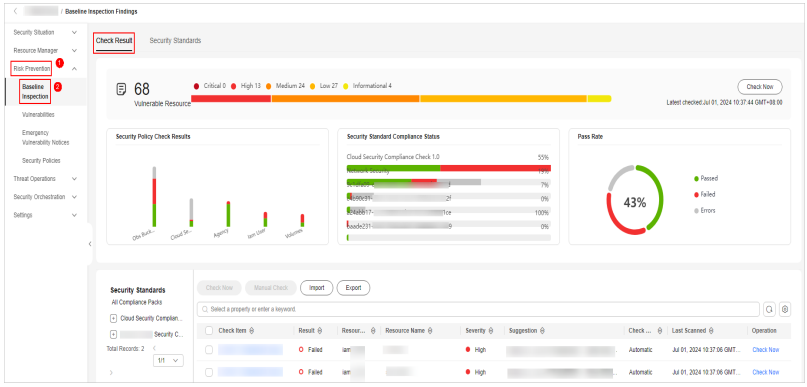
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-15** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-16** Accessing the check result page




**Step 6** In the check result list in the lower part of the **Check Result** tab, click **Manual Check** in the **Operation** column of the target check item.

**Step 7** In the displayed dialog box, select a result and click **OK**.

NOTE

Report manual check results every 7 days as your feedback is valid only for 7 days.

**----End**

## Ignoring a Check Item

If you have custom requirements for a check item, ignore the check item. For example, SecMaster checks whether the session timeout duration is set to 15

minutes, while you need to set it to 20 minutes. In this situation, ignore this check item so that SecMaster no longer executes this check.

An ignored check item will be no longer executed. It will not be counted when the **Pass Rate** is calculated.

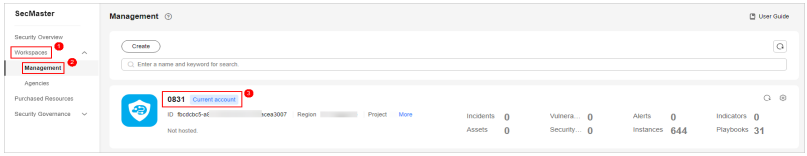
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

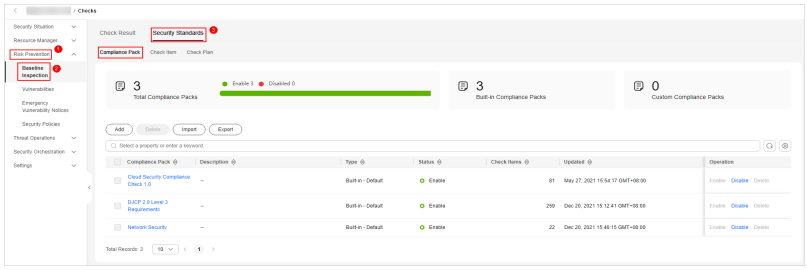
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-17** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-18** Accessing the Compliance Pack tab




**Step 6** Click the name of the target compliance pack to go to its details page.

**Step 7** Search for the target check item in the compliance pack list and click **Ignore** in the **Operation** column.

**Step 8** In the displayed dialog box, click **OK**.

NOTE

- The ignored check items will be not executed. They will not be counted when the **Pass Rate** is calculated.
- To resume an ignored check item, locate the row containing the ignored check item, and click **Cancel Ignore** in the **Operation** column. Then, in the displayed dialog box, click **OK**.

**----End**

## Importing Check Results

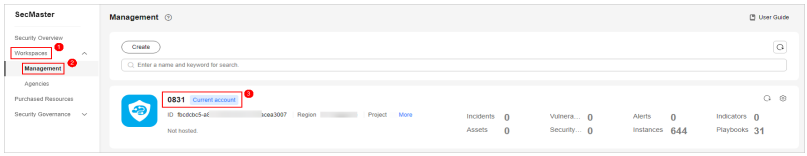
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

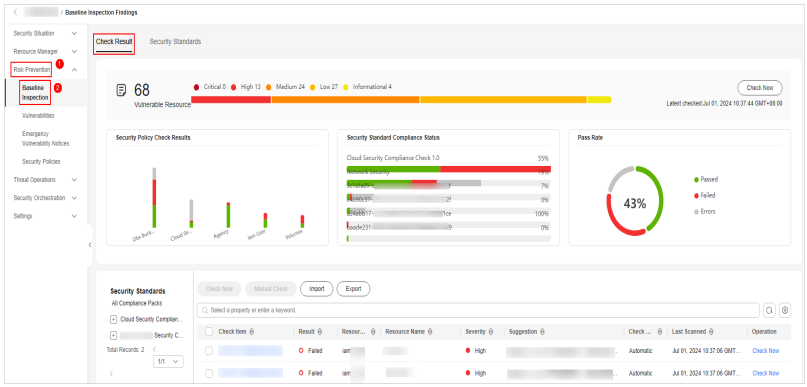
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-19** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**.

**Figure 9-20** Accessing the check result page



**Step 6** In the upper left corner above the check result list, click **Import**.

**Step 7** In the dialog box displayed, click **Download Template** and complete the template.

**Step 8** In the displayed dialog box, click **Add File** and upload the completed template file.

NOTE

- Only .xlsx files can be imported.
- Each time only one file can be imported. Maximum file size: 500 KB and 500 records.
- Duplicate data will be removed and will not be imported repeatedly.

**Step 9** Click **Import**.

**----End**

## Exporting Check Results

**Step 1** Log in to the management console.

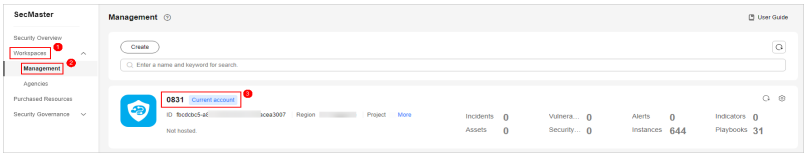
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

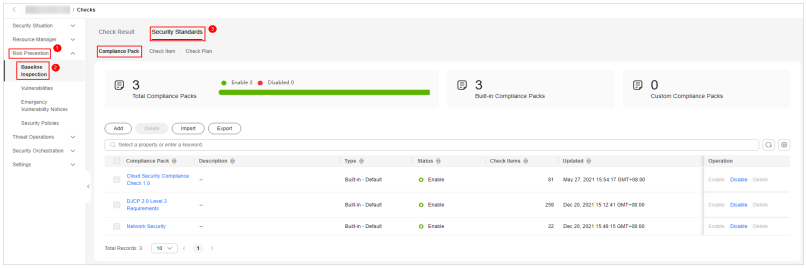
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-21** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-22** Accessing the Compliance Pack tab




**Step 6** Select the target compliance pack and click **Export** in the upper left corner above the compliance pack list.

**Step 7** In the displayed dialog box, select the format and data columns you want.

**Step 8** Click **OK**.

**----End**

# 9.1.6 Viewing Compliance Packs

This topic describes where to learn what compliance packs you have.

## Procedure

**Step 1** Log in to the management console.

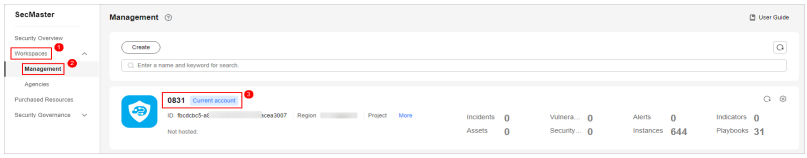
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

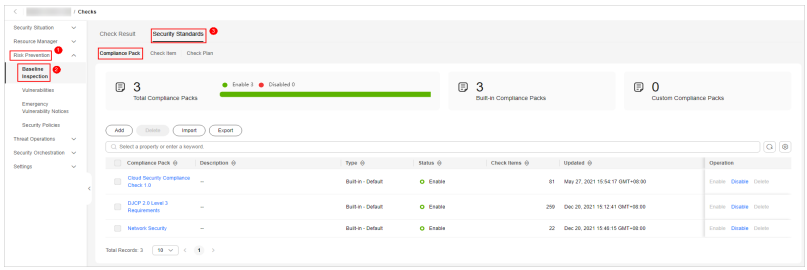
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-23** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-24** Accessing the Compliance Pack tab




**Step 6** View details about compliance packs. For details about the parameters, see **Table 9-4**.

**Figure 9-25** Viewing compliance packs

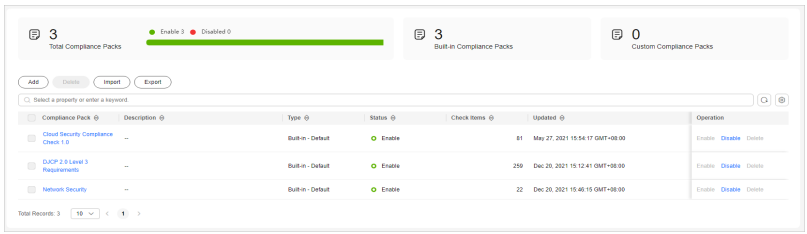



**Table 9-4** Parameters for compliance packs

| Parameter | Description |
| --- | --- |
| Total Compliance Packs | Total number of existing compliance packs are organized, as well as the number of compliance packs by their statuses. The compliance pack status can be **Enabled** or **Disabled**. |
| Built-in Compliance Packs | The number of compliance packs preconfigured in SecMaster. |
| Custom Compliance Packs | The number of compliance packs you create. |

| Parameter | Description |
| --- | --- |
| *Compliance packs and their details* | All compliance packs and their basic information.<br>• In the compliance pack list, you can view the type, status, and number of check items of a compliance pack. You can also enable, disable, and delete a compliance pack.<br>• To search for a specific compliance, select a filter and press **Enter**.<br>• To display certain columns only, click the setting button in the upper right corner of the compliance pack list and complete the settings (for example, whether to wrap lines and whether to fix the operation column).<br>• To view details about a compliance pack, click its name to go to its details page.<br>On the compliance pack details page, you can view its version, description, and check items. |

**----End**

## 9.1.7 Creating a Custom Compliance Pack

This topic walks you through on how to create a custom compliance pack.

### Procedure

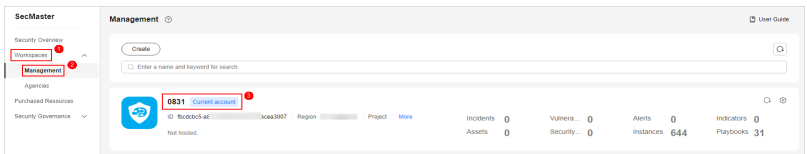
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

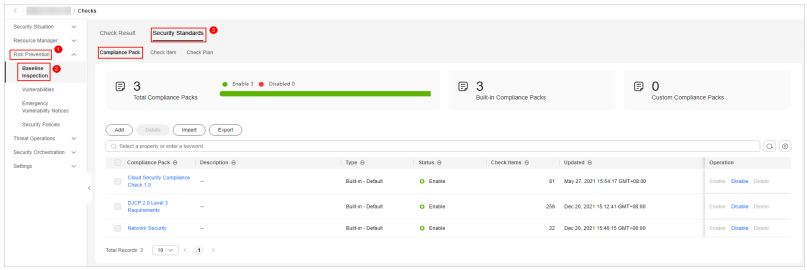
**Figure 9-26** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-27** Accessing the Compliance Pack tab



**Step 6** In the upper left corner above the compliance list, click **Add**

**Step 7** On the displayed page, configure basic information about the compliance pack.

**Table 9-5** Basic information

| Parameter | | Description |
|---|---|---|
| Compliance Pack | | The compliance pack name you specify. |
| Description | | Description of the compliance pack. |
| (Optional) Advanced | Version | Set the compliance pack version. |
| | Classify | Enter the category the compliance pack belongs to. |
| | Domain | Enter the domain the compliance pack belongs to. |
| | Owner | The people in charge of the compliance pack. |
| | Applicable Region | Enter the region where the compliance pack is used. |

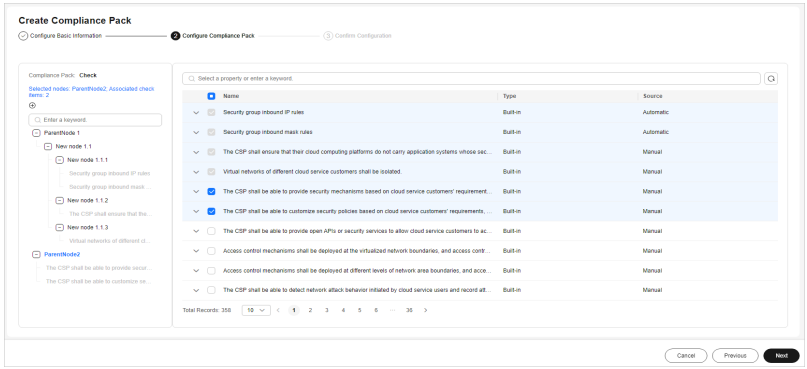
**Step 8** Click **Next** to go to the configuration page.

**Step 9** On the displayed page, complete other parameters of the compliance pack.

1. In the navigation pane on the left, click ⊕. In the displayed text box, enter the node name and click **OK**.
   - Adding a subnode: To add a level-2 or level-3 node, hover over the node name and click the **Create** button. In the text box displayed, enter the node name and press **Enter**.
   - Editing or deleting a node: To edit or delete a node, hover over the node name and click the **Edit** or **Delete** button.
2. Select the name of an added node (minimum level. For example, if a level-3 node is added, select the level-3 node name). In all check items displayed on the right, select the check items you want to associate.

**Figure 9-28** Compliance pack configuration




**Step 10** Click **Next** to enter the confirmation page.

**Step 11** Confirm the settings and click **OK**.

**----End**

## Related Operations

- Disabling a compliance pack
  a. In the row that contains the target compliance pack, click **Disable** in the **Operation** column.
  b. In the displayed dialog box, click **OK**.
- Enabling a compliance pack
  a. Click **Enable** in the **Operation** column of the compliance pack you want to enable.
  b. In the displayed dialog box, click **OK**.
- Editing check items in a compliance pack
  a. Click the name of the compliance pack you want to edit to go to its details page.
  b. Click **Edit** in the **Compliance Pack Content** area.
  c. Edit check node information and their associated check items and click **OK**.
- Deleting a compliance pack
  a. In the row that contains the compliance pack you want to delete, click **Delete** in the **Operation** column.
  b. In the displayed dialog box, enter **DELETE** and click **OK**.

# 9.1.8 Importing and Exporting a Compliance Pack

## Scenarios

This section describes how to import and export a compliance pack.

## Limitations and Constraints

When you import a compliance pack, note the following restrictions:

- Only .xlsx files can be imported.
- Only one file can be imported at a time. Maximum file size: 100 records.

## Importing a Compliance Pack

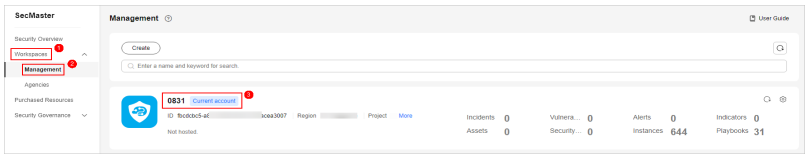
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

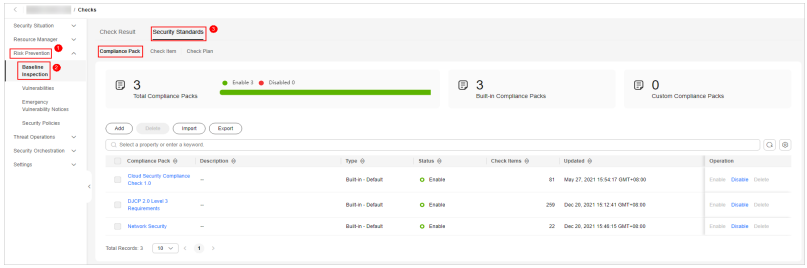
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-29** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-30** Accessing the Compliance Pack tab




**Step 6** In the upper left corner above the compliance pack list, click **Import**.

**Step 7** In the dialog box displayed, click **Download Template** and complete the template.

**Step 8** In the displayed dialog box, click **Add File** and upload the completed template file.

NOTE

- Only .xlsx files can be imported.
- Only one file can be imported at a time. Maximum file size: 100 records.

**Step 9** Click **Import**.

**----End**

## Exporting a Compliance Pack

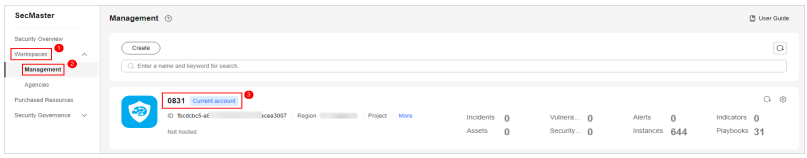
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

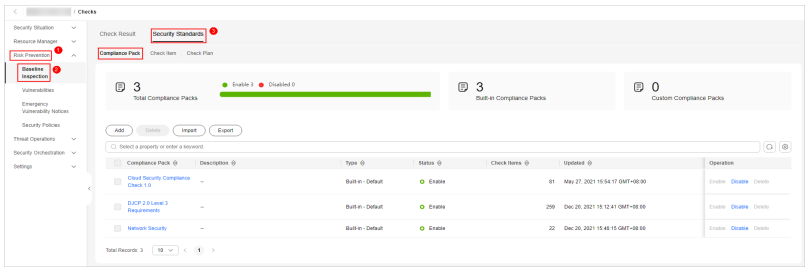
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-31** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Compliance Pack** tab.

**Figure 9-32** Accessing the Compliance Pack tab




**Step 6** Select the target compliance pack and click **Export** in the upper left corner of the compliance pack list.

**Step 7** In the displayed dialog box, select the format and data columns you want.

**Step 8** Click **Export**.

**----End**

# 9.1.9 Viewing Check Items

This section describes how to view existing check items.

## Procedure

**Step 1** Log in to the management console.

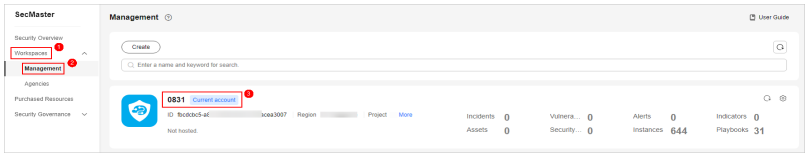
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

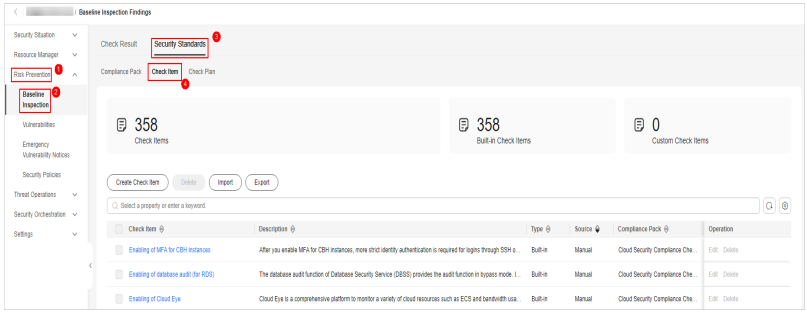
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-33** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Item** tab.

**Figure 9-34** Accessing the Check Item tab




**Step 6** On the **Check Item** tab, view the information about existing check items. For details about the parameters, see **Table 9-6**.

**Figure 9-35** Check items

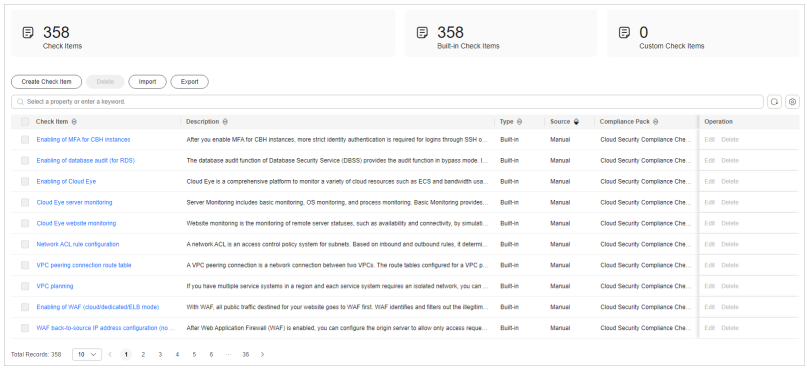



**Table 9-6** Parameters for check items

| Parameter | Description |
| --- | --- |
| Check Items | Total number of check items in the current workspace. |
| Built-in Check Items | The number of check items preconfigured in SecMaster. |

| Parameter | Description |
| --- | --- |
| Custom Check Items | The number of check items you create. |
| *Check items and details* | All check items and their basic information.<br>• In the check item list, you can view the description, type, and number of compliance packs used for a check item. You can also edit or delete custom check items.<br>• If there are a large number of check items, you can select a filter and press **Enter** to search for a specific resource.<br>• To display certain columns only, click the setting button in the upper right corner of the check item list and complete the settings (for example, whether to wrap lines and whether to fix the operation column).<br>• To view details about a check item, click its name. The details page is displayed on the right.<br>On the check item details page, you can view the description and compliance pack used for the check item. |

**----End**

# 9.1.10 Creating a Custom Check Item

This topic describes how to create a custom check item.

## Limitations and Constraints

For custom check items, SecMaster does not check them immediately after they are created. You need to perform an immediate check manually or check the compliance pack the check items associated with. Then, you can get their check results.

## Procedure

**Step 1** Log in to the management console.

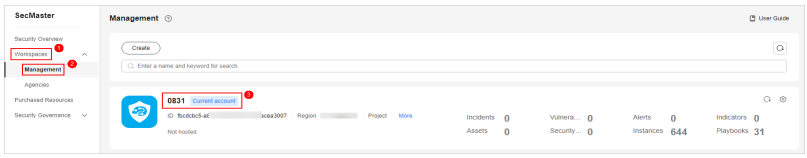
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

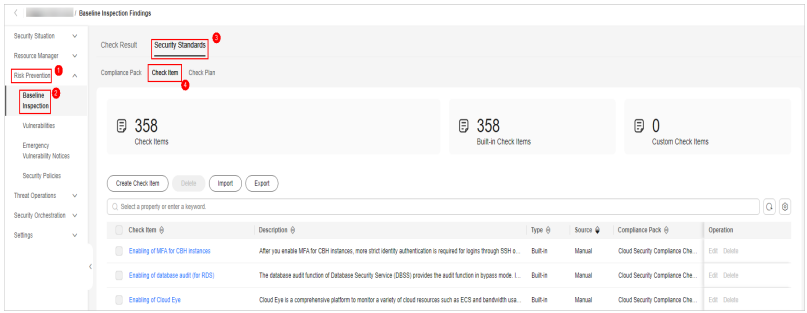
  

**Figure 9-36** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Item** tab.

**Figure 9-37** Accessing the Check Item tab




**Step 6** Click **Create Check Item** in the upper left corner of the check item list.

**Step 7** On the **Create Check Item** page, set check item parameters.

**Table 9-7** Parameters for creating check items

| Parameter | Description |
| --- | --- |
| Check Item | Name you specify for the check item. |
| Description | Description you provide for the check item. |
| Severity | Select the severity of the check item. |
| Action | Select an action for the check item.<br>• **Executed by workflows**: The check item is automatically executed through a workflow you specify, and the check result is reported by the workflow as well.<br>• **Executed manually**: You will manually complete the check item offline. |
| Select Workflow | If **Action** for a check item is set to **Executed by workflows**, you need to select a workflow for the check item.<br>If no appropriate workflows are available, click **Create Workflow** and create one on the workflow page. |
| Manual Check Items | If **Action** for a check item is set to **Executed manually**, SecMaster sets the check result options by default. |

| Parameter | Description |
| --- | --- |
| Cloud service | Enter the information about the cloud service associated with the check item. |

**Step 8** Click **OK**.

NOTE

For custom check items, SecMaster does not check them immediately after they are created. You need to perform an immediate check manually or check the compliance pack the check items associated with. Then, you can get their check results.

**----End**

## Related Operations

- Editing check items in a compliance pack
  a. In the row containing the target check item, click **Edit** in the **Operation** column.
  b. On the **Edit Check Item** page, edit the check item parameters and click **OK**.
- Deleting a check item
  a. In the row that contains the check item you want to delete, click **Delete** in the **Operation** column.
  b. In the displayed dialog box, enter **DELETE** and click **OK**.

# 9.1.11 Importing and Exporting Check Items

## Scenarios

This topic describes how to import and export check items.

## Limitations and Constraints

When you import check items, note the following restrictions:

- Only .xlsx files can be imported.
- Only one file can be imported at a time. Maximum file size: 100 records.

## Importing Check Items

**Step 1** Log in to the management console.

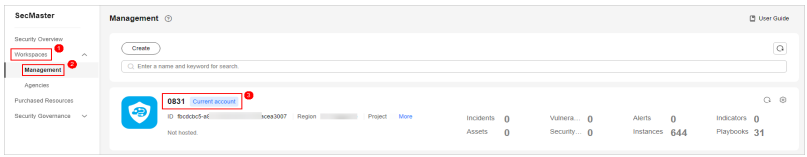
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

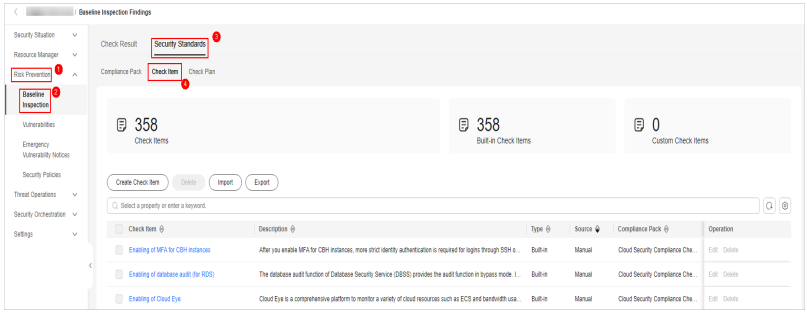
  

**Figure 9-38** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Item** tab.

**Figure 9-39** Accessing the Check Item tab



**Step 6** In the upper left corner above the check item list, click **Import**.

**Step 7** In the dialog box displayed, click **Download Template** and complete the template.

**Step 8** In the displayed dialog box, click **Add File** and upload the completed template file.

NOTE

- Only .xlsx files can be imported.
- Only one file can be imported at a time. Maximum file size: 100 records.

**Step 9** Click **OK**.

**----End**

## Exporting Check Items

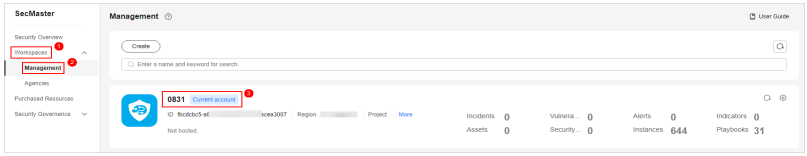
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

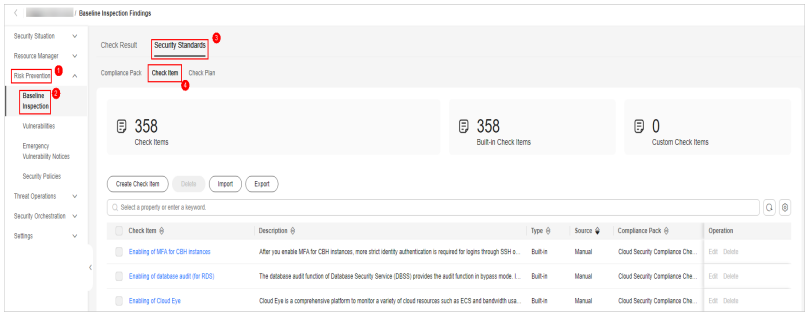
**Figure 9-40** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Baseline Inspection**. On the displayed page, click the **Security Standards** tab. Then, click the **Check Item** tab.

**Figure 9-41** Accessing the Check Item tab




**Step 6** Select check items you want to export from the check item list and click **Export** in the upper left corner above the list.

**Step 7** In the displayed dialog box, select the format and data columns you want.

**Step 8** Click **Export**.

**----End**

# 9.2 Vulnerability Management

## 9.2.1 Overview

### Background

SecMaster can integrate the vulnerabilities scanned by Host Security Service (HSS) and display them centrally. You can quickly locate vulnerable assets and fix vulnerabilities.

For details about how HSS scans for vulnerabilities and which types of vulnerability it scans for, see **HSS Vulnerability Management Overview**.

### ECS Vulnerabilities

SecMaster can display vulnerabilities scanned by HSS in real time. You can view vulnerability details and find fixing suggestions.

The following host vulnerabilities can be detected:

**Table 9-8** ECS vulnerability check items

| Check Items | Description |
| --- | --- |
| Linux software vulnerability detection | SecMaster detects vulnerabilities in the system and software (such as SSH, OpenSSL, Apache, and MySQL) based on vulnerability libraries, reports the results to the management console, and generates alerts. |

| Check Items | Description |
| --- | --- |
| Windows OS vulnerability detection | SecMaster subscribes to Microsoft official updates, checks whether the patches on the server have been updated, pushes Microsoft official patches, reports the results to the management console, and generates vulnerability alerts. |
| Web-CMS vulnerability detection | SecMaster checks web directories and files for Web-CMS vulnerabilities, reports the results to the management console, and generates vulnerability alerts. |
| Application Vulnerabilities | SecMaster detects the vulnerabilities in the software and dependency packs running on the server, reports risky vulnerabilities to the console, and displays vulnerability alerts. |

The vulnerability severity levels in SecMaster and vulnerability fix priorities in HSS are as follows:

- HSS: The vulnerability fix priority is weighted based on the CVSS score, release time, and the importance of the assets affected by the vulnerability. It reflects the urgency of the fix.

  HSS classifies vulnerability fix priorities into four levels: critical, high, medium, and low. You can refer to the priorities to fix the vulnerabilities that have significant impact on your server first.
- SecMaster: The vulnerability severity is determined by CVSS scores. It reflects how severe the vulnerability is.

  SecMaster classified vulnerability severity into four levels: high, medium, low, and informative. You can fix vulnerabilities based on their severity.

## 9.2.2 Viewing Vulnerability Details

### Scenario

This topic describes how to view vulnerabilities details.

### Prerequisites

- You have purchased the SecMaster professional edition and the edition is within the validity period.
- You have installed HSS agent. For details, see the **Installing an Agent**.
- HSS logs have been connected to SecMaster and the function of automatically converting logs to alerts has been enabled. For details, see **Data Integration**. If access to HSS vulnerability scan results has been enabled during data integration but the automatic alert conversion is disabled, the vulnerability scan results will not be displayed on the **Vulnerabilities** page in SecMaster.

## Procedure

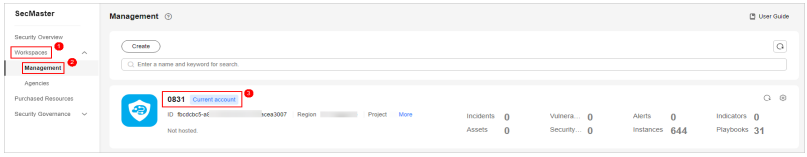
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

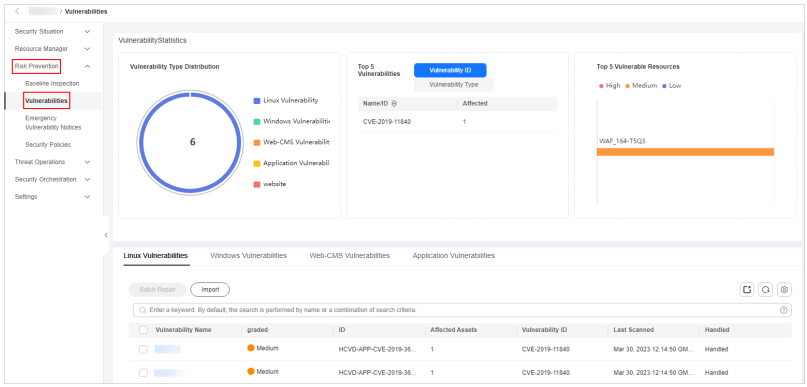
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-42** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 9-43** Accessing the vulnerability management page




**Step 6** View vulnerability information on the **Vulnerabilities** page.

**Table 9-9** Viewing vulnerability information

| Parameter | Description |
| --- | --- |
| Vulnerability Type Distribution | This graph displays the total number of vulnerabilities and the distribution of vulnerabilities by type. |

| Parameter | Description |
| --- | --- |
| Top 5 Vulnerabilities | • The **Top 5 Vulnerabilities** area lists the five vulnerabilities with the most affected assets. The more affected assets, the higher the vulnerability ranking is.<br>• The **Vulnerability ID** tab displays the IDs and the affected asset quantity for the five vulnerabilities.<br>• The **Vulnerability Type** tab displays the names, severity levels, and affected asset quantity for the five vulnerabilities. |
| Top 5 Vulnerable Resources | This graph displays the five resources with the most vulnerabilities. |
| *Vulnerability List* | • The vulnerable list area includes **Linux Vulnerabilities**, **Windows Vulnerabilities**, **Web-CMS Vulnerabilities**, and **Application Vulnerabilities** tabs. **Table 9-10** lists parameters for these vulnerability tabs.<br>• If there are many vulnerabilities displayed, use filters to search for a specific one.<br>• To view details about a vulnerability, click the vulnerability name and view the details on the page displayed on the right.<br>• You can view the total number of vulnerabilities below the vulnerability list. You can view a maximum of 10,000 vulnerability records page by page. To view more than 10,000 records, optimize the filter criteria. |

**Table 9-10** Vulnerability parameters

| Parameter | Description |
| --- | --- |
| Vulnerability Name | Name of the scanned vulnerability.<br>Click a vulnerability name to view vulnerability description and vulnerability library information. |
| Severity | Severity level of the vulnerability. |
| ID | ID of the vulnerability. |
| Affected Assets | Total number of assets affected by a vulnerability |
| Vulnerability ID | ID of a vulnerability. |
| Last Scanned | Time of the last scan |
| Handled | This column specifies whether the vulnerability has been handled. |

**----End**

## 9.2.3 Fixing Vulnerabilities

### Scenario

If HSS detects a vulnerability on a server, you need to handle the vulnerability in a timely manner based on its severity and your business conditions to prevent further vulnerability exploits.

If a vulnerability may harm your services, fix it as soon as possible. For Linux and Windows vulnerabilities, you can go to the HSS console and fix them in one-click. Web-CMS, emergency, and application vulnerabilities cannot be automatically fixed. You can handle them by referring to the suggestions provided on the vulnerability details page.

### Constraints and Limitations

- For details about vulnerability management in Host Security Service (HSS) editions, see **Types of Vulnerabilities That Can Be Scanned and Fixed**.
- CentOS 7, CentOS 8, Debian 9 and 10, Windows 2012 R2, and Ubuntu 14.04 and earlier have reached EOL and cannot be fixed because no official patches are available. You are advised to change to the OSs in active support.
- Ubuntu 16.04 to Ubuntu 22.04 do not support free patch updates. You need to subscribe to Ubuntu Pro to install upgrade packages. If Ubuntu Pro is not configured, vulnerabilities will fail to be fixed.
- Fixing kernel vulnerabilities may cause servers to be unavailable. Therefore, HSS does not automatically fix the server kernel vulnerabilities of CCE, MRS, or BMS. When batch fixing vulnerabilities, HSS filters out these types of vulnerabilities.
- To handle vulnerabilities on a server, ensure the server is in the **Running** state, its agent status is **Online**, and its protection status is **Protected**.

### Precautions

- Vulnerability fixing operations cannot be rolled back. If a vulnerability fails to be fixed, services will probably be interrupted, and incompatibility issues will probably occur in middleware or upper layer applications. To prevent unexpected consequences, you are advised to use CBR to back up ECSs. For details, see **Purchasing a Server Backup Vault**. Then, use idle servers to simulate the production environment and test-fix the vulnerability. If the test-fix succeeds, fix the vulnerability on servers running in the production environment.
- Servers need to access the Internet and use external image sources to fix vulnerabilities.
  - Linux OS: If your servers cannot access the Internet, or the external image sources cannot provide stable services, you can use the image source provided by Huawei Cloud to fix vulnerabilities. Before fixing vulnerabilities online, configure the Huawei Cloud image sources that match your server OSs. For details, see **Image Source Management**.

- Windows OS: If your servers cannot access the Internet, ensure you have set up a patch server.

## Fixing Vulnerabilities on the Console

Only Linux vulnerabilities and Windows vulnerabilities can be fixed using the repair function on the console.

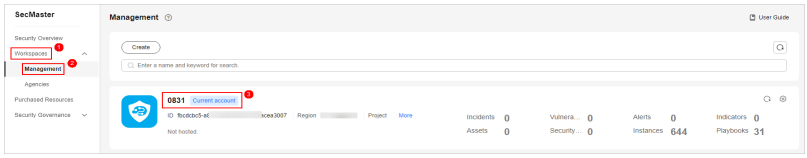
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

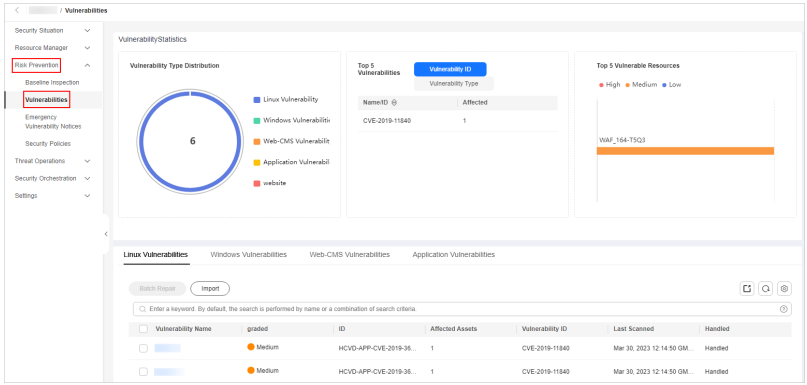
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-44** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 9-45** Accessing the vulnerability management page




**Step 6** On the displayed page, click **Linux Vulnerabilities** or **Windows Vulnerabilities**.

**Step 7** In the vulnerability list, click the name of the target vulnerability. The vulnerability details page is displayed.

**Step 8** On the **Vulnerability Details** page, click **Affected Resources**. In the resource list, locate the row that contains the target resource and click **Repair** in the **Operation** column.

To fix vulnerabilities in batches, select all the target vulnerabilities and click **Batch Repair** in the upper left corner above the list.

**Step 9** If a vulnerability is fixed, its status will change to **Fixed**. If it fails to be fixed, its status will change to **Failed**.

NOTE

Restart the system after you fixed a Linux kernel vulnerability, or the system will probably continue to warn you of this vulnerability.

**----End**

## Manually Fixing Software Vulnerabilities

One-click automatic fix of Web-CMS or application vulnerabilities is not supported. You can log in to the server to manually fix them by referring to the fix suggestions on the vulnerability details slide-out panel.

- **Vulnerability Fixing Commands**

  On the basic information page of vulnerabilities, you can fix a detected vulnerability based on the provided suggestions. For details about the vulnerability fixing commands, see **Table 9-11**.

  NOTE

  - Restart the system after you fixed a Windows or Linux kernel vulnerability, or the system will probably continue to warn you of this vulnerability.
  - Fix the vulnerabilities in sequence based on the suggestions.
  - If multiple software packages on the same server have the same vulnerability, you only need to fix the vulnerability once.

  **Table 9-11** Vulnerability fix commands

| OS | Fix Command |
| --- | --- |
| CentOS/Fedora/ EulerOS/Red Hat/Oracle | **yum update** *Software name* |
| Debian/Ubuntu | **apt-get update && apt-get install** *Software name --only-upgrade* |
| Gentoo | See the vulnerability fix suggestions for details. |

- **Vulnerability Fixing Methods**

  Vulnerability fixing may affect service stability. You are advised to use either of the following methods to avoid such impacts:

  - **Method 1: Create a VM to fix the vulnerability.**
    i. Create an image for the ECS host whose vulnerability needs to be fixed. For details, see **Creating a Full-ECS Image from an ECS**.
    ii. Use the image to create an ECS. For details, see **Creating an ECS from an Image**.
    iii. Fix the vulnerability on the new ECS and verify the result.
    iv. Switch services over to the new ECS and verify they are stably running.
    v. Release the original ECS. If a fault occurs after the service switchover and cannot be rectified, you can switch services back to the original ECS.

- **Method 2: Fix the vulnerability on the current server.**
  i. Create a backup for the ECS to be fixed. For details, see **Creating a CSBS Backup**.
  ii. Fix vulnerabilities on the current server.
  iii. If services become unavailable after the vulnerability is fixed and cannot be recovered in a timely manner, use the backup to restore the server. For details, see **Using Backups to Restore Servers**.

NOTE

- Use method 1 if you are fixing a vulnerability for the first time and cannot estimate the impact on services. You are advised use pay-per-use billing for newly created ECSs. After the service switchover, you can change the billing mode to yearly/monthly. In this way, you can release the ECSs at any time to save costs if the vulnerability fails to be fixed.
- Use method 2 if you have fixed the vulnerability on similar servers before.

## Verifying Vulnerability Fix

After a vulnerability is fixed, you are advised to verify it immediately.

**Table 9-12** Verification

| Method | Operation |
| --- | --- |
| Manual verification | • Click **Verify** on the vulnerability details page.<br>• Run the following command to check the software upgrade result and ensure that the software has been upgraded to the latest version:<br>– CentOS, Fedora, EulerOS, Red Hat, and Oracle: **rpm -qa \| grep** *Software name*<br>– Debian and Ubuntu: **dpkg -l \| grep** *Software name*<br>– Gentoo: **emerge --search** *Software name*<br>• **Perform a manual scan** on the HSS console to check the vulnerability fixing result. |
| Automatic verification | HSS performs a full scan every early morning. If you do not perform a manual verification, you can view the system check result on the next day after you fix the vulnerability. |

## Related Operations

If you evaluate that some vulnerabilities do not affect your services and do not want to view the vulnerabilities in the vulnerability list, you can whitelist the vulnerabilities. After they are whitelisted, the vulnerabilities will be ignored in the vulnerability list and no alarms will be reported. The vulnerabilities will not be scanned and the vulnerability information will not be displayed when the next vulnerability scan task is executed. For details, see **Handling Vulnerabilities**.

# 9.2.4 Importing and Exporting Vulnerabilities

## Scenario

This section describes how to import and export vulnerabilities.

- **Importing Vulnerabilities**
- **Exporting Vulnerabilities**

## Constraints

- Only .xlsx files no larger than 5 MB can be imported.
- A maximum of 9,999 vulnerability records can be exported from SecMaster.

## Importing Vulnerabilities

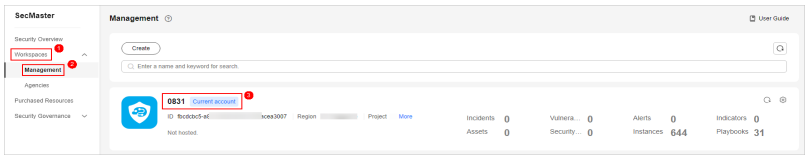
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

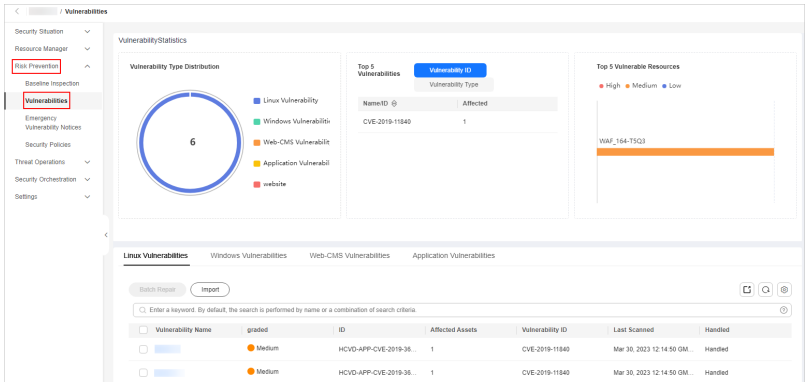
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-46** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 9-47** Accessing the vulnerability management page




**Step 6** On the displayed page, select a tab to go to the corresponding vulnerability management page.

For example, to import Linux vulnerabilities, click the **Linux Vulnerabilities** tab.

**Step 7** Click **Import** above the vulnerability list. The **Import** dialog box is displayed.

**Step 8** In the **Import** dialog box, click **Download Template** to download a template, and fill in the downloaded template according to the requirements.

**Step 9** After the vulnerability file is ready, click **Select File** in the **Import** dialog box, and select the Excel file you want to import.

**Step 10** Click **OK**.

**----End**

## Exporting Vulnerabilities

A maximum of 9,999 vulnerability records can be exported.

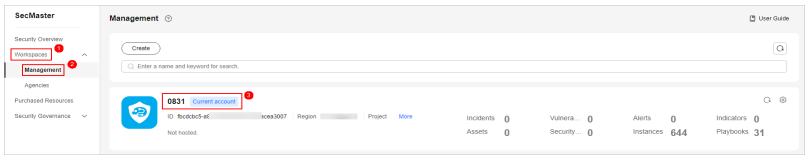
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

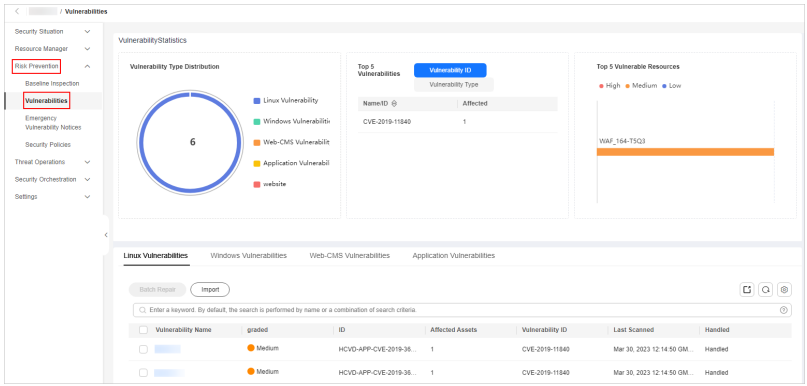
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-48** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 9-49** Accessing the vulnerability management page




**Step 6** On the **Vulnerabilities** page, click the target vulnerability tab.

For example, if you want to export Linux vulnerabilities, click the **Linux Vulnerabilities** tab.

**Step 7** Click in the upper right corner above the vulnerability list. The **Export** dialog box is displayed.

**Step 8** In the **Export** dialog box, set vulnerability parameters.

**Table 9-13** Exporting vulnerabilities

| Parameter | Description |
| --- | --- |
| Format | By default, the vulnerability list is exported into an Excel. |
| Columns | Select the parameters included in the exported file. |

**Step 9** Click **OK**.

The system automatically downloads the Excel to your local PC.

**----End**

## 9.2.5 Ignoring and Unignoring a Vulnerability

### Scenario

Some vulnerabilities are risky only in specific conditions. For example, if a vulnerability can be exploited only through an open port, but there are no open ports on the target server, the vulnerability will not harm the server. Such vulnerabilities can be ignored. HSS will still generate alerts when next time it finds the vulnerabilities you ignore before. SecMaster will synchronize the vulnerability information as well. You can also unignore a vulnerability as needed.

This topic describes how to ignore a vulnerability and cancel ignoring a vulnerability.

### Procedure

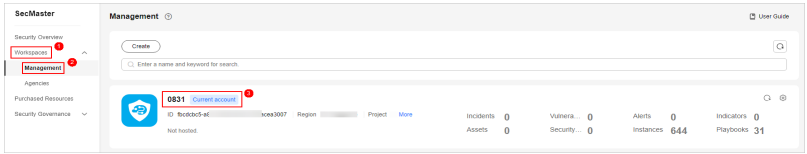
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

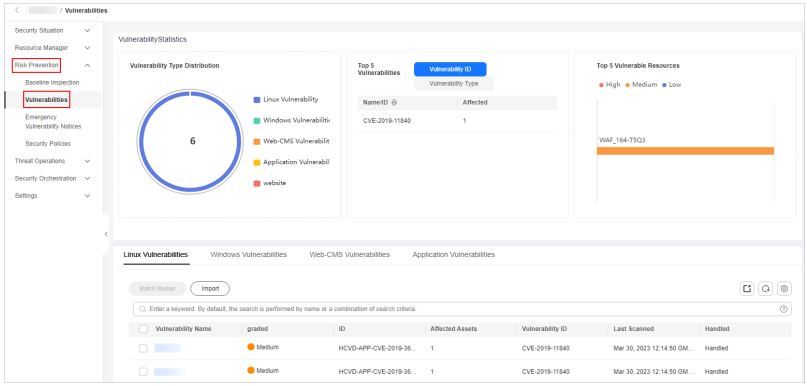
**Figure 9-50** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 9-51** Accessing the vulnerability management page



**Step 6** On the **Vulnerabilities** page, click any vulnerability type tab. In the vulnerability list, click the name of the target vulnerability. The vulnerability details page is displayed on the right.

For example, if you want to handle a Linux vulnerability, click the **Linux Vulnerabilities** tab and click the target vulnerability name. Then, you can view the vulnerability details on the page displayed on the right.

**Step 7** Ignore or unignore the target vulnerability.

- Ignore

  On the **Vulnerability Details** page, click **Affected Resources**. In the resource list, locate the row that contains the target resource and click **More** and then **Ignore** in the **Operation** column.

- Unignore

  a. On the **Vulnerability Details** page, click **Affected Resources**. In the resource list, locate the row that contains the target resource and click **More** and then **Cancel Ignore** in the **Operation** column.

  b. In the confirmation dialog box, confirm the information and click **OK**.

**----End**

# 9.3 Viewing/Exporting Emergency Vulnerability Notices

## Background

SecMaster obtains data from Huawei Cloud security notices and dynamically displays security vulnerabilities disclosed in the industry, making it easier for you to obtain security vulnerability details, impact scope, and handling suggestions.

With the emergency vulnerability notices, you can easily:

- Backtrack disclosed vulnerabilities dated from April 2014.
- View latest vulnerability notices which are updated every 5 minutes.
- View emergency vulnerability notices by disclosure time.
- Search for emergency vulnerability notices by keyword.

- Export the list of emergency vulnerability notices.

## Scenario

This topic describes how to view and export emergency vulnerability notices.

## Limitations and Constraints

- Only disclosed vulnerability notices dated from April 2014 can be backtracked.
- Only vulnerability notice list can be exported. To learn details, click the link of the notice name you want.

## Viewing Emergency Vulnerability Notices

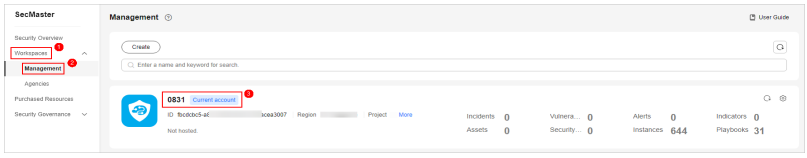
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

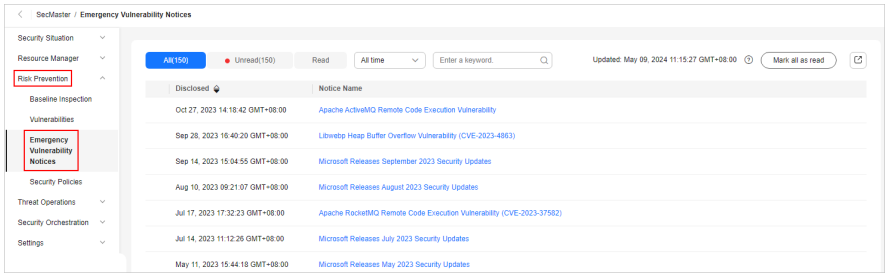
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-52** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Emergency Vulnerability Notices**.

**Figure 9-53** Accessing the emergency vulnerability notices page




**Step 6** View the update time of emergency vulnerability notices.

View the update time next to **Updated** in the upper right corner above the list of notices.

**Step 7** View details of an emergency vulnerability notice.

Click the name of the emergency vulnerability you wish to learn about to switch to the vulnerability notice page. You can view the vulnerability disclosure process, severity, affected products, and handling method.

**Step 8** View emergency vulnerability notices by time range.

Select **All time**, **Last 7 days**, **Last 3 days**, or **Last 24 hours** to view the emergency vulnerability notices reported during the selected period.

**Step 9** Search for historical emergency vulnerability notices.

Enter a keyword in the search box to search for emergency vulnerability notices that meet the filter criteria.

**----End**

### Exporting Emergency Vulnerability Notices

On the **Emergency Vulnerability Notices** tab, click the export icon in the upper right corner to download listed notices as an Excel file. You can then view emergency vulnerability notices offline.

The exported Excel file contains the notice names, disclosure time, and links.

# 9.4 Policy Management

## 9.4.1 Overview

You can use SecMaster to manage and maintain tasks across accounts with ease, making it simple to implement protection of different services, including WAF, CFW, VPC security groups and IAM. You can view all policies centrally, manage policies for seven defense lines manually, and query manual and automatic block records quickly.

### Limitations and Constraints

- Currently, the emergency policies include only the blacklist policies of CFW, WAF, VPC security groups and IAM.
- A maximum of 300 emergency policies that support block aging can be added for a single workspace you have. A maximum of 1,300 emergency policies can be added for a single workspace you have. Limits on blocked objects at a time are as follows:
  - When a policy needs to be delivered to CFW, each time a maximum of 50 IP addresses can be added as blocked objects for each account.
  - When a policy needs to be delivered to WAF, each time a maximum of 50 IP addresses can be added as blocked objects for each account.
  - When a policy needs to be delivered to VPC, each time a maximum of 20 IP addresses can be added as blocked objects within 1 minute for each account.
  - When a policy needs to be delivered to IAM, each time a maximum of 50 IAM users can be added as blocked objects for each account.

- If an IP address or IP address range or an IAM user is added to the blacklist, CFW, WAF, VPC, and IAM will block requests from that IP address or user without checking whether the requests are malicious.

## 9.4.2 Viewing Defense Policies

### Scenario

This section describes how to view defense policies.

There are seven defense lines, physical, identity, server, maintenance, data, application, and network defense lines.

### Procedure

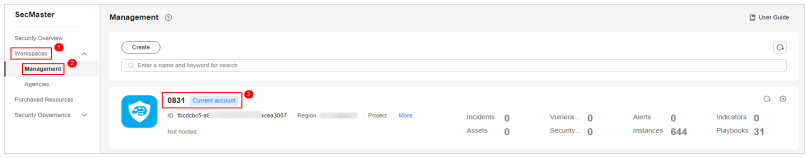
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

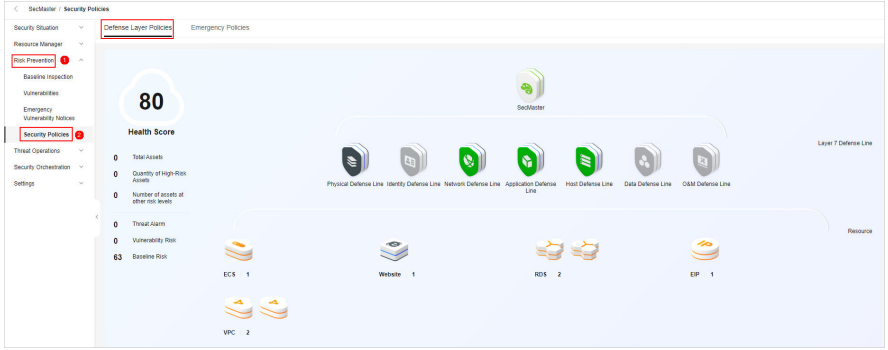
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-54** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Policy Management**.

**Figure 9-55** Defense Layer Policies




**Step 6** View defense policy statistics.

- **Health Score**: indicates the current health status of resources.

  The score ranges from 0 to 100. The higher the security score, the more secure your resources. For details, see **Security Score**.

- **Total Assets**: displays how many assets, high-risk assets, and assets at other risk levels you have.
- Threat alarm, vulnerability, and baseline check statistics: display unhandled threat alarms, unfixed vulnerabilities, and risky baseline settings.
  - **Threat Alarm**: Displays threat alarms that have not been handled in **the last seven days**.
  - **Vulnerability Risk**: Displays the top 5 types of vulnerabilities in assets and the total number of vulnerabilities that have not been fixed in **the last seven days**.
  - **Baseline Risk**: displays resources by risk severity, including critical, high, medium, low, and informational levels, based on the latest baseline inspection results.
- SecMaster Protection Overview: displays the protection status and resource information in the seven defense lines.
  - In the seven defense line area, you can click the icon of a defense line to view the protection products and protection statistics of the defense line.
  - You can view the resource statistics in the resource area.

**----End**

## 9.4.3 Configuring Defense Policies

### Scenario

This section describes how to configure protection policies.

### Procedure

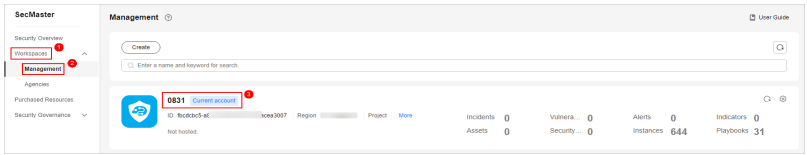
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

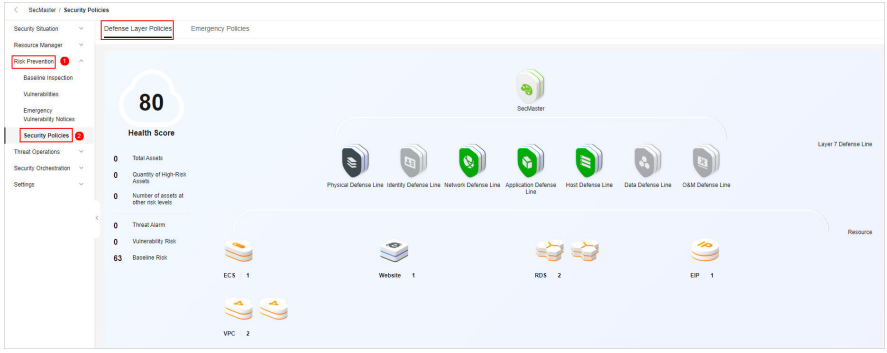
**Figure 9-56** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Policy Management**.

**Figure 9-57** Defense Layer Policies




**Step 6** Click the name of the defense line to which the security service belongs. The cloud service information corresponding to the defense line slides out from the right.

**Step 7** On the tab page of the corresponding cloud service, click **Protection Policy** to go to the configuration page.

If you have not purchased the corresponding cloud service, click the service name under service overview in the tab to go to the service console and purchase the service.

**Step 8** On the policy configuration page, configure policies of the corresponding cloud service.

- Anti-DDoS policy configuration:
  - **Configuring a Protection Policy**
  - **Configuring a Protection Policy**
- CFW protection policies: **Configuring Intrusion Prevention** and **Basic Defense Rule Management**
- WAF protection policies: **Creating a Protection Policy**
- HSS protection policies: **Enabling HSS**, **Creating a Policy Group**, and **Installation and Configuration**

**----End**

# 9.4.4 Adding and Editing an Emergency Policy

## Scenario

An emergency policy is used to quickly block attacks. You can select a block type based on the alert source to block attackers. **Table 9-14** lists recommended settings. You can also block a single attack source based on the comprehensive investigation of multiple alerts.

**Table 9-14** Recommended blocking policies

| Alert Type | Defense Layer | Recommended Policy |
| --- | --- | --- |
| HSS alerts | Server protection | VPC policies are recommended to block traffic. |

| Alert Type | Defense Layer | Recommended Policy |
| --- | --- | --- |
| WAF alerts | Application protection | WAF policies are recommended to block traffic. |
| CFW alerts | Network protection | CFW policies are recommended to block traffic. |
| IAM alerts | Identity authentication | IAM policies are recommended to block traffic. |
| OBS and DBSS alerts | Data protection | You can use VPC or CFW policies based on actual attack scenarios and investigation results to disconnect attack sources from protected resources. |

This topic describes how to add and edit an emergency policy.

## Limitations and Constraints

- A maximum of 300 emergency policies that support block aging can be added for a single workspace you have. A maximum of 1,300 emergency policies can be added for a single workspace you have. Limits on blocked objects at a time are as follows:
  - When a policy needs to be delivered to CFW, each time a maximum of 50 IP addresses can be added as blocked objects for each account.
  - When a policy needs to be delivered to WAF, each time a maximum of 50 IP addresses can be added as blocked objects for each account.
  - When a policy needs to be delivered to VPC, each time a maximum of 20 IP addresses can be added as blocked objects within 1 minute for each account.
  - When a policy needs to be delivered to IAM, each time a maximum of 50 IAM users can be added as blocked objects for each account.
- If an IP address or IP address range or an IAM user is added to the blacklist, CFW, WAF, VPC, and IAM will block requests from that IP address or user without checking whether the requests are malicious.
- Once an emergency policy is added, its blocked object type and blocked objects, such as IP addresses, IP address ranges, or IAM user names, cannot be modified.

## Prerequisites

If the blocked object is an IAM user, you need to create a SecMaster agency before adding an emergency policy. For details, see **Creating a SecMaster Agency**.

## Adding an Emergency Policy

**Step 1** Log in to the management console.

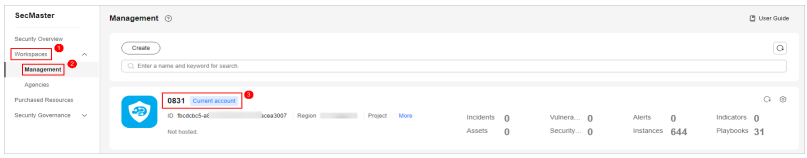
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

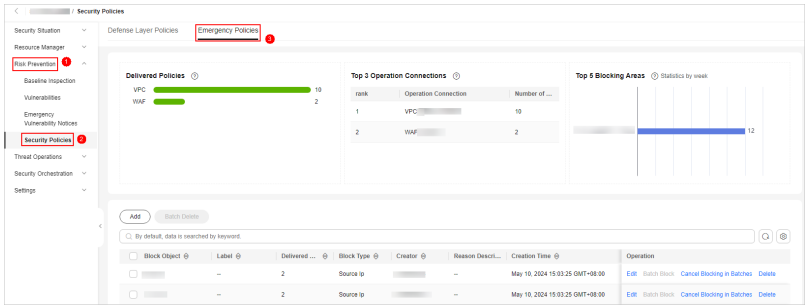
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-58** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-59** Emergency Policies




**Step 6** On the **Emergency Policies** page, click **Add**. The page for adding policies slides out from the right of the page.

**Step 7** On the **Add** page, configure policy information.

**Table 9-15** Emergency policy parameters

| Parameter | Description |
| --- | --- |
| Blocked Object Type | Type of the object you want to block. You can select **IP** or **IAM**. |

| Parameter | Description |
| --- | --- |
| Block Object | • If you select **IP** for **Blocked Object Type**, enter one or more IP addresses or IP address ranges you want to block. If there are multiple IP addresses or IP address ranges, separate them with commas (,).<br>• If you select **IAM** for **Blocked Object Type**, enter IAM user names.<br>• There are some restrictions on delivery of blocked objects:<br>– When a policy needs to be delivered to CFW, each time a maximum of 50 IP addresses can be added as blocked objects for each account.<br>– When a policy needs to be delivered to WAF, each time a maximum of 50 IP addresses can be added as blocked objects for each account.<br>– When a policy needs to be delivered to VPC, each time a maximum of 20 IP addresses can be added as blocked objects within 1 minute for each account.<br>– When a policy needs to be delivered to IAM, each time a maximum of 50 IAM users can be added as blocked objects for each account. |
| Label | Label of a custom emergency policy. |
| Operation Connection | Asset connections that are used to operate blocking workflows of security services in the seven layers of defense.<br>Select the operation connection for the policy. |
| Block Aging | Check whether the policy needs to be stopped.<br>• If you select **Yes**, set the aging time of the policy. For example, if you set the aging time to 180 days, the policy is valid within 180 days after the setting. After 180 days, the IP address/rangeor the IAM user will not be blocked.<br>• If you select **No**, the policy is always valid and blocks the specified IP address/rangeor the IAM user. |
| Policy Description | Description of the custom policy. |

**Step 8** Click **OK**. In the dialog box displayed, confirm the information and click **OK**.

**----End**

## Editing an Emergency Policy

NOTE

Once an emergency policy is added, its blocked object type and blocked objects, such as IP addresses, IP address ranges, or IAM user names, cannot be modified.

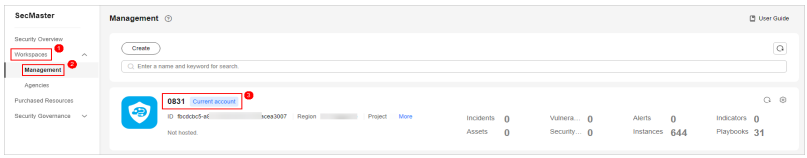
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

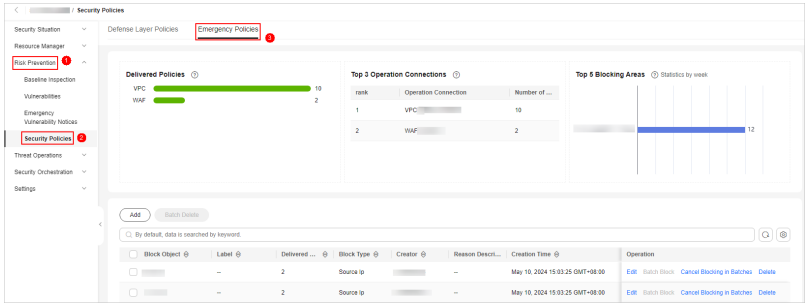
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-60** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-61** Emergency Policies




**Step 6** On the emergency policy management page, locate the row that contains the policy you want to edit and click **Edit** in the **Operation** column.

**Step 7** On the edit policy page, modify the policy information.

**Table 9-16** Editing an emergency policy

| Parameter | Description |
| --- | --- |
| Blocked Object Type | After an emergency policy is added, its blocked object cannot be modified. |
| Blocked Object | After an emergency policy is added, its blocked object cannot be modified. |
| Label | Label of a custom emergency policy. |
| Operation Connection | Select the operation connection for the policy. |

| Parameter | Description |
| --- | --- |
| Block Aging | Check whether the policy needs to be stopped.<br>• If you select **Yes**, set the aging time of the policy. For example, if you set the aging time to 180 days, the policy is valid within 180 days after the setting. After 180 days, the IP address/rangeor the IAM user will not be blocked.<br>• If you select **No**, the policy is always valid and blocks the specified IP address/rangeor the IAM user. |
| Policy Description | Description of the custom policy. |

**Step 8** Click **OK**.

**----End**

## Creating a SecMaster Agency

If the blocked object is an IAM user, you need to create a SecMaster agency before adding an emergency policy. Perform the following steps:

**Step 1** Log in to the management console.

**Step 2** Click ☰ in the upper left corner of the page and choose **Management & Governance** > **Identity and Access Management**.

**Step 3** Add a custom policy.

1. In the navigation pane on the left, choose **Permissions** > **Policies/Roles**. In the upper right corner of the displayed page, click **Create Custom Policy**.
2. Configure a policy.
   - **Policy Name**: Enter a policy name.
   - **Policy View**: Select **JSON**.
   - **Policy Content**: Copy the following content and paste it in the text box.

```
{
    "Version": "1.1",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "iam:users:updateUser"
            ]
        }
    ]
}
```

3. Click **OK**.

**Step 4** Create an agency.

1. In the navigation pane on the left, choose **Agencies**. On the page displayed, click **SecMaster_Agency**. The **Basic Information** page of **SecMaster_Agency** is displayed by default.
2. On the **Permissions** tab page, click **Authorize**.

3. On the **Select Policy/Role** page, search for and select the policy added in **Step 3** and click **Next**.
4. Set the authorization scope. Select **All resources** for **Scope**. After the setting is complete, click **OK**.

**----End**

# 9.4.5 Viewing Emergency Policies

## Scenario

This section describes how to view emergency policies.

## Procedure

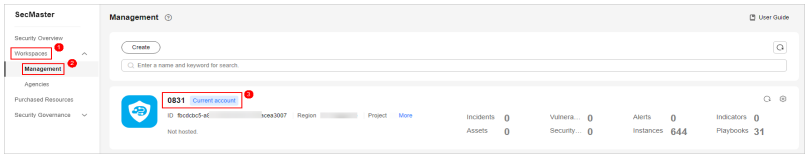
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

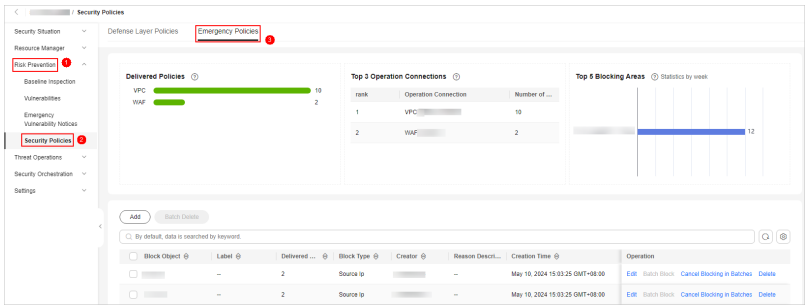
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-62** Workspace management page




**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-63** Emergency Policies




**Step 6** On the **Emergency Policies** page, view emergency policy details.

**Table 9-17** Parameters of emergency policies

| Parameter | Description |
| --- | --- |
| Delivered Policies | Shows how many policies that have been applied over the last week. |
| Top 3 Operation Connections | The 3 operation connections that have blocked the most IP addresses over the last week. |
| Top 5 Blocking Areas | The 5 regions blocked the most times over the last week. |
| Emergency policy list | • In the emergency policy list, you can view the blocked objects, blocking type, and number of delivered policies.<br>In the list, you can edit, block, cancel blocking, and delete a policy.<br>• To view details about an emergency policy, select the policy and click **Selected: xxx** in the lower part of the page to open the details page.<br>On the details page, you can block, cancel blocking, and delete a policy, and view historical records of the policy. |

**----End**

## 9.4.6 Deleting an Emergency Policy

### Scenario

This section describes how to delete emergency policies or delete emergency policies in batches.

### Procedure

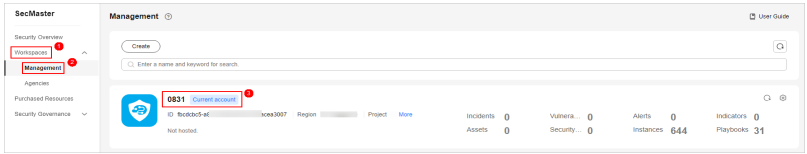
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

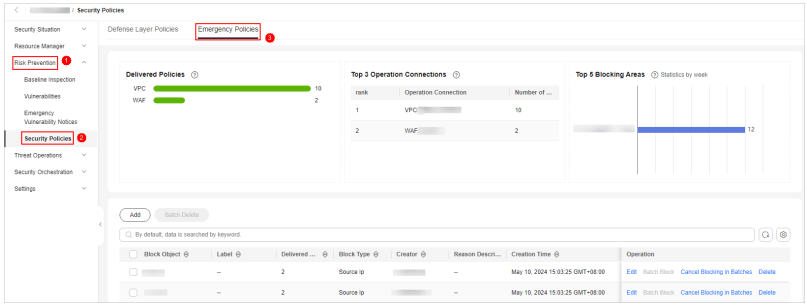
**Figure 9-64** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-65** Emergency Policies




**Step 6** On the emergency policy page, locate the row that contains the policy you want to delete and click **Delete** in the **Operation** column.

To delete multiple policies, select the target policies and click **Batch Delete** above the list.

**Step 7** In the displayed confirmation dialog box, click **Confirm**.

**----End**

# 9.4.7 Blocking or Canceling Blocking of an IP Address or IP Address Range

## Scenario

If an IP address, IAM user, or IP address range added as blocked object for an emergency policy needs to be blocked in other operation connections, you can block them in batches. If there is no need to block an IP address, IAM user, or IP address range for operation connections, you can cancel the blocking in batches.

This section describes how to block or cancel blocking of IP addresses or IP address ranges in multiple connections.

## Limitations and Constraints

If an IP address or IP address range or an IAM user is added to the blacklist, CFW, WAF, VPC, and IAM will block requests from that IP address without checking whether the requests are malicious.

## Enabling an IP Address Blocklist for Multiple Connections

**Step 1** Log in to the management console.

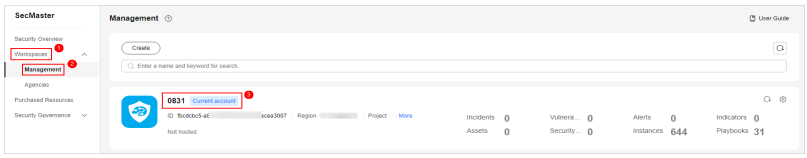
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

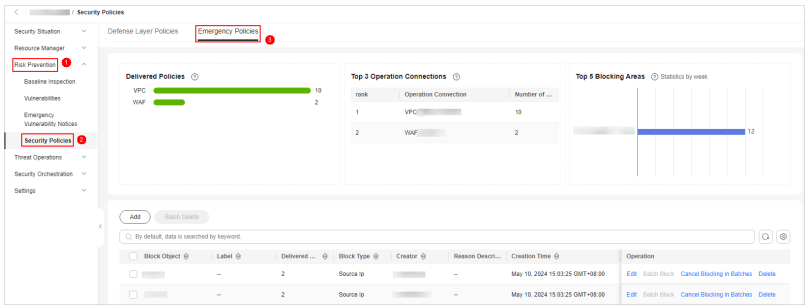
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 9-66** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-67** Emergency Policies



**Step 6** On the emergency policy page, locate the row that contains the policy you want to enable batch block and click **Batch Block** in the **Operation** column.

**Step 7** In the displayed dialog box, enter the blocking reason and click **OK**.

**----End**

## Canceling Batch Block

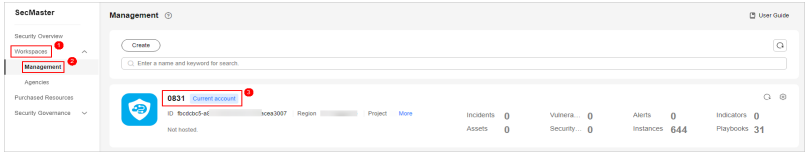
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

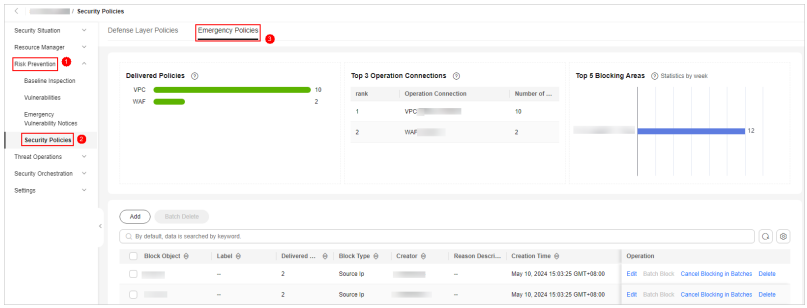
**Figure 9-68** Workspace management page



**Step 5** In the navigation pane on the left, choose **Risk Prevention** > **Security Policies**. Then, click the **Emergency Policies** tab to go to the emergency policy page.

**Figure 9-69** Emergency Policies




**Step 6** On the emergency policy page, locate the row that contains the target policy, click **Cancel Blocking in Batches** in the **Operation** column.

**Step 7** In the dialog box displayed, enter the reason for canceling the blocking and click **OK**.

**----End**

# 10 Threat Operations

## 10.1 Incident Management

### 10.1.1 Viewing Incidents

#### Scenario

An incident is a broad concept. It can include but is not limited to alerts. It can be a part of normal system operations, exceptions, or errors. In the O&M and security fields, an incident usually refers to a problem or fault that has occurred and needs to be focused on, investigated, and handled. An incident may be triggered by one or more alerts or other factors, such as user operations and system logs.

An incident is usually used to record and report historical activities in a system for analysis and audits.

On the **Incidents** page in SecMaster, you can check the incident list for the last 360 days. The list contains incident names, types, severity levels, and occurrence time. By customizing filtering conditions, such as the incident name, risk severity, and time, you can quickly query information about the specific incident.

This topic describes how to view incident information.

#### Procedure

**Step 1** Log in to the management console.

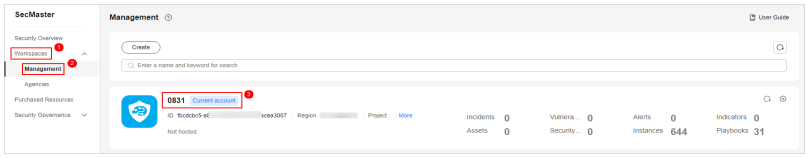
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

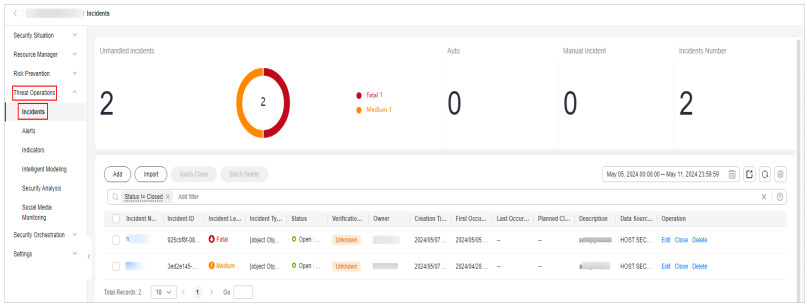
  

**Figure 10-1** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-2** Incidents



**Step 6** On the **Incidents** page, view incident details.

**Figure 10-3** Viewing an Incident

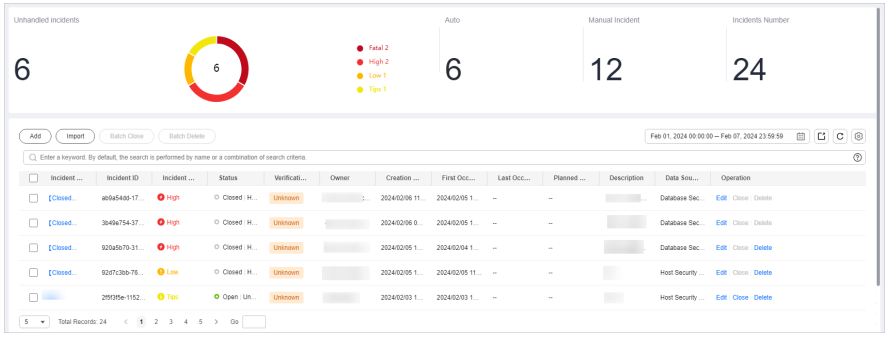


**Table 10-1** Viewing an Incident

| Parameter | Description |
| --- | --- |
| Unhandled Incidents | This area displays how many incidents that are not handled within the specified time range in the current workspace. The unhandled incidents are displayed by severity. |
| **Auto** (Incidents Handled Automatically) | This area displays how many incidents that are handled automatically by playbooks within the specified time range in the current workspace. |
| **Manual Incident** (Incidents Handled Manually) | This area displays how many incidents that are handled manually within the specified time range in the current workspace. |

| Parameter | Description |
| --- | --- |
| **Incidents Number** (Incidents) | This area displays how many incidents that are reported within the specified time range in the current workspace. |
| Incident list | The list displays more details about each incident.<br>You can view the total number of incidents below the incident list. You can view a maximum of 10,000 incident records page by page. To view more than 10,000 records, optimize the filter criteria.<br>In the incident list, you can view the incident name, severity, source, and status. To obtain overview of an incident, click the incident name. The **incident overview** panel is displayed on the right.<br>● On the **Incident Overview** panel, you can view incident handling suggestions, basic information, and associated information (including associated threat indicators, alerts, incidents, and attack information).<br>● To view incident details, click **Incident Details** in the lower right corner of the incident overview panel. The incident details page is displayed.<br>On the details page, you can view the incident timeline and attack information in addition to the information on the overview page. For example, you can view the first occurrence time of an incident, detection time, and attack process ID.<br>● On the incident overview or details page, you can change the incident severity and status in the corresponding drop-down list boxes.<br>● On the incident overview or details page, you can associate or disassociate alerts, incidents, and indicators and view information about affected resources. |

**----End**

# 10.1.2 Adding and Editing an Incident

## Scenario

This section describes how to add or edit an incident.

## Adding an Incident

**Step 1** Log in to the management console.

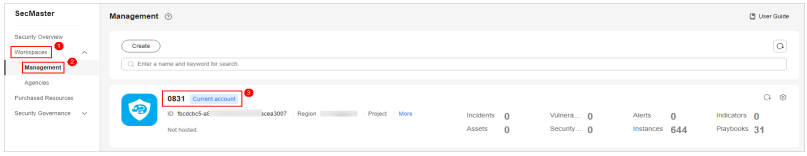
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

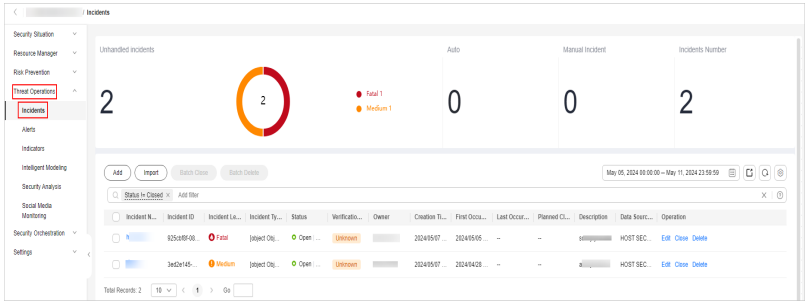
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-4** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-5** Incidents




**Step 6** On the **Incidents** page, click **Add**. On the displayed **Add** page, set parameters as described in **Table 10-2**.

**Table 10-2** Parameters for adding an incident

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Incident Name | Custom incident name. The value must contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 255 characters |
| | Type | Incident type |
| | (Optional) Service ID | Enter the service ID corresponding to the incident. |
| | Incident Severity | Select a severity level. |
| | Status | Select an incident status. |
| | (Optional) Owner | Primary owner of the incident. |

| Parameter | | Description |
| --- | --- | --- |
| | Data Source Product Name | Select the name of the data source product. |
| | Data Source Type | Select the type of the data source. For example, if the data source is a cloud service, select the cloud service. |
| Timeline | First Occurrence Time | Time when the incident occurred first time. |
| | (Optional) Last Occurrence Time | Time when the incident occurred last time. |
| | (Optional) Planned Closure Time | Time to close the incident. |
| Other | (Optional) Verification Status | Verification status of the incident to identify the accuracy of the incident. |
| | (Optional) Stage | Incident phase.<br>• **Preparation**: Prepare resources to process incidents.<br>• **Detection and analysis**: Detect and analyze the cause of an incident.<br>• **Containment, extradition, and recovery**: Handle an incident.<br>• **Post Incident Activity**: Follow-up activities. |
| | (Optional) Debugging data | Whether to enable simulated debugging |
| | (Optional) Labels | Label of the incident. |
| | Description | Incident description. The value can contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 1,024 characters. |

**Step 7** Click **OK**. The incident is created.

**----End**

## Editing an Incident

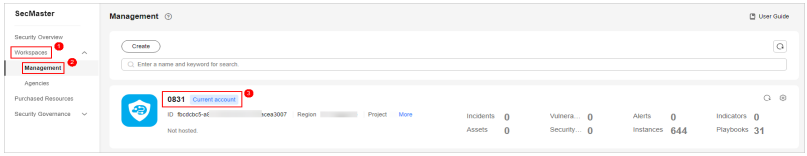
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

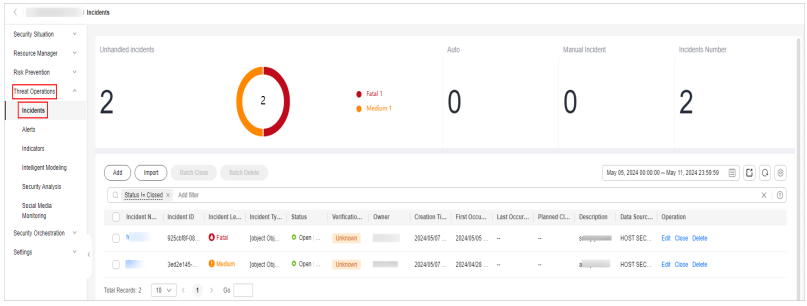
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-6** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-7** Incidents




**Step 6** In the incident list, locate the row that contains the target incident and click **Edit** in the **Operation** column.

**Step 7** On the **Edit** page that is displayed, edit incident parameters.

**Table 10-3** Parameters for editing an incident

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Incident Name | Custom incident name. The value must contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 255 characters |
| | Incident Type | Incident type |
| | (Optional) Service ID | Enter the service ID corresponding to the incident. |
| | Incident Level | Select a severity level. |

| Parameter | | Description |
| --- | --- | --- |
| | Status | Select an incident status. |
| | (Optional) Owner | Primary owner of the incident. |
| | Data Source Name | Name of the data source, which **cannot be changed** |
| | Data Source Type | Type of the data source, which **cannot be changed** |
| Timeline | First Occurrence Time | Time when the incident occurred first time. |
| | (Optional) Last Occurrence Time | Time when the incident occurred last time. |
| | (Optional) Planned Closure Time | Time to close the incident. |
| Other | (Optional) Verification Status | Verification status of the incident to identify the accuracy of the incident. |
| | (Optional) Phase | Incident phase.<br>• **Preparation**: Prepare resources to process incidents.<br>• **Detection and analysis**: Detect and analyze the cause of an incident.<br>• **Contain, extradition, and recovery**: Handle an incident.<br>• **Post Incident Activity**: Follow-up activities. |
| | (Optional) Debugging data | Whether to enable simulated debugging. This parameter **cannot be modified** once configured. |
| | (Optional) Label | Label of the incident. |
| | Description | Incident description. The value can contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 1,024 characters. |

**Step 8** Click **OK**. The incident editing is complete.

**----End**

# 10.1.3 Importing and Exporting Incidents

## Scenario

This section describes how to import and export incidents.

## Limitations and Constraints

- Only .xlsx files no larger than 5 MB can be imported.
- A maximum of 9,999 incident records can be exported.

## Importing Incidents

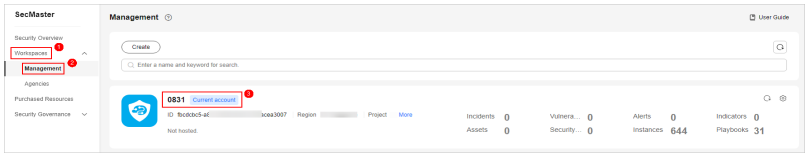
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

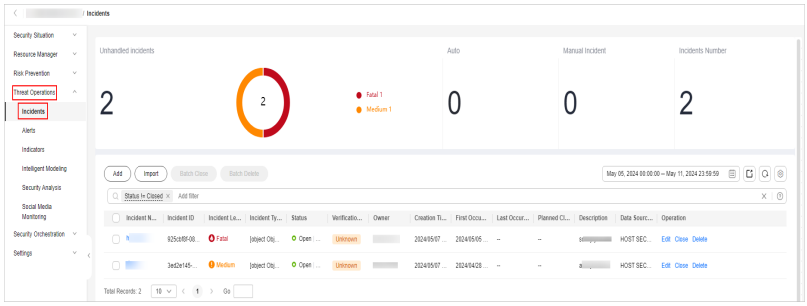
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-8** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-9** Incidents




**Step 6** On the **Incidents** page, click **Import** in the upper left corner above the incident list.

**Step 7** In the displayed **Import** dialog box, click **Download Template** to download a template, and fill in the downloaded template according to the requirements.

**Step 8** After the template is filled, click **Add File** in the **Import Incident** dialog box and select the Excel file you want to import.

**Step 9** Click **OK**.

**----End**

## Exporting Incidents

**Step 1** Log in to the management console.

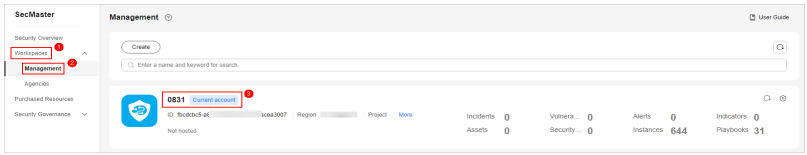
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

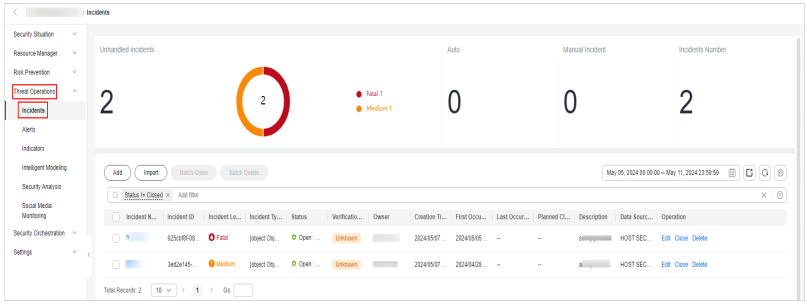
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-10** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-11** Incidents




**Step 6** On the **Incidents** page, select the incidents to be exported and click in the upper right corner of the list. The **Export** dialog box is displayed.

**Step 7** In the **Export** dialog box, set parameters.

**Table 10-4** Exporting incidents

| Parameter | Description |
| --- | --- |
| Format | By default, the incident list is exported into an Excel. |
| Columns | Select the parameters to be exported. |

**Step 8** Click **OK**.

The system automatically downloads the Excel to your local PC.

**----End**

# 10.1.4 Closing or Deleting Incidents

## Scenario

This topic describes how to close and delete an incident.

## Procedure

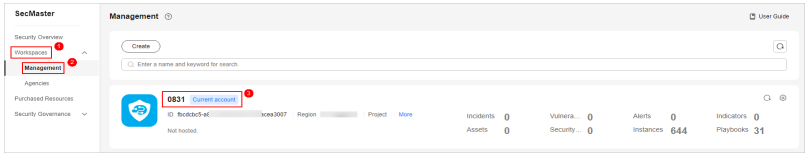
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

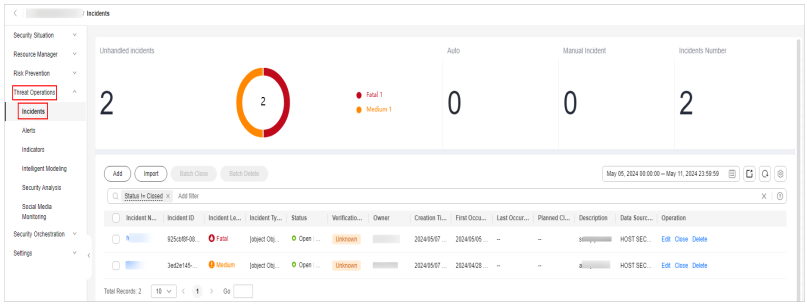
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-12** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Incidents**.

**Figure 10-13** Incidents




**Step 6** On the **Incidents** page, close or delete an incident.

**Table 10-5** Managing incidents

| Operation | Description |
| --- | --- |
| Closing an Incident | 1. Locate the row that contains the target incident and click **Close** in the **Operation** column.<br>To close multiple incidents, select them in the incident list and click **Close** above the list.<br>2. In the confirmation dialog box, select **Reason for**, enter **Close Comment**, and click **OK**. |

| Operation | Description |
| --- | --- |
| Deleting an Incident | 1. On the **Incident** page, locate the row that contains the target incident and click **Delete** in the **Operation** column. To delete multiple incidents, select the target incidents in the incident list and click **Delete** above the list.<br>2. In the dialog box that is displayed, click **OK**.<br>**NOTE**<br>Deleted incidents cannot be restored. Exercise caution when deleting an incident. |

**----End**

# 10.2 Alert Management

## 10.2.1 Viewing Alerts

### Scenario

An alert is a notification of abnormal signals in O&M. It is usually automatically generated by a monitoring system or security device when detecting an exception in the system or networks. For example, when the CPU usage of the server exceeds 90%, the system may generate an alert. These exceptions may include system faults, security threats, or performance bottlenecks.

Generally, an alert can clearly indicate the location, type, and impact of an exception. In addition, alerts can be classified by severity, such as critical, major, and minor, so that O&M personnel can determine which alerts need to be handled first based on their severity.

The purpose of an alert is to notify related personnel in a timely manner so that they can make a quick response and take measures to fix the problem.

When SecMaster detects an exception (for example, a malicious IP address attacks an asset or an asset has been hacked into) in cloud resources, it generates an alert and displays the threat information on the **Alerts** page in SecMaster.

On the **Alerts** page in SecMaster, you can check the alert list for the last 360 days. The list contains alert names, types, severity levels, and occurrence time. By customizing filtering conditions, such as the alert name, risk severity, and time, you can quickly query information about the specific alerts.

This section describes how to view alert information.

### Prerequisites

To check alerts from other cloud services, you need to enable the function of automatically converting logs to alerts on the **Data Integration** page. If this function is disabled, logs that meet certain alert rules will not be converted to alerts or displayed on the **Alerts** page. For details, see **Enabling Log Access**.

## Procedure

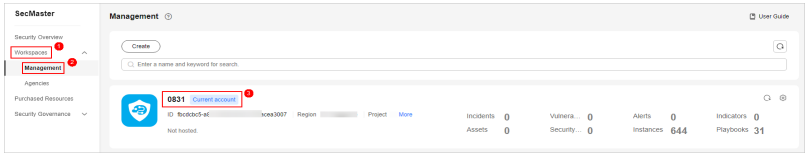
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

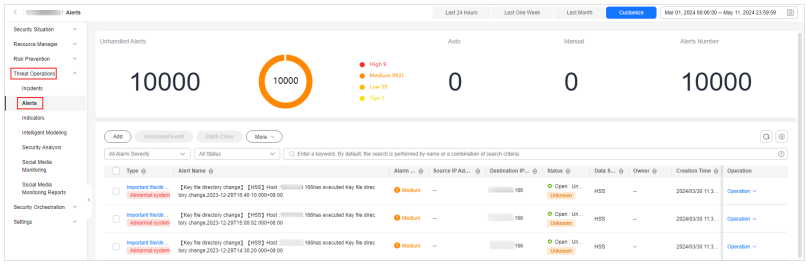
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-14** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-15** Alerts




**Step 6** View alert information.

**Figure 10-16** Viewing Alerts

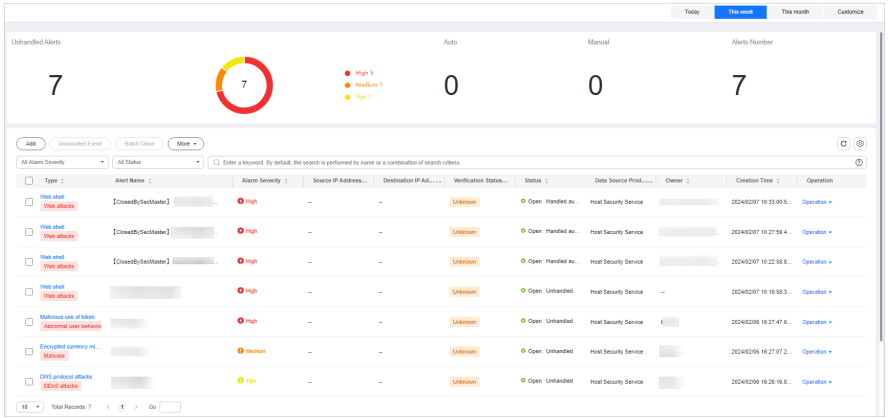


**Table 10-6** Viewing Alerts

| Parameter | Description |
| --- | --- |
| Time ranges (**Today**, **This week**, **This month**, or **Customize**) | In the upper right corner on the page, you can select a time range to view alerts generated during this period. By default, alerts generated in the current week are displayed. |
| **Unhandled Alerts** | This area displays how many alerts that are not handled within the specified time range in the current workspace. The unhandled alerts are displayed by severity. |
| Alerts Handled Automatically (**Auto**) | This area displays how many alerts that are handled automatically by playbooks within the specified time range in the current workspace. |
| Alerts Handled Manually (**Manual**) | This area displays how many alerts that are handled manually within the specified time range in the current workspace. |
| Alerts | This area displays how many alerts that are reported within the specified time range in the current workspace. |

| Parameter | Description |
| --- | --- |
| Alarm list | The list displays more details about each alert.<br>You can view the total number of alerts below the alert list. You can view a maximum of 10,000 alert records page by page. To view more than 10,000 records, optimize the filter criteria.<br>In the alert list, you can view the alert type, summary, severity, source, and handling status. To view details about an alert, click its name. On the alert details page displayed:<br>• You can comment on, block, unblock, close, and delete the alert, convert the alert to an incident, and refresh the alert status.<br>• You can view the security overview, context, relationship, and comments about the alert.<br>– **Security Overview**: On this tab, you can view the summary, handling suggestions, basic information, and request details of the alert.<br>– **Context**: On this tab, you can view the key and full context information of the alert in JSON format or in a table.<br>– **Relationship**: On this tab, you can view associated information, such as associated alerts, incidents, indicator, and affected assets, about the alert.<br>– **Comment**: On this tab, you can view historical comments on the alert and make your comments. |

**----End**

# 10.2.2 Converting an Alert to an Incident or Associating an Alert with an Incident

## Scenario

SecMaster analyzes alerts it aggregates from other services. During the analysis, if SecMaster detects attacks or serious threats, it converts such alerts into incidents or associates such alerts with certain incidents.

This section describes how to convert an alert to an incident and how to associate an alert with an incident.

## Relationships Between Alerts and Incidents

This part describes the meanings and differences between alerts and incidents, reasons for converting alerts to incidents, and reasons for associating alerts with incidents.

- **Meanings and Differences Between Alerts and Incidents**

**Table 10-7 Meanings and differences between alerts and incidents**

| Type | Description |
| --- | --- |
| Definition | • Alerts<br>An alert is a notification of abnormal signals in O&M. It is usually automatically generated by a monitoring system or security device when detecting an exception in the system or networks. For example, when the CPU usage of the server exceeds 90%, the system may generate an alert. These exceptions may include system faults, security threats, or performance bottlenecks.<br>Generally, an alert can clearly indicate the location, type, and impact of an exception. In addition, alerts can be classified by severity, such as critical, major, and minor, so that O&M personnel can determine which alerts need to be handled first based on their severity.<br>The purpose of an alert is to notify related personnel in a timely manner so that they can make a quick response and take measures to fix the problem.<br>• Incidents<br>An incident is a broad concept, and may include, but is not limited to, an alert. An incident can be a part of the normal operation of the system, an exception, or an error. In the O&M and security fields, an incident usually refers to a problem or fault that has occurred and needs to be focused on, investigated, and handled. An incident may be triggered by one or more alerts or other factors, such as user operations and system logs.<br>An incident is usually used to record and report historical activities in a system for analysis and audits. |

| Type | Description |
| --- | --- |
| Handling process | • Alerts<br>The alert handling process includes receiving, confirming, analyzing, responding to, and closing alerts. When the monitoring system generates an alert, O&M personnel need to confirm that the alert is a positive one. Then, they need to analyze the alert causes and impact scope, take measures to rectify the fault, and close the alert.<br>• Incidents<br>The event handling process is more complex and comprehensive. In addition to each phase in the alert handling process, incident handling also involves incident investigation, impact assessment, risk analysis, emergency plan formulation, emergency response execution, and post-event summary. The objective of incident handling is to completely solve problems, prevent similar incidents in the future, and reduce the impact of incidents on services. |
| Importance and urgency | • Alerts<br>Generally, alerts need to be evaluated and responded immediately.<br>The severity and importance of each alert vary depending on the alert type, severity, and impact scope. Some alerts may be simple reminders or warnings, while others may indicate that the system has been severely attacked or faces major fault risks.<br>• Incidents<br>In some cases, incidents may need to be recorded, analyzed, and handled, but do not require immediate responses.<br>An incident is usually of higher importance and urgency than an alert. Because an incident has occurred and has had an actual impact, immediate measures need to be taken to control the risk and solve the problem. If an incident is not handled in a timely manner, it may cause significant economic loss or reputation damage to the organization. |

- **Causes for converting alerts to incidents or associating alerts with incidents**

  An alert is a notification generated when a system or service becomes abnormal or a potential fault occurs. These exceptions may directly affect service availability. So alerts must be handled in a timely manner to prevent service exceptions. When an alert is generated, you need to take corresponding measures to rectify the fault. Otherwise, services may be abnormal due to these exceptions or faults.

  An incident is a notification generated when the system or service is running properly. An event may involve some important status changes, but may not

cause service exceptions. So incidents do not need to be handled. They are mainly used to analyze and locate problems.

**Table 10-8** Causes for converting alerts to incidents or associating alerts with incidents

| Type | Description |
| --- | --- |
| **Alert-to-Incident reasons** | When the severity of an alert reaches a certain level, an alert appears continuously, or the impact scope is wide, the alert may not only be a signal that requires attention. It also indicates that a continuous problem exists in the system or network. In this case, the alert has evolved into an incident that needs to be handled immediately. So, we need to convert such alerts to incidents to further investigate the root causes and take necessary measures. Generally, an alert will be converted to an incident out of the following causes:<br>• Information aggregation and classification<br>An alert is usually an instant response to a violation against a specific condition or threshold. The number of alerts is increasing over time. If they are handled independently, it would cause chaos and waste time and human resources. Aggregating these alerts into incidents helps related personnel classify alerts by alert type, source, and impact so that they can handle them more effectively.<br>• Simplified working processes<br>During the process to convert alerts to incidents, alerts are filtered, deduplicated, and aggregated. So that multiple similar alerts that may be triggered are integrated into a more representative incident. In this way, the workload of handling alerts is reduced; the handling process is clearer; and the tracing and recording become easier.<br>• **Higher problem-solving efficiency**<br>As an incident has much more context details than an alert, related personnel can easily identify the root cause. This helps quickly locate issues and take effective measures.<br>• Historical data review and trend analysis<br>An incident usually records the entire process of how an issue occurred, evolved, and is resolved. So converting alerts to incidents provides helpful historical data for prevention of similar issues and system optimization. By analyzing the trend of an incident, O&M personnel can discover potential weak points in the system and take measures in advance.<br>• Cross-department collaboration enhanced<br>In a large organization, different departments may need to participate in the handling of problems. After an alert is converted to an incident, related information can be shared among departments more easily, which promotes cross-department |

| Type | Description |
| --- | --- |
| | collaboration and improves problem solving efficiency.<br>In a word, converting alerts to incidents helps simplify working processes, improve problem solving efficiency, and facilitate historical review and trend analysis. |

| Type | Description |
| --- | --- |
| **Causes for associating alerts with incidents** | As an important part of monitoring and fault management, associating alerts with incidents involve combining multiple independent but possibly correlated incidents or alerts to better understand the root cause and scope of a problem, facilitating troubleshooting and response. Generally, an alert will be associated with an incident out of the following causes:<br>• Dependencies<br>In a complex system, there are complex dependencies between components. When a component becomes faulty, other components that depend on the component may be affected, causing a series of alerts. For example, in the microservice architecture, the crash of a service may cause problems in other services that use the service.<br>• Resource sharing<br>When multiple systems or services share the same resource (such as a server, database, or network device), the problem of the resource may cause multiple systems or services to generate alerts at the same time. For example, a performance deterioration of a shared database server may trigger performance alerts for multiple applications that depend on the database.<br>• Chain reactions<br>In some cases, an initial failure may trigger a series of chain reactions, affecting more components or systems. This chain reaction may be caused by improper system design, incomplete error handling mechanism, or resource limitations (such as performance deterioration caused by memory leakage).<br>• Configuration errors<br>Incorrect or inconsistent configurations may cause system behavior exceptions, triggering multiple seemingly irrelevant alerts. For example, incorrect routing configurations may cause traffic to be incorrectly routed to unstable servers, causing multiple performance-related alerts.<br>• Software defects<br>Software defects, such as bugs, may cause programs to be abnormal in specific conditions and trigger alerts. If these defects affect multiple components or systems, multiple associated alerts may be generated.<br>• External factors<br>External factors, such as natural disasters (such as earthquakes and floods), network attacks, and |

| Type | Description |
| --- | --- |
| | infrastructure faults (such as power outages and network interruptions), may also cause problems in multiple systems or components at the same time and trigger a large number of alerts. |

## Converting an Alert to an Incident

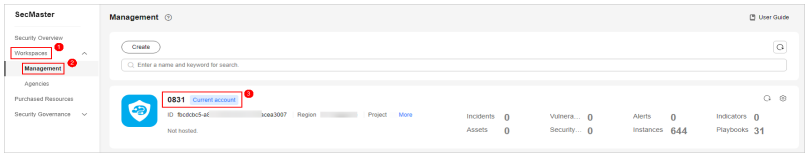
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

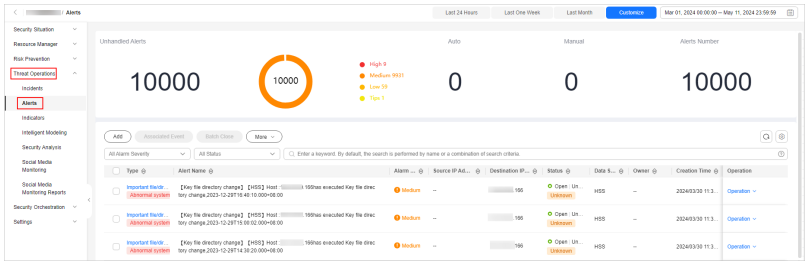
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-17** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-18** Alerts




**Step 6** In the alert list, locate the row that contains the target alert, click **Convert to Incident** in the **Operation** column. The **Convert to Incident** page is displayed on the right.

In addition, you can click **Alert-to-Incident** in the upper right corner of the details page of an alarm.

**Step 7** On the **Convert to Incident** page, specify **Incident Name** and **Incident Type**.

The incident name is automatically set to the name of the current alert. This name can be modified.

**Step 8** Click **OK**.

**----End**

## Associating an Alert with an Incident

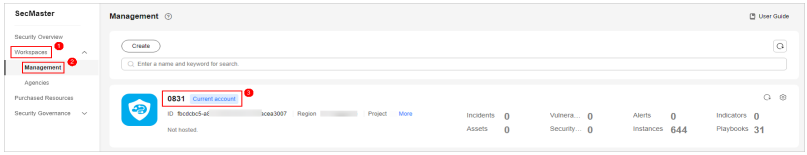
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

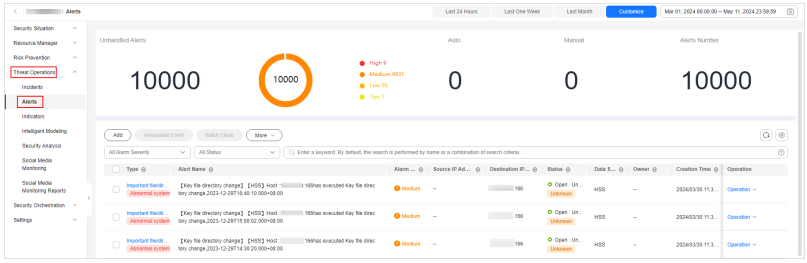
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-19** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-20** Alerts




**Step 6** In the alert list, select the alerts you want to associate and click **Associated Event** above the list. The **Bind Incident** dialog box is displayed.

**Step 7** In the dialog box displayed, select the target incidents and click **OK**.

After the association is complete, click the type of the target alert in the alert list. On the alert details page displayed, choose **Relationship** > **Associated Incidents** and check the association details.

**----End**

# 10.2.3 Adding and Editing an Alert

## Scenario

This section describes how to add or edit an alert.

## Adding an Alert

**Step 1** Log in to the management console.

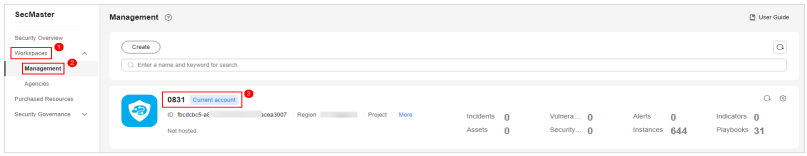
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

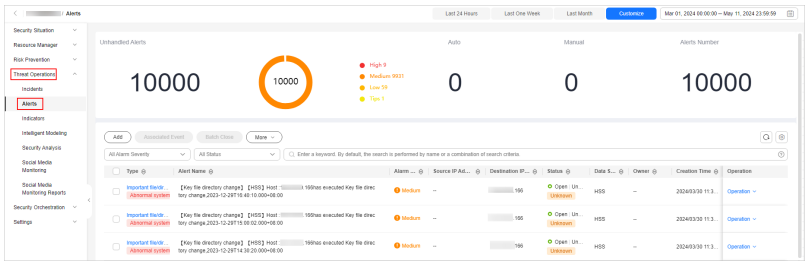
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-21** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-22** Alerts




**Step 6** On the **Alerts** page, click **Add**. On the **Add** page displayed on the right, set parameters as described in **Table 10-9**.

**Table 10-9** Alert parameters

| Parameter | | Description |
| --- | --- | --- |
| Basic information | Alert Name | User-defined alert name. The value must contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 255 characters |
| | Alert Type | Alert type |
| | Alert Severity | Alert severity. The options are **Informational**, **Low**, **Medium**, **High**, and **Critical**. |
| | Status | Alert status. The options are **Open**, **Blocked**, and **Closed**. |
| | (Optional) Owner | Primary owner of the alert. |
| | Data Source Product Name | Data source name |
| | Data Source Type | Type of the data source. The options are **Cloud Service**, **Third-party**, and **Private**. |

| Parameter | | Description |
| --- | --- | --- |
| Timeline | First Occurrence Time | Time when an alert is generated for the first time. |
| | (Optional) Last Occurrence Time | Last time when an alert was generated |
| | (Optional) Planned Closure Time | Time when the alert plan is disabled. |
| Other | (Optional) Verification Status | Verification status of the alert to identify the accuracy of the alert. The options are **Unknown**, **Positive**, and **False positive**. |
| | (Optional) stage | Alert phase.<br>• **Preparation**: Prepare resources to process alert.<br>• **Detection and analysis**: Detect and analyze the cause of an alert.<br>• **Containment, extradition, and recovery**: Handle an alert.<br>• **Post Incident Activity**: Follow-up activities. |
| | (Optional) Debugging data | Whether to enable simulated debugging. |
| | (Optional) Labels | Alert labels. |
| | Description | Alert description. The value can contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 1,024 characters. |

**Step 7** Click **OK**.

**----End**

## Editing an Alert

**Step 1** Log in to the management console.

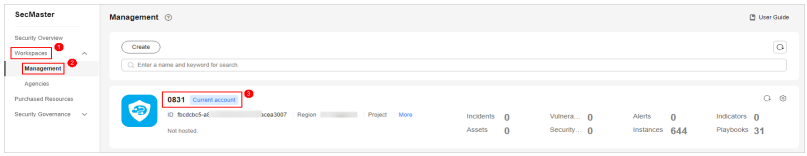
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

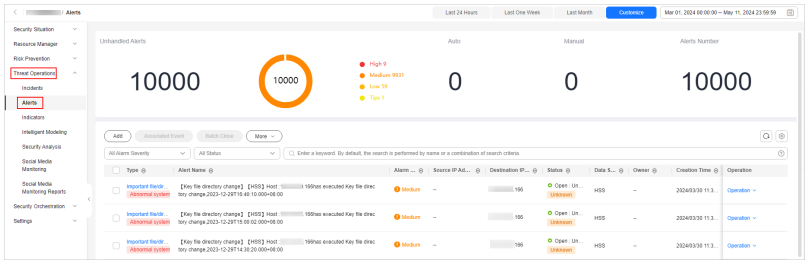
  

**Figure 10-23** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-24** Alerts



**Step 6** In the alert list, locate the row that contains the target alert and click **More** > **Edit** in the **Operation** column.

**Step 7** On the **Edit** slide-out that is displayed, modify alert parameters. For details about the parameters, see **Table 10-10**.

**Table 10-10** Alert parameters

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Alert Name | User-defined alert name. The value must contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 255 characters |
| | Alert Type | Alert type |
| | Alert Severity | Alert severity. The options are **Tips**, **Low**, **Medium**, **High**, and **Fatal**. |
| | Status | Alert status. The options are **Open**, **Blocked**, and **Closed**. |
| | (Optional) Owner | Primary owner of the alert. |
| | Data Source Product Name | Name of the data source, which **cannot be changed** |
| | Data Source Type | Type of the data source, which **cannot be changed** |
| Timeline | First Occurrence Time | Time when an alert is generated for the first time. |

| Parameter | | Description |
| --- | --- | --- |
| | Last Occurrence Time | Last time when an alert was generated |
| | Planned Closure Time | Time when the alert plan is disabled. |
| Other | Labels | Alert labels. |
| | Debugging data | Whether to enable simulated debugging. This parameter **cannot be modified** once configured. |
| | Verification Status | Verification status of the alert to identify the accuracy of the alert. The options are **Unknown**, **Positive**, and **False positive**. |
| | Stage | Alert phase.<br>• **Preparation**: Prepare resources to process alert.<br>• **Detection and analysis**: Detect and analyze the cause of an alert.<br>• **Contain, extradition, and recovery**: Handle an alert.<br>• **Post Incident Activity**: Follow-up activities. |
| | Description | Alert description. The value can contain:<br>• Only uppercase letters, lowercase letters, digits, and the special characters: -_ ()<br>• A maximum of 1,024 characters. |

**Step 8** Click **OK**.

**----End**

# 10.2.4 Importing and Exporting Alerts

## Scenario

This section describes how to import and export alerts.

## Limitations and Constraints

- Only .xlsx files no larger than 5 MB can be imported.
- A maximum of 9,999 alert records can be exported.

## Importing Alerts

**Step 1** Log in to the management console.

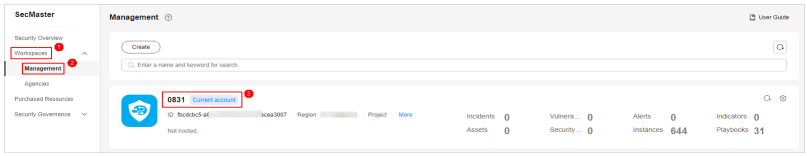
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

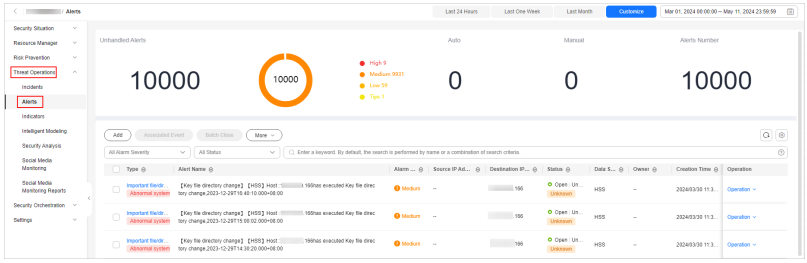
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-25** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-26** Alerts



**Step 6** On the **Alerts** page, click **More** > **Import** in the upper left corner of the list.

**Step 7** In the displayed **Import** dialog box, click **Download Template** to download a template, and fill in the downloaded template according to the requirements.

**Step 8** After the alert file is ready, click **Select File** in the **Import** dialog box, and select the Excel file you want to import.

**Step 9** Click **OK**.

**----End**

## Exporting Alerts

**Step 1** Log in to the management console.

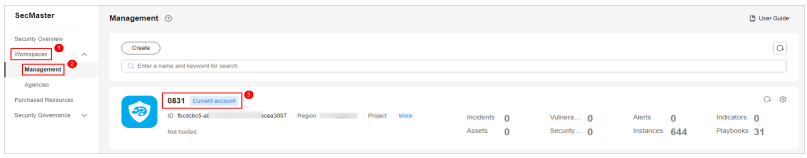
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

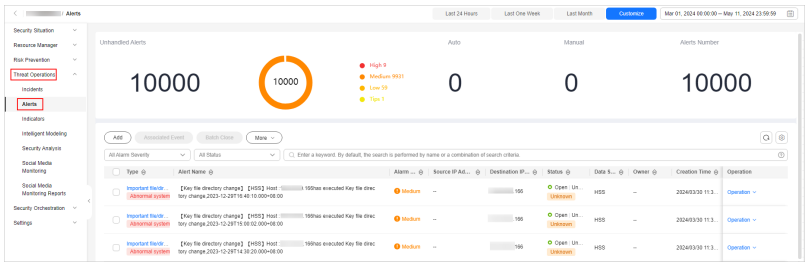
  

**Figure 10-27** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-28** Alerts



**Step 6** In the alert list, select the alerts you want to export and click **More** > **Export** in the upper right corner of the list.

**Step 7** In the **Export** dialog box, set parameters.

**Table 10-11** Exporting alerts

| Parameter | Description |
| --- | --- |
| Format | By default, the alert list is exported into an Excel. |
| Columns | Select the indicator parameters to be exported. |

**Step 8** Click **OK**.

The system automatically downloads the Excel to your local PC.

**----End**

# 10.2.5 Closing or Deleting an Alert

## Scenario

This topic describes how to close and delete an alert.

## Procedure

**Step 1** Log in to the management console.

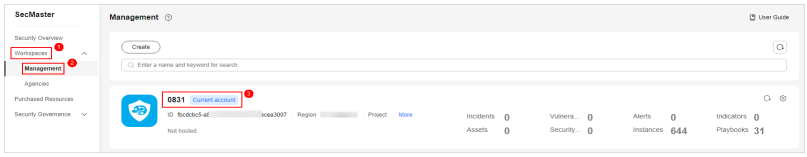
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

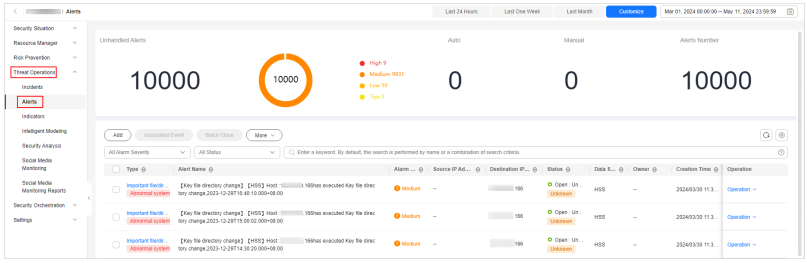
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-29** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-30** Alerts




**Step 6** On the **Alerts** page, close or delete an alert.

**Table 10-12** Managing alerts

| Operation | Description |
| --- | --- |
| Closing an alert | 1. Locate the row that contains the target alert, click **Close** in the **Operation** column. A dialog box is displayed for you to confirm the close operation.<br>To close multiple alerts, select the alerts in the alert list and click **Batch Close** above the list.<br>2. In the confirmation dialog box, select **Reason for**, enter **Close Comment**, and click **OK**. |
| Deleting an alert | 1. Locate the row that contains the target alert, click **More** in the **Operation** column, and select **Delete**. The deletion confirmation dialog box is displayed.<br>To delete multiple alerts, select the alerts in the alert list and click **More** > **Batch Delete** above the list.<br>2. In the displayed dialog box, click **OK**.<br>**NOTE**<br>Deleted alerts cannot be restored. Exercise caution when deleting an alert. |

**----End**

## 10.2.6 Handling Alerts based on Suggestions

During data integration, SecMaster can automatically convert cloud service logs to alerts. SecMaster provides the following suggestions for handling such concerted alerts.

## Abnormal System Behavior/High-risk Command Execution

- **Data source**

  HSS alert logs

- **Alert Presentation**

  [dangercmd] [HSS] Host: {{ipList}} Run dangercmd, {{__time}}

- **Monitoring Scenario**: HSS

  High-Risk command

- **Alert Field**

  To view corresponding high-risk command alerts in SecMaster, take the following steps:

  a. Go to the **Security Orchestration** page of the target workspace. Then, choose **Objects** > **Classify&Mapping**.

  b. Click the name of the **HSS Alert Categorization and Re-Mapping** to go to the details page.

     The high-risk command execution corresponds to **msg.appendInfo.event_type=3015**.

- **Investigation Guideline and Handling Suggestion**

  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-hss-alarm**. The query and analysis page of **ssec-hss-alarm** is displayed on the right.

  b. Search for the log details for the current alert based on the values of the **appendInfo.event_type**, **__time**, and **ipList** fields to confirm the meaning and purpose of the command.

     - Use the **appendInfo.process_info** field to check whether the current high-risk command (process_cmdline) and its parent process command (parent_process_cmdline) are suspicious.
     - You can use **sec-hss-log** to query the host (**ipList**) behavior in a similar period of time, and use **appendInfo.pid_link (sec-hss-log)** and **appendInfo.process_info.parent_process_pid(sec-hss-alarm)** to sort the process sequence. Then, you can make informative decisions to find out suspicious processes and commands. For those processes and commands, you can scan for further hacking behavior, such as viewing sensitive data, viewing network environments, privilege escalation, network probing, and PoC execution.
     - If it is confirmed that the fault is triggered by attacks, contact the resource owner immediately.

- **High-Risk Commands**

  The high-risk commands involved in alerts are as follows:

  – **strace**: captures and records all system calls of a specified process and all received signals.

  – **rz**: used to upload files from a local computer to a remote server. It is usually used in SSH sessions.

  – **sz**: used to download files from a remote server to a local computer. This command is usually used in SSH sessions.

- **tcpdump**: used to probe data packets and capture data packets flowing on network adapters.
- **nmap**: used to scan and probe networks.
- **nc/ncat**: or netcat, used to implement many network-related functions, such as listening and connecting ports.

## Web Attacks (SQL Injection)

- **Corresponding Alert Field**

  To view corresponding SQL inject alerts in SecMaster, take the following steps:

  a. Go to the **Security Orchestration** page of the target workspace. Then, choose **Objects** > **Classify&Mapping**.

  b. Click the name of the **WAF Alert Categorization and Re-Mapping** to go to the details page.

     The **msg.attack** for SQL injection is **sqli**.

- **Troubleshooting Methods and Handling Suggestions**

  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-waf-attack**. The query and analysis page of sec-waf-attack is displayed on the right.

  b. Search for the log details for the current alert based on the values of the **attack**, **__time**, and **sip** fields. The key parameters are as follows:

     - **hit_data**: attack packet or link.
     - **uri**: request URL.
     - **action**: processing action
     - **cookie**: request cookie information.

  c. Check attack packets to see how the SQL injection is made and check whether there is any vulnerability in the application.

     If there is, rectify the fault in time by using parameterized query, input verification, and software update and patching.

## Web Attacks/Vulnerability Exploits

- **Corresponding Alert Field**

  To view corresponding vulnerability exploit alerts in SecMaster, take the following steps:

  a. Go to the **Security Orchestration** page of the target workspace. Then, choose **Objects** > **Classify&Mapping**.

  b. Click the name of the **WAF Alert Categorization and Re-Mapping** to go to the details page.

     The **msg.attack** value for vulnerability exploits is **vuln**.

- **Troubleshooting Methods and Handling Suggestions**

  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-waf-attack**. The query and analysis page of sec-waf-attack is displayed on the right.

b. Search for the log details for the current alert based on the values of the **attack**, **__time**, and **sip** fields. The key parameters are as follows:

- **hit_data**: attack packet or link.
- **uri**: request URL.
- **action**: processing action
- **cookie**: request cookie information.
- **header**: request header information.

c. Confirm the vulnerability exploit type based on the attack packet and detect vulnerabilities in attacked assets.

If there is a vulnerability, fix it in a timely manner to prevent attackers from exploiting this vulnerability to attack the system or applications.

## Web Attacks/Command Injection

- **Corresponding Alert Field**

  To view corresponding command injection alerts in SecMaster, take the following steps:

  In SecMaster, choose **Security Orchestration** > **Objects** > **Classify&Mapping**. Click **WAF Alert Categorization and Re-Mapping** to go to the details page. The **msg.attack** value for command injection attacks is **cmdi**.

- **Troubleshooting Methods and Handling Suggestions**

  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-waf-attack**. The query and analysis page of sec-waf-attack is displayed on the right.

  b. Search for the log details for the current alert based on the values of the **attack**, **__time**, and **sip** fields. The key parameters are as follows:

  - **hit_data**: attack packet or link.
  - **uri**: request URL.
  - **action**: processing action
  - **cookie**: request cookie information.
  - **header**: request header information.

  c. Check attack packets to see how the command injection is made and check whether there is any vulnerability in the application.

  - If there is any vulnerability, fix it as soon as possible and update the related software or database version.
  - Perform a comprehensive check on the system to see if there are other vulnerabilities or backdoors.
  - Restrict system access permissions. For example, you can disable the root account and restrict access from some IP addresses to reduce possible intrusion paths.

## Abnormal System/Process Behavior

Locate the affected assets, services, and workloads based on the corresponding alerts.

- **Corresponding Alert Field**

  To view corresponding abnormal system or process behavior alerts in SecMaster, take the following steps:

  a. Go to the **Security Orchestration** page of the target workspace. Then, choose **Objects** > **Classify&Mapping**.

  b. Click the name of the **HSS Alert Categorization and Re-Mapping** to go to the details page.

     Abnormal process behavior: **msg.appendInfo.event_type=3007**

- **Troubleshooting Methods and Handling Suggestions**

  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-hss-alarm**. The query and analysis page of sec-hss-alarm is displayed on the right.

     i. Search for the log details for the current alert based on the values of the **appendInfo.event_type**, **__time**, and **ipList** fields.

  b. Check the information about the current process and parent process in **appendInfo. process_info** to determine whether the process is abnormal. If the process is abnormal, contact the corresponding resource owner.

     - Immediately stop affected processes or services to avoid further attacks or other damage.
     - Investigate the causes and sources of abnormal behavior by all means, for example, viewing logs, monitoring the system, and analyzing the process memory, to determine the specific symptoms and possible root causes of exceptions.
     - Based on the nature and severity of the abnormal behavior, take proper measures, such as restarting processes, rectifying software errors, rectifying system faults, and replacing hardware devices.
     - Comprehensively check the affected system to see if there are other vulnerabilities or backdoors.

## Abnormal System Behavior/Key File Directory Modifications

Locate the affected assets, services, and workloads based on the corresponding alerts.

- **Corresponding Alert Field**

  To view corresponding key file directory modification alerts in SecMaster, take the following steps:

  a. Go to the **Security Orchestration** page of the target workspace. Then, choose **Objects** > **Classify&Mapping**.

  b. Click the name of the **HSS Alert Categorization and Re-Mapping** to go to the details page.

     Key file directory modification: **msg.appendInfo.event_type=3005**

- **Troubleshooting Methods and Handling Suggestions**
  a. Go to the **Threat Operations** > **Security Analysis** page in SecMaster, expand the target data space, and click pipeline **sec-hss-alarm**. The query and analysis page of sec-hss-alarm is displayed on the right.
  b. Search for the log details for the current alert based on the values of the **appendInfo.event_type**, **__time**, and **ipList** fields.

     In the preceding information, **appendInfo.file_info** indicates the file directory information. Check whether the file directory information is normal. If the file directory information is abnormal, contact the corresponding resource owner.

     - Determine the impact scope of the change. First, determine the files that are affected by the directory change and the impact of the files on services. If the impact scope is large, immediate measures must be taken to prevent further losses.
     - Restore key files: If directories or files are changed abnormally, restore them in a timely manner. If a file is deleted or damaged, you need to restore it from a backup. If the files are not backed up, stop related operations immediately and take data restoration measures to restore the files to the status before the change.
     - Update related configurations: For some programs and systems that require configuration file paths, update related configurations in a timely manner to ensure that these programs and systems can correctly access key files.
     - Review the change reason: Review and check the reason for the directory change. If the change was caused by human misoperations, correct the fault and strengthen management in a timely manner. If the change was made by the system, evaluate the necessity and impact of the change and ensure that the change is reasonable and secure.
     - Enhance security measures: For security management of key files, measures must be enhanced to ensure that files cannot be mistakenly deleted, maliciously tampered with, or disclosed. Measures such as encryption, backup, and access control can be taken to ensure file integrity and availability.

# 10.2.7 One-click Blocking or Unblocking

## Scenario

An emergency policy is used to quickly prevent attacks. You can select a block type based on the alert source to block attackers. **Table 10-13** lists recommended settings. You can also block a single attack source based on the comprehensive investigation of multiple alerts.

**Table 10-13** Recommended blocking policies

| Alert Type | Defense Layer | Recommended Policy |
| --- | --- | --- |
| HSS alerts | Server protection | VPC policies are recommended to block traffic. |
| WAF alerts | Application protection | WAF policies are recommended to block traffic. |
| CFW alerts | Network protection | CFW policies are recommended to block traffic. |
| IAM alerts | Identity authentication | IAM policies are recommended to block traffic. |
| OBS and DBSS alerts | Data protection | You can use VPC or CFW policies based on actual attack scenarios and investigation results to disconnect attack sources from protected resources. |

This topic describes how to block or unblock attack sources quickly.

## One-click Blocking

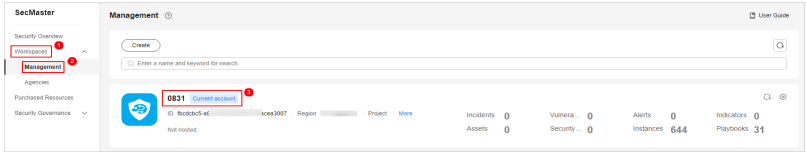
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

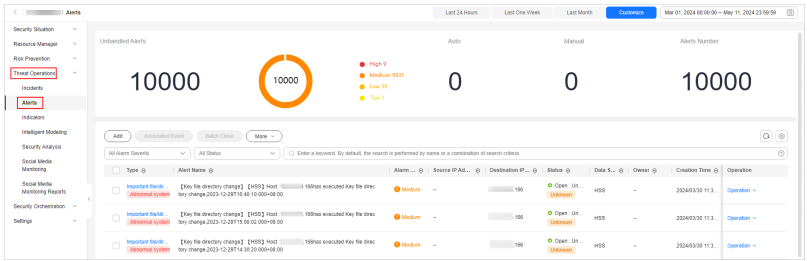
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-31** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-32** Alerts



**Step 6** In the alert list, locate the row that contains the target alert and choose **Operation** > **One-Click Block** in the **Operation** column. The **One-Click Block** panel is displayed on the right.

You can also go to the details page of the target alert and click **One-Click Block** in the upper right corner of the page.

**Step 7** On the displayed page, configure the blocking policy.

**Table 10-14** One-click blocking

| Parameter | Description |
| --- | --- |
| Block Object | • If you select **IP** for **Blocked Object Type**, enter one or more IP addresses or IP address ranges you want to block. If there are multiple IP addresses or IP address ranges, separate them with commas (,).<br>• If you select **IAM** for **Blocked Object Type**, enter IAM user names.<br>• There are some restrictions on delivery of blocked objects:<br>– When a policy needs to be delivered to CFW, each time a maximum of 50 IP addresses can be added as blocked objects for each account.<br>– When a policy needs to be delivered to WAF, each time a maximum of 50 IP addresses can be added as blocked objects for each account.<br>– When a policy needs to be delivered to VPC, each time a maximum of 20 IP addresses can be added as blocked objects within 1 minute for each account.<br>– When a policy needs to be delivered to IAM, each time a maximum of 50 IAM users can be added as blocked objects for each account. |
| Label | Label of the custom emergency policy. |
| Operation Connection | Select the operation connections for the policy. |
| Block Aging | Check whether the policy needs to be stopped.<br>• If you select **Yes**, set the aging time of the policy. For example, if you set the aging time to 180 days, the policy is valid within 180 days after the setting. After 180 days, the IP address or IP address range will not be blocked.<br>• If you select **No**, the policy is always valid and blocks the specified IP address or IP address range. |
| Policy Description | Description of the custom policy. |

**Step 8** Click **OK**. In the dialog box displayed, confirm the information and click **OK**.

**----End**

## One-click Unblocking

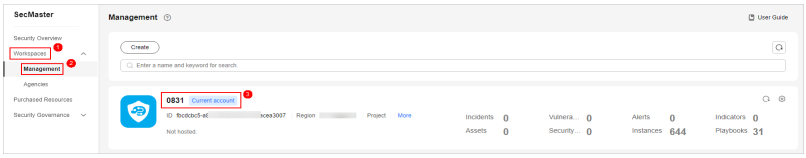
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

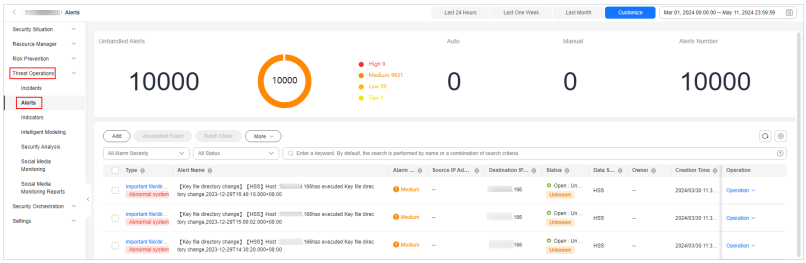
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-33** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 10-34** Alerts




**Step 6** In the alert list, locate the row that contains the target alert, click **Operation** > **One-Click Unblock** in the **Operation** column.

You can also go to the details page of the target alert and click **One-Click Unblock** in the upper right corner of the page.

**Step 7** In the displayed dialog box, enter the reason and click **OK**.

**----End**

# 10.3 Indicator Management

## 10.3.1 Adding and Editing an Indicator

### Scenario

The indicator library list displays information about all your indicators.

This section describes how to create and edit an indicator.

## Adding an Indicator

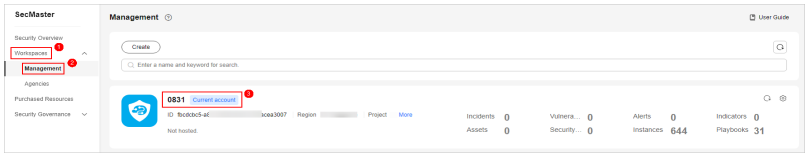
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

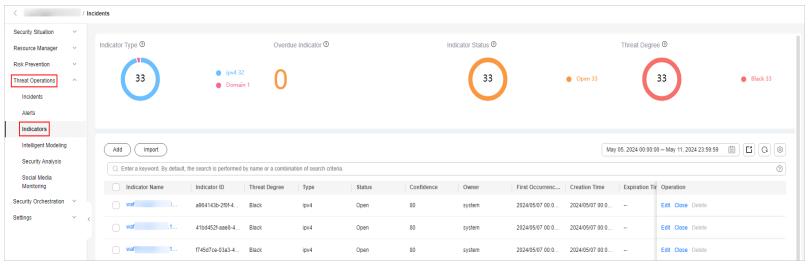
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-35** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-36** Indicators



**Step 6** On the **Indicators** page, click **Add**. On the **Add** page, set parameters.

**Table 10-15** Indicator parameters

| Parameter | Description |
| --- | --- |
| Indicator Name | Name of a user-defined threat indicator. The value can contain:<br>Only uppercase letters, lowercase letters, digits, and the special characters: -_ () |
| Type | Indicator type. |
| Threat Degree | Select a threat degree level.<br>• **Black**: dangerous<br>• **Gray**: minor<br>• **White**: secure |
| Data Source Product Name | Data source product name |

| Parameter | Description |
| --- | --- |
| Data Source Type | Type of the data source. The options are **Cloud Service**, **Third-party**, and **Private**. |
| Status | Indicator status. Possible values are **Open**, **Closed**, and **Revoked**. |
| (Optional) Confidence | Reliability of the selected indicator. The value ranges from 80 to 100. |
| (Optional) Owner | Primary owner of the indicator. |
| (Optional) Labels | Label of a user-defined counter. |
| First Occurrence Time | First occurrence time of the indicator. |
| Last Occurrence Time | Latest occurrence time of the indicator. |
| (Optional) Expiration Time | Expiration time of the indicator. |
| Invalid or not | Whether to invalidate the indicator. The default value is **No**. |
| Granularity | Granularity of the indicator. The options are **First time observed**, **In-house data**, **To be purchased**, and **Queried from external networks**. |
| *Other parameters* | You need to set the parameters based on the selected type. Set the parameters as prompted.<br>For example, if you select **IPv6** for **Type**, you also need to configure the IP address, email account, and region. |

**Step 7** Click **OK**.

**----End**

## Editing an Indicator

**Step 1** Log in to the management console.

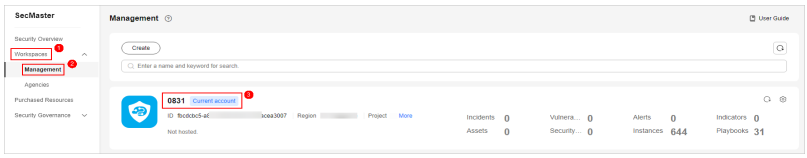
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

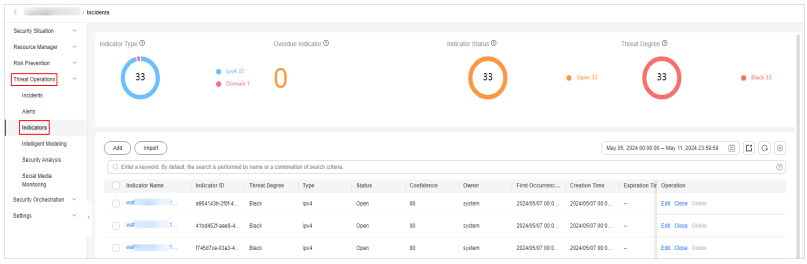
  

**Figure 10-37** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-38** Indicators



**Step 6** On the **Indicators** page, locate the target indicator and click **Edit** in the **Operation** column.

**Step 7** On the **Edit** page that is displayed, edit indicator parameters.

**Table 10-16** Indicator parameters

| Parameter | Description |
| --- | --- |
| Indicator Name | Name of a user-defined threat indicator. The value can contain:<br>Only uppercase letters, lowercase letters, digits, and the special characters: -_ () |
| Type | Indicator type. |
| Threat Degree | Select a threat degree level.<br>• **Black**: dangerous<br>• **Gray**: minor<br>• **White**: secure |
| Data Source Product Name | Name of the data source, which **cannot be changed** |
| Data Source Type | Type of the data source, which **cannot be changed** |
| Status | Indicator status. Possible values are **Open**, **Closed**, and **Revoked**. |
| Confidence | Reliability of the selected indicator. The value ranges from 80 to 100. |
| Owner | Primary owner of the indicator. |
| Labels | Label of a user-defined indicator. |

| Parameter | Description |
| --- | --- |
| First Occurrence Time | First occurrence time of the indicator. |
| Last Occurrence Time | Latest occurrence time of the indicator. |
| Expiration Time | Expiration time of the indicator. |
| Invalid or not | Whether to invalidate the indicator. The default value is **No**. |
| Granularity | Granularity of the indicator. The options are **First time observed**, **In-house data**, **To be purchased**, and **Queried from external networks**. |
| *Other parameters* | You need to set the parameters based on the selected type. Set the parameters as prompted.<br>For example, if you select **IPv6** for **Type**, you also need to configure the IP address, email account, and region. |

**Step 8** Click **OK**.

**----End**

## 10.3.2 Disabling and Deleting an Indicator

### Scenario

This topic describes how to disable or delete an indicator.

### Procedure

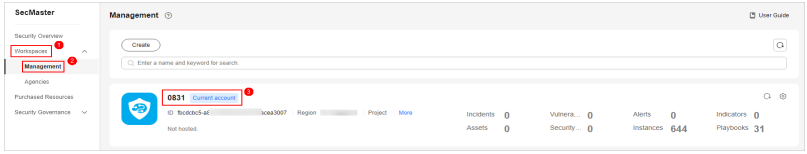
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

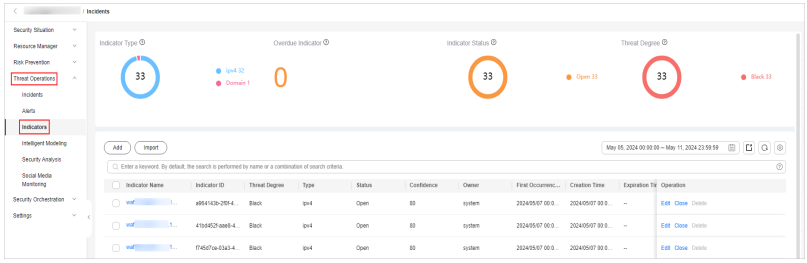
**Figure 10-39** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-40** Indicators



**Step 6** On the **Indicators** page, close or delete an indicator.

**Table 10-17** Indicator parameters

| Operation | Description |
| --- | --- |
| Close | 1. On the **Indicator** page, locate the row that contains the target indicator, click **Close** in the **Operation** column. The **Close** dialog box is displayed.<br>2. In the dialog box that is displayed, select the close reason and enter comments.<br>3. Click **OK**. |
| Delete | 1. On the **Indicators** page, locate the target indicator and click **Delete** in the **Operation** column.<br>2. In the dialog box displayed, click **OK**.<br>**NOTE**<br>Deleted indicators cannot be restored. Exercise caution when performing this operation. |

**----End**

# 10.3.3 Importing and Exporting Intelligence Indicators

## Scenario

This section describes how to import and export intelligence indicators.

## Constraints

- Only .xlsx files no larger than 5 MB can be imported.
- A maximum of 9,999 indicator records can be exported.

## Importing an Indicator

**Step 1** Log in to the management console.

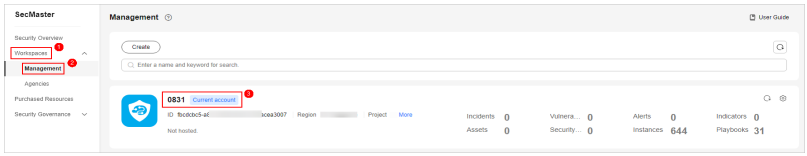
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

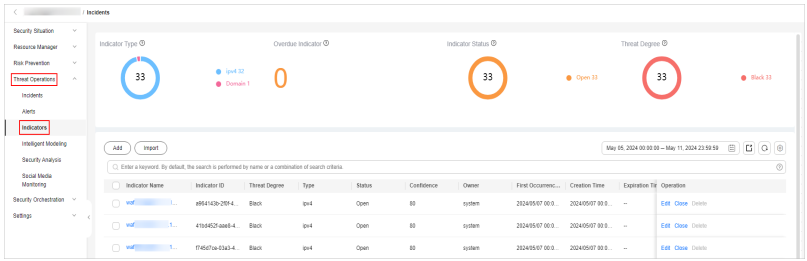
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-41** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-42** Indicators



**Step 6** On the **Indicator** page, click **Import** in the upper left corner above the indicator list.

**Step 7** In the displayed **Import** dialog box, click **Download Template** to download a template, and fill in the downloaded template according to the requirements.

**Step 8** After the indicator file is ready, click **Select File** in the **Import** dialog box, and select the Excel file you want to import.

**Step 9** Click **OK**.

**----End**

## Exporting Indicators

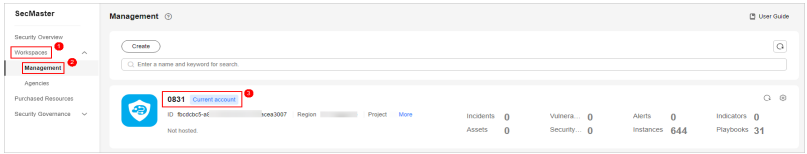
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

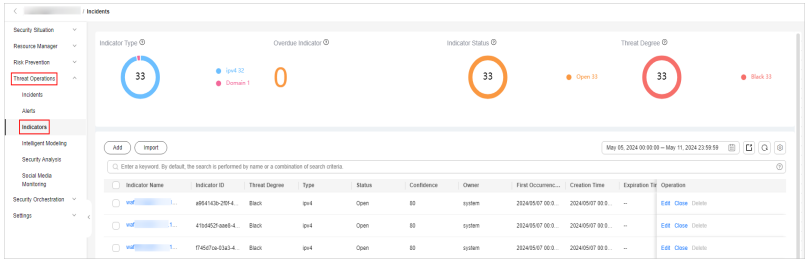
**Figure 10-43** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-44** Indicators



**Step 6** On the **Indicators** page, select the indicators you want to export and click in the upper right corner of the list. The **Export** dialog box is displayed.

**Step 7** In the **Export** dialog box, set parameters.

**Table 10-18** Exporting indicators

| Parameter | Description |
| --- | --- |
| Format | By default, the indicator list is exported into an Excel. |
| Columns | Select the indicator parameters to be exported. |

**Step 8** Click **OK**.

The system automatically downloads the Excel to your local PC.

**----End**

# 10.3.4 Viewing Indicators

## Scenario

This topic describes where to view existing intelligence indicators.

## Procedure

**Step 1** Log in to the management console.

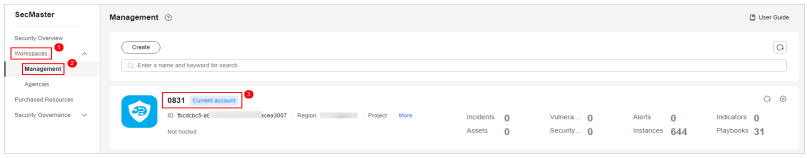
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

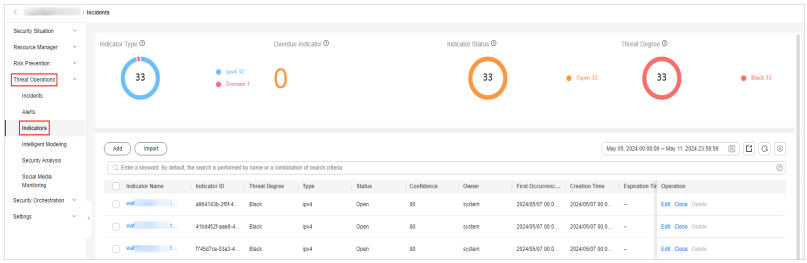
  

**Figure 10-45** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Indicators**.

**Figure 10-46** Indicators



**Step 6** On the **Indicators** page, view details about the indicator.

**Figure 10-47** Viewing an Indicator

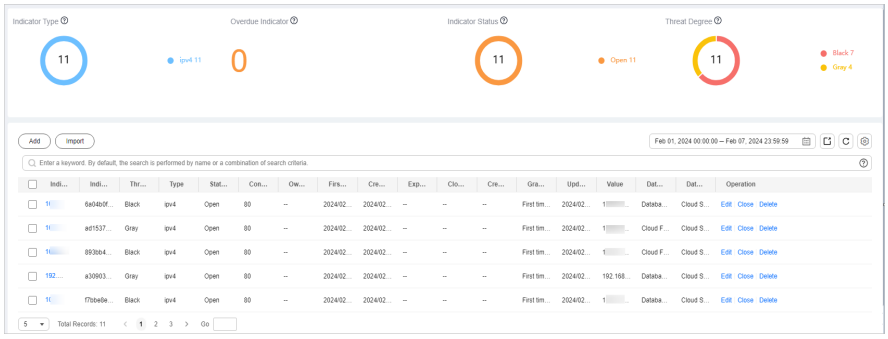


**Table 10-19** Indicator parameters

| Parameter | Description |
| --- | --- |
| Indicator Type | **Indicator Type** displays the total number of indicators of all types and the number of indicators of the corresponding type. |
| Overdue Indicator | **Overdue Indicator** displays the total number of threat indicators that have expired and have not been closed. |
| Indicator Status | **Indicator Status** displays the total number of indicators in different states and the number of indicators in the corresponding state. |
| Threat Degree | **Threat Degree** displays the number of indicators of different threat levels. |

| Parameter | Description |
| --- | --- |
| Indicator list | Displays detailed information about each indicator.<br>You can view the total number of indicators below the indicator list. You can view a maximum of 10,000 indicator records page by page. To view more than 10,000 records, optimize the filter criteria.<br>You can view the threat degree, discovery time, and status of indicators. To view details about an indicator, click the indicator name. The indicator details are displayed on the right of the page.<br>• On the **Indicator Overview** page, you can view basic information of an indicator as well as its association information, such as associated indicators, alerts, and incidents.<br>• In the **Associated Information** area, you can bind or unbind an indicator to or from other indicators, alerts, and incidents. |

**----End**

# 10.4 Intelligent Modeling

## 10.4.1 Viewing Available Model Templates

### Scenario

SecMaster uses models to scan log data in pipelines. If SecMaster detects data that hits the trigger in a model, SecMaster generates an alert. Models are created based on templates. Therefore, you need to use available templates to create models.

This section describes how to view available model templates.

### Procedure

**Step 1** Log in to the management console.

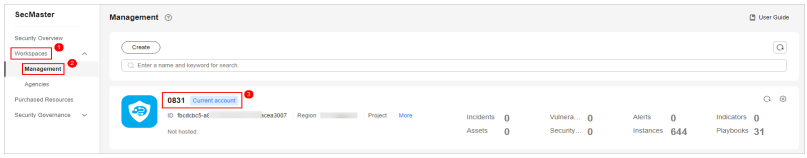
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

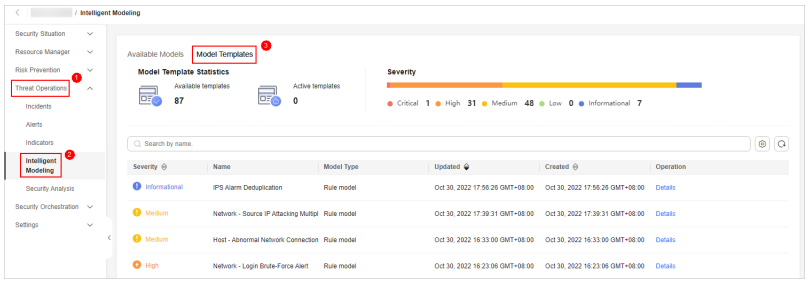
  

**Figure 10-48** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**, and select the **Model Templates** tab.

**Figure 10-49** Model Templates tab




**Step 6** On the **Model Templates** tab, view available model templates.

**Table 10-20** Template information

| Parameter | Description |
| --- | --- |
| Model Template Statistics | This area displays how many **Available templates** and how many **Active templates** you have. |
| Severity | This bar displays the number of available templates by severity levels, including **Critical**, **High**, **Medium**, **Low**, and **Informative**. |
| Template list | • The template list displays the severity, name, and model type of each template as well as when the template is created and upgraded.<br>• To view details about a model template, locate the row that contains the template, click **Details** in the **Operation** column. The template details page is displayed on the right.<br>On the details page, you can view the description, query rules, triggering conditions, and query plans of the current model template. |

**----End**

# 10.4.2 Creating and Editing a Model

## Scenario

SecMaster can use models to monitor log data in pipelines. If SecMaster detects the data that hits trigger conditions in a mode, SecMaster generates an alert.

The recommended preconfigured models in the current region can be automatically enabled in the first workspace of each region. For non-first workspaces, you need to enable them manually.

This topic describes how to create and edit an alert model.

- **Creating an Alert Model Using a Template**
- **Creating a Custom Alert Model**
- **Editing a Model**

## Limitations and Constraints

- A maximum of 100 alert models can be created in a single workspace under a single account in a single region.
- The running interval of an alert model must be greater than or equal to 5 minutes, and the time range for querying data must be less than or equal to 14 days.

## Creating an Alert Model Using a Template

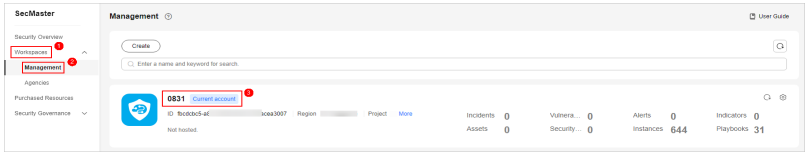
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

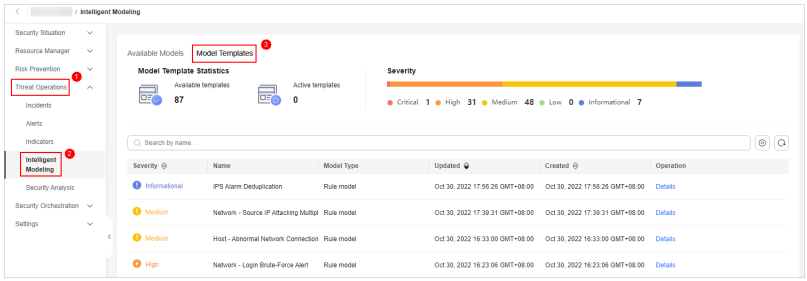
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-50** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**, and select the **Model Templates** tab.

**Figure 10-51** Model Templates tab




**Step 6** In the model template list, click **Details** in the **Operation** column of the target model template. The template details page is displayed on the right.

**Step 7** On the model template details page, click **Create Model** in the lower right corner. The page for creating an alert model is displayed.

**Step 8** On the **Create Threat Model** page, configure basic information about the model by referring to **Table 10-21**.

**Table 10-21** Basic alert model parameters

| Parameter | Description |
| --- | --- |
| Pipeline Name | Select the execution pipeline for the alert model based on the pipeline described in **Restrictions** area in the **Description** text box. |
| Model Name | Name of the alert model. |
| Severity | Severity of the alert model. You can set the severity to **Critical**, **High**, **Medium Low**, or **Informative**. |
| Alarm Type | Alarm type displayed after the alert model is triggered. |
| Model Type | The default value is **Rule model**. |
| Description | Description of the alert model |
| Status | Indicates whether to enable the alert model.<br>The status set here can be changed after the entire alert model is set successfully. |

**Step 9** After the setting is complete, click **Next** in the lower right corner of the page. The page for setting the model logic is displayed.

**Step 10** Set the model logic. For details about the parameters, see **Table 10-22**.

**Table 10-22** Configure Model Logic

| Parameter | Description |
| --- | --- |
| Query Rule | Set alert query rules. After the setting is complete, click **Run** and view the running result.<br>A query analysis statement consists of a query statement and an analysis statement. The format is **Query Statement\|Analysis Statement**. For details about the syntax of query analysis statements, see **Query and Analysis Statements - SQL Syntax**.<br>**NOTE**<br>If the reserved field is of the text type, **MATCH_QUERY** is used for word segmentation queries by default. |

| Parameter | Description |
| --- | --- |
| Query Plan | Set an alert query plan.<br>• Running query interval: xx minutes/hour/day. If the running query interval is minute, set this parameter to a value ranging from 5 to 59 minutes. If the running query interval is hour, set this parameter to a value ranging from 1 to 23 hours. If the running query interval is day, set this parameter to a value ranging from 1 to 14 days.<br>• Time window: xx minutes/hour/day. If the time window is minute, the value ranges from 5 minutes to 59 minutes. If the time window is hour, the value ranges from 1 hour to 23 hours. If the time window is day, the value ranges from 1 day to 14 days.<br>• Execution Delay: xx minutes. The value ranges from 0 to 5 minutes. |
| Advanced Alarm Settings | • **Custom Information**: Customize extended alert information. Click **Add**, and set the **key** and **value** information.<br>• **Alarm Details**: Enter the alarm name, description, and handling suggestions. |
| Trigger Condition | Sets alert triggering conditions. The value can be greater than, equal to, not equal to, or less than xx.<br>If there are multiple trigger conditions, click **Add** and add them. A maximum of five trigger conditions can be added.<br>If there are multiple trigger conditions, SecMaster scans log data to hit each trigger condition from top to bottom and generates all types of alerts for hit trigger conditions. |
| Alarm Trigger | The way to trigger alerts for queried results. The options are as follows:<br>• One alert for all query results<br>• One alert for each query result |
| Debugging | Sets whether to generate debugging alarms. |
| Suppression | Specifies whether to stop the query after an alert is generated.<br>• If **Suppression** is enabled, the **query stops** after an alert is generated.<br>• If **Suppression** is disabled, the **query is not stopped** after an alert is generated. |

**Step 11** After the setting is complete, click **Next** in the lower right corner of the page. The model details preview page is displayed.

**Step 12** After confirming that the preview is correct, click **OK** in the lower right corner of the page.

**----End**

## Creating a Custom Alert Model

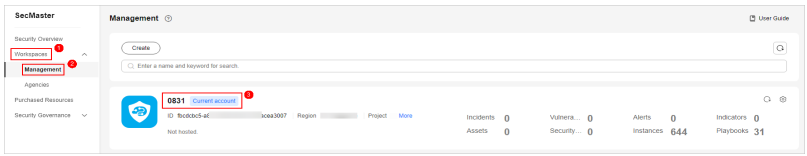
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

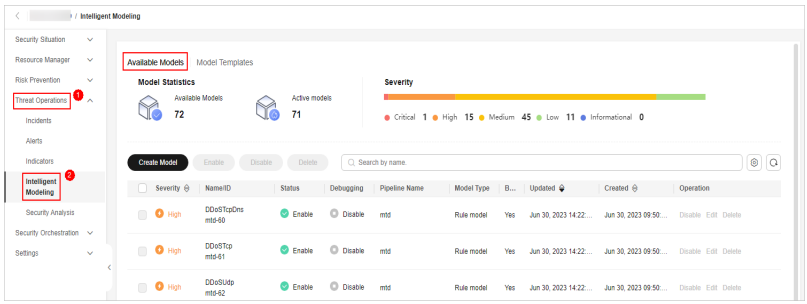
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-52** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**.

**Figure 10-53** Available Models




**Step 6** Click **Create Model** in the upper left corner of the **Available Models** tab.

**Step 7** On the **Create Model** slide-out panel displayed, configure basic information about the alert model. For details about the parameters, see **Table 10-23**.

**Table 10-23** Basic alert model parameters

| Parameter | Description |
| --- | --- |
| Pipeline Name | Select the execution pipeline of the alert model. |

| Parameter | Description |
| --- | --- |
| Model Name | Name of the alert model. |
| Severity | Severity of the alert model. You can set the severity to Critical, High Risk, Medium Risk, Low Risk, or Warning. |
| Alarm Type | Alarm type displayed after the alert model is triggered. |
| Model Type | The default value is **Rule model**. |
| Description | Description of the alert model |
| Status | Indicates whether to enable the alert model.<br>The status set here can be changed after the entire alert model is set successfully. |

**Step 8** After the setting is complete, click **Next** in the lower right corner of the page. The page for setting the model logic is displayed.

**Step 9** Set the model logic. For details about the parameters, see **Table 10-24**.

**Table 10-24** Configure Model Logic

| Parameter | Description |
| --- | --- |
| Query Rule | Set alert query rules. After the setting is complete, click **Run** and view the running result.<br>For details about the syntax, see **Query and Analysis Statements - SQL Syntax**. |
| Query Plan | Set an alert query plan.<br>• Running query interval: xx minutes/hour/day. If the running query interval is minute, set this parameter to a value ranging from 5 to 59 minutes. If the running query interval is hour, set this parameter to a value ranging from 1 to 23 hours. If the running query interval is day, set this parameter to a value ranging from 1 to 14 days.<br>• Time window: xx minutes/hour/day. If the time window is minute, the value ranges from 5 minutes to 59 minutes. If the time window is hour, the value ranges from 1 hour to 23 hours. If the time window is day, the value ranges from 1 day to 14 days.<br>• Execution Delay: xx minutes. The value ranges from 0 to 5 minutes. |

| Parameter | Description |
| --- | --- |
| Advanced Alarm Settings | • Extended information about a user-defined alert.<br>Click **Add**, and set the **Key** and **Value** information.<br>• **Alarm Details**: Enter the alarm name, description, and handling suggestions. |
| Trigger Condition | Setting alert triggering conditions. The value can be greater than, equal to, not equal to, or less than xx.<br>To configure multiple trigger conditions, click **Add** and add them one by one. A maximum of five trigger conditions can be added.<br>If there are multiple trigger conditions, SecMaster scans log data to hit each trigger condition and generates all types of alerts for hit trigger conditions. |
| Alarm Trigger | The way to trigger alerts for queried result. The options are as follows:<br>• One alert for all query results<br>• One alert for each query result |
| Debugging | Sets whether to generate debugging alarms. |
| Suppression | Specifies whether to stop the query after an alert is generated.<br>• If **Suppression** is enabled, the **query stops** after an alert is generated.<br>• If **Suppression** is disabled, the **query is not stopped** after an alert is generated. |

**Step 10** After the setting is complete, click **Next** in the lower right corner of the page. The model details preview page is displayed.

**Step 11** After confirming that the preview is correct, click **OK** in the lower right corner of the page.

**----End**

## Editing a Model

Only custom models can be edited.

**Step 1** Log in to the management console.

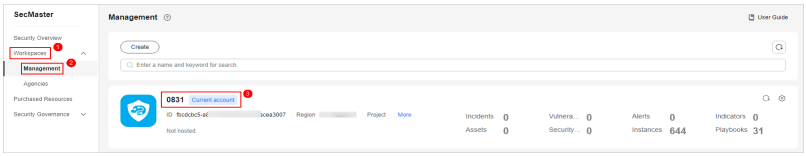
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

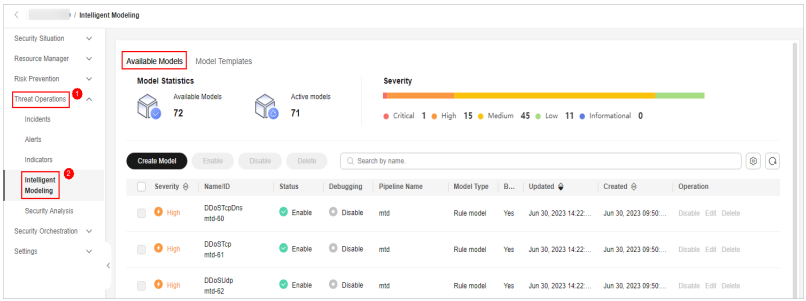
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-54** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**.

**Figure 10-55** Available Models




**Step 6** In the available model list, click **Edit** in the **Operation** column of the target model.

**Step 7** On the **Edit Model** slide-out panel, configure basic information about the alert model. For details about the parameters, see **Table 10-25**.

**Table 10-25** Basic alert model parameters

| Parameter | Description |
| --- | --- |
| Pipeline Name | Select the execution pipeline of the alert model. Editing the pipeline name is not supported currently. |
| Model Name | Name of the alert model. |
| Severity | Severity of the alert model. You can set the severity to **Critical**, **High**, **Medium Low**, or **Informative**. |
| Alarm Type | Alarm type displayed after the alert model is triggered. |
| Model Type | The default value is **Rule model**. |
| Description | Description of the alert model |

**Step 8** After the setting is complete, click **Next** in the lower right corner of the page. The page for setting the model logic is displayed.

**Step 9** Set the model logic. For details about the parameters, see **Table 10-26**.

**Table 10-26** Configure Model Logic

| Parameter | Description |
| --- | --- |
| Query Rule | Set alert query rules. After the setting is complete, click **Run** and view the running result.<br>A query analysis statement consists of a query statement and an analysis statement. The format is **Query Statement\|Analysis Statement**. For details about the syntax of query analysis statements, see **Query and Analysis Statements - SQL Syntax**.<br>**NOTE**<br>If the reserved field is of the text type, **MATCH_QUERY** is used for word segmentation queries by default. |
| Query Plan | Set an alert query plan.<br>• Running query interval: xx minutes/hour/day. If the running query interval is minute, set this parameter to a value ranging from 5 to 59 minutes. If the running query interval is hour, set this parameter to a value ranging from 1 to 23 hours. If the running query interval is day, set this parameter to a value ranging from 1 to 14 days.<br>• Time window: xx minutes/hour/day. If the time window is minute, the value ranges from 5 minutes to 59 minutes. If the time window is hour, the value ranges from 1 hour to 23 hours. If the time window is day, the value ranges from 1 day to 14 days.<br>• Execution Delay: xx minutes. The value ranges from 0 to 5 minutes. |
| Advanced Alarm Settings | • **Custom Information**: Customize extended alert information. Click **Add**, and set the **key** and **value** information.<br>• **Alarm Details**: Enter the alarm name, description, and handling suggestions. |

| Parameter | Description |
| --- | --- |
| Trigger Condition | Sets alert triggering conditions. The value can be greater than, equal to, not equal to, or less than xx.<br>If there are multiple trigger conditions, click **Add** and add them. A maximum of five trigger conditions can be added.<br>If there are multiple trigger conditions, SecMaster scans log data to hit each trigger condition from top to bottom and generates all types of alerts for hit trigger conditions. |
| Alarm Trigger | The way to trigger alerts for queried results. The options are as follows:<br>• One alert for all query results<br>• One alert for each query result |
| Debugging | Sets whether to generate debugging alarms. |
| Suppression | Specifies whether to stop the query after an alert is generated.<br>• If **Suppression** is enabled, the **query stops** after an alert is generated.<br>• If **Suppression** is disabled, the **query is not stopped** after an alert is generated. |

**Step 10** After the setting is complete, click **Next** in the lower right corner of the page. The model details preview page is displayed.

**Step 11** After confirming that the preview is correct, click **OK** in the lower right corner of the page.

**----End**

# 10.4.3 Viewing Available Models

## Scenario

This topic describes how to view available models.

## Prerequisites

A model has been created. For details, see **Creating and Editing a Model**.

## Procedure

**Step 1** Log in to the management console.

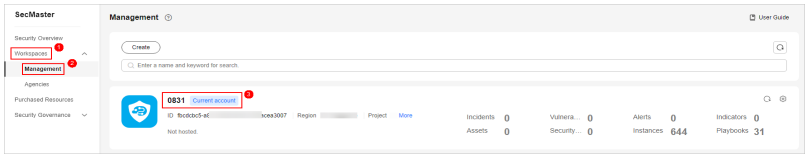
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

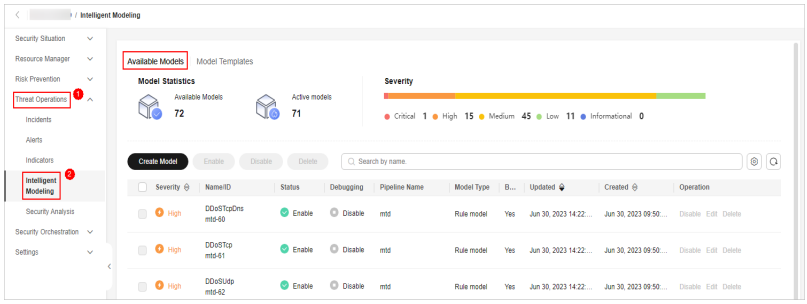
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-56** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**.

**Figure 10-57** Available Models




**Step 6** On the **Available Models** tab, view available models.

**Table 10-27** Viewing available models

| Parameter | Description |
| --- | --- |
| Model Statistics | This area displays how many **Available Models** and how many **Active models** you have. |
| Severity | This bar displays the number of available models by severity levels, including **Critical**, **High**, **Medium**, **Low**, and **Informative**. |
| Model list | The model list displays the severity, name/ID, pipeline name, model type of each model as well as when the model is created and upgraded. |

**----End**

# 10.4.4 Managing Models

## Scenario

This topic walks you through how to manage models, such as enabling, disabling, and deleting a model.

## Limitations and Constraints

Only custom models can be enabled, disabled, and deleted.

## Procedure

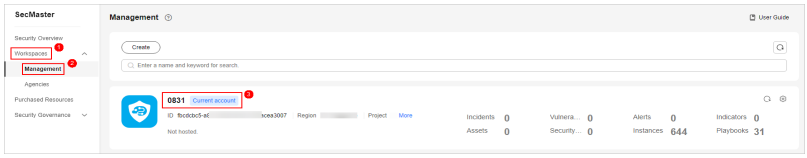
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

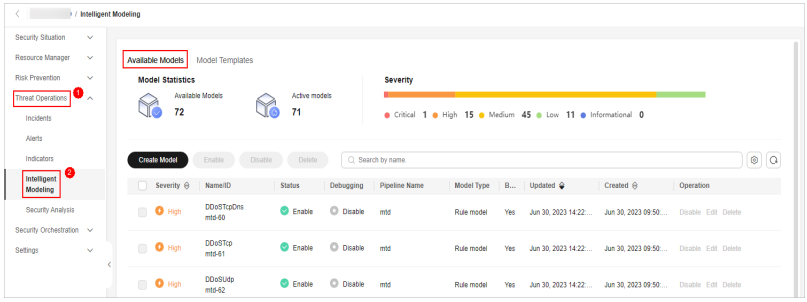
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-58** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**.

**Figure 10-59** Available Models




**Step 6** On the **Available Models** tab, manage models.

**Table 10-28** Managing models

| Operation | Description |
| --- | --- |
| Enable | In the model list, click **Enable** in the **Operation** column of the target model.<br>**NOTE**<br>To enable models in batches, select all models you want to start and click **Enable** in the upper left corner of the list.<br>If the model status changes to **Enable**, the model is successfully started. |

| Operation | Description |
| --- | --- |
| Disable | In the model list, locate the row that contains the target model and click **Disable** in the **Operation** column.<br>**NOTE**<br>To disable models in batches, select all models and click **Disable** in the upper left corner of the list.<br>When the alert model status changes to **Disable**, the model is disabled. |
| Delete | 1. In the model list, locate the row that contains the target model and click **Delete** in the **Operation** column.<br>**NOTE**<br>To delete models in batches, select all models to be deleted and click **Delete** in the upper left corner of the list.<br>2. In the displayed dialog box, click **OK**. |

**----End**

# 10.5 Security Analysis

## 10.5.1 Security Analysis Overview

The security analysis function works as a cloud native security information and event management (SIEM) solution in SecMaster. It can collect, aggregate, and analyze security logs and alarms from multiple products and sources based on predefined and user-defined threat detection rules. It helps quickly detect and respond to security incidents and protect cloud workloads, applications, and data.

### Cloud services and logs that can be interconnected with SecMaster

SecMaster can integrate logs of multiple Huawei Cloud services, such as Web Application Firewall (WAF), Host Security Server (HSS), and Object Storage Service (OBS). You can search for and analyze all collected logs in SecMaster. By default, the logs are stored for 7 days.

For details, see **Log Access Supported by SecMaster**.

### Limitations and Constraints

- A maximum of 500 results can be returned for a single analysis query.
- A maximum of 50 shortcut queries can be created in a pipeline. That is, a maximum of 50 query analysis criteria can be saved as shortcut queries.
- If there are over 50,000 results for a single query, the accuracy may decrease. In this case, you can select a short time range or apply more filter criteria to reduce the number of query results.
- In aggregation queries (for example, GROUP BY statement) based on several fields, the default number of buckets for the second field is 10. If more than 10 buckets are generated, part of qualified data will be lost. In this case, the query results are not accurate.

## 10.5.2 How to Use Security Analysis

Table 10-29 shows the process of using the security analysis function.

**Table 10-29** Process

| Step | Description |
| --- | --- |
| **Adding a Workspace** | Add a workspace for resource isolation and control. |
| **Integrating Data** | Configure the source of security data you need to collect.<br>SecMaster can integrate log data of multiple Huawei Cloud products, such as storage, management and supervision, and security. After the integration, you can search for and analyze all collected logs. |
| (Optional) **Adding a Data Space** | Create a data space for storing collected log data.<br>For data accessed through the console, the system creates a default data space. You do not need to create a data space. |
| (Optional) **Creating a Pipeline** | Create pipelines for collecting, storing, and querying log data.<br>For data accessed through the console, the system creates a default data pipeline. You do not need to create a pipeline. |
| **Configuring Indexes** | Configure indexes to narrow down the query scope.<br>By default, indexes have been configured for some reserved fields in the accessed cloud service logs. For details, see **Log Fields**. |
| **Querying and Analyzing Data** | Query and analyze the accessed data. |
| **Downloading Logs** | Allows you to download raw logs or queried and analyzed logs. |
| **Querying Analysis Results in Charts and Tables** | After you run query and analysis statements, SecMaster can display the query and analysis results in charts and tables.<br>Currently, data can be displayed in tables, line charts, bar charts, and pie charts. |

## 10.5.3 Log Fields

If you access WAF, HSS, CFW, CTS, and IPS logs through the console, SecMaster adds information such as log sources and timestamps to these logs in the form of key-value pairs.

This section describes the meaning of each field.

- **Common Fields**: describes common fields.
- **sec-waf-attack**: describes the fields in WAF attack logs.
- **sec-waf-access**: describes the fields in WAF access logs.
- **sec-obs-access**: describes the fields in OBS access logs.
- **sec-nip-attack**: describes the fields in IPS attack logs.
- **sec-iam-audit**: describes the fields in IAM audit logs.
- **sec-hss-vul**: describes the fields in the HSS host vulnerability scan result.
- **sec-hss-alarm**: describes the fields in the HSS host security alerts.
- **sec-hss-log**: describes the fields in the HSS host security logs.
- **sec-ddos-attack**: describes the fields in the DDoS attack logs.
- **sec-cts-audit**: describes the fields in the CTS logs.
- **sec-cfw-risk**: describes the fields in the CFW attack incident logs.
- **sec-cfw-flow**: describes the fields in the CFW traffic logs.
- **sec-cfw-block**: describes the fields in the CFW access control logs.
- **sec-apig-access**: describes the fields in the API Gateway access logs.
- **sec-dbss-alarm**: describes the fields in the DBSS alert logs.
- **sec-dsc-alarm**: describes the fields in the DSC alert logs.

## Common Fields

**Table 10-30** Common fields

| Parameter | Field Type | Description |
| --- | --- | --- |
| __time | Date | Time when a log is generated |
| __raw | String | Raw log |
| ops.source | String | Data source |
| ops.rgn | String | Site |
| ops.csvc | String | Data source (cloud service) |
| ops.ver | String | Data warehouse version |
| ops.hash | String | Integrity verification of **extend hash value of original** |
| [src_/dest_]asset.domain.id | String | Domain ID |
| [src_/dest_]asset.domain.name | String | Domain name |
| [src_/dest_]asset.id | String | Asset ID |
| [src_/dest_]asset.name | String | Asset name |

| Parameter | Field Type | Description |
| --- | --- | --- |
| [src_/dest_]asset.type | String | Asset type |
| [src./dest.]asset.region | String | Asset site |
| [src_/dest_]geo.ip | String | IP address |
| [src_/dest_]geo.country | String | Country name (Chinese) |
| [src_/dest_]geo.prov | String | Province name (Chinese) |
| [src_/dest_]geo.city | String | City name (Chinese) |
| [src_/dest_]geo.org | String | Organization that registers the IP address |
| [src_/dest_]geo.isp | String | Carrier |
| [src_/dest_]geo.loc.lat | Float | Latitude |
| [src_/dest_]geo.loc.lon | Float | Longitude |
| [src_/dest_]geo.tz | Integer | Time zone |
| [src_/dest_]geo.utc_off | Integer | Time zone |
| [src_/dest_]geo.cac | String | Time zone |
| [src_/dest_]geo.iddc | String | International call prefix code |
| [src_/dest_]geo.cc | String | Country code (ISO) |
| [src_/dest_]geo.contc | String | Continental code (ISO) |
| [src_/dest_]geo.idc | String | Data center (equipment room) |
| [src_/dest_]geo.bs | String | Mobile base station |
| [src_/dest_]geo.cc3 | String | Country code (3 digits) |
| [src_/dest_]geo.euro | String | EU member states |

## sec-waf-attack

Fields in WAF attack logs

**Table 10-31** sec-waf-attack

| Field | Type | Description |
| --- | --- | --- |
| category | String | Category. The value is **attack**. |
| time | Date | Log time. |
| time_iso8601 | Date | ISO 8601 time of the log. |

| Field | Type | Description |
| --- | --- | --- |
| policy_id | String | Protection policy ID. |
| level | Integer | Protection policy level. The value can be **1** (loose), **2** (medium), or **3** (strict). |
| attack | String | Attack type The value can be:<br>• **default**: default attacks<br>• **xss**: cross-site scripting (XSS) attacks<br>• **sqli**: SQL injections<br>• **cmdi**: command injections<br>• **lfi**: local file inclusion attacks<br>• **rfi**: remote file inclusion attacks<br>• **webshell**: web shells<br>• **robot**: crawler attacks (blocked based on the user agent blacklist)<br>• **vuln**: vulnerability exploits<br>• **cc**: attacks that hit the CC rules<br>• **custom_custom**: attacks that hit a precise protection rule<br>• **custom_whiteip**: attacks that hit a whitelist rule<br>• **custom_geoip**: attacks that hit a geolocation rule<br>• **illegal**: unauthorized requests<br>• **anticrawler**: attacks that hit the anti-crawler rule, such as JS challenges<br>• **antitamper**: attacks that hit a web tamper protection rule<br>• **leakage**: attacks that hit a sensitive data protection rule<br>• **followed_action**: attacks that hit a known attack source rule<br>• **trojan**: Website Trojans |

| Field | Type | Description |
| --- | --- | --- |
| action | String | Processing action. The value can be:<br>• **block**: WAF blocks attacks.<br>• **log**: WAF only logs detected attacks.<br>• **captcha**: verification code. |
| rule | String | ID of the triggered rule or the description of the custom policy type. |
| sub_type | String | When **attack** is set to **robot**, this field cannot be left blank. It indicates the subtype of a crawler.<br>• **script_tool**: script tools<br>• **search_engine**: search engines<br>• **scanner:** scanning tools<br>• **uncategorized**: other crawlers |
| location | String | Location of the triggered payload. |
| resp_headers | String | Response header. |
| resp_body | String | Response body. |
| hit_data | String | Triggered payload string. |
| status | String | Status code of the response to the request. |
| reqid | String | Random ID. |
| id | String | Attack ID. |
| method | String | Request method. |
| sip | String | Request IP address of the client. |
| sport | String | Request port of the client. |
| host | String | Domain name of the requested server. |
| http_host | String | Port number of the requested server. |
| uri | String | Request URL. |

| Field | | Type | Description |
| --- | --- | --- | --- |
| header | | String | Request header information. |
| mutipart | | String | Request multipart header (file upload). |
| cookie | | String | Request cookie. |
| params | | String | Parameters following the request URI. |
| body_bytes_sent | | String | Total number of bytes of the response body sent to the client. |
| upstream_response_time | | String | Response time of the backend server. |
| process_time | | String | Detection duration of the engine. |
| engine_id | | String | Unique ID of the engine. |
| group_id | | String | Log group ID used for interconnecting with LTS. |
| attack_stream_id | | String | ID of **access_stream** of the user in the log group identified by the **group_id** field. |
| hostid | | String | ID of a protected domain name. |
| tenantid | | String | Tenant ID of the protected domain name. |
| projectid | | String | Project ID of the protected domain name. |
| backend | | Object | Address of the backend server to which the request is forwarded. |
| backend | type | String | Backend host type (IP address or domain name). |
| | alive | String | Backend host status. |
| | host | String | Backend host value. |
| | protocol | String | Backend protocol. |
| | port | Integer | Backend port. |

## sec-waf-access

Table 10-32 describes the fields in WAF access logs.

**Table 10-32** sec-waf-access

| Field | Type | Description |
| --- | --- | --- |
| requestid | String | Random ID |
| time | Date | Log time |
| eng_ip | String | Engine IP address |
| hostid | String | ID of a protected domain name |
| tenantid | String | Tenant ID of the protected domain name |
| projectid | String | Project ID of the protected domain name |
| remote_ip | String | IP address of the client that sends the request |
| scheme | String | Request protocol type |
| response_code | String | Response code of a request |
| method | String | Request method |
| http_host | String | Domain name of the requested server |
| url | String | Request URL |
| request_length | String | Request length |
| bytes_send | String | Total number of bytes sent to the client |
| body_bytes_sent | String | Total number of bytes of the response body sent to the client |
| upstream_addr | String | IP address of the selected backend server |
| request_time | String | Request processing time, which starts from the first byte sent from the client |
| upstream_response_time | String | Response time of the backend server |
| upstream_status | String | Response code of the backend server |
| upstream_connect_time | String | Duration for connecting to the backend server |

| Field | Type | Description |
| --- | --- | --- |
| upstream_header_time | String | Time used by the backend server to receive the first byte of the response header |
| bind_ip | String | Retrieval IP address of the engine |
| engine_id | String | Unique ID of the engine |
| time_iso8601 | Date | ISO 8601 time of the log |
| sni | String | Domain name requested through the SNI |
| tls_version | String | Version of the protocol used to establish an SSL connection |
| ssl_curves | String | List of curves supported by the client |
| ssl_session_reused | String | Whether an SSL session is reused<br>• **r**: It is reused.<br>• **.**: It is not used. |
| process_time | String | Detection duration of the engine |
| x_forwarded_for | String | Content of **X-Forwarded-For** in the request header |
| cdn_src_ip | String | Content of **Cdn-Src-Ip** in the request header |
| x_real_ip | String | Content of **X-Real-Ip** in the request header |

## sec-obs-access

Fields in OBS access logs

**Table 10-33** sec-obs-access

| Field | Type | Description |
| --- | --- | --- |
| srcip | String | Source IP address for accessing OBS. |
| srcport | String | Source port for accessing OBS. |
| logtime | Date | Time when the log is generated. |
| ces_log_version | String | Version number, which is **V0** for an internal request. **V0** does not record Cloud Eye audit logs, and **V1** records Cloud Eye audit logs. |
| request_start_time | String | Request start time. |

| Field | Type | Description |
| --- | --- | --- |
| ctx_request_id | String | Request ID, which uniquely identifies a request to be traced. |
| request_method | String | Request method (GET/POST). |
| remote_ip | String | Remote IP address, in the format of **Client IP address:Port number**. |
| operation | String | Operation type, for example, **GET.OBJECT**. |
| bucket_name | String | Bucket name. |
| object_name | String | Object name (file name). |
| query_string | String | Request query. |
| http_status | String | HTTP request status code, for example, 200. |
| content_length | String | Length of the requested content. |
| user_agent | String | Client agent. |
| storage_class | String | OBS storage class. |
| user_name | String | Username of the requester. |
| user_id | String | User ID of the requester. |
| domain_name | String | Domain name of the requester. |
| domain_id | String | Domain ID of the requester. |
| project_id | String | Project ID of the requester. |
| owner_domain_name | String | Tenant name of the bucket owner. |
| owner_domain_id | String | Tenant ID of the bucket owner. |
| owner_project_id | String | Project ID of the bucket owner. |
| transmission_type | String | Network type. The value can be:<br>• **1**: intranet<br>• **2**: public network |
| scheme | String | Network protocol. |
| http_version | String | HTTP version. |
| host | String | OBS domain name. |
| port | String | Port number. |
| auth_v2_v4 | String | Authentication mode. |
| host_type | String | Access type. |

| Field | Type | Description |
| --- | --- | --- |
| x_forwarded_for | String | IP address of the proxy client. |
| pub_bkt | String | Whether the bucket is accessed anonymously. |
| pub_obj | String | Whether an object is accessed anonymously. |
| website_req | String | Whether the request is a website request. |
| crr_req | String | Whether the request is a CRR request. |
| huawei_cloud_service | String | Whether the request is a CDN request.<br>• **CDN_F**: Authentication failed.<br>• **CDN**: Authentication succeeded. |
| batch_delete_success_count | String | Number of successful batch deletions. |
| ctc_log_urn | String | Agency. |
| requester | String | Agency account. |
| is_over_write | String | Whether to overwrite data. |
| error_code | String | Cause of an error. |
| detail_error_code | String | Detailed error cause. |
| request_content_type | String | Request object type. |
| request_content_md5 | String | MD5 of the request object. |
| total_bytes_received | String | Total bytes of received content. |
| response_content_type | String | Response object type. |
| total_bytes_sent | String | Total bytes of sent content in the response header and response body. |
| referrer | String | Reference page. |
| index_read_count | String | Metadata table query latency. |
| persistence_read_count | String | Number of times that data is read. |
| vpc_id | String | ID of the VPC to which the request client belongs. |
| access_with_security_token | String | Access using the STS token. |
| copy_size | String | Copy size. |

| Field | Type | Description |
| --- | --- | --- |
| vpcep_traffic | String | Transmission through VPCEP. |
| access_key | String | AK. |

## sec-nip-attack

Fields in IPS attack logs

**Table 10-34** sec-nip-attack

| Field | Type | Description |
| --- | --- | --- |
| SyslogId | String | Log serial number (SN). |
| Vsys | String | Virtual system name. |
| Policy | String | Name of a security policy. |
| SrcIp | String | Source IP address of a packet. |
| DstIp | String | Destination IP address of a packet. |
| SrcPort | String | Source port of a packet. For an ICMP packet, the value of this field is **0**. |
| DstPort | String | Destination port of a packet. For an ICMP packet, the value of this field is **0**. |
| SrcZone | String | Source security zone of a packet. |
| DstZone | String | Destination security zone of a packet. |
| User | String | Username. |
| Protocol | String | Protocol of the packet detected by a signature. |
| Application | String | Application that the packet detected by a signature belongs to. |
| Profile | String | Name of a configuration file. |
| SignName | String | Name of a signature. |
| SignId | String | ID of a signature. |
| EventNum | String | The field is used for log mergence. Whether logs are merged is determined by the mergence frequency and conditions. The value is **1** if logs are not merged. |

| Field | Type | Description |
| --- | --- | --- |
| Target | String | Object attacked by the packet detected by a signature. The value can be:<br>• **server**: The attack object is the server.<br>• **client**: The attack object is the client.<br>• **both**: The attack objects are both the server and client. |
| Severity | String | Severity of the attack caused by the packet detected by a signature. The value can be:<br>• **information**<br>• **low**<br>• **medium**<br>• **high** |
| Os | String | OS attacked by the packet detected by a signature. The value can be:<br>• **all**: all OSs<br>• **android**: Android<br>• **ios**: iOS<br>• **unix-like**: Unix<br>• **windows**: Windows<br>• **other**: other OSs |
| Category | String | Threat type of the detected attack packet features. |
| Action | String | Signature action.<br>• Alert<br>• Block |
| Reference | String | Reference information about the signature. |
| Extend | String | Evidence collection field in enhanced mode. |

## sec-iam-audit

Fields in IAM audit logs

**Table 10-35** sec-iam-audit

| Field | Type | Description |
| --- | --- | --- |
| uid | String | User ID |
| un | String | Username |
| did | String | Domain ID |
| dn | String | Domain name |
| src | String | Request domain name |
| opl | String | Operation level |
| op | String | Operation type |
| res | String | IAM service invoking result |
| ter | String | Source IP address |
| dtl | String | IAM authentication details |
| tn | Date | Occurrence time |
| ts | Long | Timestamp when the IAM service is invoked |
| tid | String | Trace ID |
| evnt | String | Incident |
| tobj | String | Service |

## sec-hss-vul

Fields in HSS vulnerability scanning results

**Table 10-36** sec-hss-vul

| Field | Type | Description |
| --- | --- | --- |
| agentUuid | String | Agent UUID. |
| alarmCsn | String | Alert UUID, which is randomly generated when the master generates an alert. |
| alarmKey | String | Alert keyword. For an alert, it is the **msg_id** reported by the transparent transmission agent. For a vulnerability, it is generated by the master. |
| alarmVersion | String | Agent version. |

| Field | | Type | Description |
| --- | --- | --- | --- |
| occurTime | | Int64 | Vulnerability detection time (ms). |
| severity | | Int32 | Vulnerability level defined by HSS. |
| hostUuid | | String | UUID of the affected host. |
| hostName | | String | Name of the affected host. |
| hostIp | | String | Communication IP address of the affected host. |
| ipList | | String | List of IP addresses of affected hosts. |
| cloudId | | String | Cloud agent SN. |
| region | | String | Region where the affected host is located. |
| projectId | | String | ID of the affected tenant. |
| enterpriseProjectId | | String | ID of the affected enterprise tenant. |
| appendInfo | | Object | Vulnerability details. |
| appendInfo | vulId | String | Official vulnerability ID. |
| | type | Int32 | Vulnerability type. The value can be:<br>• **0**: Linux<br>• **1**: Windows<br>• **2**: Web CMS |
| | repairNecessity | Int32 | Necessity level of vulnerability fixing. The value can be:<br>• **1**: low-risk<br>• **2&3**: medium-risk<br>• **4**: high risk |
| | status | Int32 | Reserved field. |
| | cve_ids | String | CVE ID list. Use commas (,) to separate CVE IDs. |
| | url | String | URL of the official website where the vulnerability details are available. |
| | vulNameEn | String | Vulnerability name in English. |
| | vulNameCn | String | Vulnerability name in Chinese. |

| Field | | Type | Description |
| --- | --- | --- | --- |
| | severityLevel | String | Vulnerability severity. The options are as follows:<br>• **Critical**<br>• **High**<br>• **Medium**<br>• **Low** |
| | descriptionEn | String | Vulnerability description in English. |
| | descriptionCn | String | Vulnerability description in Chinese. |
| | solutionEn | String | Solution description in English. |
| | solutionCn | String | Solution description in Chinese. |
| | repairCmd | String | Fix command. |
| | needBoot | Int32 | Whether to restart the system. The default value is **1**, which means not to restart the system. |
| | errorInfo | String | Fix failure cause. |
| | appName | String | Name of the software that has the vulnerability (only for Linux vulnerabilities). |
| | version | String | Version of the software that has the vulnerability (only for Linux vulnerabilities). |
| | createTime | Int64 | First detection time (ms). |
| | updateTime | Int64 | Vulnerability fixing time (ms). The initial value is the same as that of **createTime**. |
| | agentId | String | UUID of the associated host agent. |
| | projectId | String | ID of the affected tenant. |

## sec-hss-alarm

Fields in HSS alert logs

**Table 10-37** sec-hss-alarm

| Field | | Type | Description |
| --- | --- | --- | --- |
| agentUuid | | String | Agent UUID. |
| alarmCsn | | String | Alert UUID. |
| alarmKey | | String | Alert keyword. For an alert, it is the **msg_id** reported by the transparent transmission agent. For a vulnerability, it is generated by the master. |
| alarmVersion | | String | Agent version. |
| occurTime | | Long | Incident occurrence time (accurate to millisecond). |
| severity | | Long | Severity. |
| hostUuid | | String | UUID of the affected host. |
| hostName | | String | Name of the affected host. |
| hostIp | | String | Communication IP address of the affected host. |
| ipList | | String | List of IP addresses of affected hosts. |
| cloudId | | String | Cloud agent SN. |
| region | | String | Region where the affected host is located. |
| projectId | | String | ID of the affected tenant. |
| enterpriseProjectId | | String | ID of the affected enterprise tenant. |
| appendInfo | | Object | Alert details. |
| appendInfo | agent_id | String | Agent ID. |
| | version | String | Incident version. |
| | container_name | String | Container ID (in container security scenarios). |
| | image_name | String | Image name (in container security scenarios). |
| | event_id | String | Incident ID (GUID). |
| | event_name | String | Incident name. |
| | event_classid | String | Unique incident ID. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | occur_time | | Long | Occurrence time (accurate to second). |
| | recent_time | | Long | Last occurrence time (accurate to second). |
| | event_category | | Integer | Incident category. |
| | event_type | | Integer | Incident type. |
| | event_count | | Integer | Number of incidents. |
| | severity | | Integer | Severity. |
| | attack_phase | | Integer | Attack phase. |
| | attack_tag | | Integer | Attack tag. |
| | confidence | | Integer | Confidence. |
| | action | | Integer | Action. |
| | detect_module | | String | Detection module. |
| | report_source | | String | Report source. |
| | related_events | | String | Related incident ID. |
| | resource_info | | Object | Resource information. |
| | network_info | | Object | Network information. |
| | app_info | | Object | Application information. |
| | system_info | | Object | System information. |
| | process_info | | list | Process information. |
| | user_info | | list | User information. |
| | file_info | | list | File information. |
| | geo_info | | Object | Geographic information. |
| | malware_info | | Object | Malware information. |
| | forensic_info | | String | Evidence collection field. |
| | recommendation | | String | Handling suggestions. |
| | extend_info | | String | Extended incident information. |
| | resource_info | project_id | String | Project ID. |
| | | region_name | String | Region name. |
| | | vpc_id | String | VPC ID. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | host_name | String | Host name. |
| | | host_ip | String | Host IP address. |
| | | host_id | String | Host ID (ECS ID). |
| | | cloud_id | String | Cloud agent SN. |
| | | vm_name | String | VM name. |
| | | vm_uuid | String | VM UUID. |
| | | container_id | String | Container ID. |
| | | image_id | String | Image ID. |
| | | sys_arch | String | System CPU architecture. |
| | | os_bit | String | OS bit version. |
| | | os_type | String | OS type. |
| | | os_name | String | OS name. |
| | | os_version | String | OS version. |
| | network_info | local_address | String | Local address. |
| | | local_port | Integer | Local port. |
| | | remote_address | String | Remote address. |
| | | remote_port | Integer | Remote port. |
| | | src_ip | String | Source IP address. |
| | | src_port | Integer | Source port. |
| | | src_domain | String | Source domain. |
| | | dest_ip | String | Destination IP address. |
| | | dest_port | Integer | Destination port. |
| | | dest_domain | String | Destination domain. |
| | | protocol | String | Protocol. |
| | | app_protocol | String | Application layer protocol. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | flow_direction | String | Flow direction. |
| | app_info | sql | String | Executed SQL statement. |
| | | domain_name | String | DNS domain name. |
| | | url_path | String | URL. |
| | | url_method | String | URL method. |
| | | req_refer | String | URL request referrer. |
| | | email_subject | String | Email subject. |
| | | email_sender | String | Email sender. |
| | | email_receiver | String | Email recipient. |
| | | email_keyword | String | Email keyword. |
| | process_info | process_name | String | Process name. |
| | | process_path | String | Process file path. |
| | | process_pid | Integer | Process ID. |
| | | process_uid | Integer | Process user ID. |
| | | process_username | String | Process username. |
| | | process_cmdline | String | Process file command line. |
| | | process_filename | String | Process file name. |
| | | process_start_time | Long | Process start time. |
| | | process_gid | Integer | Process group ID. |
| | | process_egid | Integer | Effective process group ID. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | process_euid | Integer | Effective process user ID. |
| | | parent_process_name | String | Parent process name. |
| | | parent_process_path | String | Parent process file path. |
| | | parent_process_pid | Integer | Parent process ID. |
| | | parent_process_uid | Integer | Parent process user ID. |
| | | parent_process_cmdline | String | Parent process file command line. |
| | | parent_process_filename | String | Parent process file name. |
| | | parent_process_start_time | Long | Parent process start time. |
| | | parent_process_gid | Integer | Parent process group ID. |
| | | parent_process_egid | Integer | Effective parent process group ID. |
| | | parent_process_euid | Integer | Effective parent process user ID. |
| | | child_process_name | String | Subprocess name. |
| | | child_process_path | String | Subprocess file path. |
| | | child_process_pid | Integer | Subprocess ID. |
| | | child_process_uid | Integer | Subprocess user ID. |
| | | child_process_cmdline | String | Subprocess file command line. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | child_process_filename | String | Subprocess file name. |
| | | child_process_start_time | Long | Subprocess start time. |
| | | child_process_gid | Integer | Subprocess group ID. |
| | | child_process_egid | Integer | Effective subprocess group ID. |
| | | child_process_euid | Integer | Effective subprocess user ID. |
| | | virt_cmd | String | Virtualization command. |
| | | virt_process_name | String | Virtualization process name. |
| | | escape mode | String | Escape mode. |
| | | escape cmd | String | Command executed after the escape. |
| | user_info | user_id | Integer | User ID. |
| | | user_gid | Integer | User GID. |
| | | user_name | String | Username. |
| | | user_group_name | String | User group name. |
| | | user_home_dir | String | User home directory. |
| | | login_ip | String | User login IP address. |
| | | service_type | String | Login service type. |
| | | service_port | Integer | Login service port. |
| | | login_mode | String | Login mode. |
| | | login_lasttime | Long | Last login time of a user. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | login_fail_count | Integer | Failed login attempts. |
| | | pwd_hash | String | Password hash. |
| | | pwd_with_fuzzing | String | Anonymized password. |
| | | pwd_used_days | Integer | Password age (days). |
| | | pwd_min_days | Integer | Minimum password validity period. |
| | | pwd_max_days | Integer | Maximum password validity period. |
| | | pwd_warn_left_days | Integer | Advance warning of password expiration (days). |
| | file_info | file_path | String | File path/name. |
| | | file_alias | String | File alias. |
| | | file_size | Integer | File size. |
| | | file_mtime | Long | Time when the file is last modified. |
| | | file_atime | Long | Time when the file is last accessed. |
| | | file_ctime | Long | Time when the file status last changes. |
| | | file_hash | String | File hash value. |
| | | file_md5 | String | File MD5 value. |
| | | file_sha256 | String | File SHA256 value. |
| | | file_type | String | File type. |
| | | file_content | String | File content. |
| | | file_attr | String | File attribute. |
| | | file_operation | String | File operation type. |
| | | file_change_attr | String | Old/New attribute. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | file_new_path | String | New file path. |
| | | file_desc | String | File description. |
| | | file_key_word | String | File keyword. |
| | | is_dir | Boolean | Whether the file is a directory. |
| | | fd_info | String | File handle information. |
| | | fd_count | Integer | Number of file handles. |
| | forensic_info | monitor_process | String | Monitoring process. |
| | | escape_mode | String | Escape mode. |
| | | abnormal_port | String | Abnormal port. |
| | geo_info | src_country | String | Source country/region. |
| | | src_city | String | Source city. |
| | | src_latitude | Long | Source latitude. |
| | | src_longitude | Long | Source longitude. |
| | | dest_country | String | Destination country/region. |
| | | dest_city | String | Destination city. |
| | | dest_latitude | Long | Destination latitude. |
| | | dest_longitude | Long | Destination longitude. |
| | malware_info | malware_family | String | Malware family. |
| | | malware_class | String | Malware classification. |
| | system_info | pwd_valid | Boolean | Whether the password is valid. |
| | | pwd_min_len | Integer | Password length. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | pwd_digit_credit | Integer | Digits contained in the password. |
| | | pwd_uppercase_letter | Integer | Uppercase letters contained in the password. |
| | | pwd_lowercase_letter | Integer | Lowercase letters contained in the password. |
| | | pwd_special_characters | Integer | Special characters contained in the password. |
| | extend_info | hit_rule | String | Hit rule. |
| | | rule_name | String | Rule name. |
| | | rulesetname | String | Rule set name. |
| | | report_type | String | Reported data type. |
| | ti_info | ti_source | String | Intelligence source. |
| | | ti_class | String | Intelligence classification. |
| | | ti_threat_type | String | Intelligence threat type. |
| | | ti_first_time | Long | First detection time. |
| | | ti_last_time | Long | Last detection time. |

## sec-hss-log

Fields in HSS security logs

**Table 10-38** sec-hss-log

| Field | Type | Description |
| --- | --- | --- |
| agentUuid | String | Agent UUID. |
| alarmCsn | String | Alert UUID. |

| Field | | Type | Description |
| --- | --- | --- | --- |
| alarmKey | | String | Alert keyword. For an alert, it is the **msg_id** reported by the transparent transmission agent. For a vulnerability, it is generated by the master. |
| alarmVersion | | String | Agent version. |
| occurTime | | Long | Incident occurrence time (accurate to millisecond). |
| severity | | Long | Severity. |
| hostUuid | | String | UUID of the affected host. |
| hostName | | String | Name of the affected host. |
| hostIp | | String | Communication IP address of the affected host. |
| ipList | | String | List of IP addresses of affected hosts. |
| cloudId | | String | Cloud agent SN. |
| region | | String | Region where the affected host is located. |
| projectId | | String | ID of the affected tenant. |
| enterpriseProjectId | | String | ID of the affected enterprise tenant. |
| appendInfo | | Object | Alert details. |
| appendInfo | agent_id | String | Agent ID. |
| | version | String | Incident version. |
| | container_name | String | Container ID (in container security scenarios). |
| | image_name | String | Image name (in container security scenarios). |
| | event_id | String | Incident ID (GUID). |
| | event_name | String | Incident name. |
| | event_classid | String | Unique incident ID. |
| | occur_time | Long | Occurrence time (accurate to second). |
| | recent_time | Long | Last occurrence time (accurate to second). |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | event_category | | Integer | Incident category. |
| | event_type | | Integer | Incident type. |
| | event_count | | Integer | Number of incidents. |
| | severity | | Integer | Severity. |
| | attack_phase | | Integer | Attack phase. |
| | attack_tag | | Integer | Attack tag. |
| | confidence | | Integer | Confidence. |
| | action | | Integer | Action. |
| | detect_module | | String | Detection module. |
| | report_source | | String | Report source. |
| | related_events | | String | Related incident ID. |
| | resource_info | | Object | Resource information. |
| | network_info | | Object | Network information. |
| | app_info | | Object | Application information. |
| | system_info | | Object | System information. |
| | process_info | | list | Process information. |
| | user_info | | list | User information. |
| | file_info | | list | File information. |
| | geo_info | | Object | Geographic information. |
| | malware_info | | Object | Malware information. |
| | forensic_info | | String | Evidence collection field. |
| | recommendation | | String | Handling suggestions. |
| | extend_info | | String | Extended incident information. |
| | resource_info | project_id | String | Project ID. |
| | | region_name | String | Region name. |
| | | vpc_id | String | VPC ID. |
| | | host_name | String | Host name. |
| | | host_ip | String | Host IP address. |
| | | host_id | String | Host ID (ECS ID). |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | cloud_id | String | Cloud agent SN. |
| | | vm_name | String | VM name. |
| | | vm_uuid | String | VM UUID. |
| | | container_id | String | Container ID. |
| | | image_id | String | Image ID. |
| | | sys_arch | String | System CPU architecture. |
| | | os_bit | String | OS bit version. |
| | | os_type | String | OS type. |
| | | os_name | String | OS name. |
| | | os_version | String | OS version. |
| | network_info | local_address | String | Local address. |
| | | local_port | Integer | Local port. |
| | | remote_address | String | Remote address. |
| | | remote_port | Integer | Remote port. |
| | | src_ip | String | Source IP address. |
| | | src_port | Integer | Source port. |
| | | src_domain | String | Source domain. |
| | | dest_ip | String | Destination IP address. |
| | | dest_port | Integer | Destination port. |
| | | dest_domain | String | Destination domain. |
| | | protocol | String | Protocol. |
| | | app_protocol | String | Application layer protocol. |
| | | flow_direction | String | Flow direction. |
| | app_info | sql | String | Executed SQL statement. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | domain_name | String | DNS domain name. |
| | | url_path | String | URL. |
| | | url_method | String | URL method. |
| | | req_refer | String | URL request referrer. |
| | | email_subject | String | Email subject. |
| | | email_sender | String | Email sender. |
| | | email_receiver | String | Email recipient. |
| | | email_keyword | String | Email keyword. |
| | process_info | process_name | String | Process name. |
| | | process_path | String | Process file path. |
| | | process_pid | Integer | Process ID. |
| | | process_uid | Integer | Process user ID. |
| | | process_username | String | Process username. |
| | | process_cmdline | String | Process file command line. |
| | | process_filename | String | Process file name. |
| | | process_start_time | Long | Process start time. |
| | | process_gid | Integer | Process group ID. |
| | | process_egid | Integer | Effective process group ID. |
| | | process_euid | Integer | Effective process user ID. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | parent_process_name | String | Parent process name. |
| | | parent_process_path | String | Parent process file path. |
| | | parent_process_pid | Integer | Parent process ID. |
| | | parent_process_uid | Integer | Parent process user ID. |
| | | parent_process_cmdline | String | Parent process file command line. |
| | | parent_process_filename | String | Parent process file name. |
| | | parent_process_start_time | Long | Parent process start time. |
| | | parent_process_gid | Integer | Parent process group ID. |
| | | parent_process_egid | Integer | Effective parent process group ID. |
| | | parent_process_euid | Integer | Effective parent process user ID. |
| | | child_process_name | String | Subprocess name. |
| | | child_process_path | String | Subprocess file path. |
| | | child_process_pid | Integer | Subprocess ID. |
| | | child_process_uid | Integer | Subprocess user ID. |
| | | child_process_cmdline | String | Subprocess file command line. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | child_process_filename | String | Subprocess file name. |
| | | child_process_start_time | Long | Subprocess start time. |
| | | child_process_gid | Integer | Subprocess group ID. |
| | | child_process_egid | Integer | Effective subprocess group ID. |
| | | child_process_euid | Integer | Effective subprocess user ID. |
| | | virt_cmd | String | Virtualization command. |
| | | virt_process_name | String | Virtualization process name. |
| | | escape mode | String | Escape mode. |
| | | escape cmd | String | Command executed after the escape. |
| | user_info | user_id | Integer | User ID. |
| | | user_gid | Integer | User GID. |
| | | user_name | String | Username. |
| | | user_group_name | String | User group name. |
| | | user_home_dir | String | User home directory. |
| | | login_ip | String | User login IP address. |
| | | service_type | String | Login service type. |
| | | service_port | Integer | Login service port. |
| | | login_mode | String | Login mode. |
| | | login_lasttime | Long | Last login time of a user. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | login_fail_count | Integer | Failed login attempts. |
| | | pwd_hash | String | Password hash. |
| | | pwd_with_fuzzing | String | Anonymized password. |
| | | pwd_used_days | Integer | Password age (days). |
| | | pwd_min_days | Integer | Minimum password validity period. |
| | | pwd_max_days | Integer | Maximum password validity period. |
| | | pwd_warn_left_days | Integer | Advance warning of password expiration (days). |
| | file_info | file_path | String | File path/name. |
| | | file_alias | String | File alias. |
| | | file_size | Integer | File size. |
| | | file_mtime | Long | Time when the file is last modified. |
| | | file_atime | Long | Time when the file is last accessed. |
| | | file_ctime | Long | Time when the file status last changes. |
| | | file_hash | String | File hash value. |
| | | file_md5 | String | File MD5 value. |
| | | file_sha256 | String | File SHA256 value. |
| | | file_type | String | File type. |
| | | file_content | String | File content. |
| | | file_attr | String | File attribute. |
| | | file_operation | String | File operation type. |
| | | file_change_attr | String | Old/New attribute. |

| Field | | | Type | Description |
| --- | --- | --- | --- | --- |
| | | file_new_path | String | New file path. |
| | | file_desc | String | File description. |
| | | file_key_word | String | File keyword. |
| | | is_dir | Boolean | Whether the file is a directory. |
| | | fd_info | String | File handle information. |
| | | fd_count | Integer | Number of file handles. |
| | forensic_info | monitor_process | String | Monitoring process. |
| | | escape_mode | String | Escape mode. |
| | | abnormal_port | String | Abnormal port. |
| | geo_info | src_country | String | Source country/region. |
| | | src_city | String | Source city. |
| | | src_latitude | Long | Source latitude. |
| | | src_longitude | Long | Source longitude. |
| | | dest_country | String | Destination country/region. |
| | | dest_city | String | Destination city. |
| | | dest_latitude | Long | Destination latitude. |
| | | dest_longitude | Long | Destination longitude. |
| | malware_info | malware_family | String | Malware family. |
| | | malware_class | String | Malware classification. |
| | system_info | pwd_valid | Boolean | Whether the password is valid. |
| | | pwd_min_len | Integer | Password length. |

| Field | | | Type | Description |
|---|---|---|---|---|
| | | pwd_digit_credit | Integer | Digits contained in the password. |
| | | pwd_uppercase_letter | Integer | Uppercase letters contained in the password. |
| | | pwd_lowercase_letter | Integer | Lowercase letters contained in the password. |
| | | pwd_special_characters | Integer | Special characters contained in the password. |
| | extend_info | hit_rule | String | Hit rule. |
| | | rule_name | String | Rule name. |
| | | rulesetname | String | Rule set name. |
| | | report_type | String | Reported data type. |
| | ti_info | ti_source | String | Intelligence source. |
| | | ti_class | String | Intelligence classification. |
| | | ti_threat_type | String | Intelligence threat type. |
| | | ti_first_time | Long | First detection time. |
| | | ti_last_time | Long | Last detection time. |

## sec-ddos-attack

Fields in Anti-DDoS attack logs

**Table 10-39** sec-ddos-attack

| Field | Type | Description |
|---|---|---|
| log_type | String | Log type |
| time | Date | local time |
| device_ip | String | Device IP address |

| Field | Type | Description |
| --- | --- | --- |
| device_type | String | Device type (**CLEAN**: cleaning device; **DETECT**: detecting device) |
| direction | String | Log direction (**inbound**, **outbound**) |
| zone_id | String | Protected object ID |
| zone_name | String | Protected object name |
| zone_ip | String | IP address |
| biz_id | String | Business ID |
| is_deszone | String | Whether the traffic is network segment traffic (**true**, **false**) |
| is_ipLocation | String | Whether the traffic is geographical location traffic (**true**, **false**) |
| ipLocation_id | String | Geographical location ID |
| total_pps | String | Total pps |
| total_kbps | String | Total rate in kbps |
| tcp_pps | String | Rate of TCP packets to the target (in pps) |
| tcp_kbps | String | Rate of TCP traffic to the target (in kbps) |
| tcpfrag_pps | String | Rate of TCP fragments to the target (in pps) |
| tcpfrag_kbps | String | Rate of TCP fragment traffic to the target (in kbps) |
| udp_pps | String | Rate of UDP packets to the target (in pps) |
| udp_kbps | String | Rate of UDP traffic to the target (in kbps) |
| udpfrag_pps | String | Rate of UDP fragments to the target (in pps) |
| udpfrag_kbps | String | Rate of UDP fragment traffic to the target (in kbps) |
| icmp_pps | String | Rate of ICMP packets to the target (in pps) |
| icmp_kbps | String | Total ICMP traffic to the target (in kbps) |
| other_pps | String | Rate of OTHER packets to the target (in pps) |

| Field | Type | Description |
| --- | --- | --- |
| other_kbps | String | Total OTHER traffic to the target (in kbps) |
| syn_pps | String | Number of SYN packets to the target (in pps) |
| synack_pps | String | Number of SYN/ACK packets to the target (in pps) |
| ack_pps | String | Rate of ACK packets to the target (in pps) |
| finrst_pps | String | Rate of FIN/Rst packets to the target (in pps) |
| http_pps | String | Rate of HTTP packets to the target (in pps) |
| http_kbps | String | Rate of HTTP traffic to the target (in kbps) |
| http_get_pps | String | Total packet rate of HTTP requests to the target (in pps) |
| https_pps | String | Rate of HTTPS packets to the target (in pps) |
| https_kbps | String | Rate of HTTPS traffic to the target (in kbps) |
| dns_request_pps | String | Rate of DNS Query packets to the target (in pps) |
| dns_request_kbps | String | Rate of DNS Query traffic to the target (in kbps) |
| dns_reply_pps | String | Rate of DNS Reply packets to the target (in pps) |
| dns_reply_kbps | String | Rate of DNS Reply traffic to the target (in kbps) |
| sip_invite_pps | String | Rate of SIP packets to the target (in PPS). |
| sip_invite_kbps | String | Rate of SIP traffic to the target (in kbps) |
| tcp_increase_con | String | Number of new TCP connections to the target per second |
| udp_increase_con | String | Number of new UDP connections to the target per second |
| icmp_increase_con | String | Number of new ICMP connections to the target per second |

| Field | Type | Description |
| --- | --- | --- |
| other_increase_con | String | Number of OTHER connections to the target per second |
| tcp_concur_con | String | Number of concurrent TCP connections to the target |
| udp_concur_con | String | Number of concurrent UDP connections to the target |
| icmp_concur_con | String | Number of concurrent ICMP connections to the target |
| other_concur_con | String | Number of concurrent OTHER connections to the target |
| total_average_pps | String | Average pps of all traffic to the target |
| total_average_kbps | String | Average Kbps of all traffic to the target |

## sec-cts-audit

Fields in CTS logs

**Table 10-40** sec-cts-audit

| Field | Type | Description |
| --- | --- | --- |
| time | Date | Time when an incident occurs. The value is the local standard time (GMT +local time zone), for example, 2022/11/08 11:24:04 GMT+08:00. |
| user | Object | Cloud account used to perform the recorded operation. |
| request | Object | Requested operation. |
| response | Object | Response to the request. |
| service_type | String | Operation source. |
| resource_type | String | Resource type. |
| resource_name | String | Resource name. |
| resource_id | String | Unique resource ID. |
| source_ip | String | IP address of the user who performs an operation. The value of this parameter is empty if the operation is triggered by the system. |

| Field | Type | Description |
| --- | --- | --- |
| trace_name | String | Operation name. |
| trace_rating | String | Level of an operation incident. The options are as follows:<br>• **normal**: The operation succeeded.<br>• **warning**: The operation failed.<br>• **incident**: The operation caused a serious consequence, for example, a node failure or service interruption. |
| trace_type | String | Operation type. The options are as follows:<br>• **ConsoleAction**: operations performed on the management console<br>• **SystemAction**: operations triggered by system<br>• **ApiCall**: operations triggered by invoking API Gateway<br>• **ObsSDK**: operations on OBS buckets, which were triggered by calling OBS SDKs<br>• **Others**: operations on OBS buckets except those triggered by calling OBS SDKs |
| api_version | String | API version of the cloud service on which an operation was performed. |
| message | Object | Supplementary information. |
| record_time | Long | Time when the operation was recorded, in the form of a timestamp. |
| trace_id | String | Unique operation ID. |
| code | Integer | HTTP return code, for example, 200 or 400. |
| request_id | String | Request ID. |
| location_info | String | Additional information required for fault locating after a request error. |
| endpoint | String | Endpoint of the page that displays details of cloud resources involved in this operation. |
| resource_url | String | Access link (excluding the endpoint) of the page that displays details of cloud resources involved in this operation. |

| Field | Type | Description |
| --- | --- | --- |
| user_agent | String | Type of OBS bucket-related operations that are not invoked using OBS SDKs. |
| content_length | Long | Length of the request body for performing operations on OBS buckets. |
| total_time | Long | Response time of the request in OBS bucket-related operations. |

## sec-cfw-risk

Fields in CFW attack event logs

**Table 10-41** sec-cfw-risk

| Field | Type | Description |
| --- | --- | --- |
| event_time | Date | Attack time |
| action | String | Response action of CFW<br>• **permit**<br>• **deny** |
| app | String | Application type |
| attack_rule | String | Defense rule that works for the detected attack |
| attack_rule_id | String | ID of the defense rule that works for the detected attack |

| Field | Type | Description |
| --- | --- | --- |
| attack_type | String | Type of the attack<br>• Vulnerability exploit<br>• Vulnerability scan<br>• Trojan<br>• Worms<br>• Phishing<br>• Web attacks<br>• Application DDoS<br>• Buffer overflow<br>• Password attacks<br>• Mail<br>• Access control<br>• Hacking tools<br>• Hijacking<br>• Protocol exception<br>• Spam<br>• Spyware<br>• DDoS flood<br>• Suspicious DNS activities<br>• Other suspicious behaviors |
| dst_ip | String | Destination IP address |
| dst_port | String | Destination port number |
| packet | String | Original data packet of the attack log |
| protocol | String | Protocol type |
| level | String | Level of detected threats<br>• **CRITICAL**<br>• **HIGH**<br>• **MIDDLE**<br>• **LOW** |
| source | String | Defense for the detected attack<br>• **0**: basic defense<br>• **1**: virtual patch |
| src_ip | String | Source IP address |
| src_port | String | Source port number |

| Field | Type | Description |
| --- | --- | --- |
| direction | String | Flow direction<br>• **out2in**: inbound<br>• **in2out**: outbound |

## sec-cfw-flow

Fields in CFW traffic logs

**Table 10-42** sec-cfw-flow

| Field | Type | Description |
| --- | --- | --- |
| app | String | Application type |
| dst_ip | String | Destination IP address |
| dst_port | String | Destination port number |
| end_time | Date | Flow end time |
| protocol | String | Protocol type |
| to_c_bytes | String | Number of bytes sent from the server to the client |
| to_c_pkts | String | Number of packets sent from the server to the client |
| to_s_bytes | String | Number of bytes sent from the client to the server |
| to_s_pkts | String | Number of packets sent from the server to the client |
| src_ip | String | Source IP address |
| src_port | String | Source port number |
| start_time | Date | Flow start time |

## sec-cfw-block

Fields in CFW access control logs

**Table 10-43** sec-cfw-block

| Field | Type | Description |
| --- | --- | --- |
| hit_time | Date | Time of access |

| Field | Type | Description |
| --- | --- | --- |
| action | String | Response action of CFW<br>• **permit**<br>• **deny** |
| app | String | Application type |
| dst_ip | String | Destination IP address |
| dst_port | String | Destination port number |
| protocol | String | Protocol type |
| rule_id | String | ID of the triggering rule |
| src_ip | String | Source IP address |
| src_port | String | Source port number |

## sec-apig-access

Fields in API Gateway access logs

**Table 10-44** sec-apig-access

| Field | Type | Description |
| --- | --- | --- |
| region_id | String | Site. |
| api_id | String | API ID. |
| body_bytes_sent | String | Response body size. |
| bytes_sent | String | Size of the entire response. |
| domain | String | Public network domain name. |
| errorType | String | Status of request throttling. Value **1** indicates that request throttling is enabled. |
| http_user_agent | String | User agent ID. |
| http_x_forwarded_for | String | **X-Forwarded-For** header. |
| opsuba_api_url | String | Request URI. |
| out_times | String | Time required for interaction between the gateway and peripheral components. |
| remote_addr | String | Remote IP address. |
| request_id | String | Request ID. |

| Field | Type | Description |
| --- | --- | --- |
| request_length | String | Size of the entire request. |
| request_method | String | HTTP request method. |
| request_time | String | Time required for access. |
| scheme | String | Protocol. |
| server_protocol | String | Request protocol. |
| status | String | Status. |
| time_local | Date | Time. |
| upstream_addr | String | Remote IP address. |
| upstream_connect_time | String | Time required for a remote connection. |
| upstream_header_time | String | Time required for receiving the header at the remote end. |
| upstream_response_time | String | Time required for returning a response from the remote end. |
| upstream_status | String | Remote status. |
| upstream_uri | String | Request backend URI. |
| user_name | String | Project ID or app ID of the user. |

## sec-dbss-alarm

Fields in DBSS alert logs

**Table 10-45** dbss-alarm

| Field | Type | Description |
| --- | --- | --- |
| domain_id | String | Account ID. |
| project_id | String | Project ID |
| region | String | Region |
| tenant_vpc_id | String | VPC ID of the tenant |
| tenant_subnet_id | String | Subnet ID of the tenant |
| instance_id | String | Instance ID |
| instance_name | String | Instance name |
| alarm | Object | Alert object |

| Field | | Type | Description |
| --- | --- | --- | --- |
| source_type | | String | DBSS |
| alarm | alarm_risk | String | Severity |
| | client_ip | String | Connection IP address |
| | database_ip | String | IP address for accessing the database |
| | count | Long | Number of alerts |
| | user_name | String | Database username |
| | schema | String | Oracle schema |
| | rule_name | String | Rule name |
| | rule_id | String | Rule ID |
| | sql_type | String | SQL execution type |
| | sql_result | String | SQL execution result |
| | db_type | String | Database type |

## sec-dsc-alarm

The reserved fields in DSC alert logs vary depending on the log types.

**Table 10-46** AK SK leakage (aksk_leakage)

| Field | Type | Description |
| --- | --- | --- |
| log_type | String | Alert type |
| region_id | String | Region |
| domain_id | String | Account ID. |
| project_id | String | Project ID |
| leakage_ak | String | AK |
| source | String | Leakage source |
| find_time | String | Discovery time |
| account | String | Account name. |
| file_name | String | File name |
| file_suffix | String | File name extension |
| leakage_user_id | String | Sub-user ID of the leakage |

| Field | Type | Description |
| --- | --- | --- |
| leakage_user_name | String | Sub-username of the leakage |
| leakage_domain_id | String | Leaked account ID. |
| leakage_domain_name | String | Leaked account name. |
| url | String | Website URL of the leakage |

**Table 10-47** Risky OBS bucket files (obs_risk)

| Field | Type | Description |
| --- | --- | --- |
| log_type | String | Alert type |
| region_id | String | Region |
| domain_id | String | Account ID. |
| project_id | String | Project ID |
| bucket_policy | String | Public bucket/Private bucket |
| bucket_domain_id | String | ID of the account that the bucket belongs to. |
| bucket_project_id | String | ID of the project to which the bucket belongs |
| bucket_name | String | Bucket name |
| file_name | String | File name |
| file_path | String | File path |
| risk_level | Integer | Sensitive risk level |
| sensitive_data_type | String[] | Sensitive data type |
| privacy_detail | String | Personal privacy data details |
| file_type | String | File type |
| mimetypes | String | File type |
| rule_list | List<Map<String,String>> | List of matched rules |
| keyword | String | Keyword for matching sensitive data rules |
| available_zone | String | AZ |
| encrypted | String | Whether to encrypt data |

**Table 10-48** Sensitive data fields (db_risk)

| Field | Type | Description |
| --- | --- | --- |
| log_type | String | Alert type |
| region_id | String | Region |
| domain_id | String | Account ID. |
| project_id | String | Project ID |
| vpc_id | String | VPC ID |
| db_instance_type | String | RDS PUB |
| db_instance_id | String | Database instance ID |
| db_instance_type | String | Database instance type |
| db_instance_ip | String | IP address of the database instance |
| db_instance_domain_id | String | ID of the account that the database instance belongs to. |
| db_instance_project_id | String | ID of the project to which the database instance belongs |
| db_instance_name | String | Database instance name |
| db_name | String | Database name |
| table_name | String | Table name |
| field_name | String | Field name |
| data_type | String | Field data type |
| risk_level | Integer | Sensitive risk level |
| sensitive_data_type | String[] | Sensitive data type |
| privacy_detail | String | Personal privacy data details |
| rule_list | List<Map<String,String>> | List of matched rules |
| keyword | String | Keyword for matching sensitive data rules |

## 10.5.4 Configuring Indexes

An index in security analysis is a storage structure used to sort one or more columns in log data. Different index configurations generate different query and analysis results. Configure indexes based on your requirements.

If you want to use the analysis function, you must configure field indexes. After configuring a field index, you can specify field keys and field values to narrow

down the query scope. For example, the query statement **level:error** is to query logs whose **level** field contains the value **error**.

## Limitations and Constraints

Custom index can be configured only for new custom pipelines. For details, see **Creating a Pipeline**.

## Configuring Field Indexes

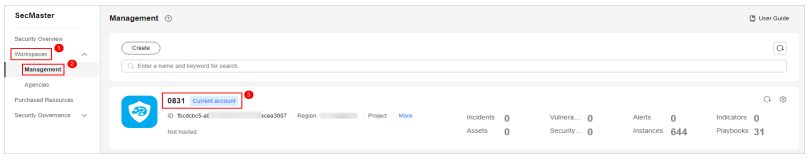
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

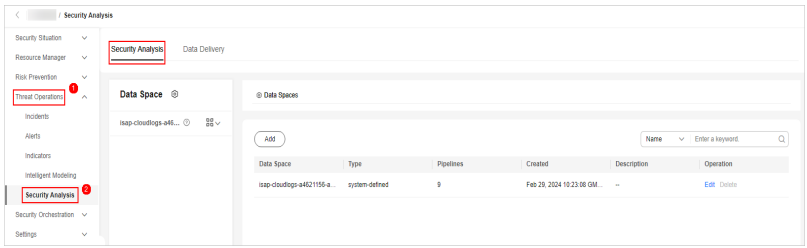
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-60** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

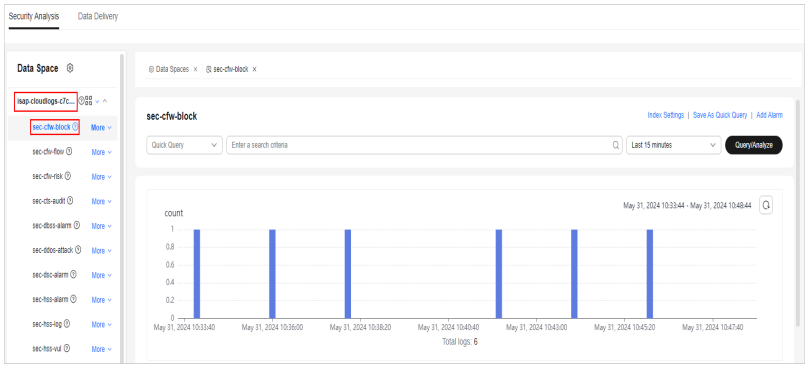
**Figure 10-61** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-62** Pipeline data page




**Step 7** On the pipeline page, click **Index Settings** in the upper right corner.

**Step 8** On the **Index Settings** page, configure index parameters.

1. Enable the index status.

   The index status is enabled by default. When the index status is disabled, collected logs cannot be queried using indexes.

2. Configure index parameters. For details about the parameters, see **Table 10-49**.

**Table 10-49** Parameters for index settings

| Parameter | Description |
| --- | --- |
| Field | Log field (key) |
| Type | Data type of the log field value. The options are text, keyword, long, integer, double, float, date, and json. |

| Parameter | Description |
| --- | --- |
| Includes Chinese | Indicates whether to distinguish between Chinese and English during query. This parameter needs to be specified when **Type** is set to **text**.<br>– After the function is enabled, if the log contains Chinese characters, the Chinese content is split based on the Chinese grammar and the English content is split based on delimiters.<br>– After this function is disabled, all content is split based on delimiters.<br>Example: The log content is **user:WAF log user Zhang San**.<br>– After **Includes Chinese** is disabled, the log is split based on the colon (:). So it is split into **user** and **WAF log user Zhang San**. You can search for the log by **user** or WAF **log user Mr. Zhang**.<br>– After **Includes Chinese** is enabled, the LTS background analyzer splits the log into **user**, **WAF**, **log**, **user,** and **Zhang San**. You can find logs by searching for **log** or **Mr. Zhang**. |

**Step 9** Click **OK**.

**----End**

# 10.5.5 Querying and Analyzing Data

## Scenario

You can query and analyze collected log data in real time on the **Analyze & Query** tab.

This topic walks you through how to query and analyze log data.

- **Executing a Query and Analysis Based on Query Criteria**
- **Using Existing Fields for Query and Analysis**
- **Managing Query Analysis Results**

## Prerequisites

Data access has been completed. For details, see **Data Integration**.

## Executing a Query and Analysis Based on Query Criteria

**Step 1** Log in to the management console.

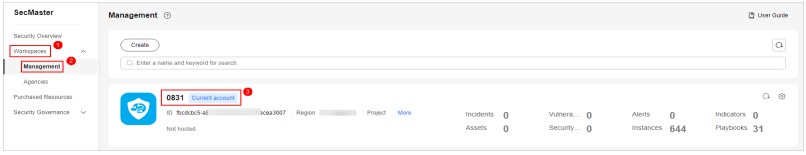
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

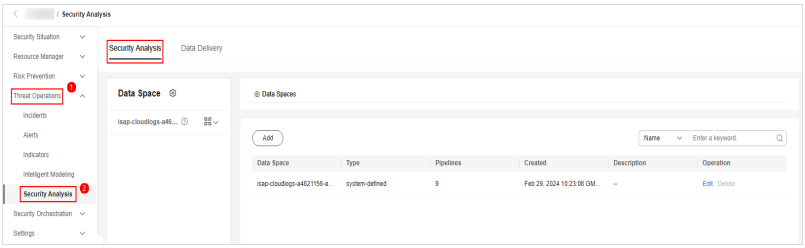
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-63** Workspace management page



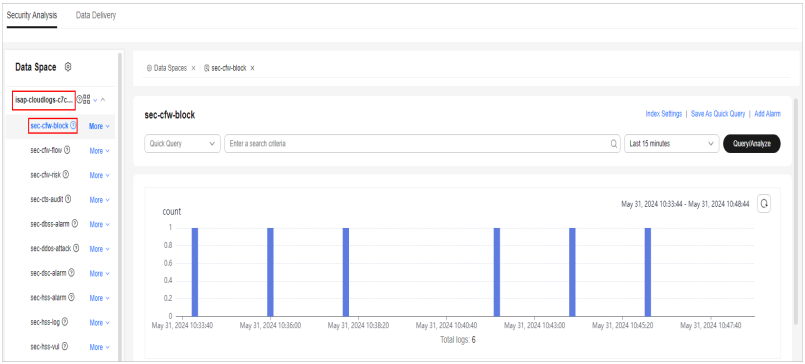

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-64** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-65** Pipeline data page




**Step 7** On the pipeline data retrieval page, enter the query analysis statement.

A query analysis statement consists of a query statement and an analysis statement. The format is **Query Statement|Analysis Statement**. For details about the syntax of query analysis statements, see **Query and Analysis Statements - SQL Syntax**.

**NOTE**

If the reserved field is of the text type, **MATCH_QUERY** is used for word segmentation query by default.

**Figure 10-66** Query/Analyze


**Step 8** Select **Last 15 minutes** as the time range.

You can select **Last 15 minutes**, **Last hour**, or **Last 24 hours** or customize a time range for the query.

**Step 9** Click **Query/Analyze** and view the results.

**----End**

## Using Existing Fields for Query and Analysis

The following part describes how to use existing fields to query and analyze logs.

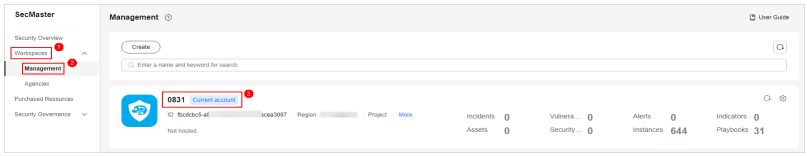
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

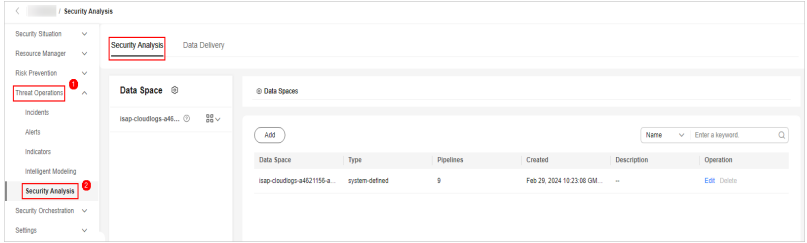
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-67** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

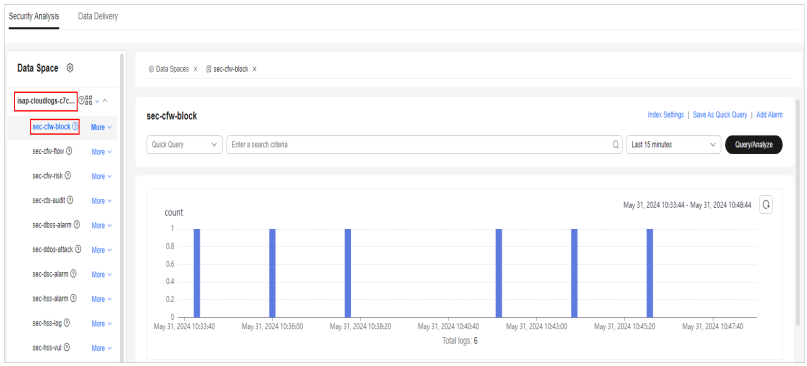
**Figure 10-68** Accessing the Security Analysis tab page



**Step 6** In the **Data Spaces** tree on the left, click a data space name to show the pipeline list. Then, click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-69** Pipeline data page




**Step 7** Set search criteria.

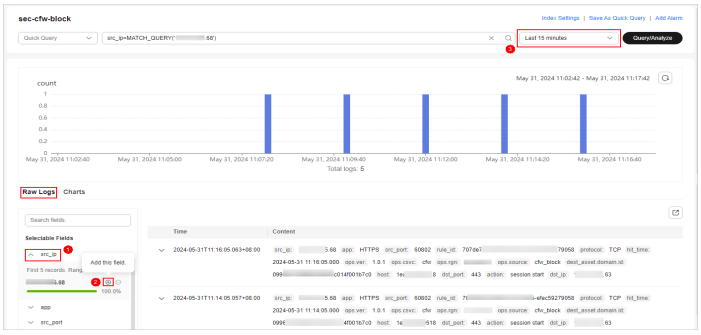
For details about the existing fields in the access data, see **Log Fields**.

**NOTE**

If the reserved field is of the text type, **MATCH_QUERY** is used for word segmentation query by default.

- In raw logs, click ⌄ before an optional field on the left and click ⊕ (adding a field value) next to the field to search for specific logs that contain the selected field value. To exclude a field value, click ⊖ before the field name.

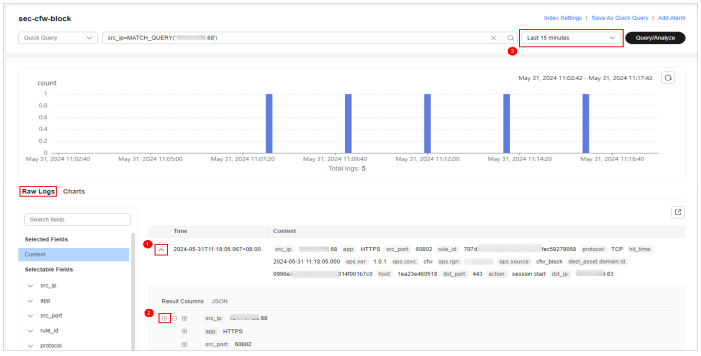
  **Figure 10-70** Filtering a Field Value (1)

- If you have expanded the log data at a specific time point and need to filter some fields, click ⊕ (adding a field value) in front of the field name. The query box displays the matched fields. To exclude a field value, click ⊖ before the field name.

**Figure 10-71** Filtering a Field Value (2)



**Step 8** By default, data in the last 15 minutes is queried and displayed. If you want to query log data in other time ranges, set the query time and click **Query/Analyze**.

**----End**

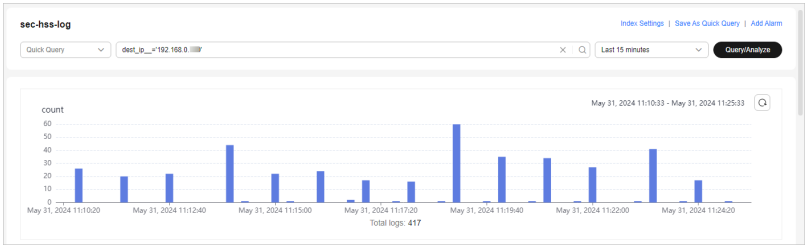
## Managing Query Analysis Results

SecMaster displays query and analysis results in the form of log distribution bar charts, **Raw Logs**, and **Charts**.

- Log distribution bar chart

  A bar chart is used to display queried logs over time. You can move the cursor to a certain bar to view the number of logs hit at the time the bar represents.

  **Figure 10-72** Log distribution bar chart



- **Raw Logs**

  The **Raw Logs** tab displays the results of the current query.

  **Figure 10-73** Raw Logs

  – To display log data over time:

    ■ By default, log data in the last 15 minutes is displayed. To display data in other time, select the time range in the upper right corner.

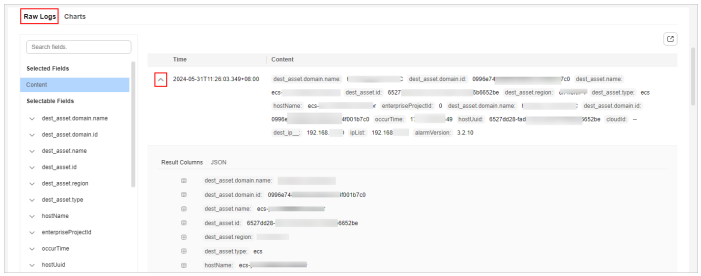
  

**Figure 10-74** Selecting a time range

- To view data of all fields at a specified time, click ⌄ in front of the time in the table to expand all data. By default, data is displayed in a table.

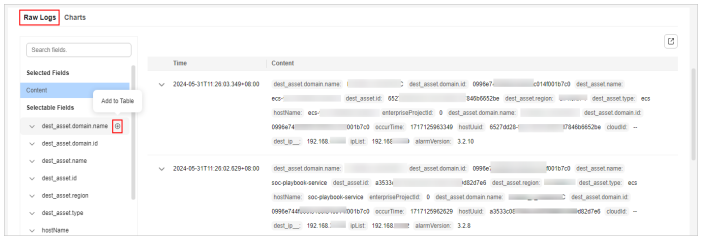
  To view data in JSON format, click the **JSON** tab. Data in JSON format is displayed on the page.

**Figure 10-75** Expand to display data



- To display or filter some fields in the list, select the fields to be displayed in the Available Fields area on the right and click ⊕ next to the field name. The fields are displayed in the log data list on the right.

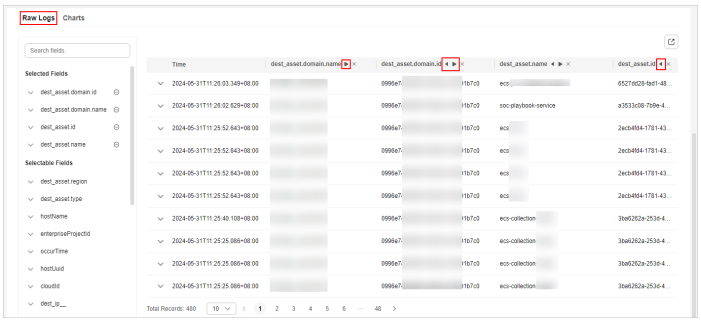
**Figure 10-76** Selected fields to be displayed



  - To adjust the field sequence: In the heading columns of the log data list on the right, select a field and then click ◂ or ▸ next to the field name to move the field left or right by one column with each click.

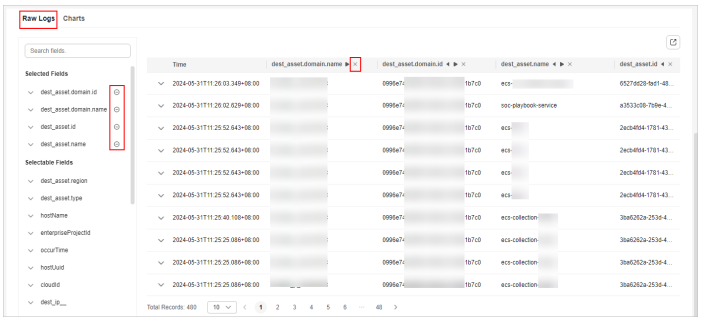
  

**Figure 10-77** Adjusting field display sequence



- To cancel the display: In the table header column of the log data list on the right, select the target field, and click × next to the field name, or click ⊖ next to the field name on the left.

**Figure 10-78** Deselect



  - To export logs: On the **Raw Logs** tab page, click ⧉ in the upper right corner of the page. The system automatically downloads raw logs to the local PC.

- **Charts**

  After a query statement is executed, you can view visualized query analysis results on the **Charts** tab.

  On the **Charts** tab, SecMaster provides query and analysis results in multiple chart types, such as tables, line charts, bar charts, and pie charts. For details, see **Overview**.

- **Alarm**

  In the upper right corner of the **Analyze & Query** tab, click **Add Alarm** to add alert models. You can set alert rules for generating alerts for query and analysis results hit the rules. For details, see **Quickly Adding a Log Alarm Model**.

- **Quick Query**

  In the upper right corner of the query analysis page, click **Save as Quick Query** to save search criteria as a quick query. For details, see **Quick Query**.

# 10.5.6 Downloading Logs

## Scenario

SecMaster allows you to download raw logs or query and analysis logs.

## Prerequisites

Data access has been completed. For details, see **Data Integration**.

## Procedure

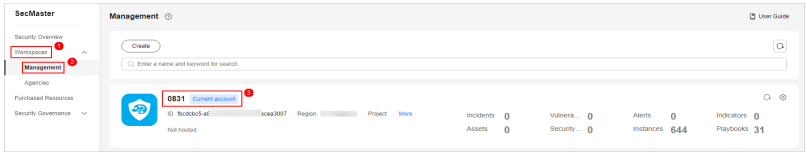
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

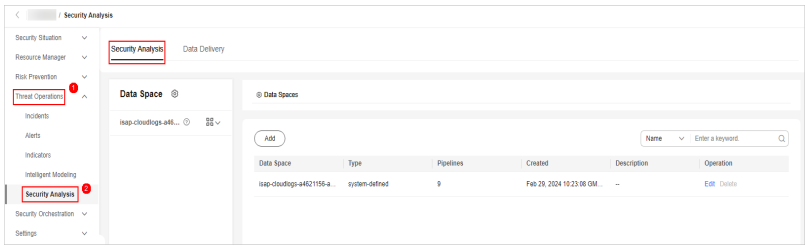
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-79** Workspace management page



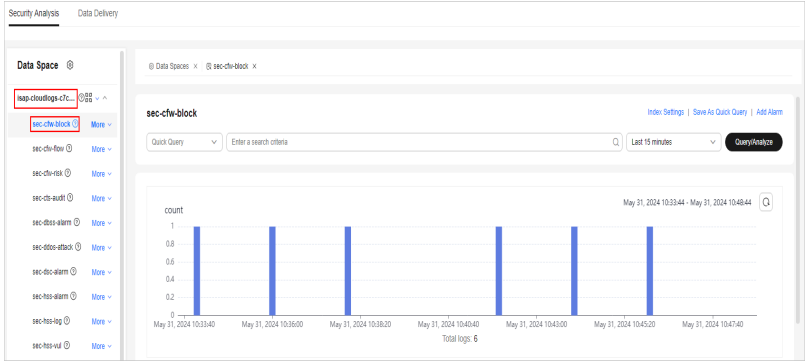

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-80** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-81** Pipeline data page



**Step 7** (Optional) On the pipeline data retrieval page, enter the search criteria, select a time range, and click **Query/Analyze**.

**Step 8** Download logs.

- Raw logs: On the **Raw Logs** tab page, click . The system downloads logs to the local PC.
- Chart logs: On the **Charts** tab page, click **Download**. The system downloads the logs to the local PC.

**----End**

# 10.5.7 Query and Analysis Statements - SQL Syntax

## 10.5.7.1 Basic Syntax

An SQL statement consists of a query statement and an analysis statement, which are separated by a vertical bar (|). Query statements can be used independently, but analysis statements must be used together with query statements.

```
Query Statement | Analysis Statement
```

**Table 10-50** Basic syntax

| Statement Type | Description |
| --- | --- |
| Query Statement | A query statement is used to specify the filter criteria for log query and return the logs that meet the filter criteria. By setting filter criteria, you can quickly query required logs. |
| Analysis statements | An analysis statement is used to calculate and collect statistics on query results. |

## 10.5.7.2 Limitations and Constraints

- Query statements do not support mathematical operations, such as (age + 100) ≤ 1000.
- Aggregate functions support only fields and do not support expressions, for example, avg(log(age)).
- Multi-table association is not supported.
- Subqueries are not supported.
- A maximum of 500 records can be returned on the page.
- A maximum of 10,000 groups can be returned by GROUP BY.

## 10.5.7.3 Query Statements

A query statement is used to specify the filter criteria for log query and return the logs that meet the filter criteria. By setting filter criteria, you can quickly query required logs.

This topic describes query statements and examples.

## Syntax

A query statement can be in either of the following formats:

- If the value is only *, full data is returned without filtering.
- It consists of one or more query clauses. The clauses are connected by **NOT**, **AND**, and **OR**. **()** can be used to increase the priority of the query conditions in parentheses.

The basic structure of a query clause is as follows:

```
Field Name Operator Field Value
```

**Operators** lists the operators that can be used.

## Operators

**Table 10-51** Operator descriptions

| Operator | Description |
| --- | --- |
| = | Queries logs in which the value of a field is equal to a certain value. |
| <> | Queries the logs in which the value of a field is not equal to a certain value. |
| > | Queries logs in which the value of a field is greater than a specified value. |
| < | Queries logs in which the value of a field is less than a specified value. |
| >= | Queries logs in which the value of a field is greater than or equal to a specified value. |
| <= | Queries logs in which the value of a field is less than or equal to a specified value. |
| IN | Queries the logs whose field values are within a specified value range. |
| BETWEEN | Queries the logs whose field values are in the specified range. |
| LIKE | Searches for logs of a field value in full text. |
| IS NULL | Queries logs whose field value is NULL. |
| IS NOT NULL | Query logs whose field value is NOT NULL. |

## Examples

**Table 10-52** Example query statements

| Query Requirement | Query Statement |
| --- | --- |
| All logs | * |
| Logs about successful GET requests (status codes 200 to 299). | request_method = 'GET' AND status BETWEEN 200 AND 299 |
| Logs of GET or POST requests | request_method = 'GET' OR request_method = 'POST' |
| Logs of non-GET requests | NOT request_method = 'GET' |
| Logs about successful GET or POST requests | (request_method = 'GET' OR request_method = 'POST') AND status BETWEEN 200 AND 299 |
| Logs of GET or POST request failures | (request_method = 'GET' OR request_method = 'POST') NOT status BETWEEN 200 AND 299 |
| Logs of successful GET requests (status code: 200 to 299) whose request time is greater than or equal to 60 seconds. | request_method = 'GET' AND status BETWEEN 200 AND 299 AND request_time >= 60 |
| Logs whose request time is 60 seconds. | request_time = 60 |

## 10.5.7.4 Analysis Statements - SELECT

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

**SELECT** indicates the field to be queried. The following part describes parameters and examples for the **SELECT** syntax.

## Using * to query all fields.

```
SELECT *
```

**Table 10-53** Using * to query all fields

| account_number | firstname | gender | city | balance | employer | state | lastname | age |
|---|---|---|---|---|---|---|---|---|
| 1 | Amber | M | Brogan | 39225 | Pyrami | IL | Duke | 32 |
| 16 | Hattie | M | Dante | 5686 | Netagy | TN | Bond | 36 |
| 13 | Nanette | F | Nogal | 32838 | Quility | VA | Bates | 28 |
| 18 | Dale | M | Orick | 4180 | null | MD | Adams | 32 |

## Querying a Specified Field

```
SELECT firstname, lastname
```

**Table 10-54** Querying a Specified Field

| firstname | lastname |
|---|---|
| Amber | Duke |
| Hattie | Bond |
| Nanette | Bates |
| Dale | Adams |

## Using AS to Define Field Aliases

```
SELECT account_number AS num
```

**Table 10-55** Using AS to define field aliases

| num |
|---|
| 1 |
| 16 |
| 13 |
| 18 |

## Using the DISTINCT Statement

```
SELECT DISTINCT age
```

**Table 10-56** Using the DISTINCT statement

| age |
| --- |
| 32 |
| 36 |
| 28 |

## Using SQL Functions

For details about functions, see **Functions**.

```
SELECT LENGTH(firstname) as len, firstname
```

**Table 10-57** Using SQL functions

| len | firstname |
| --- | --- |
| 4 | Amber |
| 6 | Hattie |
| 7 | Nanette |
| 4 | Dale |

## 10.5.7.5 Analysis Statements - GROUP BY

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

Where, **GROUP BY** indicates grouping by value. The following part describes parameters and examples for the **GROUP BY** syntax.

## Grouping by Field Value

```
SELECT age GROUP BY age
```

**Table 10-58** Grouping by field value

| age |
| --- |
| 28 |
| 32 |
| 36 |

## Grouping by Field Alias

```
SELECT account_number AS num GROUP BY num
```

**Table 10-59** Grouping by field alias

| num |
| --- |
| 1 |
| 16 |
| 13 |
| 18 |

## Grouping by Multiple Fields

```
SELECT account_number AS num, age GROUP BY num, age
```

**Table 10-60** Grouping by multiple fields

| num | age |
| --- | --- |
| 1 | 32 |
| 16 | 36 |
| 13 | 28 |
| 18 | 32 |

## Using SQL Functions

For details about functions, see **Function**.

```
SELECT LENGTH(lastname) AS len, COUNT(*) AS count GROUP BY LENGTH(lastname)
```

**Table 10-61** Using SQL functions

| len | count |
| --- | --- |
| 4 | 2 |
| 5 | 2 |

## 10.5.7.6 Analysis Statements - HAVING

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

The **HAVING** syntax specifies the conditions for filtering group results (**GROUP BY**) or aggregation calculation results. The following part describes parameters and examples for the **HAVING** syntax.

Filters data based on grouping and **Aggregate Functions**.

```
SELECT age, MAX(balance) GROUP BY age HAVING MIN(balance) > 10000
```

**Table 10-62** The HAVING function

| age | MAX(balance) |
| --- | --- |
| 28 | 32838 |
| 32 | 39225 |

## 10.5.7.7 Analysis Statements - ORDER BY

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

Where, **ORDER BY** indicates sorting by field value. The following part describes parameters and examples for the **ORDER BY** syntax.

## Sorting Data by Field Value

```
SELECT age ORDER BY age DESC
```

**Table 10-63** Sorting by field value

| age |
| --- |
| 28 |
| 32 |
| 32 |
| 36 |

## 10.5.7.8 Analysis Statements - LIMIT

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

Where, **LIMIT** indicates the number of returned data records. The following part describes parameters and examples for the **LIMIT** syntax.

## Specifying the Number of Returned Records

```
SELECT * LIMIT 1
```

**Table 10-64** Specifying the number of returned records

| account_number | firstname | gender | city | balance | employer | state | lastname | age |
|---|---|---|---|---|---|---|---|---|
| 1 | Amber | M | Brogan | 39225 | Pyrami | IL | Duke | 32 |

## Specifying the Number of Returned Records and Offsets

```
SELECT * LIMIT 1 OFFSET 1
```

**Table 10-65** Specifying the number of returned records and offsets

| account_number | firstname | gender | city | balance | employer | state | lastname | age |
|---|---|---|---|---|---|---|---|---|
| 16 | Hattie | M | Dante | 5686 | Netagy | TN | Bond | 36 |

## 10.5.7.9 Analysis Statements - Functions

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

This section describes functions.

## Mathematics Functions

**Table 10-66** Mathematics Functions

| Function | Purpose | Description | Example Value |
|---|---|---|---|
| abs | Absolute value | abs(number T) -> T | SELECT abs(0.5) LIMIT 1 |
| add | Addition | add(number T, number) -> T | SELECT add(1, 5) LIMIT 1 |
| cbrt | Cubic root | cbrt(number T) -> T | SELECT cbrt(0.5) LIMIT 1 |
| ceil | Rounded up | ceil(number T) -> T | SELECT ceil(0.5) LIMIT 1 |

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| divide | Division | divide(number T, number) -> T | SELECT divide(1, 0.5) LIMIT 1 |
| e | Natural base number e | e() -> double | SELECT e() LIMIT 1 |
| exp | Power of the natural base number e | exp(number T) -> T | SELECT exp(0.5) LIMIT 1 |
| expm1 | Subtract one from the power of the natural base number e. | expm1(number T) -> T | SELECT expm1(0.5) LIMIT 1 |
| floor | Rounded down | floor(number T) -> T | SELECT floor(0.5) AS Rounded_Down LIMIT 1 |
| ln | Returns the natural logarithm. | ln(number T) -> double | SELECT ln(10) LIMIT 1 |
| log | Logarithm with T as the base | log(number T, number) -> double | SELECT log(10) LIMIT 1 |
| log2 | Logarithm with 2 as the base | log2(number T) -> double | SELECT log2(10) LIMIT 1 |
| log10 | Logarithm to base 10 | log10(number T) -> double | SELECT log10(10) LIMIT 1 |
| mod | Remainder | mod(number T, number) -> T | SELECT modulus(2, 3) LIMIT 1 |
| multiply | Multiplication | multiply(number T, number) -> number | SELECT multiply(2, 3) LIMIT 1 |
| pi | π | pi() -> double | SELECT pi() LIMIT 1 |
| pow | T power of | pow(number T, number) -> T | SELECT pow(2, 3) LIMIT 1 |
| power | T power of | power(number T) -> T, power(number T, number) -> T | SELECT power(2, 3) LIMIT 1 |
| rand | Random number. | rand() -> number, rand(number T) -> T | SELECT rand(5) LIMIT 1 |
| rint | Discard decimals. | rint(number T) -> T | SELECT rint(1.5) LIMIT 1 |

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| round | Round off | round(number T) -> T | SELECT round(1.5) LIMIT 1 |
| sign | Symbol | sign(number T) -> T | SELECT sign(1.5) LIMIT 1 |
| signum | Symbol | signum(number T) -> T | SELECT signum(0.5) LIMIT 1 |
| sqrt | Square root | sqrt(number T) -> T | SELECT sqrt(0.5) LIMIT 1 |
| subtract | Subtraction | subtract(number T, number) -> T | SELECT subtract(3, 2) LIMIT 1 |
| / | Division | number / number -> number | SELECT 1 / 100 LIMIT 1 |
| % | Remainder | number % number -> number | SELECT 1 % 100 LIMIT 1 |

## Trigonometric Functions

**Table 10-67** Trigonometric functions

| Functions | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| acos | Arc cosine | acos(number T) -> double | SELECT acos(0.5) LIMIT 1 |
| asin | Arc sine | asin(number T) -> double | SELECT asin(0.5) LIMIT 1 |
| atan | Inverse tangent | atan(number T) -> double | SELECT atan(0.5) LIMIT 1 |
| atan2 | T Arc tangent of the result of dividing U | atan2(number T, number U) -> double | SELECT atan2(1, 0.5) LIMIT 1 |
| cos | Cosine | cos(number T) -> double | SELECT cos(0.5) LIMIT 1 |
| cosh | hyperbolic cosine | cosh(number T) -> double | SELECT cosh(0.5) LIMIT 1 |
| cot | Cotangent | cot(number T) -> double | SELECT cot(0.5) LIMIT 1 |
| degrees | Converting radians to degrees | degrees(number T) -> double | SELECT degrees(0.5) LIMIT 1 |

| Functions | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| radians | Converting degrees to radians | radians(number T) -> double | SELECT radians(0.5) LIMIT 1 |
| sin | Sine | sin(number T) -> double | SELECT sin(0.5) LIMIT 1 |
| sinh | hyperbolic sine | sinh(number T) -> double | SELECT sinh(0.5) LIMIT 1 |
| tan | Tangent | tan(number T) -> double | SELECT tan(0.5) LIMIT 1 |

## Temporal Functions

**Table 10-68** Temporal functions

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| curdate | Specifies the current date. | curdate() -> date | SELECT curdate() LIMIT 1 |
| date | Date | date(date) -> date | SELECT date() LIMIT 1 |
| date_format | Obtains the date value based on the format. | date_format(date, string) -> string | SELECT date_format(date, 'Y') LIMIT 1 |
| day_of_month | Month | day_of_month(date) -> integer | SELECT day_of_month(date) LIMIT 1 |
| day_of_week | Day of a week | day_of_week(date) -> integer | SELECT day_of_week(date) LIMIT 1 |
| day_of_year | Number of days in the current year | day_of_year(date) -> integer | SELECT day_of_year(date) LIMIT 1 |
| hour_of_day | Number of hours on the current day | hour_of_day(date) -> integer | SELECT hour_of_day(date) LIMIT 1 |
| maketime | Date of Generation | maketime(integer, integer, integer) -> time | SELECT maketime(11, 30, 00) LIMIT 1 |

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| minute_of_hour | Number of minutes in the current hour | minute_of_hour(date) -> integer | SELECT minute_of_hour(date) LIMIT 1 |
| minute_of_day | Number of minutes on the current day | minute_of_day(date) -> integer | SELECT minute_of_day(date) LIMIT 1 |
| monthname | Month Name | monthname(date) -> string | SELECT monthname(date) LIMIT 1 |
| now | Current time. | now() -> time | SELECT now() LIMIT 1 |
| second_of_minute | Number of seconds | minute_of_day(date) -> integer | SELECT minute_of_day(date) LIMIT 1 |
| timestamp | Date | timestamp(date) -> date | SELECT timestamp(date) LIMIT 1 |
| year | Year | year(date) -> integer | SELECT year(date) LIMIT 1 |

## Text Functions

**Table 10-69** Text functions

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| ascii | ASCII value of the first character | ascii(string T) -> integer | SELECT ascii('t') LIMIT 1 |
| concat_ws | Connection String | concat_ws(separator, string, string) -> string | SELECT concat_ws('-', 'Tutorial', 'is', 'fun!') LIMIT 1 |
| left | Obtain a character string from left to right. | left(string T, integer) -> T | SELECT left('hello', 2) LIMIT 1 |
| length | length | length(string) -> integer | SELECT length('hello') LIMIT 1 |
| locate | Search for a string | locate(string, string) -> integer | SELECT locate('o', 'hello') LIMIT 1 |
| replace | Replace strings | replace(string T, string, string) -> T | SELECT replace('hello', 'l', 'x') LIMIT 1 |

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| right | Obtain a character string from right to left. | right(string T, integer) -> T | SELECT right('hello', 1) LIMIT 1 |
| rtrim | Remove the empty character string on the right. | rtrim(string T) -> T | SELECT rtrim('hello ') LIMIT 1 |
| substring | Obtaining a Substring | substring(string T, integer, integer) -> T | SELECT substring('hello', 2,5) LIMIT 1 |
| trim | Remove empty character strings on both sides. | trim(string T) -> T | SELECT trim(' hello ') LIMIT 1 |
| upper | Convert all letters to uppercase letters. | upper(string T) -> T | SELECT upper('helloworld') LIMIT 1 |

## Other

**Table 10-70** Other

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| if | if condition | if(boolean, object, object) -> object | SELECT if(false, 0, 1) LIMIT 1 ,<br>SELECT if(true, 0, 1) LIMIT 1 |
| ifnull | If the field is null, the default value is used. | ifnull(object, object) -> object | SELECT ifnull('hello', 1) LIMIT 1 ,<br>SELECT ifnull(null, 1) LIMIT 1 |
| isnull | Indicates whether a field is null. If yes, 1 is returned. If no, 0 is returned. | isnull(object) -> integer | SELECT isnull(null) LIMIT 1 ,<br>SELECT isnull(1) LIMIT 1 |

### 10.5.7.10 Analysis Statements - Aggregate Functions

The syntax of a complete analysis statement is as follows:

```
SELECT [DISTINCT] (* | expression) [AS alias] [, ...]
[GROUP BY expression [, ...] [HAVING predicates]]
[ORDER BY expression [ASC | DESC] [, ...]]
[LIMIT size OFFSET offset]
```

This section describes some aggregate functions.

**Table 10-71** Aggregate functions

| Function | Purpose | Description | Example Value |
| --- | --- | --- | --- |
| avg | Average value | avg(number T) -> T | SELECT avg(age) LIMIT 1 |
| sum | Sum | sum(number T) -> T | SELECT sum(age) LIMIT 1 |
| min | Specifies the minimum value. | min(number T) -> T | SELECT min(age) LIMIT 1 |
| max | Maximum value | max(number T) -> T | SELECT max(age) LIMIT 1 |
| count | Occurrences | count(field) -> integer ,<br>count(*) -> integer ,<br>count(1) -> integer | SELECT count(age) LIMIT 1 ,<br>SELECT count(*) LIMIT 1 ,<br>SELECT count(1) LIMIT 1 |

## 10.5.8 Quick Query

### Scenario

Quick Query is a function of SecMaster that provides saved query and analysis operations. You can save a common query and analysis statement as a quick query statement for future use.

This topic describes how to create a quick query.

### Prerequisites

Indexes have been configured. For details, see **Configuring Indexes**.

### Creating a Quick Query

**Step 1** Log in to the management console.

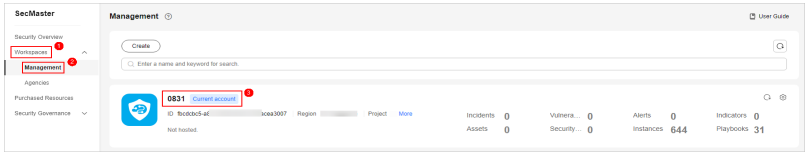
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

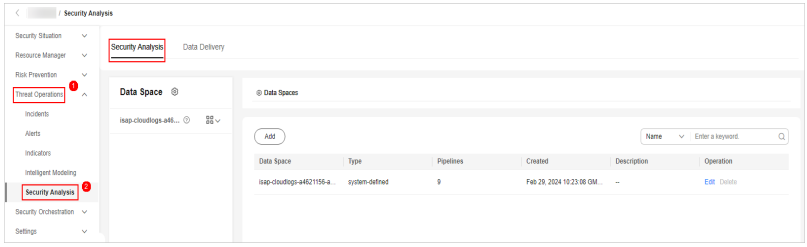
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-82** Workspace management page



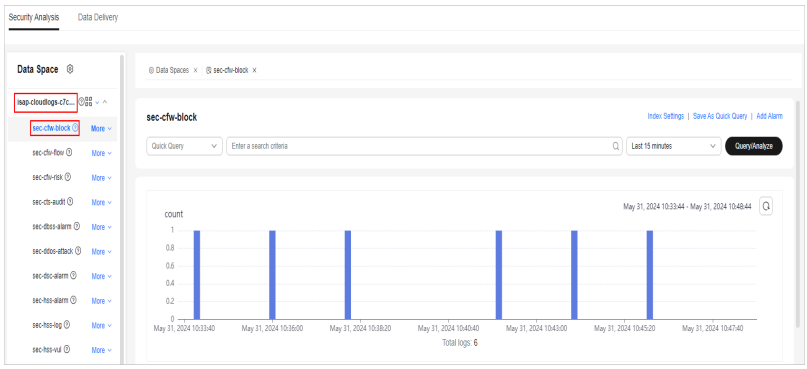

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-83** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-84** Pipeline data page




**Step 7** Enter the query and analysis statement, set the time range, and click **Query/Analyze**.

For details, see **Querying and Analyzing Data**.

**Step 8** Click **Save as Quick Query** in the upper right corner of the area, configure query parameters on the right, and click **OK**.

**Table 10-72** Parameters for a quick query

| Parameter | Description |
| --- | --- |
| Query Name | Set the name of the quick query. |
| Query statement | The system automatically generates the query statement entered in **Step 7**. |

**Step 9** Click **OK**.

After creating a quick query, you can click ▼ in the quick query search box on the pipeline data query and analysis page and select the target quick query name to use the quick query.

**----End**

# 10.5.9 Quickly Adding a Log Alarm Model

## Scenario

SecMaster allows you to set alarm models for query and analysis results and trigger alarms when conditions are met.

This topic describes how to quickly configure alarm models for logs.

## Prerequisites

Data access has been completed. For details, see **Data Integration**.

## Procedure

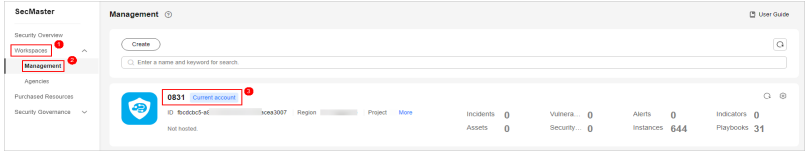
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

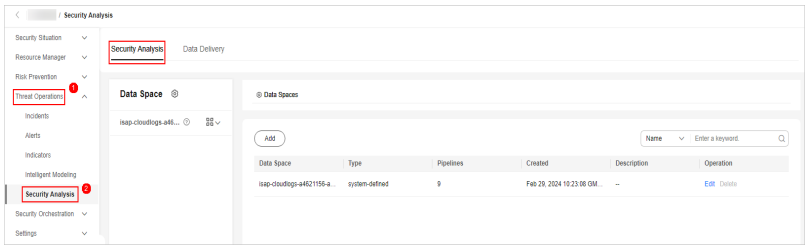
**Figure 10-85** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

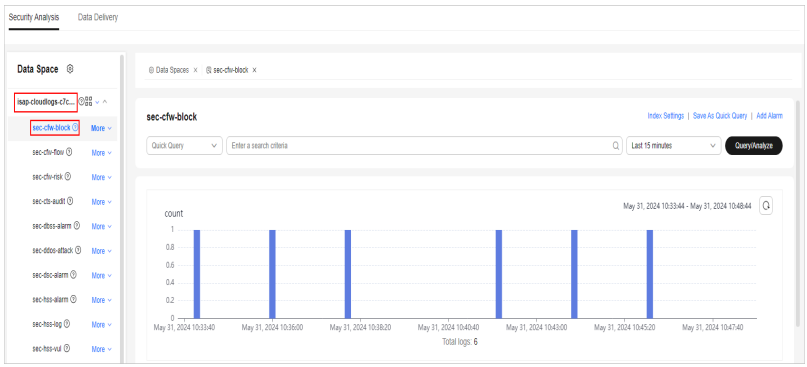
  

**Figure 10-86** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-87** Pipeline data page

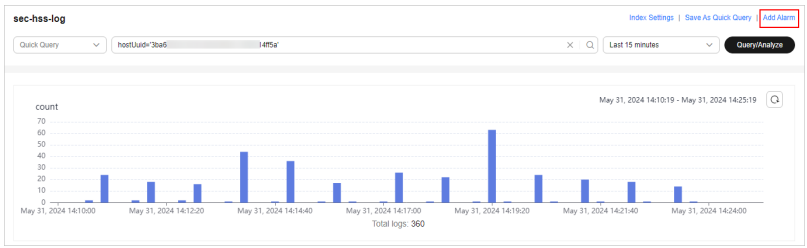



**Step 7** Enter the query analysis statement, set the time range, and click **Query/Analyze**. The query analysis result is displayed.

For details, see **Querying and Analyzing Data**.

**Step 8** Click **Add Alarm** in the upper right corner of the page. The **Create Alarm Model** page is displayed.

**Figure 10-88** Add Alarm




**Step 9** Configure basic alarm information by referring to **Table 10-73**.

**Table 10-73** Basic parameters of an alarm model

| Parameter | Description |
| --- | --- |
| Pipeline Name | The pipeline where the alert model is executed, which is generated by the system by default. |
| Model Name | Name of the alarm model. |

| Parameter | Description |
| --- | --- |
| Severity | Severity of alarms reported by the alarm model. You can set the severity to **Critical**, **High**, **Medium Low**, or **Informative**. |
| Alarm Type | Alarm type displayed after the alarm model is triggered. |
| Model Type | The default value is **Rule model**. |
| Description | Enter the description of the alarm model. |
| Status | The alarm model status.<br>You can change the alarm model status after the model is configured. |

**Step 10** After the setting is complete, click **Next** in the lower right corner of the page. The page for setting the model logic is displayed.

**Step 11** Set the model logic. For details about the parameters, see **Table 10-74**.

**Table 10-74** Configure Model Logic

| Parameter | Description |
| --- | --- |
| Query Rule | Set alert query rules. After the setting is complete, click **Run** and view the running result.<br>A query analysis statement consists of a query statement and an analysis statement. The format is **Query Statement\|Analysis Statement**. For details about the syntax of query analysis statements, see **Query and Analysis Statements - SQL Syntax**.<br>**NOTE**<br>If the reserved field is of the text type, **MATCH_QUERY** is used for word segmentation queries by default. |

| Parameter | Description |
| --- | --- |
| Query Plan | Set an alert query plan.<br>• Running query interval: xx minutes/hour/day. If the running query interval is minute, set this parameter to a value ranging from 5 to 59 minutes. If the running query interval is hour, set this parameter to a value ranging from 1 to 23 hours. If the running query interval is day, set this parameter to a value ranging from 1 to 14 days.<br>• Time window: xx minutes/hour/day. If the time window is minute, the value ranges from 5 minutes to 59 minutes. If the time window is hour, the value ranges from 1 hour to 23 hours. If the time window is day, the value ranges from 1 day to 14 days.<br>• Execution Delay: xx minutes. The value ranges from 0 to 5 minutes. |
| Advanced Alarm Settings | • **Custom Information**: Customize extended alert information. Click **Add**, and set the **key** and **value** information.<br>• **Alarm Details**: Enter the alarm name, description, and handling suggestions. |
| Trigger Condition | Sets alert triggering conditions. The value can be greater than, equal to, not equal to, or less than xx.<br>If there are multiple trigger conditions, click **Add** and add them. A maximum of five trigger conditions can be added.<br>If there are multiple trigger conditions, SecMaster scans log data to hit each trigger condition from top to bottom and generates all types of alerts for hit trigger conditions. |
| Alarm Trigger | The way to trigger alerts for queried results. The options are as follows:<br>• One alert for all query results<br>• One alert for each query result |
| Debugging | Sets whether to generate debugging alarms. |
| Suppression | Specifies whether to stop the query after an alert is generated.<br>• If **Suppression** is enabled, the **query stops** after an alert is generated.<br>• If **Suppression** is disabled, the **query is not stopped** after an alert is generated. |

**Step 12** After the setting is complete, click **Next** in the lower right corner of the page. The model details preview page is displayed.

**Step 13** After confirming that the preview is correct, click **OK** in the lower right corner of the page to confirm the configuration.

**----End**

# 10.5.10 Charts

## 10.5.10.1 Overview

SecMaster supports a wide range of chart types to display query and analysis results. You can select the one you like.

SecMaster can display query and analysis results in the following chart types:

- **Table**
- **Line Chart**
- **Bar Chart**
- **Pie Chart**

## 10.5.10.2 Tables

The query and analysis results can be displayed in a table.

Table is the most commonly used method to display and analyze data. In SecMaster, the data results obtained by querying and analyzing statements are displayed in tables by default.

## Procedure

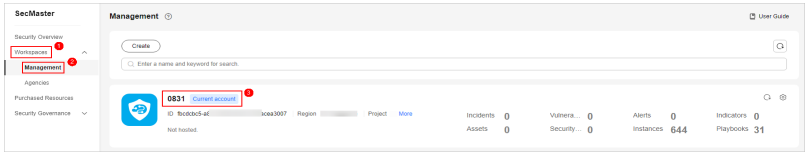
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

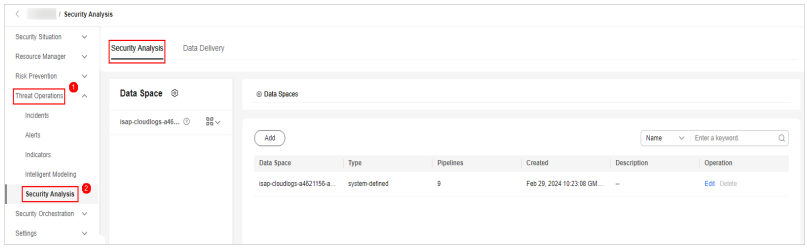
**Figure 10-89** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

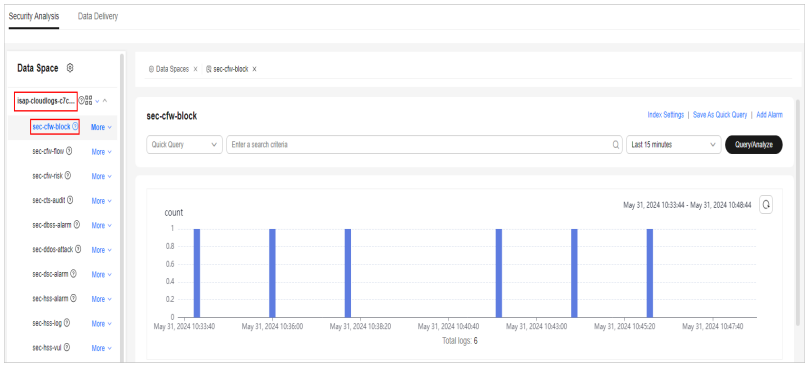
  

**Figure 10-90** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-91** Pipeline data page




**Step 7** Enter the query and analysis statement, set the time range, and click **Query/Analyze**.

**Step 8** Click the **Charts** tab. In the **Chart Type** area on the right of the page, click .

**Step 9** Set parameters in the table.

**Table 10-75** Table parameters

| Category | Parameter | Description |
| --- | --- | --- |
| Base Settings | Title | Customize the table title. |
| Chart Settings | Hidden Fields | Select a target field to hide it in the table. |

After the chart is configured, you can preview the configured data analysis on the left.

**----End**

## Related Operations

- Download logs: After the chart configuration, you can click **Download** in the upper right corner of the table to download the current query analysis data to the local PC.

- Hide configuration: After the chart configuration, you can click **Hide Configuration** on the right of the **Preview** to hide the parameters.
- Show configuration: After the chart configuration is hidden, you can click **Show Configuration** on the right of **Preview** to expand and set parameters.

## 10.5.10.3 Line Charts

The query and analysis results can be displayed in a line chart.

A line chart is used to display the change of a group of data in a period and show the data change trend.

## Procedure

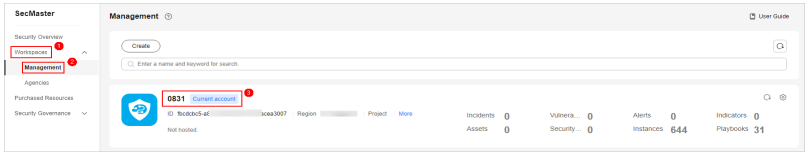
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

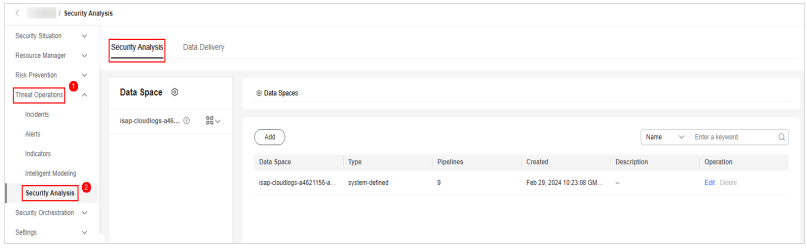
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-92** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

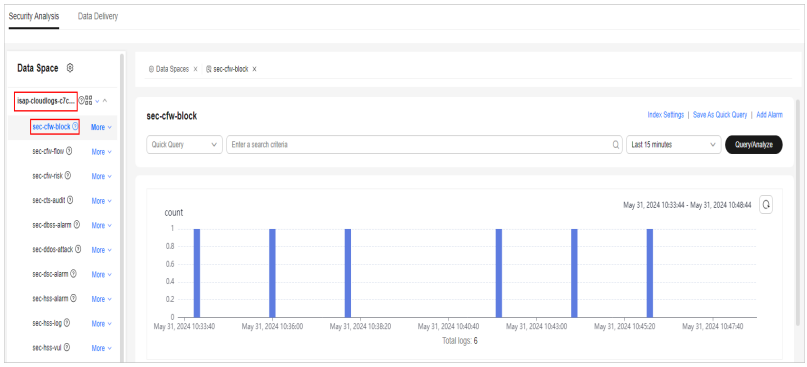
**Figure 10-93** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-94** Pipeline data page




**Step 7** Enter the query and analysis statement, set the time range, and click **Query/Analyze**.

**Step 8** Click the **Charts** tab. In the **Chart Type** area on the right of the page, click .

**Step 9** Set line chart parameters.

**Table 10-76** Line chart parameters

| Category | Parameter | Description |
| --- | --- | --- |
| Base Settings | Title | Customized line chart title |
| Chart Settings | X-Axis Title | Customized title of the X axis |
| | Y-Axis Title | Customized title of the Y axis |
| | X-Axis Field | Field to be displayed on the X axis |
| | Y-Axis Field | Field to be displayed on the Y axis |
| Legend | Show Legend | Determine whether to display the legend. |
| | Position | This parameter is mandatory when the legend display function is enabled.<br>Position of the legend in the chart. The options are **Top**, **Bottom**, **Left**, and **Right**. |

After the chart is configured, you can preview the configured data analysis result on the left.

**----End**

## Related Operations

- Download logs: After the chart configuration, you can click **Download** in the upper right corner of the table to download the current query analysis data to the local PC.

- Hide configuration: After the chart configuration, you can click **Hide Configuration** on the right of the **Preview** to hide the parameters.
- Show configuration: After the chart configuration is hidden, you can click **Show Configuration** on the right of **Preview** to expand and set parameters.

## 10.5.10.4 Bar Charts

The query and analysis results can be displayed in a bar chart.

A bar chart presents categorical data with rectangular bars with heights or lengths. It can be used to compare data and trends. In SecMaster, the bar chart uses vertical bars (the width is fixed and the height indicates the value) to display data by default.

## Procedure

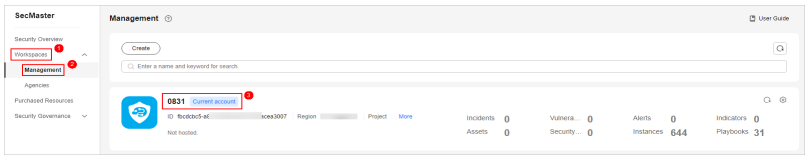
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

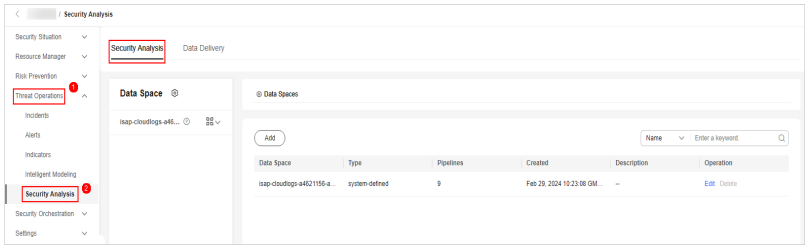
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-95** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

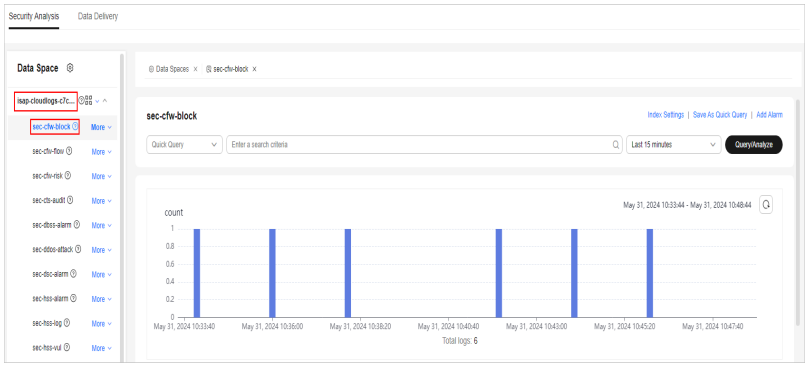
**Figure 10-96** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-97** Pipeline data page




**Step 7** Enter the query and analysis statement, set the time range, and click **Query/Analyze**.

**Step 8** Click the **Charts** tab. In the **Chart Type** area on the right of the page, click .

**Step 9** Set bar chart parameters.

**Table 10-77** Bar chart parameters

| Category | Parameter | Description |
| --- | --- | --- |
| Base Settings | Title | Customized line chart title |
| Chart Settings | X-Axis Title | Customized title of the X axis |
| | Y-Axis Title | Customized title of the Y axis |
| | X-Axis Field | Field to be displayed on the X axis |
| | Y-Axis Field | Field to be displayed on the Y axis |
| Legend | Show Legend | Determine whether to display the legend. |
| | Position | This parameter is mandatory when the legend display function is enabled.<br>Position of the legend in the chart. The options are **Top**, **Bottom**, **Left**, and **Right**. |

After the chart is configured, you can preview the configured data analysis result on the left.

**----End**

## Related Operations

- Download logs: After the chart configuration, you can click **Download** in the upper right corner of the table to download the current query analysis data to the local PC.

- Hide configuration: After the chart configuration, you can click **Hide Configuration** on the right of the **Preview** to hide the parameters.
- Show configuration: After the chart configuration is hidden, you can click **Show Configuration** on the right of **Preview** to expand and set parameters.

## 10.5.10.5 Pie Charts

The query and analysis results can be displayed in a pie chart.

The pie chart is used to show the proportion of different categories. Different categories are compared by radian.

## Procedure

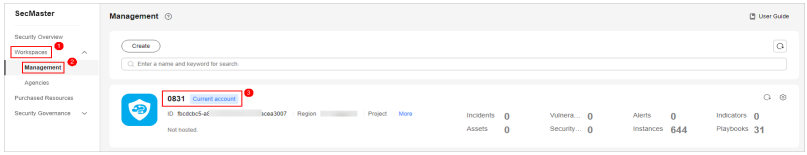
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

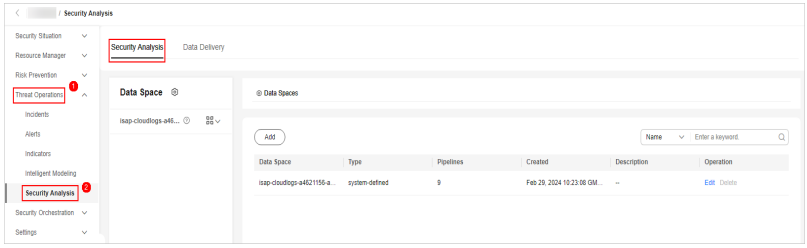
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-98** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

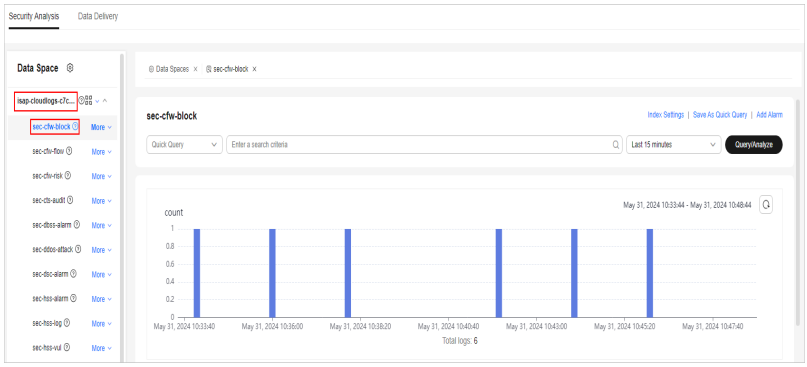
**Figure 10-99** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-100** Pipeline data page




**Step 7** Enter the query and analysis statement, set the time range, and click **Query/Analyze**.

**Step 8** Click the **Charts** tab. In the **Chart Type** area on the right of the page, click .

**Step 9** Set pie chart parameters.

**Table 10-78** Pie chart parameters

| Category | Parameter | Description |
| --- | --- | --- |
| Base Settings | Title | Customized line chart title |
| Chart Settings | Classify | Data classification |
| | Column Value | Value of the data type |
| Legend | Show Legend | Determine whether to display the legend. |
| | Position | This parameter is mandatory when the legend display function is enabled.<br>Position of the legend in the chart. The options are **Top**, **Bottom**, **Left**, and **Right**. |

After the chart is configured, you can preview the configured data analysis result on the left.

**----End**

## Related Operations

- Download logs: After the chart configuration, you can click **Download** in the upper right corner of the table to download the current query analysis data to the local PC.
- Hide configuration: After the chart configuration, you can click **Hide Configuration** on the right of the **Preview** to hide the parameters.
- Show configuration: After the chart configuration is hidden, you can click **Show Configuration** on the right of **Preview** to expand and set parameters.

# 10.5.11 Managing Data Spaces

## 10.5.11.1 Creating a Data Space

### Scenario

A data space is a unit for data grouping, load balancing, and flow control. Data in the same data space shares the same load balancing policy.

When you need to use the security analysis, data analysis, and intelligent modeling features provided by SecMaster, you need to create a data space.

This section describes how to create a data space.

### Limitations and Constraints

- A maximum of five data spaces can be created in a workspace in a region for a single account.

### Procedure

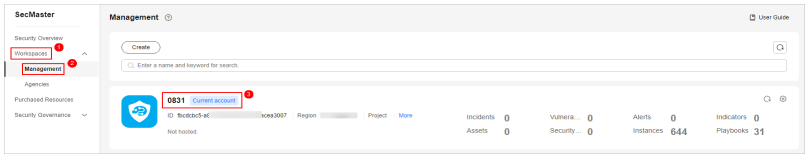
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

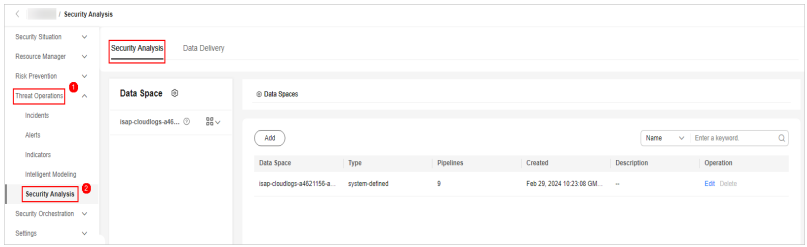
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-101** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

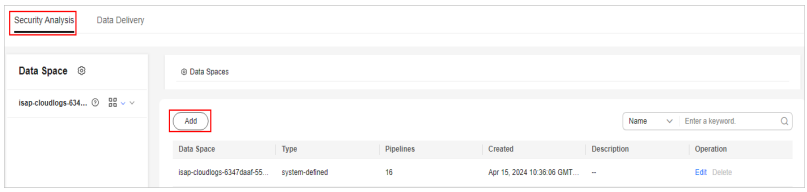
**Figure 10-102** Accessing the Security Analysis tab page




**Step 6** In the upper left corner of the data space list, click **Add**. The **Adding Data Spaces** page is displayed on the right.

**Figure 10-103** Adding a data space




**Step 7** On the **Adding Data Spaces** page, set the parameters for the new data space. For details about the parameters, see **Table 10-79**.

**Table 10-79** Adding a data space

| Parameter | Description |
| --- | --- |
| Data Space | Data space name. It must meet the following requirements:<br>• The name contains 5 to 63 characters.<br>• The value can contain letters, numbers, and hyphens (-). The hyphen (-) cannot be used at the beginning or end, or used consecutively.<br>• The name must be unique on Huawei Cloud and cannot be the same as any other data space name. |
| Description | You can make remarks on the data space. This parameter is optional. |

**Step 8** Click **OK**. The data space is added.

After the data space is added, you can view the new data space in the data space list.

**----End**

## 10.5.11.2 Viewing Data Space Details

## Scenario

This topic describes how to view the information about a data space, including the name, type, and creation time.

## Procedure

**Step 1** Log in to the management console.

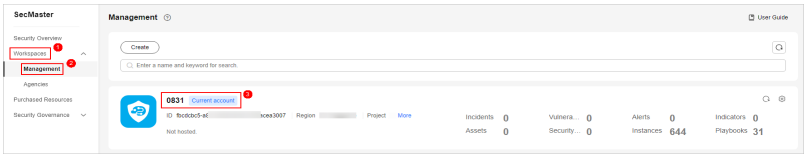
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

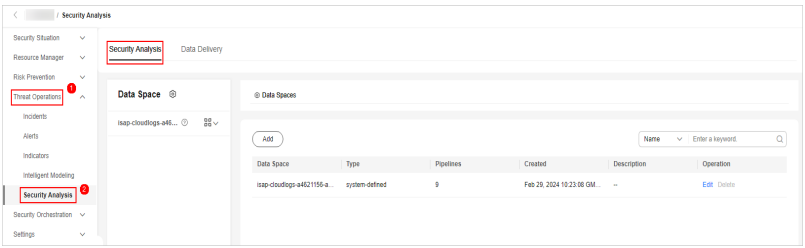
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-104** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-105** Accessing the Security Analysis tab page




**Step 6** On the **Data Spaces** page, view all data space information. **Table 10-80** describes related parameters.

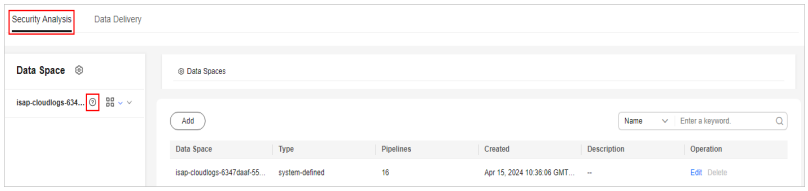
**Table 10-80** Data space parameters

| Parameter | Description |
| --- | --- |
| Data Spaces | Data space name |
| Type | Type of data in the data space. It may be:<br>• System-defined: data space created by the system by default during data access.<br>• User-defined: data space created by users. |
| Pipelines | Number of pipelines in the data space. |
| Created | Time when the data space is created. |
| Description | Description of the data space |
| Operation | You can perform operations such as editing and deleting in the **Operation** column. |

**Step 7** In the data space column on the left, click next to a data space name to view the details about the data space.

**Figure 10-106** Data space details




**Step 8** In the Data **Space Details** area, you can view details about a data space. For details about the parameters, see **Table 10-81**.

**Table 10-81** Data space details

| Parameter | Description |
| --- | --- |
| Data Spaces | Data space name |
| Pipelines | Number of pipelines in the data space. |
| Created | Time when the data space is created. |
| Description | Description of the data space |

**----End**

## 10.5.11.3 Editing a Data Space

## Scenario

This topic describes how to modify the information of a data space after the data space is created.

## Procedure

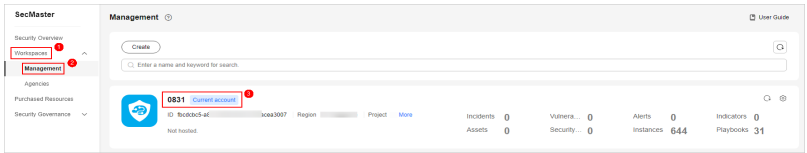
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

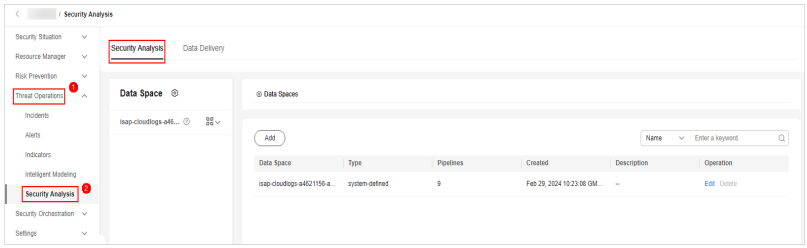
**Figure 10-107** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

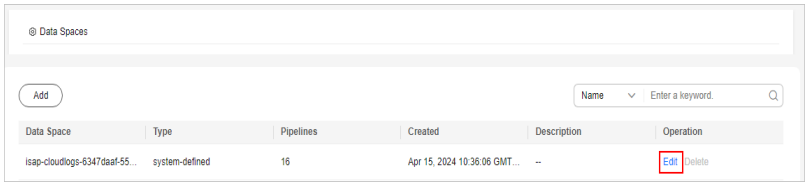
  

**Figure 10-108** Accessing the Security Analysis tab page




**Step 6** Locate the row that contains the data space to be edited, and click **Edit** in the **Operation** column.

**Figure 10-109** Editing a data space




**Step 7** In the displayed **Edit Data Space** dialog box, modify the data space information.

**Step 8** Click **OK**.

**----End**

## 10.5.11.4 Deleting a Data Space

## Scenario

This topic describes how to delete a data space that is no longer needed.

## Limitations and Constraints

- The default data space created by the system cannot be deleted.
- If a pipeline exists in the data space to be deleted, the data space cannot be deleted directly. You need to delete the pipeline before deleting the data space.

## Procedure

**Step 1** Log in to the management console.

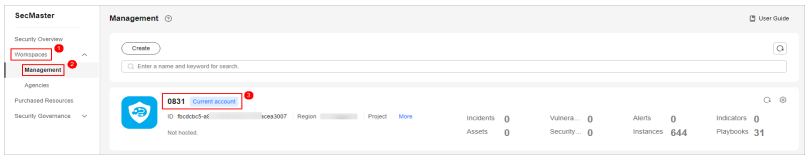
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

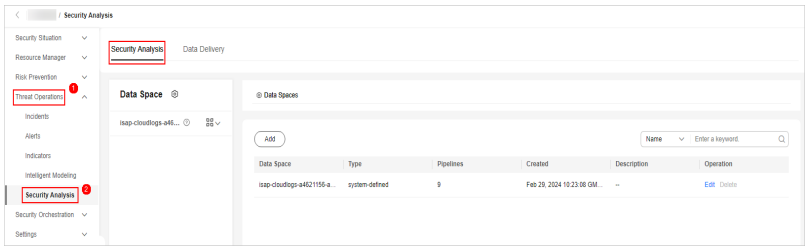
  

**Figure 10-110** Workspace management page



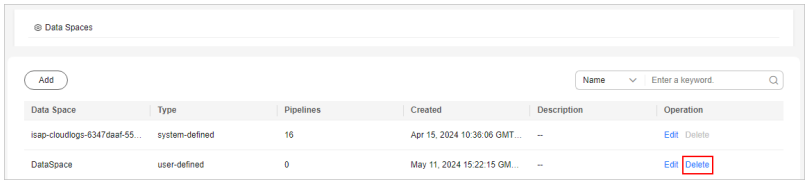

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-111** Accessing the Security Analysis tab page




**Step 6** In the row containing the desired database, click **Delete** in the **Operation** column.

**Figure 10-112** Deleting a data space




**Step 7** In the dialog box displayed, click **OK**.

**CAUTION**

If a pipeline exists in the data space to be deleted, the data space cannot be deleted directly. You need to delete the pipeline before deleting the data space.

**----End**

# 10.5.12 Managing Pipelines

## 10.5.12.1 Creating a Pipeline

### Scenario

A data transfer message topic and a storage index form a pipeline.

To use the security analysis, data analysis, and intelligent modeling functions provided by SecMaster, you need to create pipelines.

This section describes how to create a pipeline.

## Prerequisites

- A workspace has been created. For details, see **Creating a Workspace**.
- A data space has been added. For details, see **Creating a Data Space**.

## Limitations and Constraints

- A maximum of 20 pipelines can be created in a data space in a region for a single account.

## Procedure

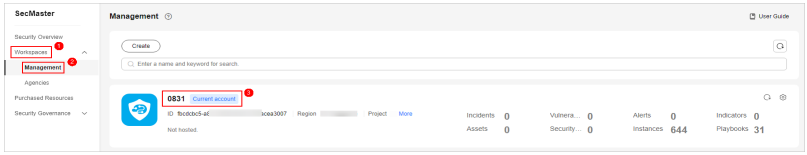
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

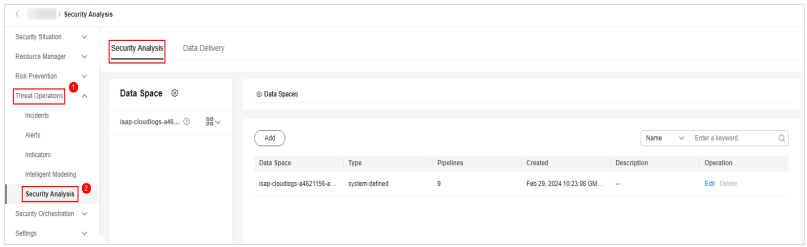
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-113** Workspace management page



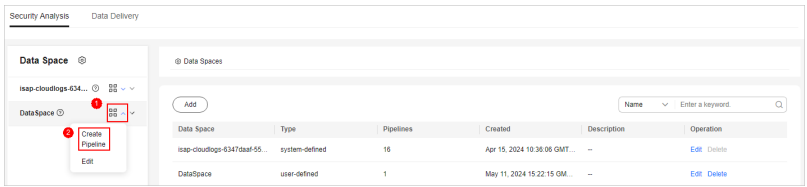

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-114** Accessing the Security Analysis tab page




**Step 6** In the data space navigation pane on the left, click on the right of the data space name and select **Create Pipeline** from the drop-down list box. The **Create Pipeline** page is displayed on the right.

**Figure 10-115** Creating a pipeline



**Step 7** On the **Create Pipeline** page, configure pipeline parameters. For details about the parameters, see **Table 10-82**.

**Table 10-82** Creating a pipeline

| Parameter | Description |
| --- | --- |
| Data Spaces | Data space to which the pipeline belongs, which is generated by the system by default. |
| Pipeline Name | Name of the pipeline. It must meet the following requirements:<br>• The name contains 5 to 63 characters.<br>• The value can contain letters, numbers, and hyphens (-). The hyphen (-) cannot be used at the beginning or end, or used consecutively.<br>• The name must be unique in the data space. |
| Shards | The number of shards of the pipeline. The value range is 1 to 64.<br>An index can potentially store a large amount of data that exceeds the hardware limits of a single node. To solve this problem, Elasticsearch subdivides your index into multiple pieces called shards. When creating an index, you can specify the number of shards as required. Each shard is in itself a fully-functional and independent "index" that can be hosted on any node in the cluster. |
| Lifecycle | Life cycle of data in the pipeline. Value range: 7-180 |
| Description | Remarks on the pipeline. This parameter is optional. |

**Step 8** Click **OK**.

After the pipeline is created, you can click the data space name or next to the data space to view the created pipeline.

**----End**

## 10.5.12.2 Viewing Pipeline Details

### Scenario

This topic describes how to view the pipeline details, including the pipeline name, data space, and creation time.

### Procedure

**Step 1** Log in to the management console.

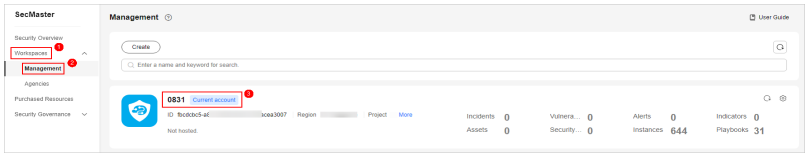
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

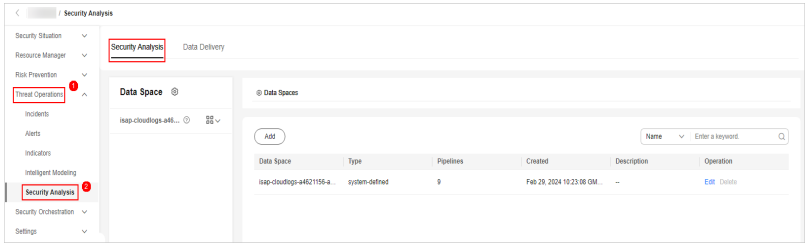
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-116** Workspace management page



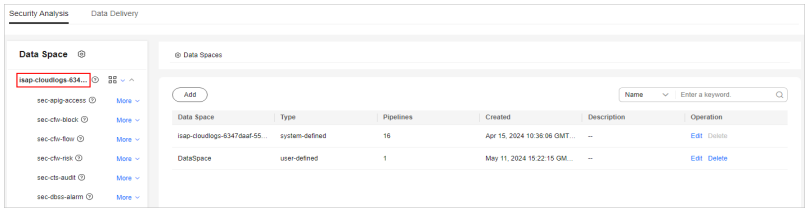

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-117** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list.

**Figure 10-118** Viewing pipeline details




**Step 7** Click ⓘ next to a pipeline name you want to view. The pipe details are displayed in the right pane.

**Table 10-83** Pipeline parameters

| Parameter | Description |
| --- | --- |
| Workspace Name | Name of the workspace to which the current pipe belongs. |
| Workspace ID | ID of the workspace to which the current pipe belongs. |
| Data Space Name | Name of the data space to which the current pipeline belongs. |

| Parameter | Description |
| --- | --- |
| Data Space ID | ID of the data space to which the current pipeline belongs. |
| Pipeline Name | Name of the current pipeline. |
| Pipeline ID | ID of the current pipeline. |
| Shards | Number of shards of the pipeline. |
| Lifecycle | Retention period of data in the pipeline. |
| Created | Time when a pipe is created |
| Description | Description of the pipeline |

**----End**

## 10.5.12.3 Editing a Pipeline

### Scenario

After a pipeline is created, you can modify the pipeline information, such as the number of shards, description, and lifecycle.

This topic describes how to modify pipeline parameters.

### Limitations and Constraints

Pipelines created by the system **cannot be edited**.

### Procedure

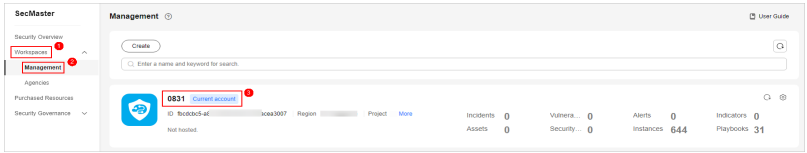
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

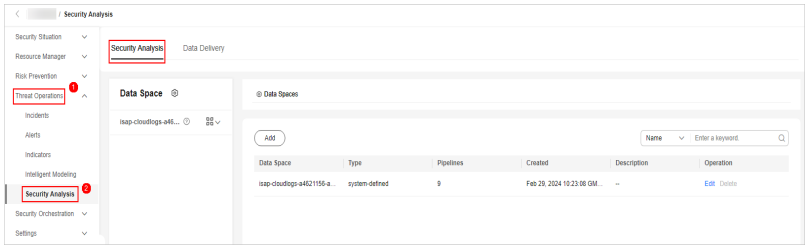
**Figure 10-119** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

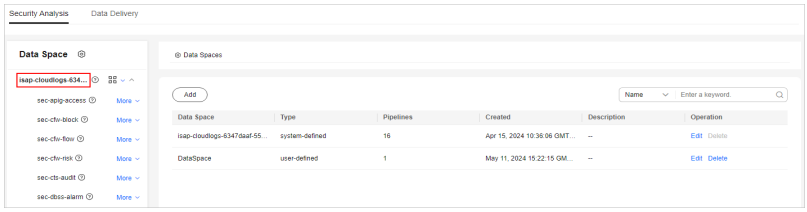
  

**Figure 10-120** Accessing the Security Analysis tab page



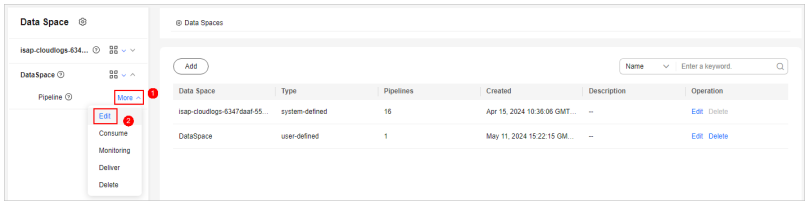

**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list.

**Figure 10-121** Viewing pipeline details




**Step 7** Click **More** > **Edit** next to the pipeline name.

**Figure 10-122** Entry for editing a pipeline




**Step 8** On the **Edit Pipeline** page, set pipeline parameters. For details about the parameters, see **Table 10-84**.

**Table 10-84** Editing a pipeline

| Parameter | Description |
| --- | --- |
| Data Spaces | Data space to which the pipeline belongs. This parameter **cannot** be modified. |
| Pipeline Name | Name you specified for the pipeline. The name **cannot** be changed after the pipeline is created. |
| Shards | The number of shards of the pipeline. The value range is 1 to 64. |
| Lifecycle | Life cycle of data in the pipeline. Value range: 7-180 |
| Description | Remarks on the pipeline. This parameter is optional. |

**Step 9** Click **OK**.

**----End**

# 10.5.12.4 Deleting a Pipeline

## Scenario

This section describes how to delete a pipeline.

Data in the pipeline will also be deleted and cannot be restored. Exercise caution when performing this operation.

## Limitations and Constraints

Pipelines created by the system cannot be deleted.

## Procedure

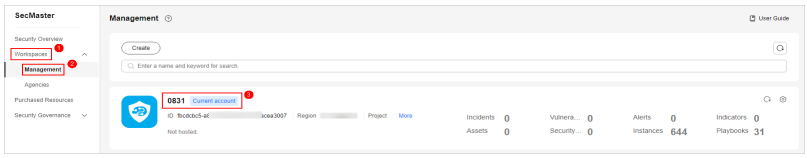
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

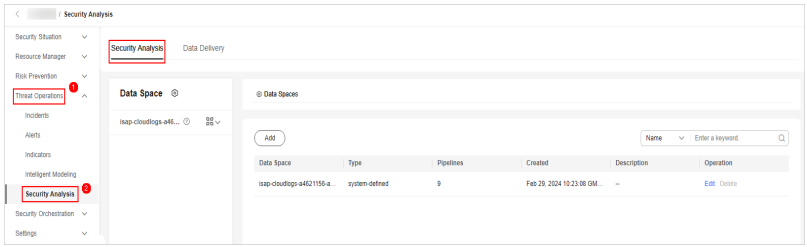
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-123** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

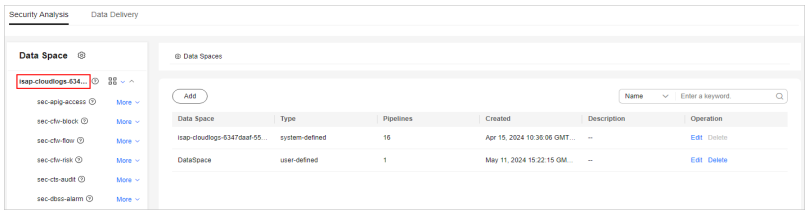
**Figure 10-124** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list.

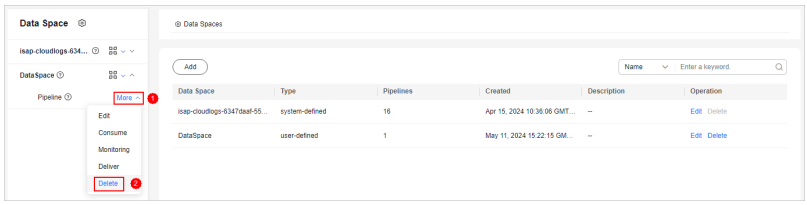
  

**Figure 10-125** Viewing pipeline details




**Step 7** Click **More** > **Delete** next to the pipeline name.

**Figure 10-126** Deleting a pipeline




**Step 8** In the dialog box displayed, click **OK**.

**----End**

# 10.5.13 Data Consumption

Data consumption refers to the process during which third-party software or cloud products consume the log data in real time through a client. It is a sequential read/write from/into full data.

SecMaster provides the data consumption function and supports real-time data consumption through the client.

## Enabling Data Consumption

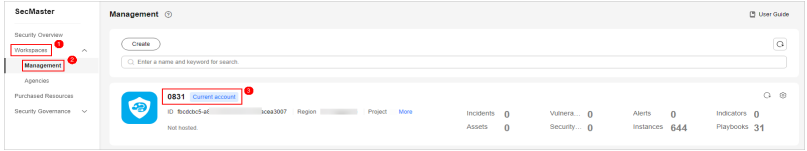
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

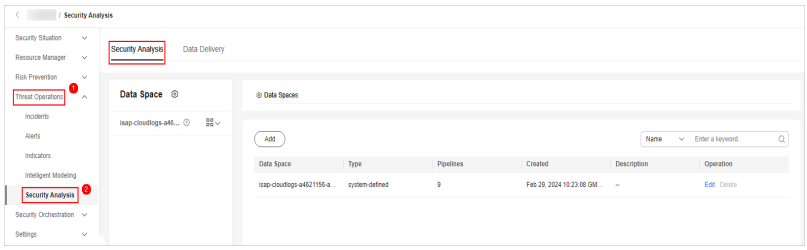
**Figure 10-127** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

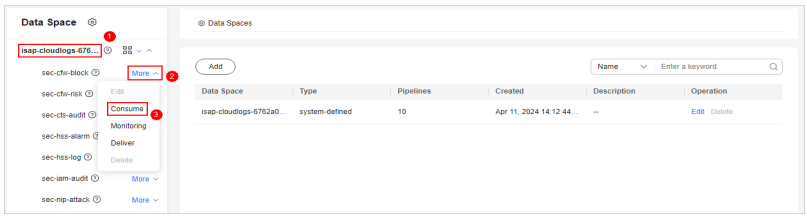
  

**Figure 10-128** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click the data space name to expand all pipelines. Next to the name of the target pipeline, click **More** > **Consume**.

**Figure 10-129** Accessing the data consumption page




**Step 7** On the Data Consumption page, click  next to Current Status to enable data consumption.

After the function is enabled, the consumption configuration information is displayed, as shown in **Table 10-85**.

**Figure 10-130** Enabling Data Consumption

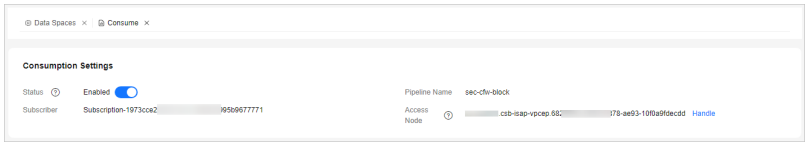



**Table 10-85** Data consumption parameters

| Parameter | Description |
| --- | --- |
| Status | Status of the data consumption function in the current pipeline |
| Pipeline Name | Name of the current pipeline |
| Subscriber | The preset subscription mode in the system. This parameter determines how data is transmitted to data consumers. |
| Access Node | Access node of the current data. |

**----End**

## Related Operations

After data consumption is enabled, you can click  next to **Status** on the Data Consumption page to disable data consumption.

# 10.5.14 Data Monitoring

SecMaster can monitor metrics such as the production rate, production volume, and total consumption rate of the upstream and downstream SecMaster pipelines. You can check the service status based on the monitoring results.

## Basic Concepts

- A producer is a logical object used to construct data and transmit it to the server. It stores data in message queues.
- A subscriber is used to subscribe to SecMaster pipeline messages. A pipeline can be subscribed to by multiple subscribers. SecMaster distributes messages through subscribers.
- A consumer is a running entity that receives and processes data. It consumes and processes messages in the SecMaster pipeline through subscribers.
- A message queue is the container for data storage and transmission.

## Viewing Metrics

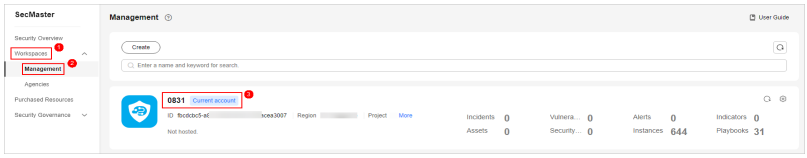
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

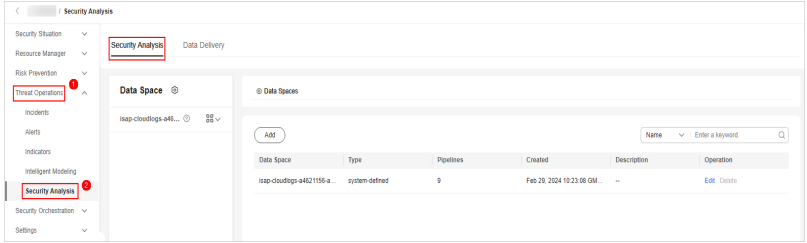
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-131** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

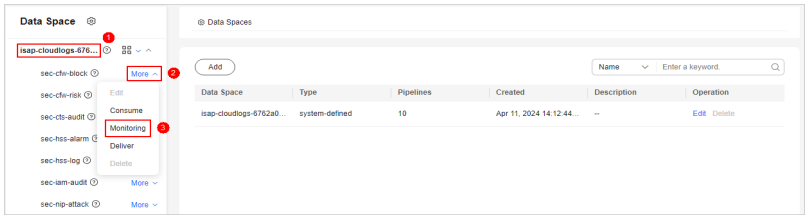
**Figure 10-132** Accessing the Security Analysis tab page



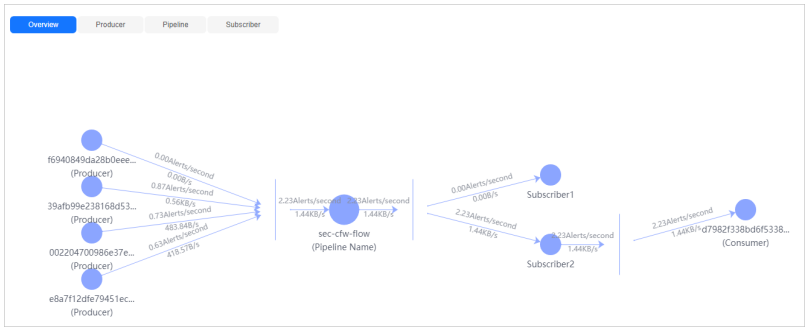
**Step 6** In the data space navigation tree on the left, click the data space name to expand all pipelines. Next to the name of the target pipeline, click **More** > **Monitoring**.

**Figure 10-133** Data monitoring page




**Step 7** On the pipeline monitoring page, view monitoring metrics.

**Figure 10-134** Viewing monitored data




- **Overview**: Displays information such as the production rate between producers, pipelines, subscribers, and consumers in the current pipeline.
- **Producer**: displays metrics of the producer, such as current production TPS, current production rate, current production volume, and current message storage size.
- **Pipeline**: displays the pipeline message size (MB), producer-to-pipeline message size (MB), producer-to-pipeline messages, message size consumed by pipelines (MB), messages consumed by pipelines, unacknowledged message size (B), pipeline production rate, pipeline consumption rate, average message size (KB), and offloaded message size (B) in a specified period (last 2/6/12/24 hours, last 7 days, or a customized period).
- Subscriber: displays the total consumption rate of subscribers, consumed data volume (B), consumed messages, and active consumers in a specified period (last 2/6/12/24 hours, last 7 days, or a user-defined period).

**----End**

# 10.6 Data Delivery

## 10.6.1 Creating a Data Delivery

### Scenario

SecMaster can deliver data to other pipelines or other cloud products in real time so that you can store data or consume data with other systems. After data

delivery is configured, SecMaster periodically delivers the collected data to the specified pipelines or cloud products.

Currently, data can be delivered to the following cloud products: Object Storage Service (OBS) and Log Tank Service (LTS).

This section describes how to create a data delivery task.

## Prerequisites

- If you want to deliver data to an OBS bucket, the bucket must have private, public read, or public read/write policy enabled. Currently, parallel file buckets are not supported. For details, see **Creating an OBS Bucket**.
- To deliver data to LTS, ensure there is an available log group and log streams. For details, see **Managing Log Groups** and **Managing Log Streams**.

## Limitations and Constraints

When performing cross-account delivery, the data can only be delivered to the pipelines instead of cloud services of other accounts.

## Creating a Data Delivery

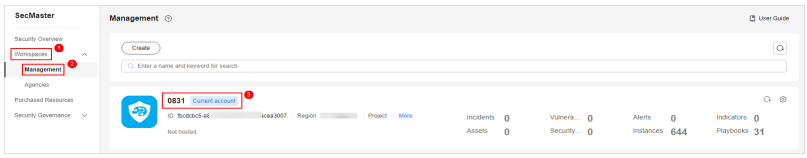
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

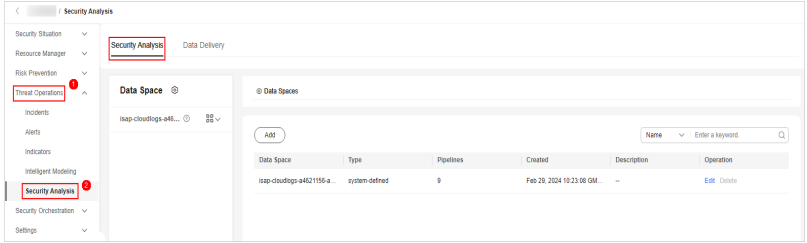
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-135** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

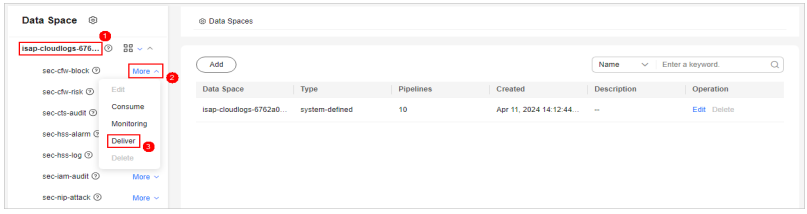
**Figure 10-136** Accessing the Security Analysis tab page



**Step 6** In the data space navigation tree on the left, click the data space name to expand all pipelines. Next to the name of the target pipeline, click **More** > **Deliver**.

**Figure 10-137** Accessing data delivery settings page




**Step 7** (Optional) Confirm the authorization information, select **Agree to authorize** and click **OK**.

Authorization is required for the first delivery to a specific destination type. If the authorization has been performed, skip this step.

**Step 8** On the **Create Delivery** page, set data delivery parameters.

1. Configure basic information.

   **Table 10-86** Basic information

| Parameter | Description |
| --- | --- |
| Delivery Name | Customized delivery rule name |
| Resource Consumption | The value is generated by default and **does not need to be configured**. |

2. Configure the data source.

   In the **Data Source Settings** area, the detailed information about the current pipeline is displayed. **You do not need to set this parameter**.

   **Table 10-87** Data source parameters

| Parameter | Description |
| --- | --- |
| Delivery Type | Delivery destination type. The default value is **PIPE**. |
| Region | Area where the current pipeline is located |
| Workspace | Workspace to which the current pipeline belongs |
| Data Spaces | Data space to which the current pipeline belongs |
| Pipeline | Pipeline name |
| Data Read Policy | Data read policy of the current pipeline |
| Read By | Identity of the data source reader |

3. Configure the delivery destination.
   - **PIPE**: Deliver the current pipeline data to other pipelines of the current account or pipelines of other accounts. Set this parameter as required.

- **Current**: Deliver the current pipeline data to another pipeline of the current account. For details about the parameters, see **Table 10-88**.

  **Table 10-88** Destination parameters - Current account pipeline

| Parameter | Description |
| --- | --- |
| Account Type | Account type of the data delivery destination. Select **Current**. |
| Delivery Type | Delivery type. Select **PIPE**. |
| Workspace | Workspace where the destination PIPE is located |
| Data Spaces | Data space where the destination PIPE is located |
| Pipeline | Pipeline where the destination PIPE is located |
| Written To | The value is generated by default and does not need to be configured. |

- Cross-account delivery: Deliver the current pipeline data to the pipeline of another account. For details about the parameters, see **Table 10-89**.

  **Table 10-89** Destination parameters - PIPE of Other account

| Parameter | Description |
| --- | --- |
| Account Type | Account type of the data delivery destination. Select **Other**. |
| Delivery Type | Delivery type. Select **PIPE**. |
| Account ID | ID of the account to which the destination pipeline belongs |
| Workspace ID | ID of the workspace where the destination PIPE is located. For details about how to query the workspace ID, see **Step 7**. |
| Data Space ID | ID of the data space where the destination PIPE is located. For details about how to query the data space ID, see **Step 7**. |
| Pipeline ID | ID of the pipeline where the destination PIPE is located. For details about how to query the pipeline ID, see **Step 7**. |
| Written To | The value is generated by default and does not need to be configured. |

- **LTS**: Deliver the pipeline data to LTS. For details about the parameter settings, see **Table 10-90**.

  To deliver data to LTS, ensure there is an available log group and log streams. For details, see **Managing Log Groups** and **Managing Log Streams**.

  **Table 10-90** Destination parameters - LTS

| Parameter | Description |
| --- | --- |
| Account Type | Account type of the data delivery destination. When delivering data to LTS, only the **Current** account type can be selected. |
| Delivery Type | Delivery type. Select **LTS**. |
| Log Group | Destination LTS log group |
| Log Stream | Destination LTS log stream |
| Written To | The value is generated by default and does not need to be configured. |

- **OBS**: Deliver the pipeline data to OBS. For details about the parameter settings, see **Table 10-91**.

  Note that the OBS bucket you use must have private, public read, or public read/write policy enabled. Currently, parallel file buckets are not supported. For details, see **Creating an OBS Bucket**.

  **Table 10-91** Destination parameters - OBS

| Parameter | Description |
| --- | --- |
| Account Type | Account type of the data delivery destination. When delivering data to OBS, only the **Current** account type can be selected. |
| Delivery Type | Delivery type. Select **OBS**. |
| Bucket Name | Name of the destination OBS bucket |
| Written To | The value is generated by default and does not need to be configured. |

4. Under **Access Authorization**, view the permissions granted in **Step 7**.

   A delivery request requires the read and write permissions to access your cloud resources. After the authorization, the delivery task can access your cloud resources.

**Step 9** Click **OK**.

**----End**

### Follow-up Operation

After a data delivery task is added, you need to grant the delivery permission. The delivery takes effect only after you accept the authorization. For details, see **Data Delivery Authorization**.

## 10.6.2 Data Delivery Authorization

### Scenario

After a data delivery task is added, you need to grant the delivery permission. The delivery takes effect only after you accept the authorization.

This topic describes how to authorize a data delivery.

### Prerequisites

Data delivery has been added.

### Limitations and Constraints

If the new data delivery is cross-account, you need to log in to SecMaster using the destination account and perform authorization.

### Procedure

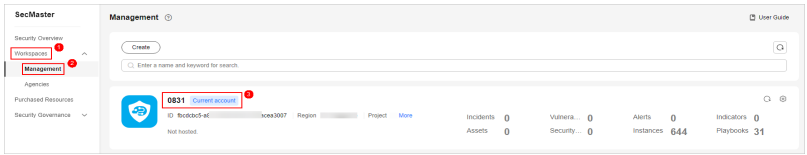
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-138** Workspace management page



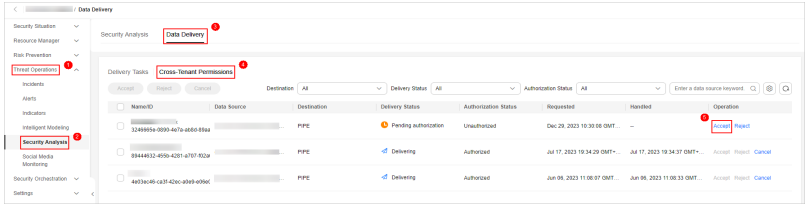

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. On the **Security Analysis** page that is displayed, click the **Data Delivery** tab. The **Data Delivery** page is displayed.

**Step 6** On the **Data Delivery** page, click the **Cross-tenant Permissions** tab. On the page that is displayed, click **Accept** in the **Operation** column of the target delivery task.

To accept authorization in batches, select all tasks to be authorized and click **Accept** in the upper left corner of the list.

**Figure 10-139** Authorization for data delivery



After the authorization is granted, the authorization status of the target delivery task is updated to **Authorized**. You can go to the delivery destination to view the delivery details. For details, see **Checking the Data Delivery Status**.

**----End**

## Related Operations

On the **Cross-tenant Permissions** tab page, you can select to **Reject** or **Cancel** the authorization.

**Table 10-92** Cross-tenant permission authorization options

| Operation | Description |
| --- | --- |
| **Reject** | In the row containing the target delivery task, click **Reject** in the **Operation** column to reject the authorization.<br>To reject authorization in batches, select all tasks to be rejected and click **Reject** in the upper left corner of the list. |
| **Cancel** | 1. In the row containing the target delivery task, click **Cancel** in the **Operation** column to cancel the authorization.<br>To cancel authorization in batches, select all tasks to be canceled and click **Cancel** in the upper left corner of the list.<br>2. In the displayed dialog box, click **OK**. |

# 10.6.3 Checking the Data Delivery Status

## Scenario

After the data is successfully delivered, you can view the data delivery status at the delivery destination. You can also perform the following operations:

- **Delivering to Other Pipelines**
- **Delivering to OBS Bucket**
- **Delivering to LTS**

## Prerequisites

Data has been delivered. For details, see **Creating a Data Delivery**.

## Delivering to Other Pipelines

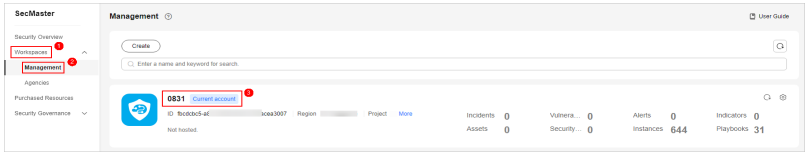
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

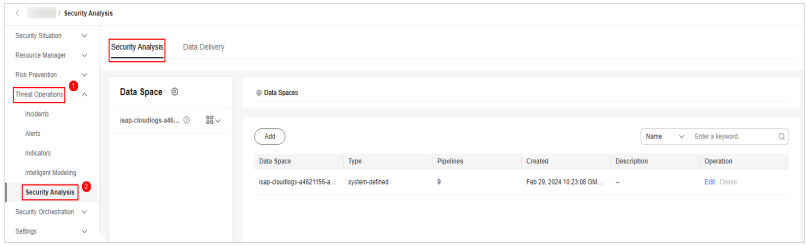
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-140** Workspace management page



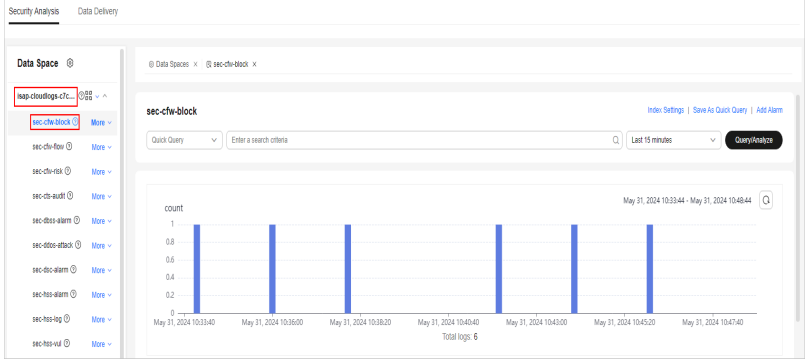

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-141** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click a data space name to show the pipeline list. Click a pipeline name. On the displayed page, you can search the pipeline data.

**Figure 10-142** Pipeline data page



**Step 7** In the target pipeline, view the delivery log information.

**----End**

### Delivering to OBS Bucket

**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Storage** > **Object Storage Service**. The bucket list page is displayed.

**Step 4** On the bucket list page, click the name of the OBS bucket selected for data delivery. The details page of the target OBS bucket is displayed.

**Step 5** On the OBS bucket details page, view the delivery log information.

**----End**

### Delivering to LTS

**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Management & Governance** > **Log Tank Service**.

**Step 4** In the log group list on the **Log Management** page, locate the log group for which you want to add data delivery and click before the log group name.

**Step 5** Click the name of the log stream selected during data delivery. The log stream details page is displayed.

**Step 6** On the log stream details page, view the delivered log information.

**----End**

## 10.6.4 Managing Data Delivery

### Scenario

This section describes how to manage delivery tasks.

- **Viewing a Data Delivery Task**
- **Suspending a Delivery Task**
- **Starting a Delivery Task**
- **Deleting a Delivery Task**

### Prerequisites

A data delivery task has been added.

## Viewing a Data Delivery Task

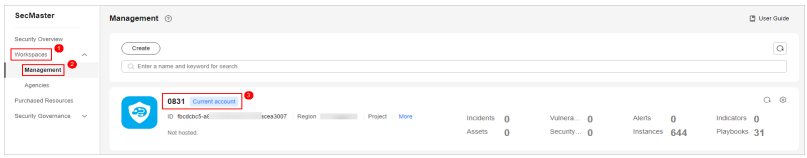
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

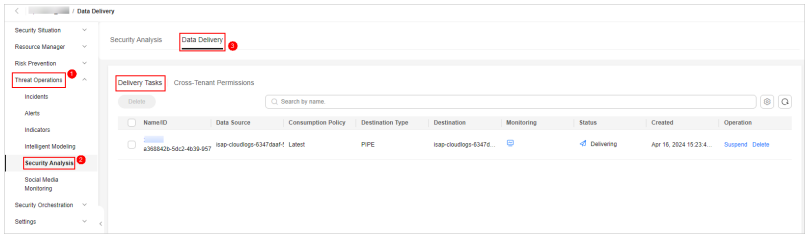
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-143** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. On the page displayed, click the **Data Delivery Management** tab.

**Figure 10-144** Data Delivery tab page




**Step 6** On the delivery task list page, view existing delivery tasks.

**Table 10-93** Delivery task parameters

| Operation | Description |
| --- | --- |
| Name/ID | Delivery task name and ID |
| Data Source | Pipeline where the data source is located |
| Consumption Policy | Consumption policy of a delivery task |
| Destination Type | Type of the data delivery destination |
| Destination | Data delivery destination |
| Monitoring | Data delivery monitoring status. You can click the monitoring icon to view the data consumption information. |
| Status | Status of a delivery task |
| Created | Time when a delivery task is created |

| Operation | Description |
| --- | --- |
| Operation | You can delete or suspend a data delivery task. |

**----End**

## Suspending a Delivery Task

After a data delivery task is added and authorized, the delivery task status changes to **Delivering**. To stop the delivery, you can suspend the target delivery task.

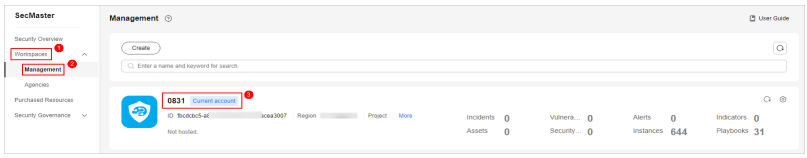
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

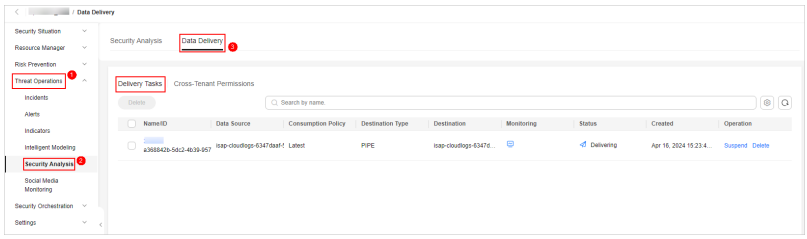
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-145** Workspace management page




**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. On the page displayed, click the **Data Delivery Management** tab.

**Figure 10-146** Data Delivery tab page




**Step 6** On the **Data Delivery** tab page, locate the row of the target delivery task and click **Suspend** in the **Operation** column.

After a delivery task is suspended, the delivery task status changes to **Suspended**, indicating that the delivery task is suspended successfully.

**----End**

## Starting a Delivery Task

You can restart a suspended delivery task.

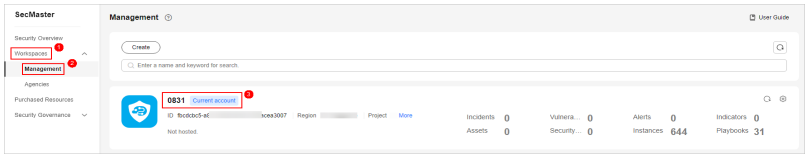
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

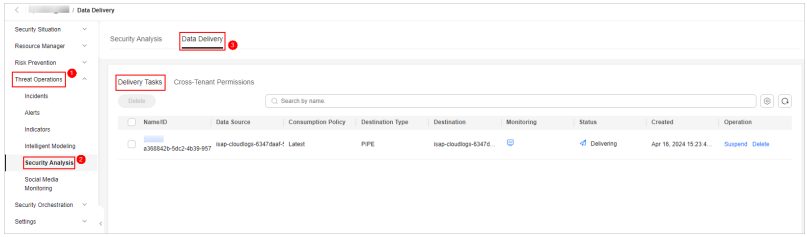
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-147** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. On the page displayed, click the **Data Delivery Management** tab.

**Figure 10-148** Data Delivery tab page



**Step 6** On the **Data Delivery** tab page, locate the row of the target delivery task and click **Start** in the **Operation** column.

After a delivery task is restarted, the delivery task status changes to **Delivering**, indicating that the delivery task is successfully started.

**----End**

## Deleting a Delivery Task

If a data delivery task is no longer needed, you can delete it.

**Step 1** Log in to the management console.

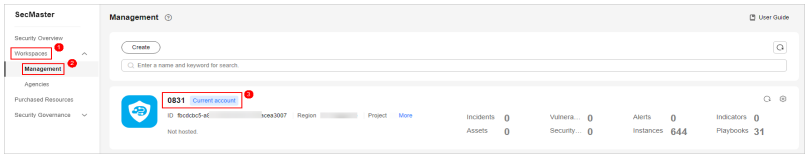
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

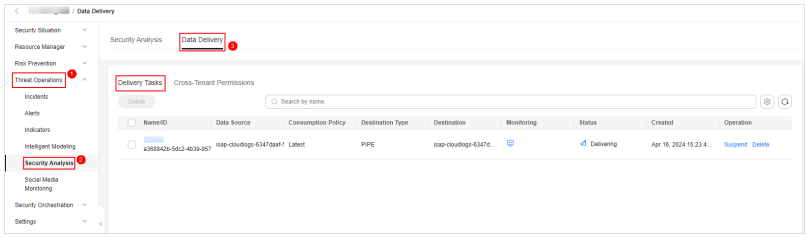
  

**Figure 10-149** Workspace management page



**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. On the page displayed, click the **Data Delivery Management** tab.

**Figure 10-150** Data Delivery tab page



**Step 6** On the **Data Delivery** tab page, locate the row of the target delivery task and click **Delete** in the **Operation** column and click **OK** in the displayed dialog box.

**----End**

# 10.6.5 Delivering Logs to LTS

## Scenario

SecMaster can integrate logs of other cloud products, such as WAF, HSS, and CFW. For details about how to integrate, see **Data Integration**.

You can deliver integrated logs to Log Tank Service (LTS) for real-time decision-making and analysis, device O&M management, and service trend analysis.

This topic walks you through how to deliver integrated logs to LTS.

## Prerequisites

- Logs you want to deliver have been aggregated in SecMaster. For details, see **Data Integration**.
- To deliver data to LTS, ensure there is an available log group and log streams. For details, see **Managing Log Groups** and **Managing Log Streams**.

## Procedure

Creating a Data Delivery

**Step 1** Log in to the management console.

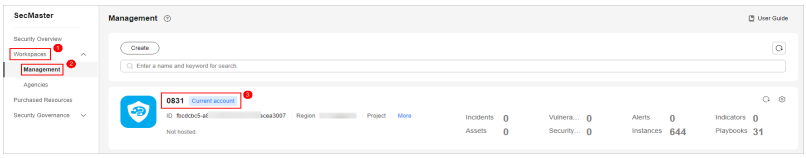
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

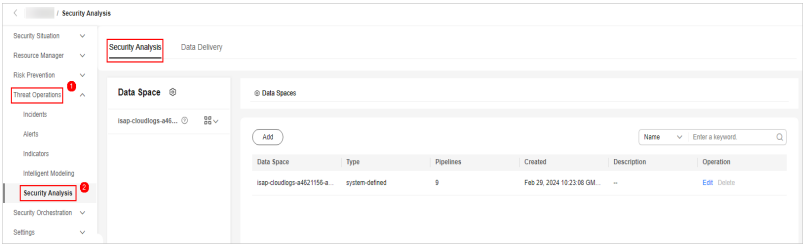
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 10-151** Workspace management page



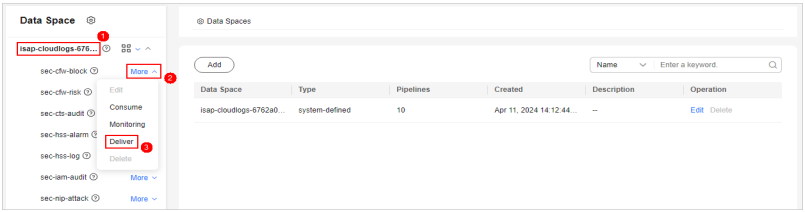

**Step 5** In the navigation pane on the left, choose **Threat Operations** > **Security Analysis**. The security analysis page is displayed.

**Figure 10-152** Accessing the Security Analysis tab page




**Step 6** In the data space navigation tree on the left, click the data space name to expand all pipelines. Next to the name of the target pipeline, click **More** > **Deliver**.

**Figure 10-153** Accessing data delivery settings page




**Step 7** (Optional) Authorization of the destination type is required for the first delivery. If the authorization has been performed, skip this step.

Confirm the authorization information, select **Agree to authorize** and click **OK**.

**Step 8** On the **Create Delivery** page, set data delivery parameters.

- **Delivery Name**: Enter a data delivery name.
- **Account Type**: Select **Current**. Only logs of the current account can be delivered to LTS.
- **Delivery Type**: Select **LTS**.
- **Log Group**: Select an LTS log group. If no log group is available, create one. For details, see **Creating an LTS Log Group**.
- **Log Stream**: Select a destination LTS log stream. If no log stream is available, create one. For details, see **Creating an LTS Log Stream**.

Other configuration parameters are generated by the system by default and do not need to be configured.

**Step 9** Under **Access Authorization**, view the permissions granted in **Step 7**.

A delivery requires the read and write permissions to access your cloud resources. A delivery task cannot access your cloud resources unless the access is authorized by you.

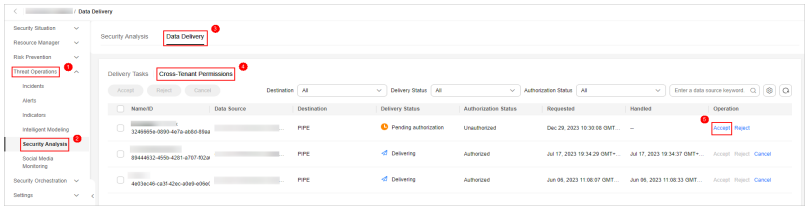
**Step 10** Click **OK**.

**Data Delivery Authorization**

**Step 11** On the **Data Delivery** page, click the **Cross-Tenant Permissions** tab. On the page displayed, click **Accept** in the **Operation** column of the target delivery task.

To accept authorization in batches, select all tasks to be authorized and click **Accept** in the upper left corner of the list.

**Figure 10-154** Authorization for data delivery




After the authorization is granted, the authorization status of the target delivery task is updated to **Authorized**. You can go to the delivery destination to view the delivery details.

**Checking the Data Delivery Status**

**Step 12** Click ☰ in the upper left corner of the page and choose **Management & Governance** > **Log Tank Service**.

**Step 13** In the log group list on the **Log Management** page, locate the log group for which you want to add data delivery and click ⌄ before the log group name.

**Step 14** Click the name of the log stream selected during data delivery. The log stream details page is displayed.

**Step 15** On the log stream details page, view the delivered log information.

**----End**

# 11 Security Orchestration

## 11.1 Security Orchestration Overview

Security orchestration combines security functions of different systems or components in a system involved in security operations of enterprises and organizations based on certain logical relationships to complete a specific security operations process and procedure. It aims to help security teams of enterprises and organizations quickly and efficiently respond to network threats and implement efficient and automatic response and handling of security incidents.

In security orchestration, playbooks and workflows are core elements. They are associated, dependent on each other, and work together to enable efficient security operations. **The following describes how they work together:**

- Definition:
  - Playbook: A playbook is a formal expression of the security operations process in the security orchestration system. It converts the security operations process and regulations into machine-read workflows.

    Playbooks embody the logic of security protection controls and schedule security capabilities. Playbooks are flexible and scalable. They can be modified and extended based on actual requirements to adapt to ever-changing security threats and service requirements.
  - A workflow is a collaborative work mode that integrates various capabilities related to security operation, such as tools, technologies, workflows, and personnel. It consists of multiple connected components. After defined in a workflow, these components can be triggered externally. For example, when a new service ticket is generated, the automatic service ticket review workflow is automatically triggered. You can use the visual canvas to define component actions for each node in a workflow.

    A workflow is a response mode when a playbook is triggered. Workflows convert instructions and procedures in the corresponding playbook into specific actions and execution steps.
- Relationships and differences
  - Relationship: A playbook provides guidance and rules for secure operations, and its workflow is responsible for converting these rules into

specific execution steps and actions. A playbook and its workflow depend on each other. The playbook guides the execution of the workflow, while the workflow implements the intent and requirements of the playbook.

- Differences: There are also some differences between playbooks and workflows. First, playbooks focus more on defining and describing security operation processes and regulations, so they focus on the overall framework and policies. Workflows focus more on specific actions and execution steps, so they focus on how to convert requirements in playbooks into actual actions. Second, playbooks are flexible and scalable, and can be modified and extended as required. However, workflows are relatively fixed. Once the design is complete, they need to follow the specified steps.

Example: Take a specific cyber security incident response case as an example. When an organization suffers from a network attack, the security orchestration system first identifies the attack type and severity based on the preset playbook. Then, the system automatically triggers corresponding security measures based on the workflow defined in the playbook, such as isolating the attacked system, collecting attack data, and notifying the security team. During the process, playbooks and workflows work closely to ensure the accuracy and timeliness of security responses.

### Limitations and Constraints

- In a single workspace of an account, the scheduling frequency of a single playbook is greater than or equal to 5 minutes.
- The maximum number of retries within a day for a single workspace of a single account is as follows:
  - Manual retry: 100. After a retry, the playbook cannot be retried until the current execution is complete.
  - API retry: 100. After a retry, the playbook cannot be retried until the current execution is complete.
- Restrictions on classification and mapping are as follows:
  - In a single workspace of a single account, a maximum of 50 classification & mapping templates can be created.
  - In a single workspace of a single account, the proportion of a classification to its mappings is 1:100.
  - A maximum of 100 classifications and mappings can be added to a workspace of a single account.

## 11.2 Built-in Playbooks

In security orchestration module, SecMaster provides built-in playbooks. You can use them without extra settings.

### Built-in Playbooks

The following playbooks are enabled by default:

HSS alert status synchronization, automatic notification of high-risk vulnerabilities, historical handling information associated with host defense alarms, SecMaster

and WAF address group association policy, historical handling information associated with application defense alarms, historical handling information associated with network defense alarms, automatic closure of repeated alarms, and alarm IP metric marking Asset protection status statistics notification, automatic alarm statistics notification, and automatic high-risk alarm notification

**Table 11-1** Built-in playbooks

| Security Layer | Playbook Name | Description | Data Class |
| --- | --- | --- | --- |
| Server security | HSS alert synchronization | Automatically synchronizes HSS alerts generated for servers. | Alert |
| | Auto High-Risk Vulnerability Notification | Sends email or SMS notifications to specified recipients when vulnerabilities rated as high severity are discovered. | Vulnerability |
| | Attack Link Analysis Alert Notification | Analyzes attack links. If HSS generates an alert for a server, the system checks the website running on the server. If the website information and alert exist, the system sends an alert notification. | Alert |
| | Server vulnerability notification | Checks servers with EIPs bound on the resource manager page and notifies of discovered vulnerabilities. | CommonContext |
| | HSS Isolation and Killing of Malware | Automatically isolates and kills malware. | Alert |
| | Mining host isolation | Isolates the server for which an alert of mining program or software was generated. The playbook also adds the server into a security group that allows no inbound or outbound traffic. | Alert |
| | Ransomware host isolation | Isolates the server for which an alert of ransomware was generated. The playbook also adds the server into a security group that allows no inbound or outbound traffic. | Alert |
| | Host Defense Alarms Are Associated With Historical Handling Information | Associates new HSS alerts with HSS alerts handled earlier and adds historical handling details to the comment area for the corresponding HSS alerts. | Alert |
| | Add host asset protection status notification | Checks new servers and notifies you of servers unprotected by HSS. | Resource |

| Security Layer | Playbook Name | Description | Data Class |
| --- | --- | --- | --- |
| | HSS High-Risk Alarm Interception Notification | Checks HSS high-risk alarms and generates to-do task notifications for source IP addresses that are not blocked by security groups. The to-do tasks will be reviewed manually. Once confirmed, the source IP addresses will be added to VPC block policy in SecMaster. | Alert |
| | Automated handling of host Rootkit event attacks | If a Rootkit alert is generated, this playbook automatically isolates the affected host by adding it to a security group that blocks all inbound and outbound traffic, and closes the alert. | Alert |
| | Automated handling of host rebound Shell attacks | If a reverse shell alert is generated, this playbook automatically isolates the affected host by adding it to a security group that blocks all inbound and outbound traffic, and closes the alert. | Alert |
| Application security | SecMaster WAF Address Group Association Policy | Associates SecMaster and WAF blacklist address groups for all enterprise projects. | CommonContext |
| | WAF clear Non-domain Policy | Checks WAF protection policies at 09:00 every Monday and deletes policies with no rules included. | CommonContext |
| | Application Defense Alarms Are Associated With Historical Handling Information | Associates new WAF alerts with WAF alerts handled earlier and adds historical handling details to the comment area for the new alerts. | Alert |
| | Web login burst interception | Checks IP addresses that establish brute-force login connections. If the IP addresses are not whitelisted, the workflow generate a to-do task. The do-to task will be reviewed manually. Once it is confirmed that the IP addresses should be blocked, the IP addresses will be added to a WAF block policy in SecMaster. | Alert |
| O&M security | Real-time Notification of Critical Organization and Management Operations | Sends real-time notifications for O&M alerts generated by models. Currently, SMN notifications can be sent for three key O&M operations: attaching NICs, creating VPC peering connections, and binding EIPs to resources. | Alert |

| Security Layer | Playbook Name | Description | Data Class |
| --- | --- | --- | --- |
| Identity security | Identity Defense Alarms Are Associated With Historical Handling Information | Associates new IAM alerts with IAM alerts handled earlier and adds historical handling details to the comment area for the new alerts. | Alert |
| Network security | Network Defense Alarms Are Associated With Historical Handling Information | Associates new CFW alerts with CFW alerts handled earlier and adds historical handling details to the comment area for new alerts. | Alert |
| Others/ General | Automatic Notification of High-Risk Alerts | Sends email or SMS notifications when there are alerts rated as High or Fatal. | Alert |
| | Alert metric extraction | Extracts IP addresses from alerts, checks the IP addresses against the intelligence system, sets alert indicators for confirmed malicious IP addresses, and associates the indicators with the source alerts. | Alert |
| | Automatic Disabling of Repeated Alerts | Closes the status of duplicate alerts when they are generated next time for the last 7 days and associates the alerts with the same name for the last 7 days. | Alert |
| | Automatic renaming of alert names | Generates custom alert names by combining specified key fields. | Alert |
| | Alert IP metric labeling | Adds attack source IP address and attacked IP address labels for alerts. | Alert |
| | IP intelligence association | Associates alerts with SecMaster intelligence (preferred) and ThreatBook intelligence. | Alert |
| | Asset Protection Status Statistics Notification | Collects statistics on asset protection status every week and sends notifications to customers by email or SMS. | CommonContext |
| | Alert statistics Notify | At 19:00 every day, collects statistics on alerts that are not cleared and sends notifications to customers by email or SMS. | Alert |

| Security Layer | Playbook Name | Description | Data Class |
| --- | --- | --- | --- |
| | Auto Blocking for High-risk Alerts | If a source IP address launched more than three attacks, triggered high-risk or critical alerts, and hit the malicious label in ThreatBook, this playbook triggers the corresponding security policies in WAF, VPC, CFW, or IAM to block the IP address. | Alert |
| | Automatic clearing of low-risk alerts | This playbook automatically clear low-risk and informative alerts. | Alert |

# 11.3 Security Orchestration Process

This topic describes how Security Orchestration works.

**Figure 11-1** Security Orchestration process

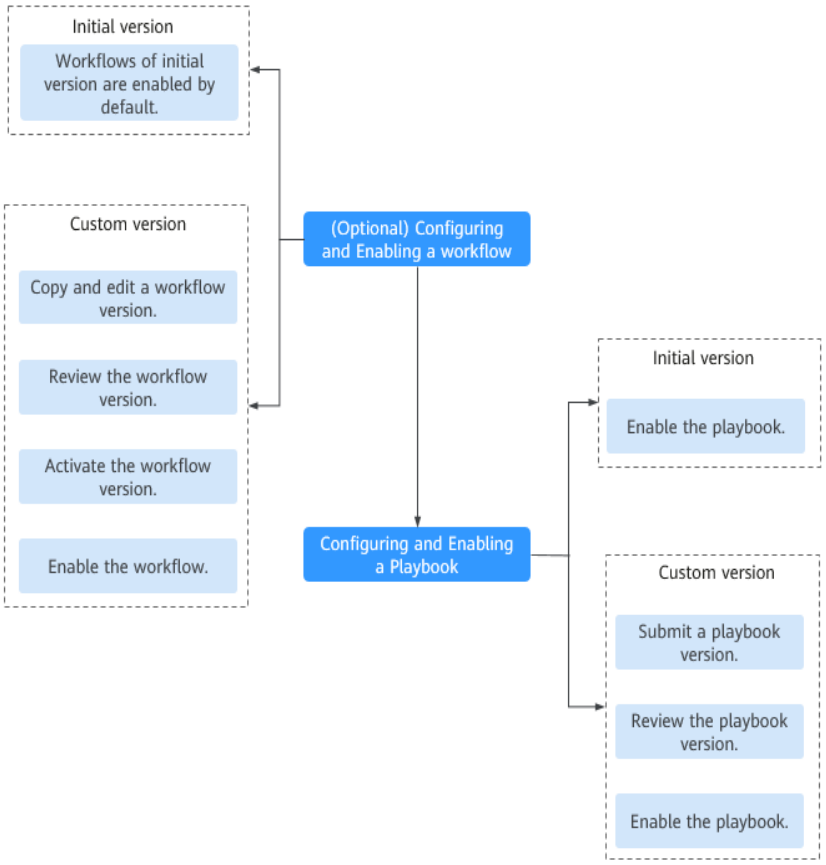


**Table 11-2** Process

| No. | Operation | Description |
| --- | --- | --- |
| 1 | (Optional) **Configuring and Enabling a Workflow** | Enable the required workflows built in SecMaster.<br>SecMaster provides some built-in workflows such as WAF uncapping, Synchronization of HSS alert status, and Fetching indicator from alert. Their initial version (V1) has been activated by default.<br>If you need to edit a workflow, you can copy the initial version and edit it. |
| 2 | (Optional) **Configuring and Enabling a Playbook** | Enable the required playbooks built in SecMaster.<br>By default, SecMaster provides playbooks such as **Fetching Indicator from alert**, **Synchronization of HSS alert status**, and **Automatic disabling of repeated alerts**. Most of playbooks are enabled by default. The following playbooks are enabled by default:<br>HSS alert status synchronization, automatic notification of high-risk vulnerabilities, historical handling information associated with host defense alarms, SecMaster and WAF address group association policy, historical handling information associated with application defense alarms, historical handling information associated with network defense alarms, automatic closure of repeated alarms, and alarm IP metric marking Asset protection status statistics notification, automatic alarm statistics notification, and automatic high-risk alarm notification<br>If you want to use a playbook that is not enabled, you can enable the initial version of the playbook (V1, activated by default), or modify the playbook and then enable it. |

# 11.4 (Optional) Configuring and Enabling a Workflow

## Scenario

SecMaster provides some built-in workflows such as WAF uncapping, Synchronization of HSS alert status, and Fetching indicator from alert. Their initial version (V1) has been activated by default.

You can customize and edit existing workflows. This topic describes how to configure and enable custom workflows.

## Enabling a Workflow of a Custom Version

**Accessing the workflow management page**

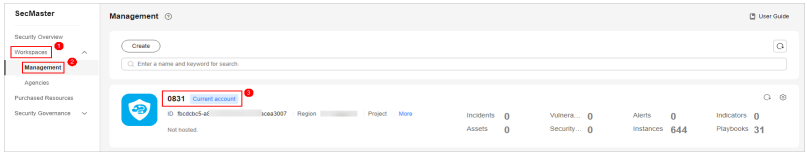
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

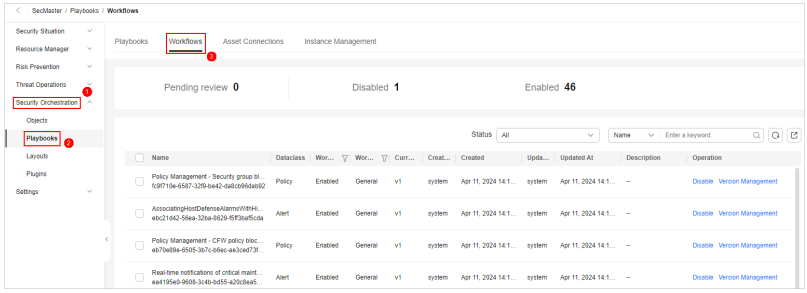
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-2** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

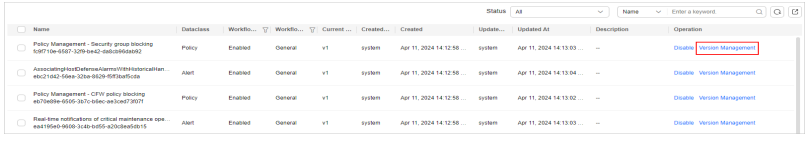
**Figure 11-3** Workflows tab page




**Copying a workflow version**

**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-4** Version Management page




**Step 7** On the **Version Management** slide-out panel for the workflow, in the **Version Information** area, locate the row containing the target workflow version, and click **Clone** in the **Operation** column.

**Step 8** In the displayed dialog box, click **OK**.

**Editing and submitting a workflow version**

**Step 9** On the **Version Management** slide-out panel for the workflow, in the **Version Information** area, locate the row containing the target workflow version, and click **Edit** in the **Operation** column.

**Step 10** On the workflow drawing page, drag basic, workflow, and plug-in nodes from **Resource Libraries** on the left to the canvas on the right for workflow design.

**Table 11-3** Resource Libraries parameters

| Parameter | | | Description |
|---|---|---|---|
| Basic | Basic Node | StartEvent | The start of a workflow. Each workflow can have only one start node. The entire workflow starts from the start node. |
| | | EndEvent | The end of a workflow. Each workflow can have multiple end nodes, but the workflow must end with an end node. |
| | | UserTask | When the workflow execution reaches this node, the workflow is suspended and a to-do task is generated on the **Task Center** page.<br>After you complete the task, the subsequent nodes in the workflow continue to be executed.<br>**Table 11-4** describes the UserTask parameters. |
| | | SubProcess | Another workflow is started to perform cyclic operations. It is equivalent to the loop body in the workflow. |
| | System Gateway | ExclusiveGateway | During line distribution, one of the multiple lines is selected for execution based on the condition expression.<br>During line aggregation, if one of the multiple lines arrives, the subsequent nodes continue to execute the task. |
| | | ParallelGateway | During line distribution, all lines are executed.<br>During line aggregation, the subsequent nodes are executed only when all the lines arrive. (If one line fails, the entire workflow fails.) |
| | | InclusiveGateway | During line distribution, all expressions that meet the conditions are selected for execution based on the condition expression.<br>During line aggregation, subsequent nodes are executed only when all lines executed during traffic distribution reach the inclusive gateway. (If one line fails, the entire workflow fails.) |
| Workflows | | | You can select all released workflows in the current workspace. |
| Plug-ins | | | You can select all plug-ins in the current workspace. |

**Table 11-4** UserTask parameters

| Parameter | Description |
| --- | --- |
| Primary key ID | The system automatically generates a primary key ID, which can be changed as required. |
| Workspace Name | Name of the manual review node |
| Expired | Expiration time of a manual review node |
| Description | Description of the manual review node |
| View Parameters | Click ». On the **Select Context** page that is displayed, select an existing parameter name. To add a parameter, click **Add Parameter**. |
| Manual Handling Parameters | Key of the input parameter To add a parameter, click **Add Parameter**. |
| Processed By | Set the reviewer of the workflow to the IAM user of the current IAM account. If a workflow needs to be approved after the setting, only the owner can handle it on the **Task Center** page. Non-owners can only view the workflow.<br>**NOTE**<br>In first time use, you need to obtain authorization. Detailed operations are as follows:<br>1. Click **Authorize**.<br>2. On the **Access Authorization** slide-out panel displayed, select **Agree** and click **OK**. |

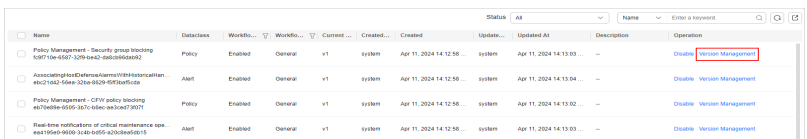
**Step 11** After the design is complete, click **Save and Submit** in the upper right corner. In the automatic workflow verification dialog box displayed, click **OK**.

If the workflow verification fails, check the workflow based on the failure message.

**Reviewing a workflow version**

**Step 12** After the workflow version is edited and submitted, the workflow management page is displayed. On the workflow management page, click **Version Management** in the **Operation** column of the target workflow.

**Figure 11-5** Version Management page



**Step 13** On the **Version Management** slide-out panel for the workflow, click **Review** in the **Operation** column of the target workflow.

**Step 14** In the displayed dialog box, set **Comment** to **Passed** and click **OK**.

**Activating a workflow version**

**Step 15** On the **Version Management** slide-out panel for the workflow, in the **Version Information** area, locate the row containing the target workflow version, and click **Activate** in the **Operation** column.

**Step 16** In the displayed dialog box, click **OK**.

**Enabling a workflow**

Some workflows have been enabled by default. You can enable other ones based on your needs. The procedure is as follows:

**Step 17** On the **Version Management** slide-out panel, click **Enable** in the **Operation** column of the target workflow.

**Step 18** On the slide-out panel displayed, select the workflow version to be enabled and click **OK**.

**----End**

# 11.5 (Optional) Configuring and Enabling a Playbook

By default, SecMaster provides playbooks such as **Fetching Indicator from alert**, **Synchronization of HSS alert status**, and **Automatic disabling of repeated alerts**. Most of playbooks are enabled by default. The following playbooks are enabled by default:

HSS alert status synchronization, automatic notification of high-risk vulnerabilities, historical handling information associated with host defense alarms, SecMaster and WAF address group association policy, historical handling information associated with application defense alarms, historical handling information associated with network defense alarms, automatic closure of repeated alarms, and alarm IP metric marking Asset protection status statistics notification, automatic alarm statistics notification, and automatic high-risk alarm notification

If you want to use a playbook that is not enabled, you can enable the initial version of the playbook (V1, activated by default), or modify the playbook and then enable it.

This section describes how to configure and enable a playbook.

- **Enabling a Playbook of the Initial Version**
- **Enabling a Playbook of a Custom Version**

## Enabling a Playbook of the Initial Version

**Step 1** Log in to the management console.

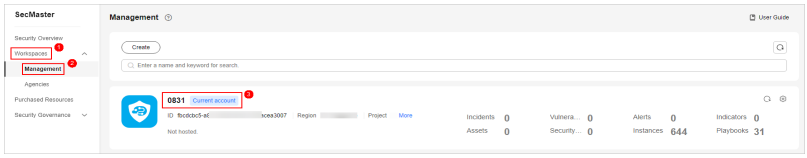
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

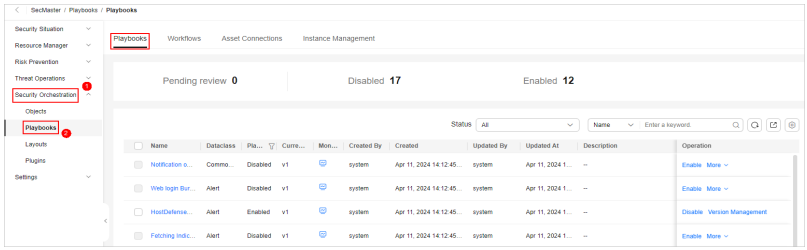
  

**Figure 11-6** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-7** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Enable**.

**Step 7** Select the playbook version to be enabled and click **OK**.

**----End**

## Enabling a Playbook of a Custom Version

### Accessing the Playbook Version Management Page

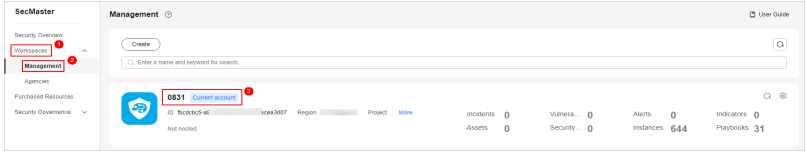
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

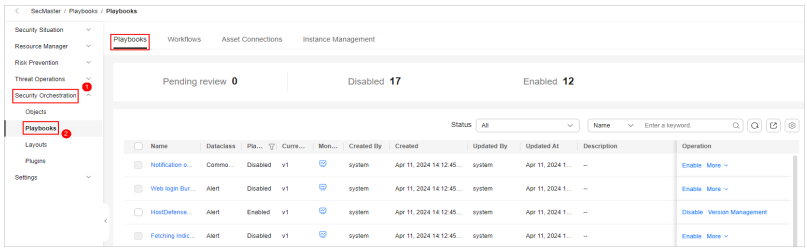
**Figure 11-8** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

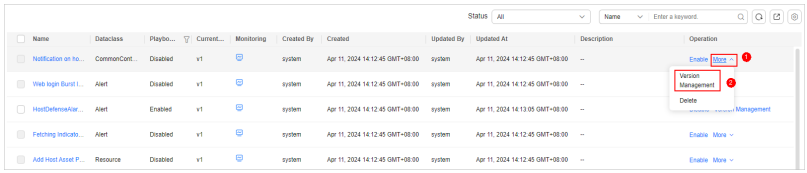
**Figure 11-9** Accessing the Playbooks tab




**Copying a Playbook Version**

**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-10** Version Management slide-out panel




**Step 7** On the **Version Management** slide-out panel, in the **Version Information** area, locate the row containing the desired playbook version, and click **Clone** in the **Operation** column.

**Step 8** In the displayed dialog box, click **OK**.

**Editing and Submitting a Playbook Version**

**Step 9** On the **Version Management** slide-out panel, in the **Version Information** area, locate the row containing the desired playbook version, and click **Edit** in the **Operation** column.

**Step 10** On the page for editing a playbook version, edit the version information.

**Step 11** Click **OK**.

**Submitting a Playbook Version**

**Step 12** On the **Version Management** slide-out panel, in the **Version Information** area, locate the target playbook version, and click **Submit** in the **Operation** column.

**Step 13** Click **OK**.

**Reviewing a Playbook Version**

**Step 14** On the **Version Management** slide-out panel for the playbook, click **Review** in the **Operation** column of the target playbook.

**Step 15** On the displayed page, set **Comment** to **Passed** and click **OK**.

**Activating a Playbook Version**

**Step 16** On the **Version Management** slide-out panel, in the **Version Information** area, locate the row of the target playbook version, and click **Activate** in the **Operation** column.

**Enabling a Playbook**

Some playbooks have been enabled by default. You can enable other ones based on your needs. The procedure is as follows:

**Step 17** On the **Playbooks** tab, locate the target playbook and click **Enable** in the **Operation** column.

**Step 18** In the slide-out panel, select the playbook version you want to enable and click **OK**.

**----End**

# 11.6 Operation Object Management

## 11.6.1 Data Class

### 11.6.1.1 Viewing Data Classes

#### Scenario

The playbook and workflow running in security orchestration and response need to be bound to a data class. The playbook is triggered by a data object (instance of the data class).

This section describes how to view existing data classes.

#### Procedure

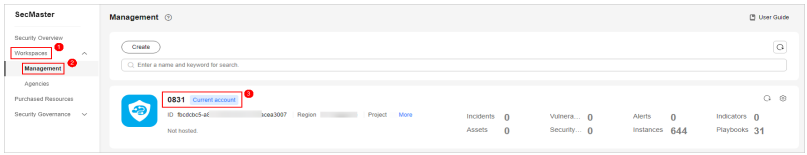
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

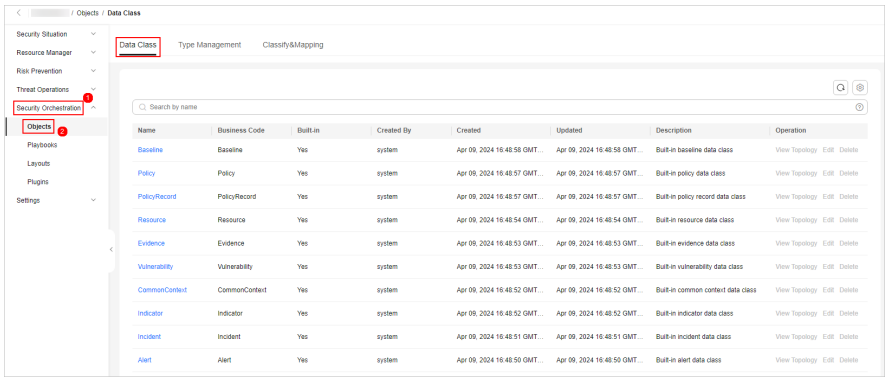
**Figure 11-11** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. The **Data Class** tab page is displayed by default.

**Figure 11-12** Accessing the Data Class tab




**Step 6** In the data class list, view the existing data class information.

- If there are many data classes displayed, use filters to search for a specific one.
- In the data class list, you can view the data class name, service code, and whether the data class is a built-in data class.
- To view details about a data class, click the name of the target data class. The details page of the target data class is displayed on the right.

  On the data class details page, you can view the basic information and fields about the data class.

**----End**

# 11.6.2 Type Management

## 11.6.2.1 Managing Alert Types

### Scenario

This section describes how to manage alert types. The detailed operations are as follows:

- **Viewing Alert Types**: describes how to view existing alert types and their details.
- **Adding an Alert Type**: describes how to create custom alert types.
- **Associating an Alert Type with a Layout**: describes how to associate a custom alert type with an existing layout.
- **Editing an Alert Type**: describes how to edit a custom alert type.
- **Managing an Alert Type**: describes how to enable, disable, and delete a custom alert type.

### Limitations and Constraints

- By default, built-in alert types are associated with existing layouts. You **cannot** customize associated layouts.
- Built-in alert types are enabled by default and **cannot** be edited, disabled, or deleted.

- After a customized alert type is added, the **Type Name**, **Type ID**, and **Subtype ID** parameters cannot be modified.

## Viewing Alert Types

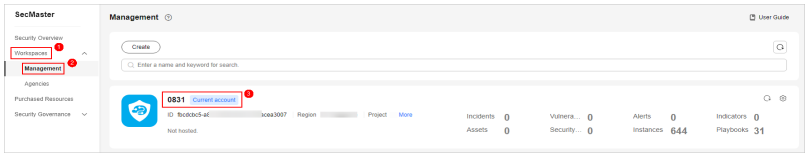
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

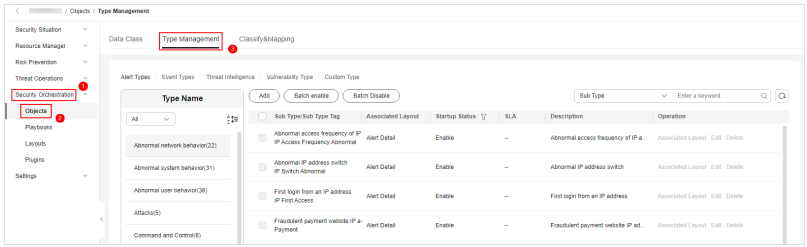
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-13** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-14** Type Management page




**Step 6** On the **Type Management** page, click the **Alert Type** tab.

**Step 7** On the **Alert Type** tab page, you can view all alert types in the **Type Name** area on the left.

To view details about subtypes of an alert type, click the target type name in **Type Name** on the left. Details about all subtypes are displayed on the right. For details about the parameters, see **Table 11-5**.

If there are many subtypes, you can select the **Sub Type** or **Associated Layout** and enter the corresponding keyword for search.

**Table 11-5** Alert type parameters

| Parameter | Description |
| --- | --- |
| Sub Type/Sub Type Tag | Name and ID of an alert subtype. |

| Parameter | Description |
| --- | --- |
| Associated Layout | Layout associated with the alert type. |
| Startup Status | Whether an alert type is enabled<br>• **Enabled**: The current type has been enabled.<br>• **Disabled**: The current type has been disabled. |
| SLA | SLA processing time of an alert type. |
| Description | Description of an alert type |
| Operation | You can edit and delete alert or incident types. |

**----End**

## Adding an Alert Type

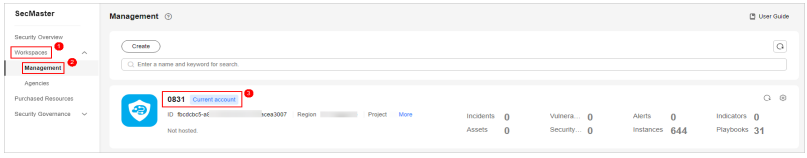
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

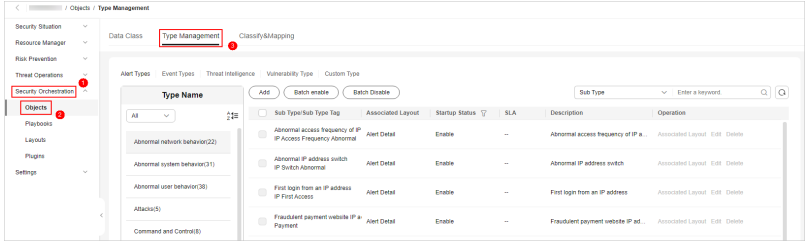
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-15** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-16** Type Management page




**Step 6** On the **Type Management** page, click the **Alert Type** tab.

**Step 7** On the **Alert Types** tab, click **Add**. On the **Add Alert Type** slide-out panel, set alert type parameters.

**Table 11-6** Parameters for adding an alert type

| Parameter | Description |
| --- | --- |
| Type Name | Customize the name of the new alert type. |
| Type Tag | Enter the alert type ID. The keyword must comply with the upper camel case naming rules, for example, **TypeTag**. |
| Sub Type | Enter the subtype of the alert type. |
| Sub Type Tag | Enter the alert subtype ID. The keyword must comply with the upper camel case naming rules, for example, **SubTypeName**. |
| Startup Status | Indicates whether an alert type is enabled. |
| SLA | Set the SLA processing time of the alert. |
| Description | Description of a user-defined alert type |

NOTE

After a customized alert type is added, the **Type Name**, **Type Tag**, and **Sub Type Tag** parameters cannot be modified.

**Step 8** In the lower right corner of the page, click **OK**.

After the alert type is added, you can view the new alert type in **Type Name** area on the **Alert Types** tab.

**----End**

## Associating an Alert Type with a Layout

NOTE

By default, built-in alert types are associated with existing layouts. You cannot customize associated layouts.

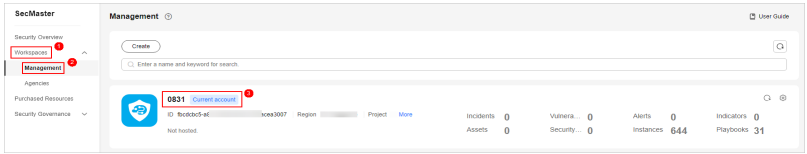
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

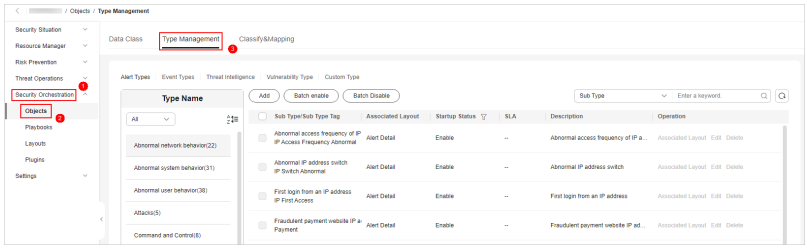
**Figure 11-17** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-18** Type Management page



**Step 6** On the **Type Management** page, click the **Alert Type** tab.

**Step 7** On the type management page, select the type to be associated with a layout and click **Associated Layout** in the **Operation** column of the target type.

**Step 8** In the **Associate Layout** dialog box, select the target layout and click **OK**.

**----End**

## Editing an Alert Type

NOTE

- Currently, the built-in alert type cannot be edited.
- After a customized alert type is added, the **Type Name**, **Type Tag**, and **Sub Type Tag** parameters cannot be modified.

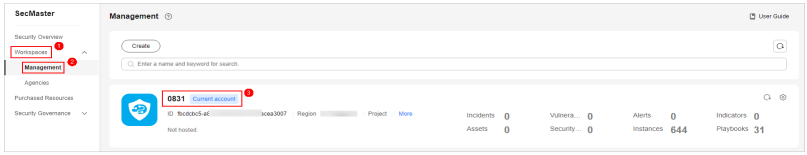
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

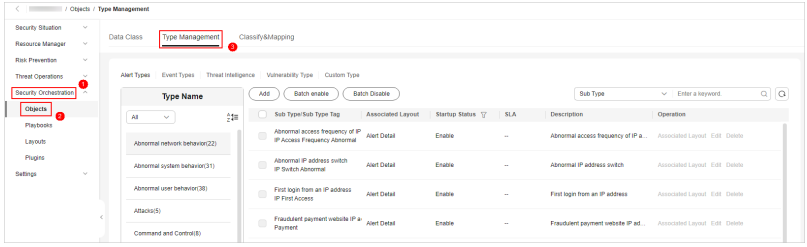
**Figure 11-19** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-20** Type Management page



**Step 6** On the **Type Management** page, click the **Alert Type** tab.

**Step 7** In the **Type Name** area on the **Alert Types** tab, click the name of the custom alert type to be edited. Details about the custom alert type are displayed on the right.

**Step 8** On the alert list page on the right, locate the row that contains the target type and click **Edit** in the **Operation** column.

**Step 9** On the displayed page, modify the parameters of the alert type.

**Table 11-7** Parameters for editing an alert type

| Parameter | Description |
| --- | --- |
| Type Name | Name of an alert type, which **cannot** be modified. |
| Type ID | Alert type ID, which **cannot** be modified. |
| Sub Type | Enter the subtype of the alert type. |
| Sub Type Tag | Alert subtype ID, which **cannot** be modified. |
| Status | Sets the startup status of an alert type. |
| SLA | Set the SLA processing time of the alert. |
| Description | Description of a custom alert type |

**Step 10** In the lower right corner of the page, click **OK**.

**----End**

## Managing an Alert Type

**Step 1** Log in to the management console.

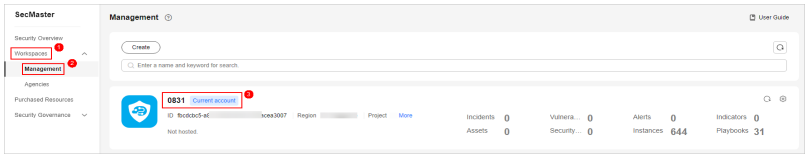
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

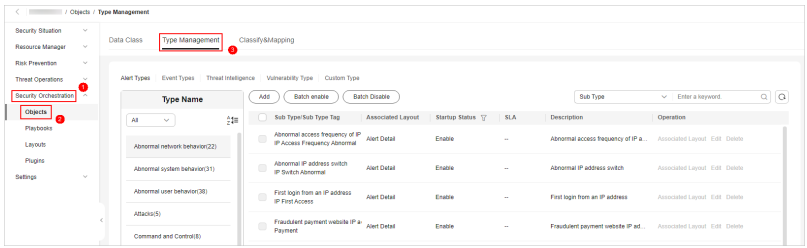
  

**Figure 11-21** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-22** Type Management page




**Step 6** On the **Type Management** page, click the **Alert Type** tab.

**Step 7** On the **Alert Types** tab, manage alert types.

NOTE

- The built-in alert types are enabled by default. You do not need to manually enable them.
- Currently, built-in alert types cannot be disabled or deleted.
- Currently, built-in alert types cannot be deleted.

**Table 11-8** Managing an alert type

| Operation | Description |
| --- | --- |
| Enable | 1. On the **Alert Types** tab, select the types you want to enable and click **Batch enable**. Alternatively, locate the row containing the alert type you want to enable, click **Disable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**.<br>If the system displays a message indicating that the operation is successful and the status of the target type changes to **Enable**, the target type is enabled successfully. |

| Operation | Description |
| --- | --- |
| Disable | 1. On the **Alert Types** tab, select the types you want to disable and click **Batch Disable**. Alternatively, locate the row containing the alert type to be disabled, click **Enable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**.<br>If the system displays a message indicating that the operation is successful and the **Status** of the target type changes to **Disable**, the target type is disabled successfully. |
| Delete | 1. On the alert type management page, select the type to be deleted and click **Delete** in the **Operation** column.<br>2. In the displayed dialog box, enter **DELETE** and click **OK**. |

**----End**

## 11.6.2.2 Managing Incident Types

### Scenario

This section describes how to manage incident types. The detailed operations are as follows:

- **Viewing Incident Types**: describes how to view existing incident types and their details.
- **Adding an Incident Type**: describes how to create custom incident types.
- **Associating an Incident Type with a Layout**: describes how to associate a custom incident type with an existing incident type.
- **Editing an Incident Type**: describes how to edit a custom incident type.
- **Managing Existing Incident Types**: describes how to enable, disable, and delete a custom incident type.

### Limitations and Constraints

- By default, built-in incident types are associated with existing layouts. You **cannot** customize associated layouts.
- Built-in incident types are enabled by default and **cannot** be edited, enabled, disabled, or deleted.
- After a customized incident type is added, the **Type Name**, **Type ID**, and **Subtype ID** parameters cannot be modified.

### Viewing Incident Types

**Step 1** Log in to the management console.

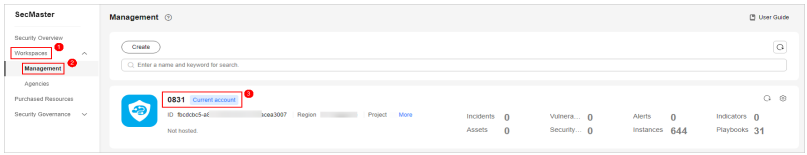
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

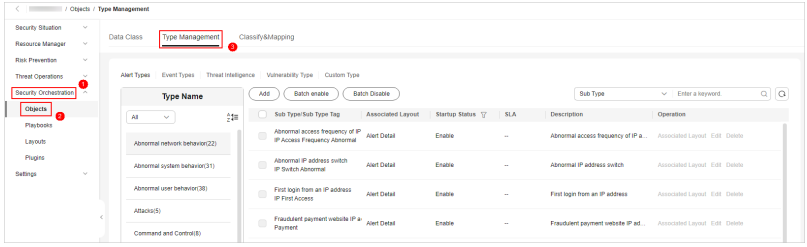
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-23** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-24** Type Management page



**Step 6** On the **Type Management** page, click the **Event Types** tab.

**Step 7** On the **Event Types** tab, view the details about existing incident types. For details about the parameters, see **Table 11-9**.

**Table 11-9** Incident type parameters

| Parameter | Description |
| --- | --- |
| Type Name | Name of an incident type |
| Sub Type/Sub Type Tag | Name and ID of an incident subtype |
| Associated Layout | Layout associated with the incident type |
| Startup Status | Indicates whether an incident type is enabled.<br>• Enable: The current type has been enabled.<br>• Disabled: The current type has been disabled. |
| SLA | SLA processing time of an incident type |
| Description | Description of an incident type |
| Operation | You can edit and delete incident types. |

**----End**

## Adding an Incident Type

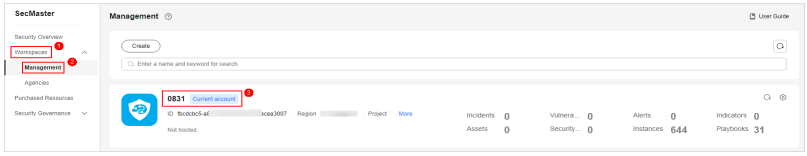
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

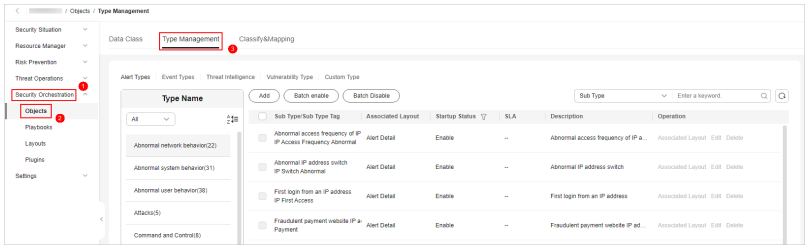
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-25** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-26** Type Management page




**Step 6** On the **Type Management** page, click the **Event Types** tab.

**Step 7** On the **Event Types** tab, click **Add**. On the **Add Event Type** slide-out panel, set incident type parameters.

**Table 11-10** Incident type parameters

| Parameter | Description |
| --- | --- |
| Type Name | Customized name of an incident type. |
| Type Tag | Enter the incident type ID. The keyword must comply with the upper camel case naming rules, for example, **TypeTag**. |
| Sub Type | Enter the subtype of the incident type. |

| Parameter | Description |
| --- | --- |
| Sub Type Tag | Enter the incident subtype ID. The keyword must comply with the upper camel case naming rules, for example, **SubTypeName**. |
| Startup Status | Indicates whether an incident type is enabled. |
| SLA | Set the SLA processing time of the incident. |
| Description | Description of a custom incident type |

NOTE

After a customized incident type is added, the **Type Name**, **Type ID**, and **Subtype ID** parameters cannot be modified.

**Step 8** In the lower right corner of the page, click **OK**.

After the incident type is added, you can view the new incident type in **Type Name** on the **Event Type** page.

**----End**

## Associating an Incident Type with a Layout

NOTE

By default, built-in incident types are associated with existing layouts. You cannot customize associated layouts.

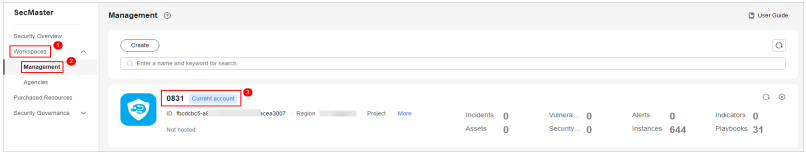
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

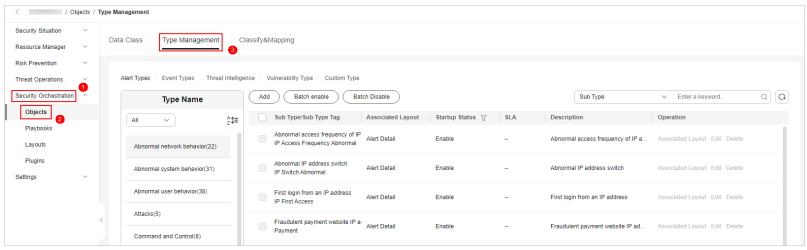
**Figure 11-27** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-28** Type Management page



**Step 6** On the **Type Management** page, click the **Event Types** tab.

**Step 7** On the **Event Type** page, select the incident type to be associated with a layout and click **Associated Layout** in the **Operation** column of the target type.

**Step 8** In the **Associate Layout** dialog box, select the target layout and click **OK**.

**----End**

## Editing an Incident Type

NOTE

- Currently, the built-in incident type cannot be edited.
- After a customized incident type is added, the **Type Name**, **Type ID**, and **Subtype ID** parameters cannot be modified.

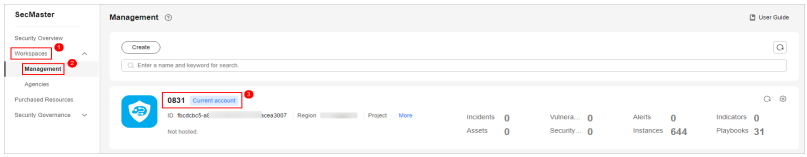
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

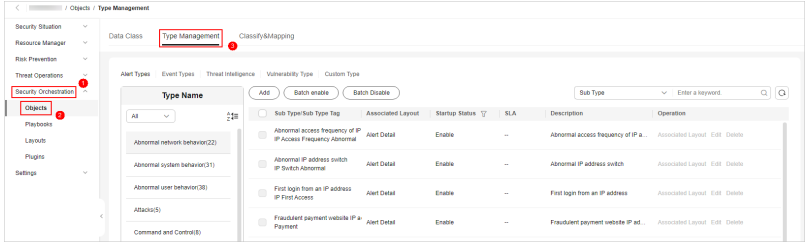
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-29** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-30** Type Management page



**Step 6** On the **Type Management** page, click the **Event Types** tab.

**Step 7** In **Type Name** on the **Alarm Types** page, click the name of the customized incident type to be edited. Details about the custom incident type are displayed on the right.

**Step 8** On the **Event Type** page, click **Edit** in the **Operation** column of the target type to be edited.

**Step 9** In the **Edit Event Type** dialog box, edit parameters.

**Table 11-11** Incident type parameters

| Parameter | Description |
| --- | --- |
| Type Name | Name of an incident type, which **cannot** be modified. |
| Type Tag | Incident type ID, which **cannot** be modified. |
| Sub Type | Enter the subtype of the incident type. |
| Sub Type Tag | Incident subtype ID, which **cannot** be modified. |
| Startup Status | Indicates whether an incident type is enabled. |
| SLA | Set the SLA processing time of the incident. |
| Description | Description of a custom incident type |

**Step 10** In the lower right corner of the page, click **OK**.

**----End**

## Managing Existing Incident Types

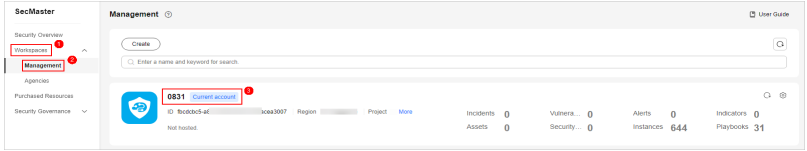
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

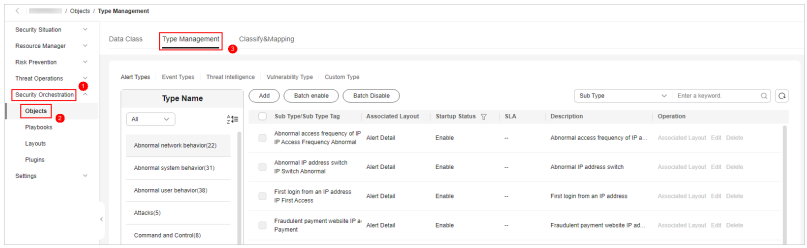
**Figure 11-31** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-32** Type Management page



**Step 6** On the **Type Management** page, click the **Event Types** tab.

**Step 7** On the incident type tab, manage incident types.

NOTE

- The built-in incident types are enabled by default. You do not need to manually enable them.
- Currently, built-in incident (event) types cannot be disabled or deleted.

**Table 11-12** Managing existing incident types

| Operation | Description |
| --- | --- |
| Enable | 1. On the type management page, select the type to be enabled and click **Batch Enable**. Alternatively, locate the row containing the incident type to be enabled, click **Disable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**. If the system displays a message indicating that the operation is successful and the status of the target type changes to **Enable**, the target type is enabled successfully. |
| Disable | 1. On the **Event Type** page, select the type to be disabled and click **Batch Disable**. Alternatively, locate the row containing the incident type to be disabled, click **Enable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**. If the system displays a message indicating that the operation is successful and the **Status** of the target type changes to **Disable**, the target type is disabled successfully. |
| Delete | 1. On the incident type management page, select the type to be deleted and click **Delete** in the **Operation** column.<br>2. In the displayed dialog box, enter **DELETE** and click **OK**. |

**----End**

# 11.6.2.3 Viewing Threat Intelligence Types

## Scenario

This section describes how to view threat intelligence types.

## Limitations and Constraints

- By default, built-in intelligence types are associated with existing layouts. You **cannot** customize associated layouts.
- Built-in intelligence types are enabled by default and **cannot** be edited, enabled, disabled, or deleted.

## Viewing Threat Intelligence Types

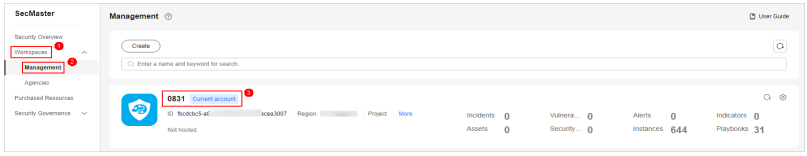
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

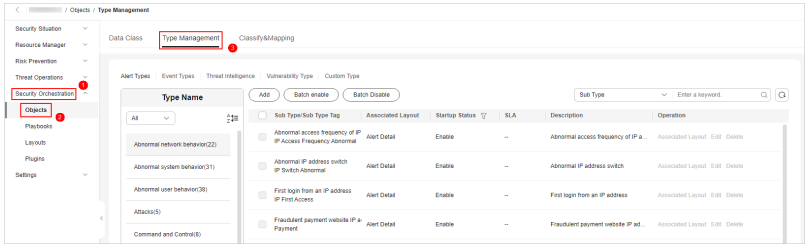
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-33** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-34** Type Management page




**Step 6** On the **Type Management** page, click the **Threat Intelligence** tab.

**Step 7** On the **Threat Intelligence** page, view details. For details about the parameters, see **Table 11-13**.

**Table 11-13** Threat intelligence type parameters

| Parameter | Description |
| --- | --- |
| Type Name/Type Tag | Name and type tag of threat intelligence |
| Associated Layout | Layout associated with threat intelligence |
| Startup Status | Indicates the enabling status of a threat intelligence type:<br>• **Enabled**: The current type has been enabled.<br>• **Disabled**: The current type has been disabled. |
| Expired Time | Expiration time of threat intelligence. |
| Built-in | Indicates whether the threat intelligence is built in the system. |
| Description | Description of a threat intelligence |
| Operation | You can edit and delete the threat intelligence. |

**----End**

## 11.6.2.4 Managing Vulnerability Types

### Scenario

This section describes how to manage vulnerability types. The detailed operations are as follows:

- **Viewing Existing Vulnerability Types**: Describes how to view existing vulnerability types and their details.
- **Adding a Vulnerability Type**: describes how to create custom vulnerability types.
- **Associating a Vulnerability Type with a Layout**: describes how to associate a custom vulnerability type with an existing layout.
- **Editing a Vulnerability Type**: describes how to edit a custom vulnerability type.
- **Managing a Vulnerability Type**: describes how to enable, disable, and delete a custom vulnerability type.

### Limitations and Constraints

- Currently, the built-in vulnerability types of the system do not support customized layouts.
- Built-in vulnerability types are enabled by default and **cannot** be edited, enabled, disabled, or deleted.
- After a user-defined vulnerability type is added, the type ID **cannot** be modified.

## Viewing Existing Vulnerability Types

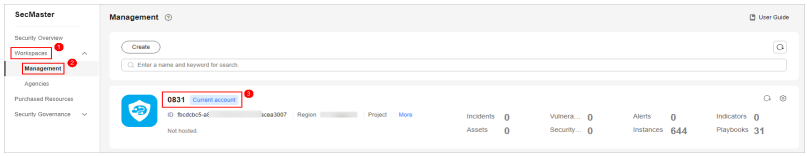
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

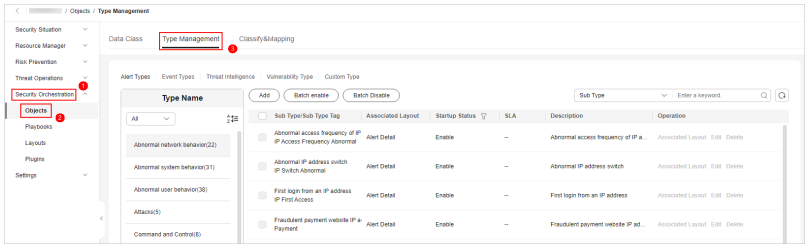
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-35** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-36** Type Management page




**Step 6** On the **Type Management** page, click the **Vulnerability Type** tab.

**Step 7** On the **Vulnerability Type** tab page, view details about existing vulnerability types. For details about the parameters, see **Table 11-14**.

**Table 11-14** Vulnerability type parameters

| Parameter | Description |
| --- | --- |
| Type Name/Type Tag | Name and tag of a vulnerability type |
| Associated Layout | Layout associated with the vulnerability type. |
| Startup Status | Indicates the enabling status of a vulnerability type:<br>• **Enabled**: The current type has been enabled.<br>• **Disabled**: The current type has been disabled. |
| Built-in | Indicates whether the vulnerability is a built-in vulnerability type. |
| Description | Description of a vulnerability type |

| Parameter | Description |
| --- | --- |
| Operation | You can edit and delete vulnerability types. |

**----End**

## Adding a Vulnerability Type

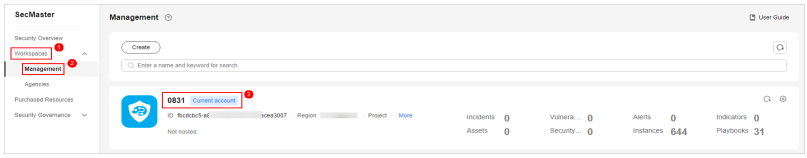
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

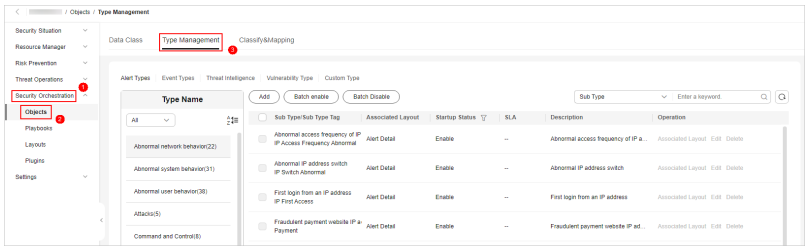
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-37** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-38** Type Management page




**Step 6** On the **Type Management** page, click the **Vulnerability Type** tab.

**Step 7** On the **Vulnerability Type** page, click **Add**. On the **Add Vulnerability Type** slide-out panel, set type parameters.

**Table 11-15** Vulnerability type parameters

| Parameter | Description |
| --- | --- |
| Type Name | Name of the vulnerability type to be added. |

| Parameter | Description |
| --- | --- |
| Type Tag | Enter the vulnerability type ID. The keyword must comply with the upper camel case naming rules, for example, **TypeTag**. |
| Startup Status | Indicates the enabling status of the vulnerability type: |
| Description | Description of a user-defined vulnerability |

NOTE

After a user-defined vulnerability type is added, the **Type ID** cannot be modified.

**Step 8** In the lower right corner of the page, click **Confirm**.

After the threat intelligence type is added, you can view the new type in the table on the **Vulnerability Type** page.

**----End**

## Associating a Vulnerability Type with a Layout

NOTE

Currently, built-in vulnerability types do not support customized layouts.

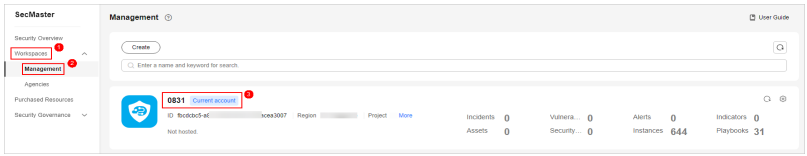
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

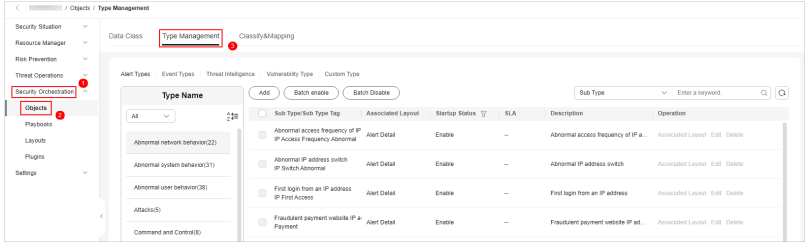
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-39** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-40** Type Management page



**Step 6** On the **Type Management** page, click the **Vulnerability Type** tab.

**Step 7** On the **Vulnerability Type** page, select the vulnerability type to be associated with a layout and click **Associated Layout** in the **Operation** column of the target type.

**Step 8** In the **Associate Layout** dialog box, select the target layout and click **OK**.

**----End**

## Editing a Vulnerability Type

NOTE

- Currently, the built-in vulnerability types cannot be edited.
- After a user-defined vulnerability type is added, the type ID cannot be modified.

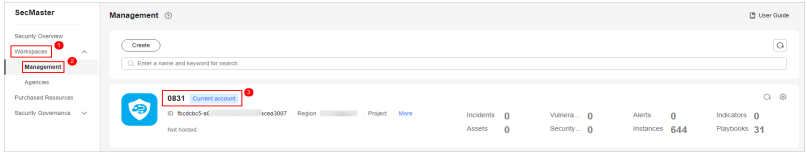
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

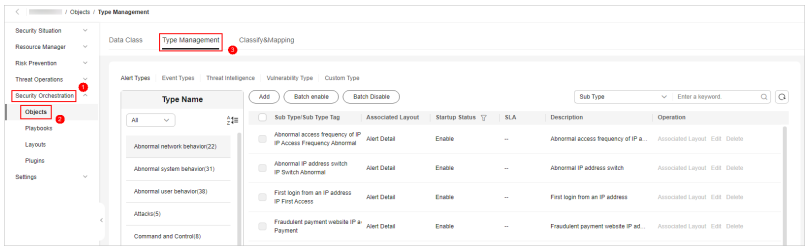
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-41** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-42** Type Management page




**Step 6** On the **Type Management** page, click the **Vulnerability Type** tab.

**Step 7** On the **Vulnerability Type** page, select the type to be edited and click **Edit** in the **Operation** column of the target type.

**Step 8** On the displayed page, edit the parameter information of the corresponding type.

**Table 11-16** Vulnerability type parameters

| Parameter | Description |
| --- | --- |
| Type Name | Name of a user-defined vulnerability type |
| Type Tag | Vulnerability type ID, which **cannot** be modified. |
| Startup Status | Set the enabling status of the vulnerability type: |
| Description | Description of a user-defined vulnerability |

**Step 9** In the lower right corner of the page, click **OK**.

**----End**

## Managing a Vulnerability Type

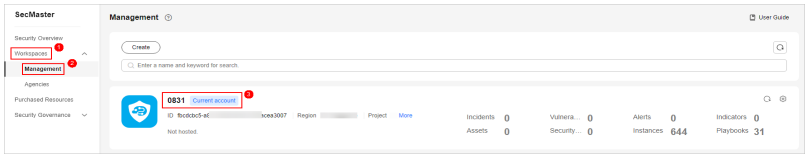
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

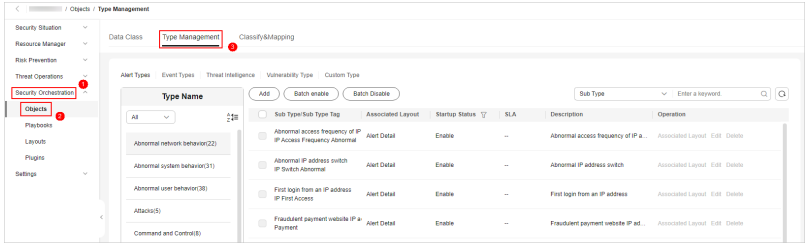
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-43** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-44** Type Management page




**Step 6** On the **Type Management** page, click the **Vulnerability Type** tab.

**Step 7** On the vulnerability type tab, manage vulnerability types.

NOTE

- Built-in vulnerability types are enabled by default. You do not need to manually enable them.
- Currently, the built-in vulnerability types cannot be disabled or deleted.

**Table 11-17** Managing a vulnerability type

| Operation | Description |
| --- | --- |
| Enable | 1. On the **Vulnerability Type** page, select the type to be enabled and click **Batch Enable**. Alternatively, locate the row containing the vulnerability type to be enabled, click **Disable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**.<br>If the system displays a message indicating that the operation is successful and the status of the target type changes to **Enable**, the target type is enabled successfully. |
| Disable | 1. On the **Vulnerability Type** page, select the type to be disabled and click **Batch Disable**. Alternatively, locate the row containing the vulnerability type to be disabled, click **Enable** in the **Status** column.<br>2. In the dialog box displayed, click **OK**.<br>If the system displays a message indicating that the operation is successful and the **Status** of the target type changes to **Disable**, the target type is disabled successfully. |
| Delete | 1. On the **Vulnerability Type** tab, select the vulnerability type to be deleted and click **Delete** in the **Operation** column.<br>2. In the displayed dialog box, enter **DELETE** and click **OK**. |

**----End**

## 11.6.2.5 Viewing Custom Types

## Scenario

This section describes how to view custom threat intelligence types.

## Limitations and Constraints

Built-in types and sub-types cannot be associated with layouts, edited, deleted, enabled, or disabled.

## Viewing Custom Types or Subtypes

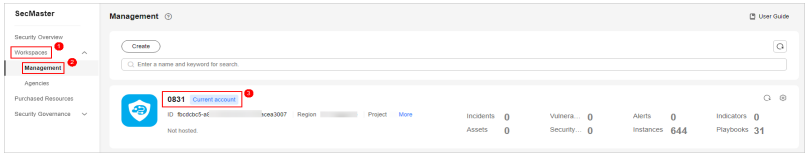
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

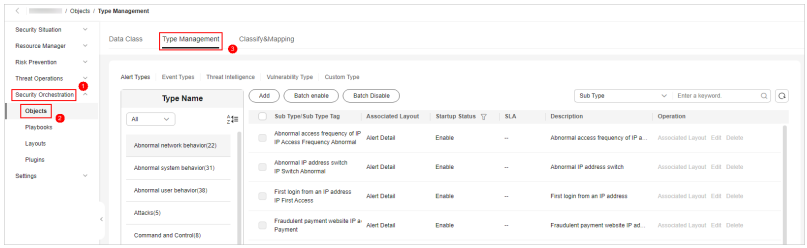
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-45** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the displayed page, click the **Type Management** tab.

**Figure 11-46** Type Management page




**Step 6** On the **Type Management** page, click the **Custom Type** tab. On the displayed page, view details about existing custom types or subtypes.

- The type list is displayed on the left, showing the existing types.
- To view details about a type, click the type name in the type list. The type details are displayed on the right. The detailed information is as follows:
  - Basic information about the target type: name, creator, creation time, and associated layout.
  - Subtype list: information about existing subtypes, subtype names, and layouts associated with subtypes.

**----End**

# 11.6.3 Classification & Mapping

# 11.6.3.1 Viewing Categorical Mappings

## Scenario

Categorical mappings are used to match alert types and map alert fields for aloud service alerts.

This section describes how to view categorical mappings.

## Procedure

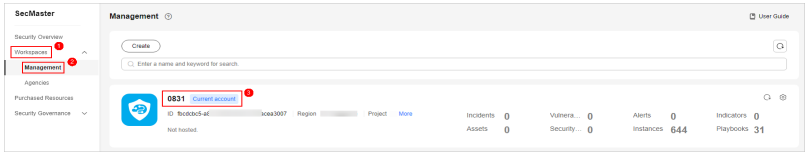
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

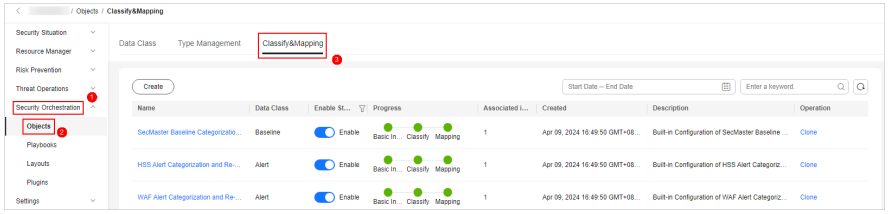
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-47** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the page displayed, click the **Classify&Mapping** tab.

**Figure 11-48** Classify&Mapping tab page




**Step 6** On the **Classify&Mapping** tab, view details about the created categorical mappings.

- In the categorical mapping list, view details such as the categorical mapping name, data class, and number of associated plug-in instances.
- If there are so many categorical mappings, you can use filters and keywords to search for a specific one.
- To edit a categorical mapping, click its name to go to the edit page.

  On the edit page, you can edit details about the categorical mapping.
- In the categorical mapping list, you can also enable, disable, clone, and delete a categorical mapping.

**----End**

# 11.6.3.2 Creating, Copying, and Editing a Categorical Mapping

## Scenario

Classification and mapping are to perform class matching and field mapping for cloud service alerts.

This section walks you through on how to create, edit, and copy a classification and mapping.

## Limitations and Constraints

- In a single workspace of a single account, a maximum of 50 classification & mapping templates can be created.
- In a single workspace of a single account, the proportion of a classification to its mappings is 1:100.
- A maximum of 100 classifications and mappings can be added to a workspace of a single account.

## Creating a Categorical Mapping

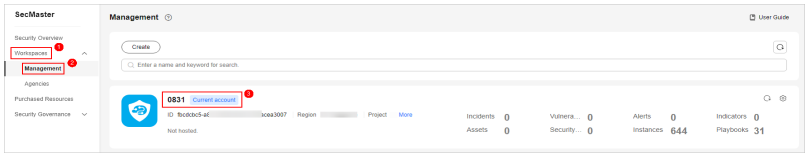
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

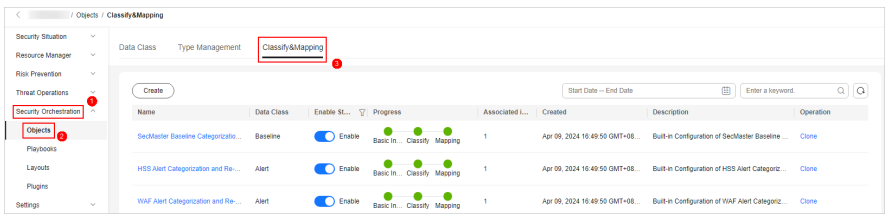
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-49** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the page displayed, click the **Classify&Mapping** tab.

**Figure 11-50** Classify&Mapping tab page

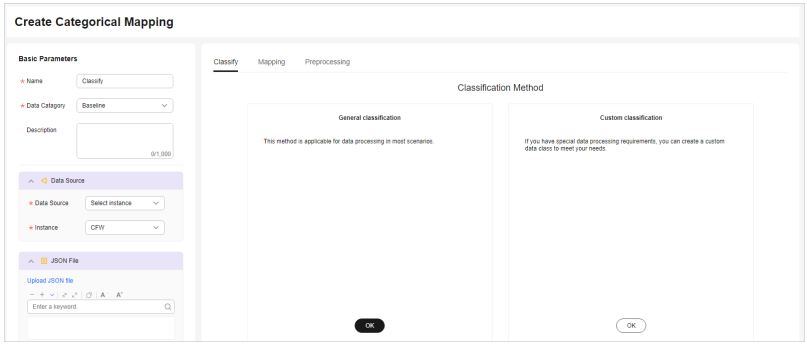



**Step 6** On the **Classify&Mapping** page, click **Create**.

**Step 7** On the **Create Categorical Mapping** page, set categorical mapping parameters.

**Figure 11-51** Create Categorical Mapping page




1. In the **Basic Parameters** area on the left, configure basic information about the categorical mapping. For details about the parameters, see **Table 11-18**.

   **Table 11-18** Configuring basic information

   | Parameter | Description |
   | --- | --- |
   | Name | Name of a user-defined categorical mapping. |
   | Data Category | Select the corresponding data type. |
   | Description | Description of the custom categorical mapping. |

2. In the **Data Source** area on the left, select the data source for categorical mapping.

   When **Data Source** is set to **Upload JSON file**, you need to click **to upload the JSON file** and upload the JSON file.

3. On the **Classify** tab page on the right, select a classification mode and set related parameters.
4. After the classification configuration is complete, click at the upper right corner of the page to save the configuration.
5. On the **Mapping** tab page in the right pane, select a mapping mode and set related parameters.
6. After categorical mapping is complete, click at the upper right corner of the page to save the configuration.
7. On the **Preprocessing** tab on the right, set preprocessing mapping parameters.
8. Click at the upper right corner of the page to save the configuration.

**----End**

## Copying a Categorical Mapping

**Step 1** Log in to the management console.

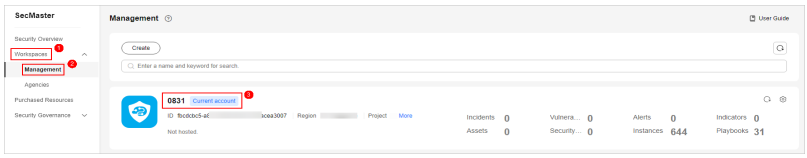
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

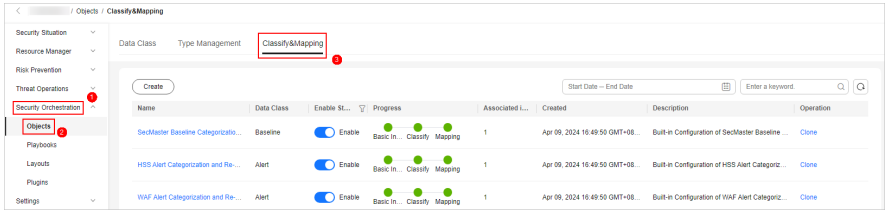
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-52** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the page displayed, click the **Classify&Mapping** tab.

**Figure 11-53** Classify&Mapping tab page



**Step 6** On the **Classify&Mapping** page, click **Clone** in the **Operation** column of the target categorical mapping.

**Step 7** In the displayed dialog box, enter the name for replicated mapping and click **OK**.

**----End**

## Editing a Categorical Mapping

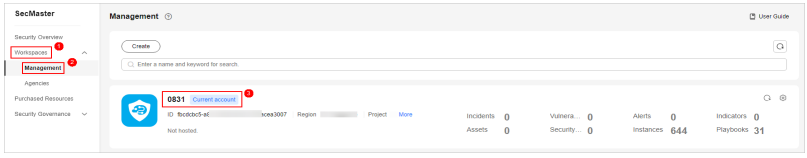
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

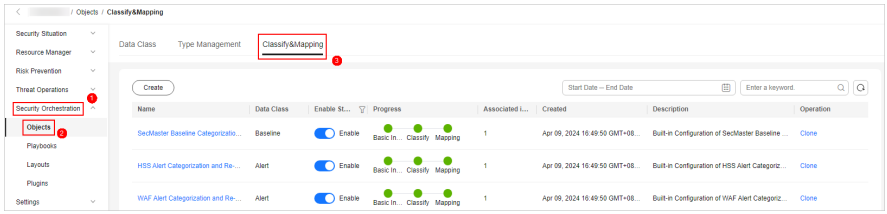
**Figure 11-54** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the page displayed, click the **Classify&Mapping** tab.

**Figure 11-55** Classify&Mapping tab page




**Step 6** On the **Classify&Mapping** page, click the target categorical mapping name to go to the edit page.

**Step 7** On the **Edit Categorical Mapping** page, set parameters.

1. In the **Basic Parameters** area on the left, configure basic information about the categorical mapping. For details about the parameters, see **Table 11-18**.

   **Table 11-19** Configuring basic information

| Parameter | Description |
| --- | --- |
| Name | Name of a user-defined categorical mapping. |
| Data Category | This field cannot be edited. |
| Description | Description of the custom categorical mapping. |

2. In the **Data Source** area on the left, select the data source for the categorical mapping.

   If **Data Source** is set to **Upload JSON file**, you need to click **Upload JSON file** and upload the JSON file.

3. On the **Classify** tab on the right, select a classification mode and set related parameters.
4. After the classification configuration is complete, click  at the upper right corner of the page to save the configuration.
5. On the **Mapping** tab on the right, select a mapping mode and set related parameters.
6. After the categorical mapping is complete, click  at the upper right corner of the page to save the configuration.
7. On the **Preprocessing** tab on the right, set preprocessing mapping parameters.
8. Click  at the upper right corner of the page to save the configuration.

**----End**

# 11.6.3.3 Managing Categorical Mappings

## Scenario

This topic describes how to manage categorical mappings, such as enabling, disabling, and deleting a categorical mapping.

## Procedure

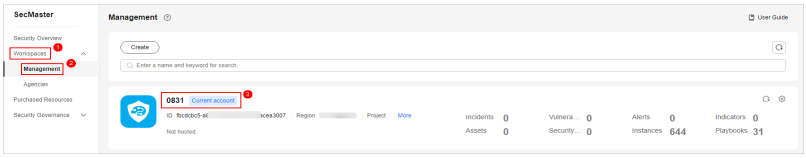
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

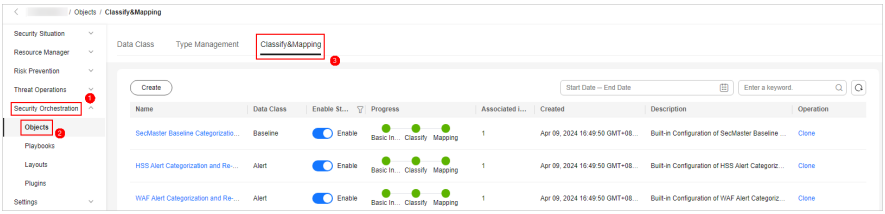
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-56** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Objects**. On the page displayed, click the **Classify&Mapping** tab.

**Figure 11-57** Classify&Mapping tab page




**Step 6** On the **Classify&Mapping** tab, manage categorical mappings.

NOTE

- Custom categorical mappings cannot be enabled or disabled.
- Currently, built-in categorical mappings cannot be deleted.

**Table 11-20** Managing categorical mappings

| Operation | Description |
| --- | --- |
| Enable | Locate the row containing the target categorical mapping and click **Disable** in the **Status** column.<br>If the status changes to **Enable**, the categorical mapping has been enabled. |
| Disable | Locate the row containing your desired categorical mapping and click **Enable** in the **Status** column.<br>If the status changes to **Disable**, the categorical mapping has been disabled. |
| Delete | 1. Click **Delete** in the **Operation** column of the target categorical mapping.<br>2. In the displayed pane on the right, click **Delete**.<br>**NOTE**<br>– If a categorical mapping is deleted, the plug-ins and connections associated with it will be stopped immediately.<br>– Deleted categorical mappings cannot be restored. Exercise caution when performing this operation. |

**----End**

# 11.7 Playbook Orchestration Management

## 11.7.1 Playbooks

### 11.7.1.1 Submitting a Playbook Version

#### Scenario

This section describes how to submit a playbook version for review.

#### Prerequisites

The workflow bound to the playbook has been enabled by referring to **Enabling a Workflow**.

#### Procedure

**Step 1** Log in to the management console.

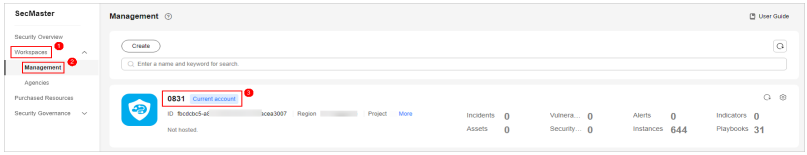
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

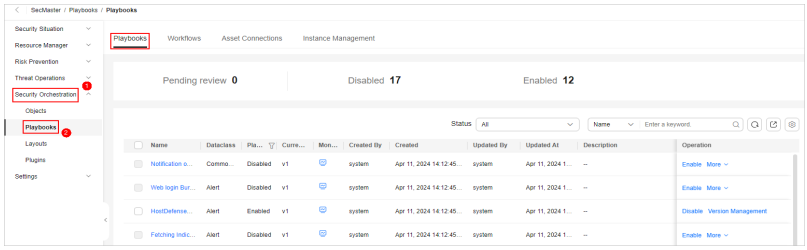
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-58** Workspace management page



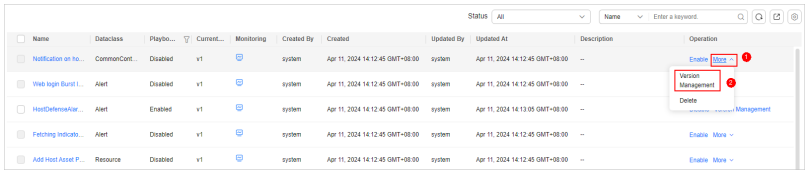

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-59** Accessing the Playbooks tab




**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-60** Version Management slide-out panel




**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired playbook version, and click **Submit** in the **Operation** column.

**Step 8** In the confirmation dialog box, click **OK** to submit the playbook version.

NOTE

- After the playbook version is submitted, **Version Status** changes to **Pending review**.
- After a playbook version is submitted, it cannot be edited. If you need to edit it, you can create a version or reject it during review.

**----End**

## Follow-up Operations

A submitted playbook version needs to be reviewed. For details, see **Reviewing a Playbook Version**.

## 11.7.1.2 Reviewing a Playbook Version

### Scenario

This section describes how to review a playbook version.

### Prerequisites

The playbook has been submitted by referring to **Submitting a Playbook Version**.

### Procedure

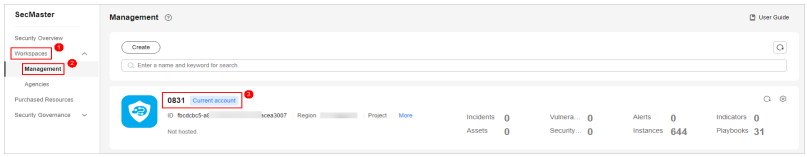
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

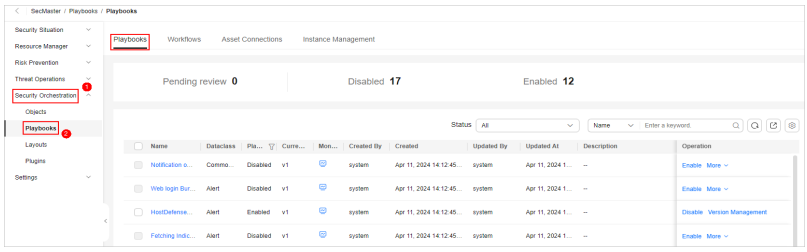
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-61** Workspace management page



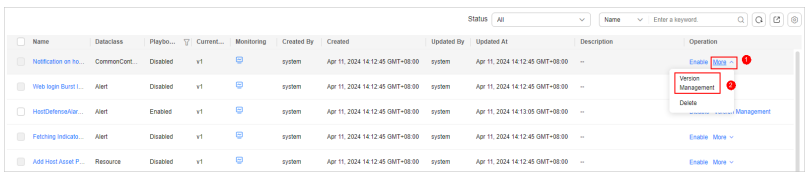

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-62** Accessing the Playbooks tab




**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-63** Version Management slide-out panel




**Step 7** On the **Version Management** slide-out panel, click **Review**.

**Step 8** On the **Review Playbook Version** page, enter the review information. **Table 11-21** describes the parameters for reviewing a playbook version.

**Table 11-21** Parameters for reviewing a playbook version

| Parameter | Description |
| --- | --- |
| Comments | Select the review conclusion.<br>• If the playbook version is approved, the playbook version status changes to **Activated**.<br>• Reject. After the playbook version is rejected, the status of the playbook version changes to **Rejected**. You can edit the playbook version and submit it again. |
| Reason for rejection | This parameter is mandatory when the review comment is Reject.<br>Enter the review comment. This parameter is mandatory when Reject is selected for Review Comment. |

NOTE

If the current playbook has only one version, the version is in the activated state by default after being approved.

**Step 9** Click **OK** to complete the playbook version review.

**----End**

## Follow-up Operations

An approved playbook version needs to be enabled. For details, see **Enabling a Playbook**.

## 11.7.1.3 Enabling a Playbook

## Scenario

After a playbook version is approved, you can enable the playbook. This section describes how to enable a playbook.

## Prerequisites

The playbook version has been activated by referring to **Activating/Deactivating a Playbook Version**.

## Procedure

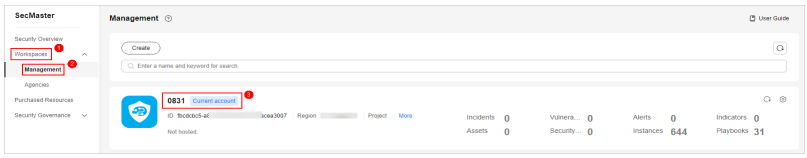
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

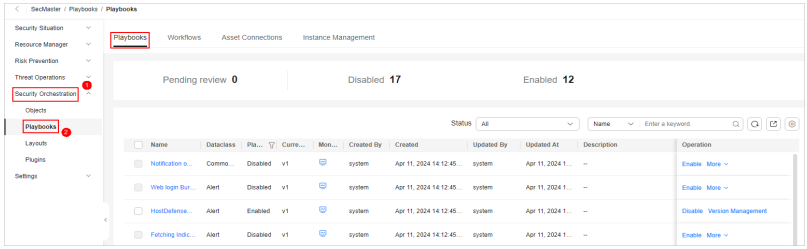
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-64** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-65** Accessing the Playbooks tab




**Step 6** In the **Operation** column of the target playbook, click **Enable**.

**Step 7** Select the playbook version you want to enable and click **OK**.

**----End**

## 11.7.1.4 Managing Playbooks

## Scenario

This section describes how to manage playbooks, including **Viewing Existing Playbooks**, **Exporting Playbooks**, **Disabling a Playbook**, and **Deleting a Playbook**.

## Viewing Existing Playbooks

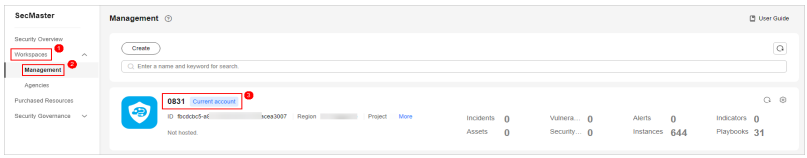
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

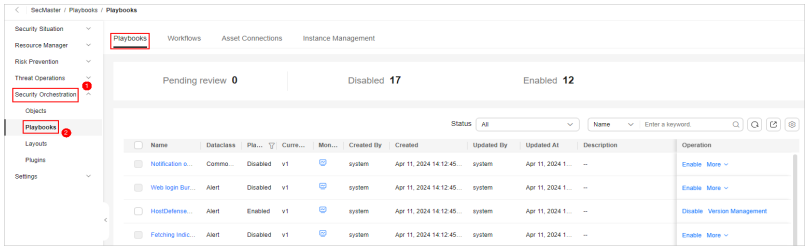
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-66** Workspace management page



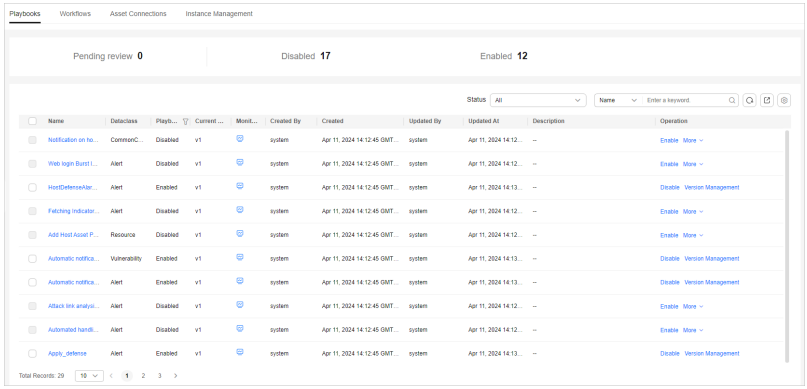

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-67** Accessing the Playbooks tab




**Step 6** On the **Playbooks** tab page, view playbook information.

**Figure 11-68** Viewing playbook information




- The numbers of **Pending review**, **Not enabled**, and **Enabled** playbooks are displayed above the playbook list.
- View the information about existing playbooks.

  If there are many playbooks displayed, use filters to search for a specific one.

  To view details about a playbook, click its name to go to its details page.

**Table 11-22** Playbook parameters

| Parameter | Description |
| --- | --- |
| Name | Name of the playbook to be created. |
| Dataclass | Data class of the playbook |
| Playbook Status | Current status of the playbook The status can be Enabled or Disabled. |
| Current Version | Current version of the playbook |

| Parameter | Description |
| --- | --- |
| Monitoring | Click to view the playbook running monitoring information.<br>– Select Time: Select the monitoring time to be viewed. You can query data in the last 24 hours, last 3 days, last 30 days, or last 90 days.<br>– Edition: Select the monitoring version to be viewed. You can query all, currently valid, and deleted types.<br>– Running Times: You can view the total number of running times, number of scheduled triggering times, and number of incident triggering times of a playbook.<br>– Average Running Duration: allows you to view the average running duration, maximum running duration, and minimum running duration. Average running duration = Total running duration of instances/Total number of instances.<br>– Instance Status Statistics: allows you to view the total number of running instances, the number of successfully running instances, the number of running instances, the number of failed instances, and the number of terminated instances. |
| Created By | User who creates the playbook |
| Created | Time when a playbook is created. |
| Updated By | User who last modified the playbook |
| Updated At | Time when the playbook was last updated. |
| Description | Description of a playbook |

**----End**

## Exporting Playbooks

NOTE

SecMaster supports the export of playbooks whose **Status** is **Enabled**.

**Step 1** Log in to the management console.

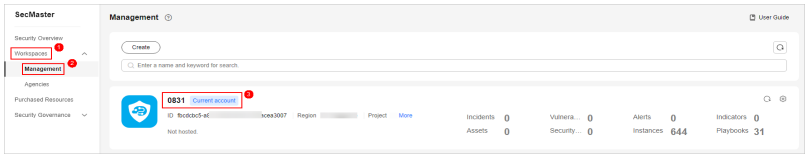
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

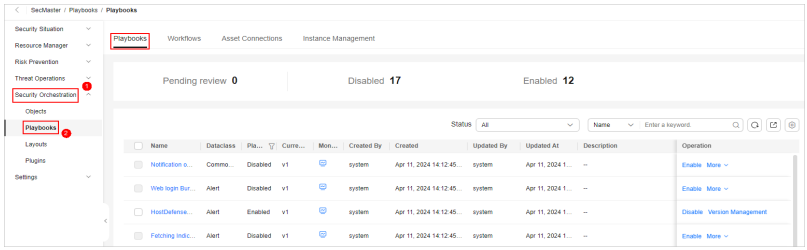
  

**Figure 11-69** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-70** Accessing the Playbooks tab



**Step 6** Select the playbooks to be exported and click in the upper right corner of the list. The dialog box for confirming the export is displayed.

**Step 7** In the dialog box that is displayed, click **OK** to export the playbooks to the local host.

**----End**

## Disabling a Playbook

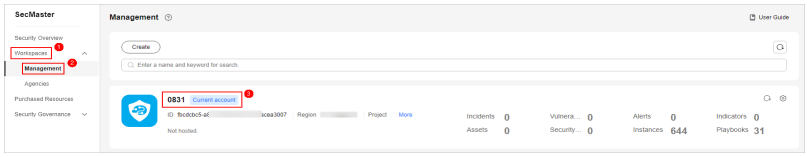
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

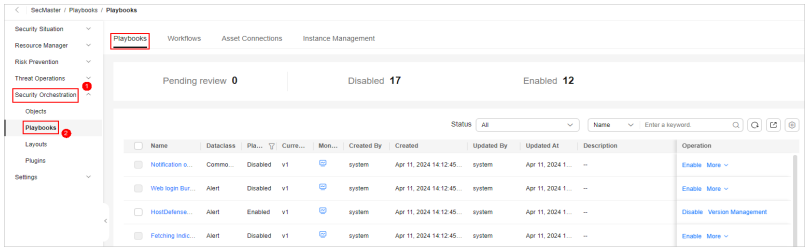
**Figure 11-71** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-72** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Disable**. A confirmation dialog box is displayed.

**Step 7** In the displayed dialog box, click **OK**.

**----End**

## Deleting a Playbook

NOTE

To delete a playbook, the following conditions must be met:

- The playbook is not enabled.
- No activated playbook version exists in the current playbook.
- No running playbook instance exists.

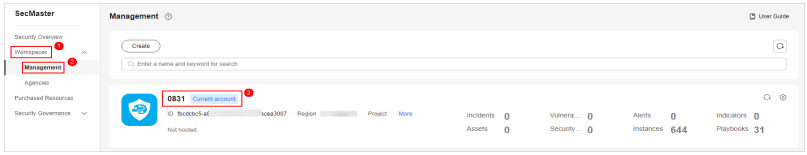
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

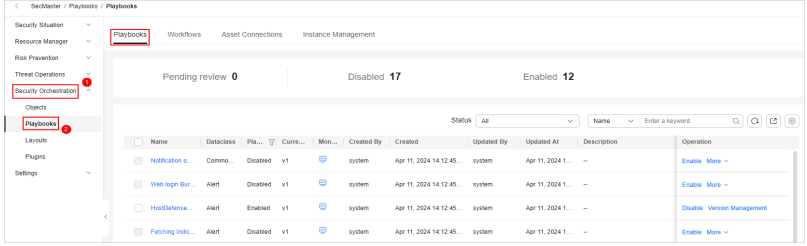
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-73** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 11-74** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the playbook to be deleted, click **Delete**.

**Step 7** In the displayed dialog box, enter **DELETE** and click **OK**.

NOTE

Deleting a playbook will delete all its versions by default. Deleted playbook versions cannot be restored. Exercise caution when performing this operation.

**----End**

## 11.7.1.5 Managing Playbook Versions

## Scenario

This section describes how to manage playbook versions, including **Previewing Playbook Versions**, **Editing a Playbook Version**, **Activating/Deactivating a Playbook Version**, **Copying a Playbook Version**, and **Deleting a Playbook Version**.

## Previewing Playbook Versions

NOTE

The draft version cannot be previewed.

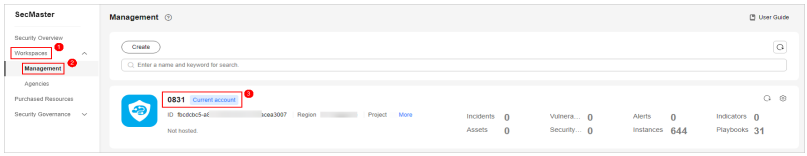
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

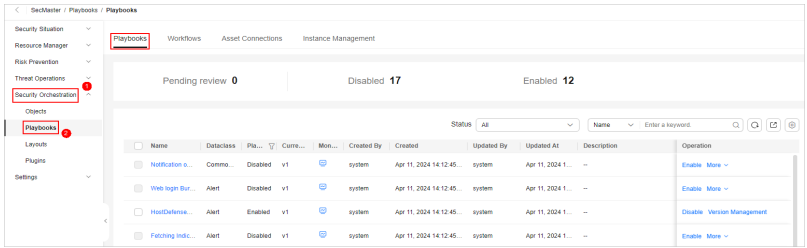
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-75** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

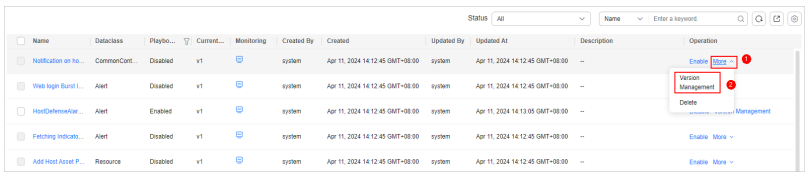
**Figure 11-76** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-77** Version Management slide-out panel



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired playbook version, and click **Preview** in the **Operation** column.

**Step 8** On the playbook version preview page, you can view the details about the target playbook version, including **Basic Information**, **Version Information**, and **Matching Workflow**.

**----End**

## Editing a Playbook Version

NOTE

Only playbook versions whose version status is **Unsubmitted** can be edited.

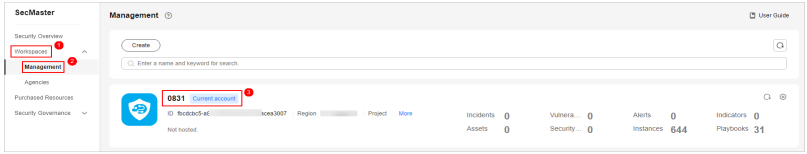
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

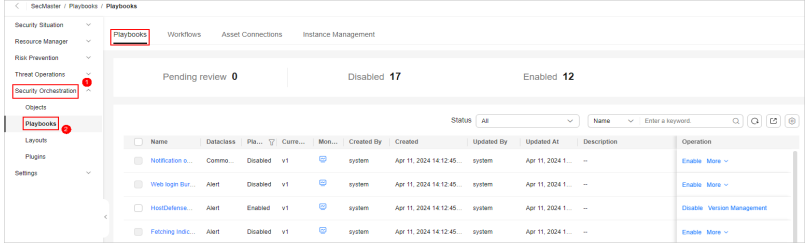
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-78** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

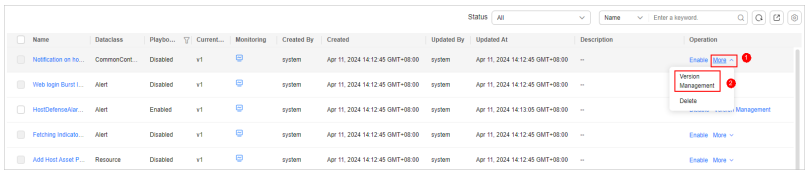
**Figure 11-79** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-80** Version Management slide-out panel



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired playbook version, and click **Edit** in the **Operation** column.

**Step 8** On the page for editing a playbook version, edit the version information.

**Step 9** Click **OK**.

**----End**

## Activating/Deactivating a Playbook Version

NOTE

- Only the playbook version that is not activated can be activated.
- Only one activated version is allowed for each playbook.
- After the current version is activated, the previously activated version is deactivated. For example, if the V2 version is activated this time, the V1 version in the activated state is deactivated and changes to the deactivated state.

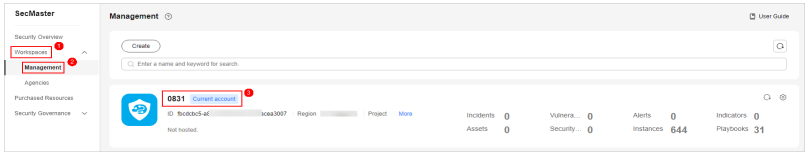
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

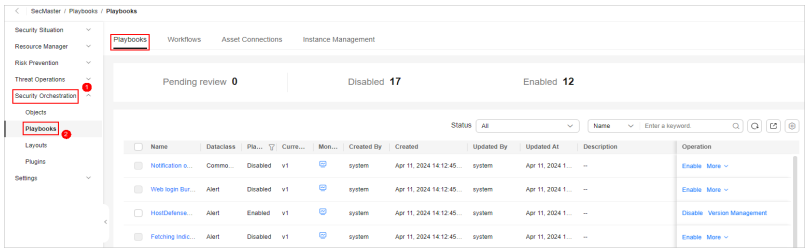
**Figure 11-81** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

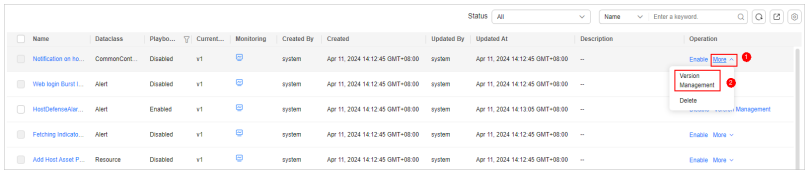
  

**Figure 11-82** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-83** Version Management slide-out panel



**Step 7** On the **Version Management** page, in the version information area, locate the row containing the desired playbook version, and click **Activate** or **Deactivate** in the **Operation** column.

**----End**

## Copying a Playbook Version

NOTE

Only playbook versions in the **Activated** or **Inactive** state can be copied.

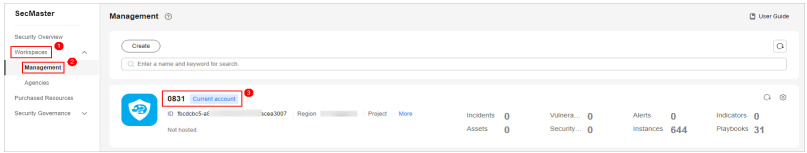
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

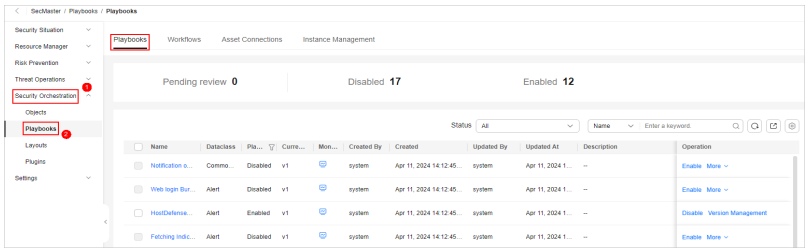
**Figure 11-84** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

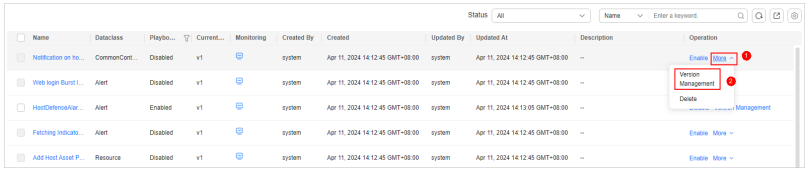
  

**Figure 11-85** Accessing the Playbooks tab



**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-86** Version Management slide-out panel



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired playbook version, and click **Copy** in the **Operation** column.

**Step 8** In the dialog box that is displayed, click **OK**.

**----End**

## Deleting a Playbook Version

NOTE

To delete a playbook version, the following conditions must be met:

- The playbook version is inactivated.
- No running playbook version instance exists.

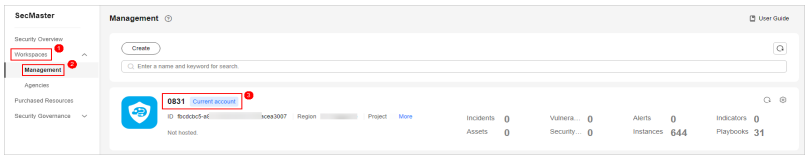
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

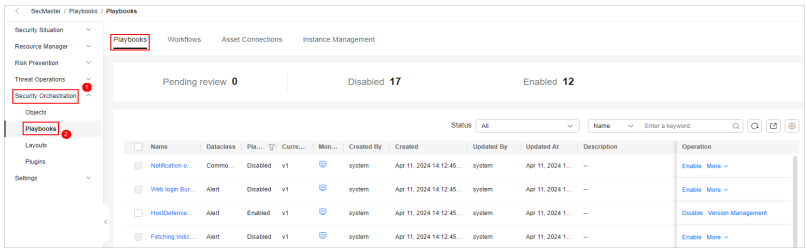
**Figure 11-87** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

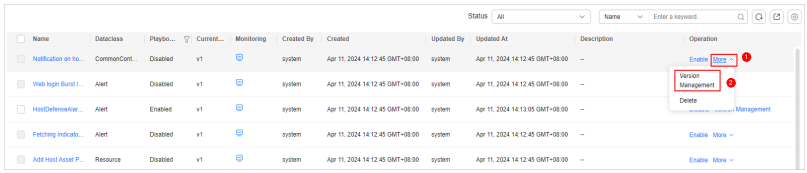
  

**Figure 11-88** Accessing the Playbooks tab




**Step 6** In the **Operation** column of the target playbook, click **Versions**.

**Figure 11-89** Version Management slide-out panel




**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired playbook version, and click **Delete** in the **Operation** column.

NOTE

After a playbook version is deleted, it cannot be retrieved. Exercise caution when performing this operation.

**----End**

# 11.7.2 Workflows

## 11.7.2.1 Reviewing a Workflow Version

## Scenario

This topic describes how to review a workflow version.

## Procedure

**Step 1** Log in to the management console.

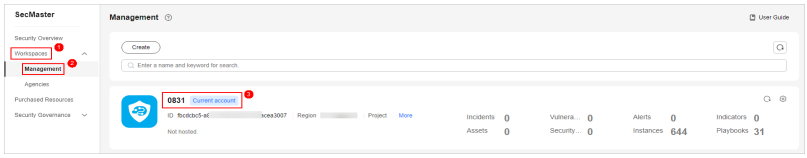
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

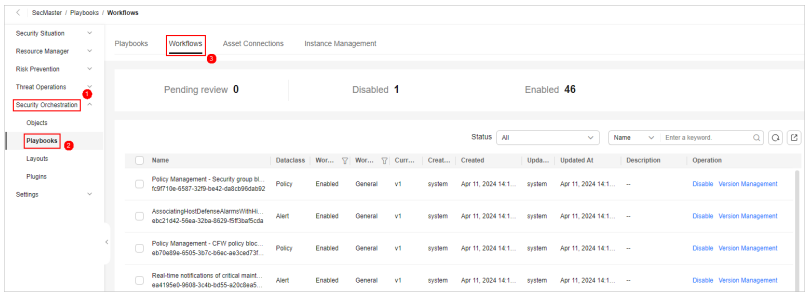
  

**Figure 11-90** Workspace management page



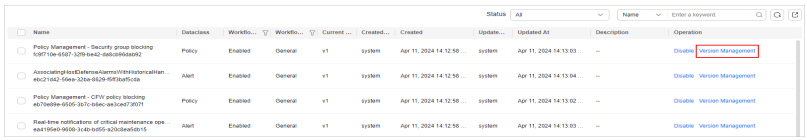

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-91** Workflows tab page




**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-92** Version Management page



**Step 7** On the **Version Management** slide-out panel, click **Review** in the **Operation** column of the target workflow.

**Step 8** Set **Comments**. Table 11-23 describes the parameters.

**Table 11-23** Workflow review parameters

| Parameter | Description |
| --- | --- |
| Comment | Select the review conclusion.<br>• **Approved**: If the workflow version is approved, the status of the workflow version changes to **Activated**.<br>• **Rejected**. If the workflow version is rejected, the status of the workflow version changes to **Rejected**. You can edit the workflow version and submit it again. |
| Reason for Rejection | Enter the review comment. This parameter is mandatory when Reject is selected for Review Comment. |

NOTE

- You can edit a rejected workflow version. For details, see **Managing Workflow Versions**.
- Workflow version status change:

  If the current workflow has only one workflow version, the status of the approved workflow **version** is **Activated** by default.

**Step 9** Click **OK** to complete the workflow version review.

**----End**

## Follow-up Operations

An approved workflow version needs to be enabled. For details, see **Enabling a Workflow**.

## 11.7.2.2 Enabling a Workflow

## Scenario

This section describes how to enable a workflow.

## Prerequisites

A workflow version has been activated by referring to **Managing Workflow Versions**.

## Procedure

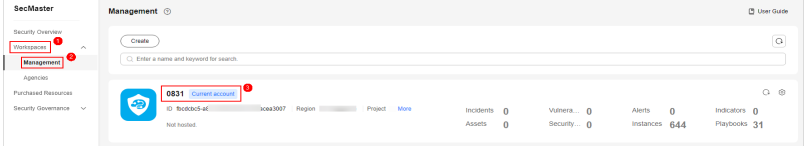
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

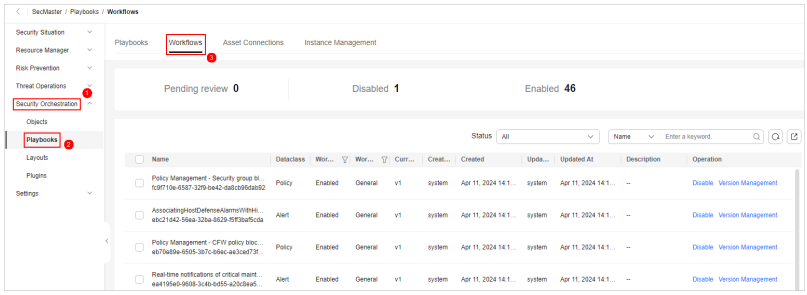
**Figure 11-93** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-94** Workflows tab page



**Step 6** In the row containing the target workflow, click **Enable** in the **Operation** column.

**Step 7** In the slide-out panel that is displayed, select the workflow version to be enabled and click **OK**.

**----End**

## 11.7.2.3 Managing Workflows

## Scenario

This section describes how to manage workflows, including **Viewing Workflows**, **Exporting Workflows**, **Deleting Workflows**, and **Disabling a Workflow**.

## Viewing Workflows

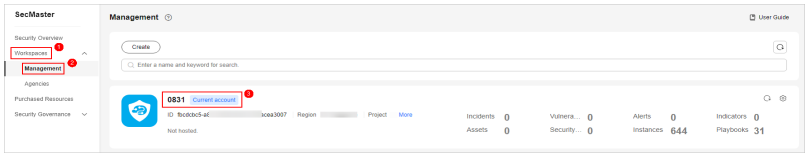
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

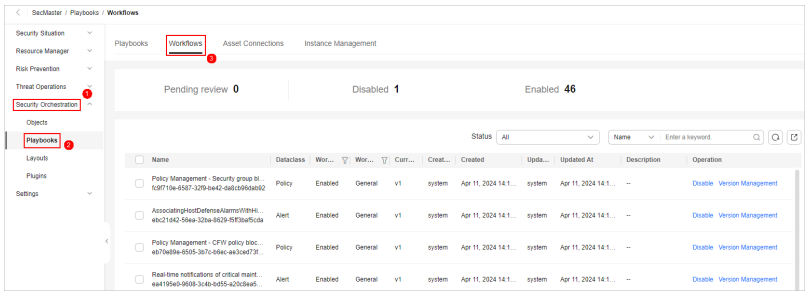
**Figure 11-95** Workspace management page



**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

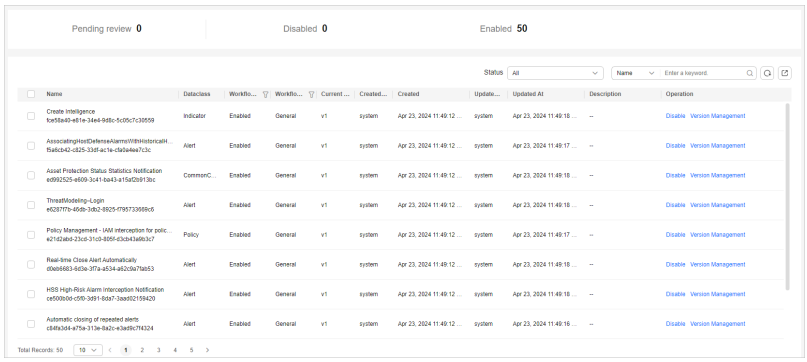
  

**Figure 11-96** Workflows tab page




**Step 6** On the **Workflows** page, view details about the created workflow.

**Figure 11-97** Viewing workflows




- The numbers of **Pending review**, **Not enabled**, and **Enabled** workflows are displayed above the workflow list.
- View information about existing workflows in the workflow list.

  If there are many workflows displayed, use filters to search for a specific one.

**Table 11-24** Workflow parameters

| Parameter | Description |
| --- | --- |
| Name | Workflow name |
| Dataclass | Data class corresponding to a workflow. |
| Workflow Status | Current status of a workflow. The status can be **Enabled** or **Disabled**. |
| Workflow Type | Current type of a workflow. |
| Current Version | Current version of a workflow. |
| Created By | User who creates the workflow. |
| Created | Time when a workflow was created |
| Updated By | User who modifies the workflow last time. |
| Updated At | Time when a workflow is last updated. |
| Description | A description of the workflow. |

| Parameter | Description |
| --- | --- |
| Operation | You can perform operations such as enabling and managing versions in the **Operation** column. |

- To view details about a workflow, click its name to access its details page.

**----End**

## Exporting Workflows

NOTE

Workflows in the **Enabled** state can be exported.

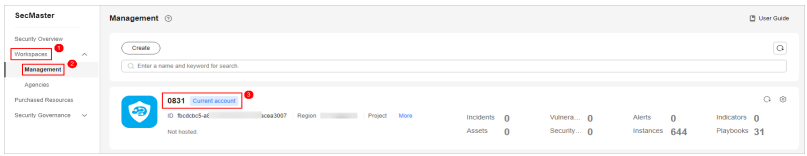
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

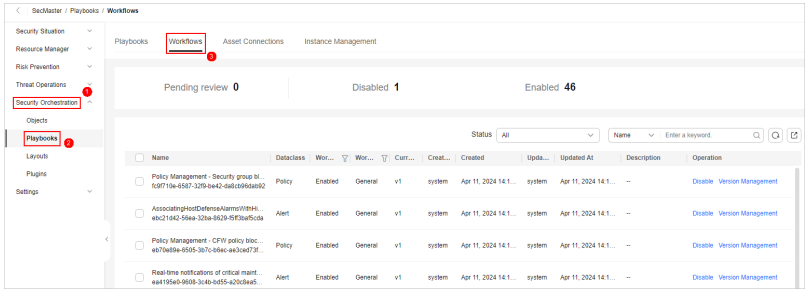
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-98** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-99** Workflows tab page




**Step 6** On the **Workflows** tab page, select the workflows to be exported and click in the upper right corner of the list.

**Step 7** In the dialog box that is displayed, click **OK**. The system exports the workflows to the local host.

**----End**

## Deleting Workflows

**NOTE**

All of the following conditions must be met before you can delete a workflow:

- The workflow is in the **Disabled** state.
- The workflow does not contain an activated workflow version.

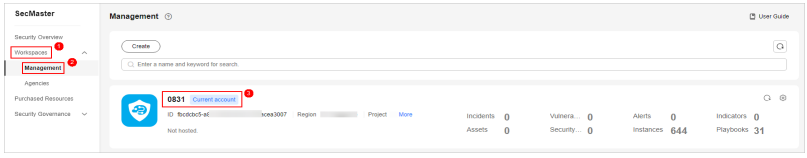
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

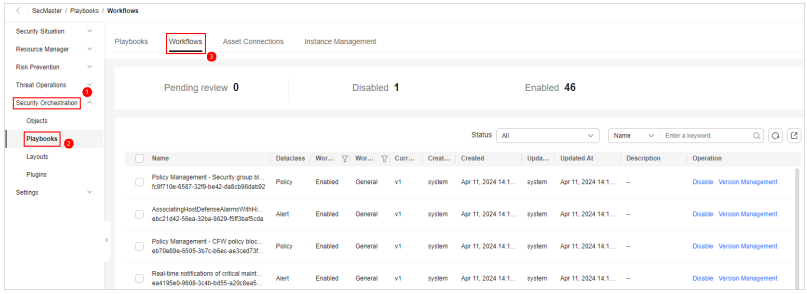
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-100** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-101** Workflows tab page




**Step 6** On the **Workflows** tab page, locate the row containing the target workflow and click **Delete** in the **Operation** column.

**Step 7** In the displayed dialog box, enter **DELETE** and click **OK**.

**NOTE**

During deletion, all historical versions in the current workflow are deleted by default. Deleted versions cannot be restored.

**----End**

## Disabling a Workflow

**Step 1** Log in to the management console.

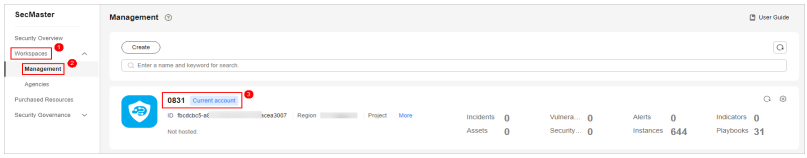
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

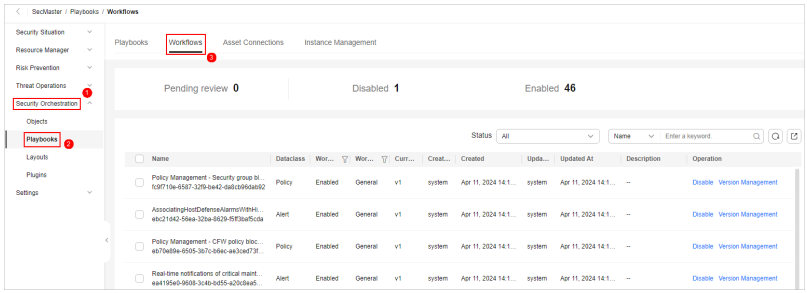
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-102** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-103** Workflows tab page




**Step 6** In the row containing the target workflow, click **Disable** in the **Operation** column.

**Step 7** In the dialog box that is displayed, click **OK**.

**----End**

## 11.7.2.4 Managing Workflow Versions

## Scenario

This section describes how to manage workflow versions, including **Copying a Workflow Version**, **Editing a Workflow Version**, **Submitting a Workflow Version**, **Activating/Deactivating a Workflow Version**, and **Deleting a Workflow Version**.

## Copying a Workflow Version

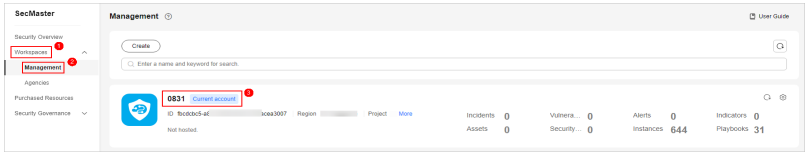
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

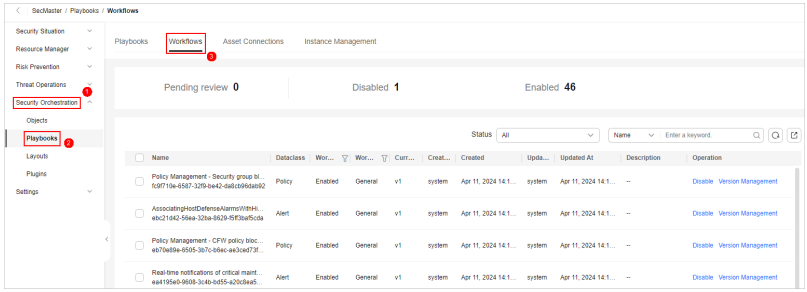
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-104** Workspace management page



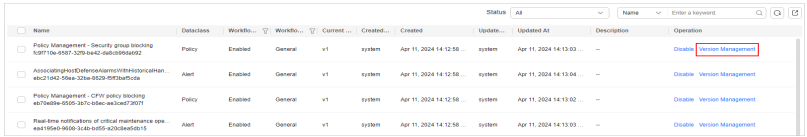

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-105** Workflows tab page




**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-106** Version Management page



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired workflow version, and click **Copy** in the **Operation** column.

**Step 8** In the dialog box displayed, click **OK**.

**----End**

## Editing a Workflow Version

NOTE

You can only edit a workflow version whose version status is **To be submitted** or **Rejected**.

**Step 1** Log in to the management console.

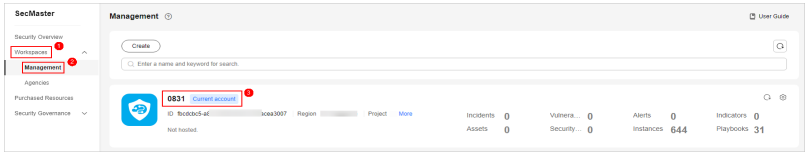
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

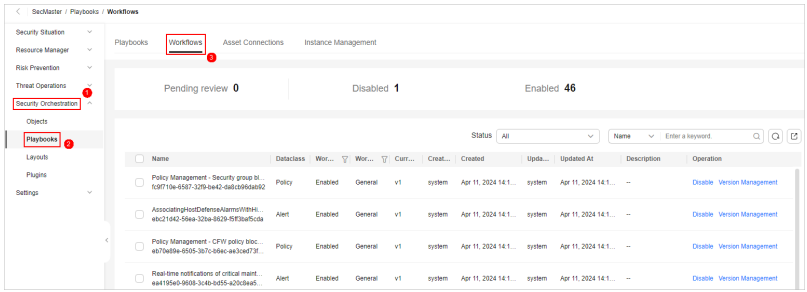
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-107** Workspace management page



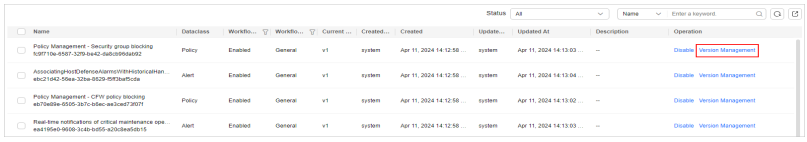

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-108** Workflows tab page




**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-109** Version Management page




**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired workflow version, and click **Edit** in the **Operation** column.

**Step 8** On the workflow drawing page, drag basic, workflow, and plug-in nodes from **Resource Libraries** on the left to the canvas on the right for workflow design.

**Table 11-25** Resource Libraries parameters

| Parameter | | | Description |
|---|---|---|---|
| Basic | Basic Node | StartEvent | The start of a workflow. Each workflow can have only one start node. The entire workflow starts from the start node. |

| Parameter | | | Description |
| --- | --- | --- | --- |
| | | EndEvent | The end of a workflow. Each workflow can have multiple end nodes, but the workflow must end with an end node. |
| | | UserTask | When the workflow execution reaches this node, the workflow is suspended and a to-do task is generated on the **Task Center** page.<br>After you complete the task, the subsequent nodes in the workflow continue to be executed.<br>**Table 11-26** describes the UserTask parameters. |
| | | SubProcess | Another workflow is started to perform cyclic operations. It is equivalent to the loop body in the workflow. |
| | System Gateway | ExclusiveGateway | During line distribution, one of the multiple lines is selected for execution based on the condition expression.<br>During line aggregation, if one of the multiple lines arrives, the subsequent nodes continue to execute the task. |
| | | ParallelGateway | During line distribution, all lines are executed.<br>During line aggregation, the subsequent nodes are executed only when all the lines arrive. (If one line fails, the entire workflow fails.) |
| | | InclusiveGateway | During line distribution, all expressions that meet the conditions are selected for execution based on the condition expression.<br>During line aggregation, subsequent nodes are executed only when all lines executed during traffic distribution reach the inclusive gateway. (If one line fails, the entire workflow fails.) |
| Workflows | | | You can select all released workflows in the current workspace. |
| Plug-ins | | | You can select all plug-ins in the current workspace. |

**Table 11-26** UserTask parameters

| Parameter | Description |
| --- | --- |
| Primary key ID | The system automatically generates a primary key ID, which can be changed as required. |
| Workspace Name | Name of the manual review node |

| Parameter | Description |
| --- | --- |
| Expired | Expiration time of a manual review node |
| Description | Description of the manual review node |
| View Parameters | Click ». On the **Select Context** page that is displayed, select an existing parameter name. To add a parameter, click **Add Parameter**. |
| Manual Handling Parameters | Key of the input parameter To add a parameter, click **Add Parameter**. |
| Processed By | Set the reviewer of the workflow to the IAM user of the current IAM account. If a workflow needs to be approved after the setting, only the owner can handle it on the **Task Center** page. Non-owners can only view the workflow.<br>**NOTE**<br>In first time use, you need to obtain authorization. Detailed operations are as follows:<br>1. Click **Authorize**.<br>2. On the **Access Authorization** slide-out panel displayed, select **Agree** and click **OK**. |

**Step 9** After the design is complete, click **Save and Submit** in the upper right corner. In the automatic workflow verification dialog box displayed, click **OK**.

If the workflow verification fails, check the workflow based on the failure message.

**----End**

## Submitting a Workflow Version

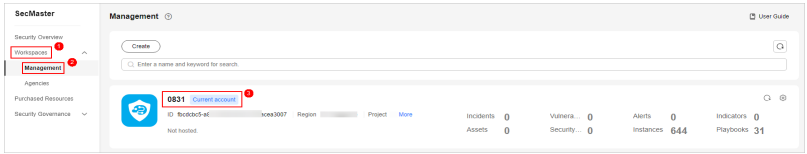
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

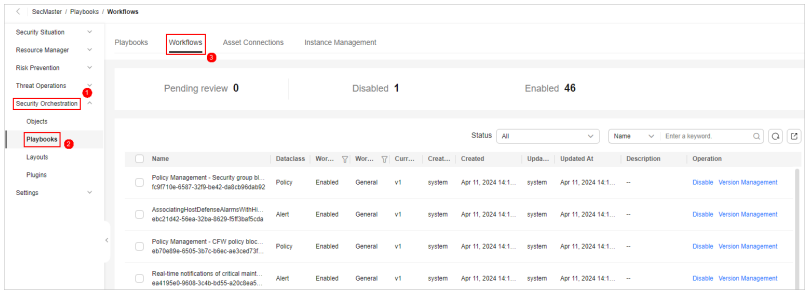
**Figure 11-110** Workspace management page



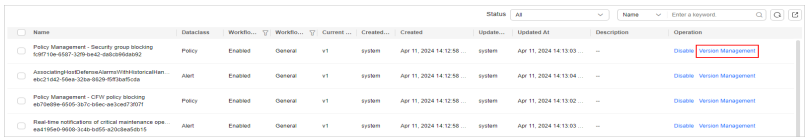
**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-111** Workflows tab page



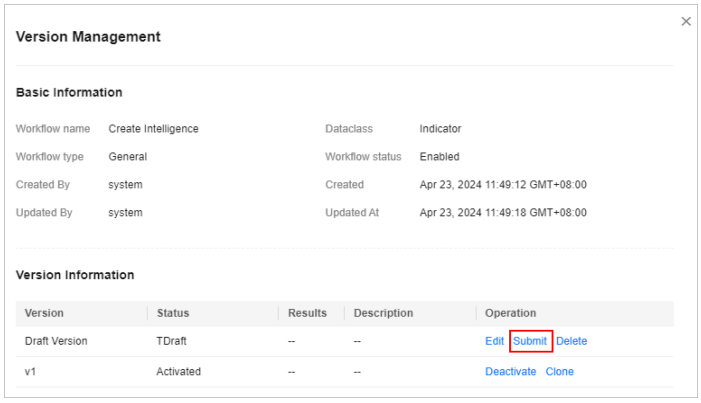
**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-112** Version Management page



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired workflow version, and click **Submit** in the **Operation** column.

**Figure 11-113** Submitting a workflow version




**Step 8** In the confirmation dialog box, click **OK** to submit the workflow version.

NOTE

- After the workflow version is submitted, the **Version Status** changes to **Pending Review**.
- After a workflow version is submitted, it cannot be edited. If you need to edit it, you can create a version or reject it during review.

**----End**

# Activating/Deactivating a Workflow Version

NOTE

- Only workflow versions in the **Inactive** state can be activated.
- Each workflow can have only one activated version.
- After the current version is activated, the previously activated version is deactivated. For example, if the V2 version is activated this time, the V1 version in the activated state is deactivated and changes to the deactivated state.

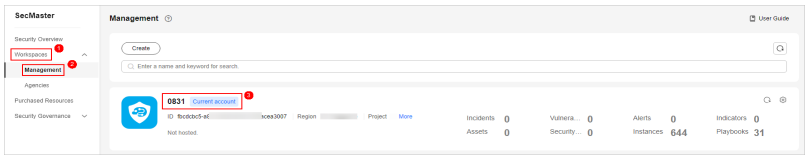
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

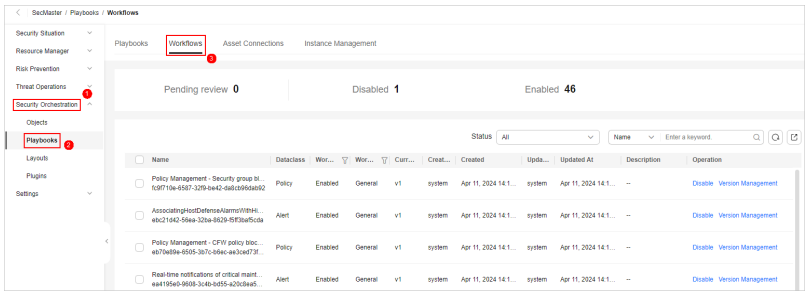
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-114** Workspace management page



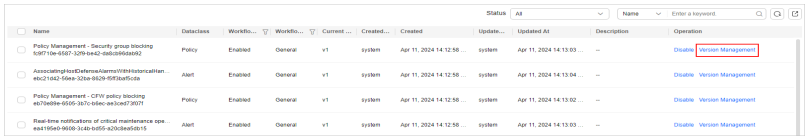

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-115** Workflows tab page




**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

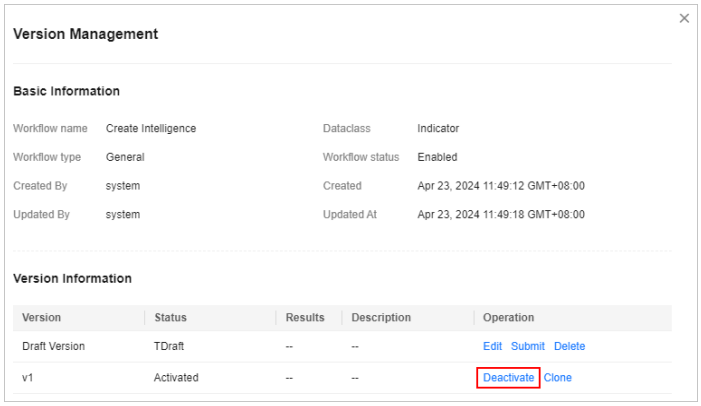
**Figure 11-116** Version Management page



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row containing the desired workflow version, and click **Activate** or **Deactivate** in the **Operation** column.

**Figure 11-117** Example deactivating a workflow version




**Step 8** In the dialog box that is displayed, click **OK**.

**----End**

## Deleting a Workflow Version

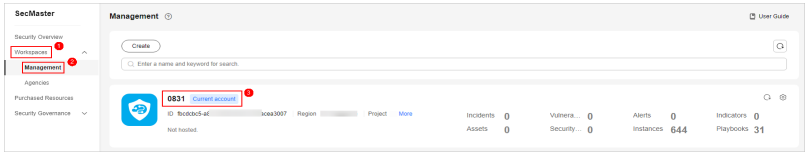
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

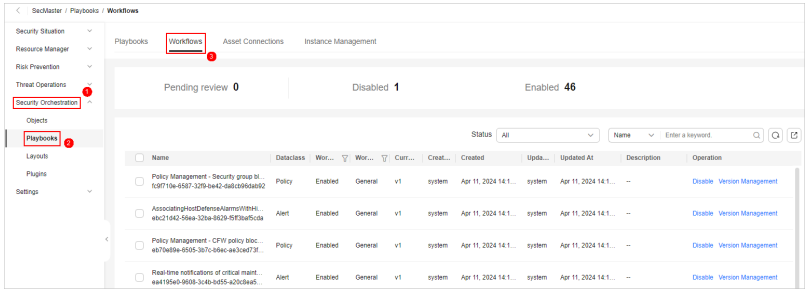
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-118** Workspace management page



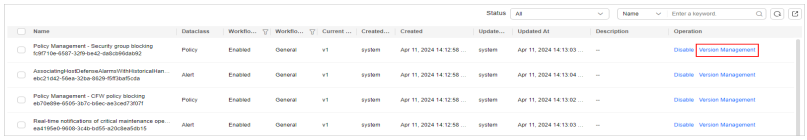

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

**Figure 11-119** Workflows tab page




**Step 6** In the **Operation** column of the target workflow, click **More** and select **Version Management**.

**Figure 11-120** Version Management page



**Step 7** On the **Version Management** slide-out panel, in the version information area, locate the row of the target workflow version, and click **Delete** in the **Operation** column.

**Step 8** In the displayed dialog box, click **OK**.

NOTE

Deleted workflow versions cannot be retrieved. Exercise caution when performing this operation.

**----End**

# 11.7.3 Asset Connections

## 11.7.3.1 Adding an Asset Connection

### Scenario

- **Concept**: An asset connection includes the domain name and authentication parameters required by each plug-in node in the security orchestration process.
- **Function**: During security orchestration, each plug-in node transfers the domain name to be connected and the authentication information, such as the username, password, and account AK/SK, to establish connections.
- **Relationship between asset connections and plug-ins**: Plug-ins access other cloud services or third-party services through domain names and authentication. So, domain name parameters (endpoints) and authentication parameters (username/password, account AK/SK, etc.) are defined in the login credential parameters of plug-ins. An asset connection configures login credential parameters for a plug-in. In a workflow, each plug-in node is associated with different asset connections so that the plug-in can access different services.

This topic describes how to create an asset.

### Procedure

**Step 1** Log in to the management console.

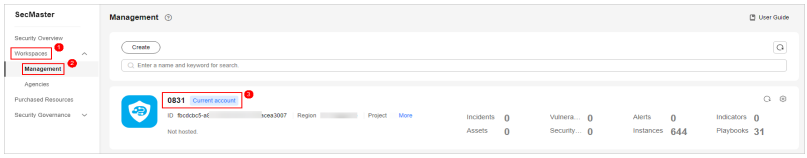
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

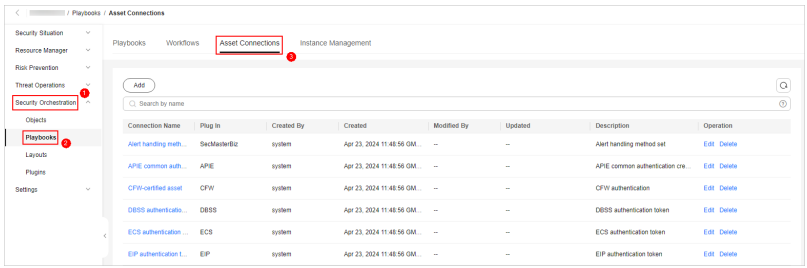
  

**Figure 11-121** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

**Figure 11-122** Asset connection tab page




**Step 6** On the **Asset Connection** tab page, click **Add**. The slide-out panel **Add** is displayed on the right.

**Step 7** On the panel, set asset connection parameters. For details about the parameters, see **Table 11-27**.

**Table 11-27** Asset connection parameters

| Parameter | Description |
| --- | --- |
| Connection Name | Enter an asset connection name. The naming rules are as follows:<br>• Only uppercase letters (A to Z), lowercase letters (a to z), digits (0 to 9), and underscores (_) are allowed.<br>• A maximum of 64 characters are allowed. |
| Description | (Optional) Enter the asset description. The description can contain a maximum of 64 characters. |
| Plug In | Select the plug-in required for asset connection. For details about the plug-in, see **Viewing Plug-in Details**. |

| Parameter | Description |
| --- | --- |
| Connection Type | Select the type of the asset connection.<br>• Cloud service agency: When a Huawei cloud service plug-in is used, you are advised to use the cloud service agency.<br>You do not need to manually enter authentication parameters such as the domain name, username, and password. The system automatically obtains the domain name (endpoint) of the corresponding cloud service based on the plug-in name and uses the cloud service agency for authentication.<br>• AK&SK: You need to manually enter the domain name (endpoint) and provide an AK and SK for authentication.<br>• Username and password: You need to manually enter the domain name (endpoint) and provide a username and password for authentication.<br>• Others: Some plug-ins have other authentication parameters in addition to the preceding authentication parameters. Set these parameters based on the plug-in login credential parameter guide. |
| Credential | Enter the credential information, such as the endpoint, AK, and SK, based on the selected connection type. |

**Step 8** Click **OK**. You can query the created asset connection in the asset connection list.

**----End**

## 11.7.3.2 Managing Asset Connections

### Scenario

This topic describes **Viewing Asset Connections**, **Editing an Asset Connection**, and **Deleting an Asset Connection**.

### Viewing Asset Connections

**Step 1** Log in to the management console.

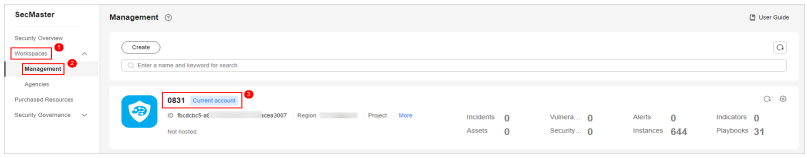
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

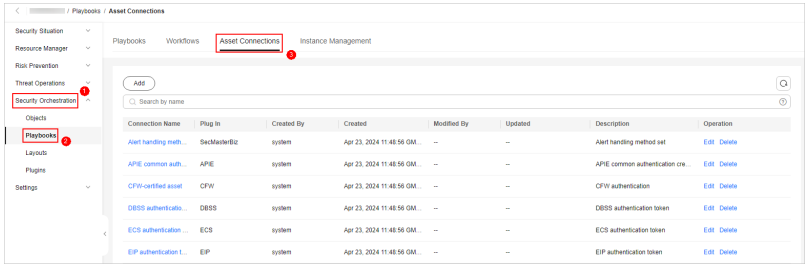
  

**Figure 11-123** Workspace management page



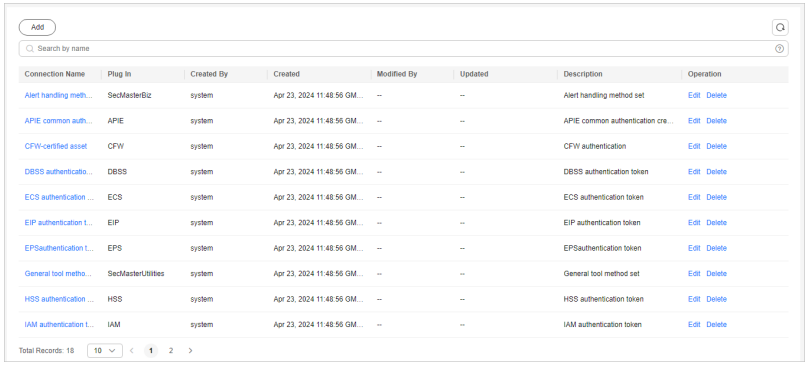

**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

**Figure 11-124** Asset connection tab page




**Step 6** On the **Asset connection** tab page, view information about existing asset connections.

**Figure 11-125** Viewing asset connections




- In the asset connection list, you can view the name, plug-in, and creator of an asset connection.
- If there are many asset connections displayed, use filters to search for a specific one.
- To view details about an asset connection, click its name to go to its **Detail** panel.

**----End**

## Editing an Asset Connection

**Step 1** Log in to the management console.

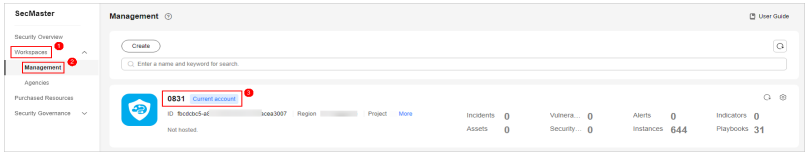
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

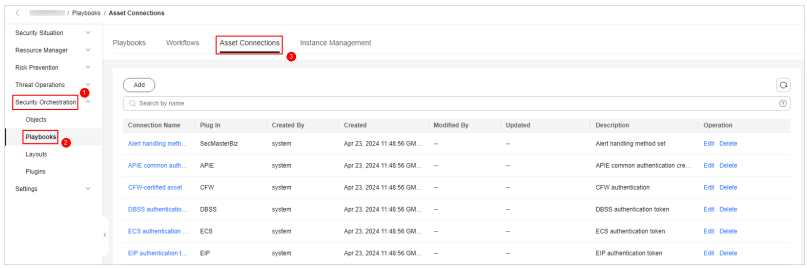
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-126** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

**Figure 11-127** Asset connection tab page




**Step 6** In the row containing a desired asset connection, click **Edit** in the **Operation** column. The slide-out panel **Edit** is displayed.

**Step 7** On the **Edit** panel, edit asset connection parameters. For details about the parameters, see **Table 11-28**.

**Table 11-28** Asset connection parameters

| Parameter | Description |
| --- | --- |
| Connection Name | Enter an asset connection name. The naming rules are as follows:<br>• Only uppercase letters (A to Z), lowercase letters (a to z), digits (0 to 9), and underscores (_) are allowed.<br>• A maximum of 64 characters are allowed. |
| Description | (Optional) Enter the asset connection description. The description can contain a maximum of 64 characters. |
| Plug In | Select the plug-in required for asset connection. For details about the plug-in, see **Viewing Plug-in Details**. |
| Created By | Creator of the asset connection. This parameter **cannot be modified**. |

| Parameter | Description |
| --- | --- |
| Created | Time when an asset connection is created. This parameter **cannot be modified**. |
| Modified By | User who last modifies the asset connection. This parameter **cannot be modified**. |
| Connection Type | Select the type of the asset connection. |
| Credential | Enter the credential information, such as AK and SK, based on the selected connection type. |

**Step 8** Click **OK**.

**----End**

## Deleting an Asset Connection

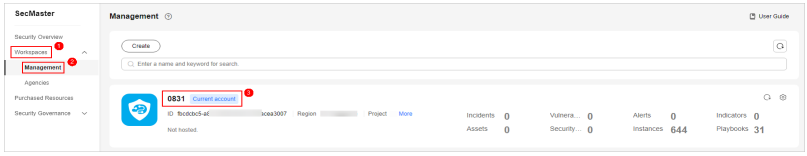
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

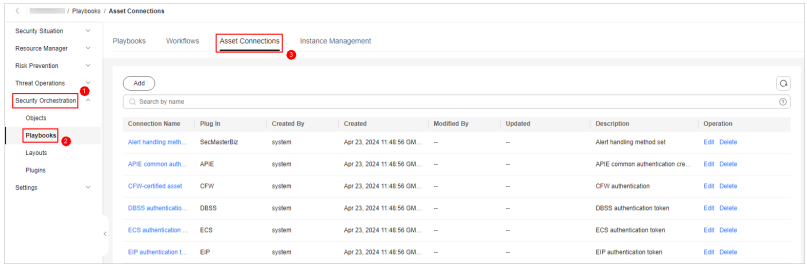
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-128** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

**Figure 11-129** Asset connection tab page




**Step 6** Locate the row that contains a desired asset connection, click **Delete** in the **Operation** column.

**Step 7** In the confirmation dialog box, enter **DELETE** and click **OK**.

NOTE

Deleted assets cannot be restored. Exercise caution when performing this operation.

**----End**

# 11.7.4 Instance Management

## 11.7.4.1 Viewing Monitored Playbook Instances

### Scenario

After a playbook is executed, a playbook instance is generated in the playbook instance management list for monitoring. Each record in the instance monitoring list is an instance. You can view the historical instance task list and the statuses of historical instance tasks.

View instance monitoring information.

### Limitations and Constraints

The maximum number of retries within a day for a single workspace of a single account is as follows:

- Manual retry: 100. After a retry, the playbook cannot be retried until the current execution is complete.
- API retry: 100. After a retry, the playbook cannot be retried until the current execution is complete.

### Procedure

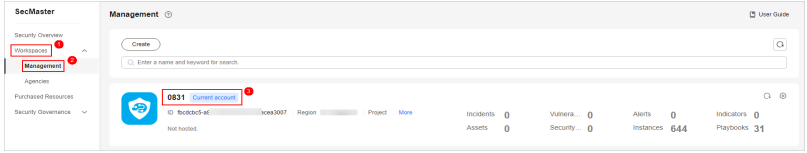
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

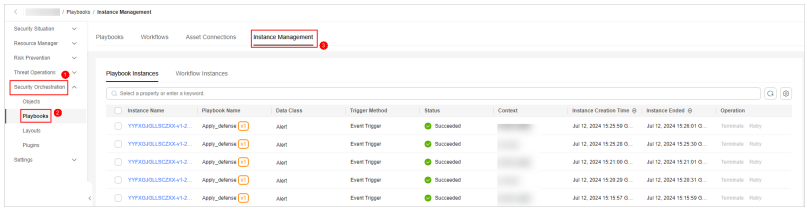
**Figure 11-130** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Instance Management** tab.

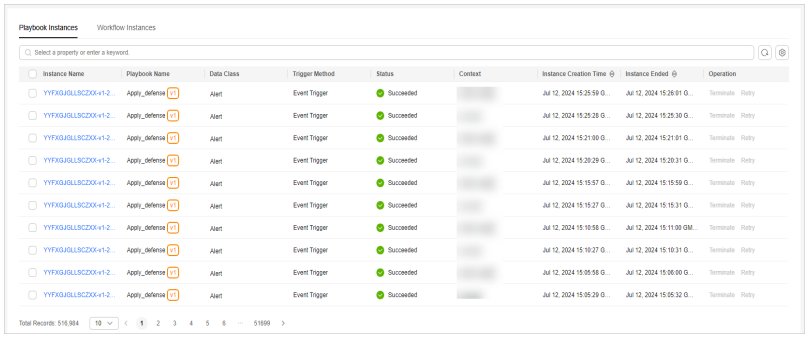
  

**Figure 11-131** Instance Management page



**Step 6** On the **Instance Management** tab, click the **Playbook Instances** or **Workflow Instances** tab, and view the instance information. For details about the parameters, see **Table 11-29**.

**Figure 11-132** Instances



- You can view the total number of instances below the instance list. You can view a maximum of 10,000 instance records page by page. To view more than 10,000 records, optimize the filter criteria.
- An instance can be stored for a maximum of 180 days.
- To view details about an instance, click the instance name. On the displayed page, you can view the instance workflow, workflow nodes, start time, and end time.

**Table 11-29** Parameters in the instance list

| Parameter | Description |
| --- | --- |
| Instance Name | Name of the instance generated by the system. |
| Playbook Name | Name of the playbook corresponding to the instance. |
| Data Class | Operation object of a playbook |
| Trigger Method | Triggering mode of an instance<br>• **Timer Trigger**<br>• **Event Trigger** |

| Parameter | Description |
| --- | --- |
| Status | Status of an instance<br>• **Succeeded**: The playbook instance is successfully executed.<br>• **Failed**: The playbook instance fails to be executed. You can click **Retry** in the **Operation** column to execute the playbook again.<br>• **Running**: The playbook instance is running. You can click **Terminate** in the **Operation** column to terminate the playbook.<br>• **Retrying**: The playbook instance is being retried.<br>• **Terminating**: The playbook instance is being terminated.<br>• **Stopped**: The playbook instance has been terminated. |
| Context | Context information of an instance |
| Instance Creation Time | Time when an instance is created. |
| Instance Ended | Time when an instance ends. |
| Operation | You can terminate or retry an instance. |

**----End**

### Related Operations

- To stop a running instance, click **Terminate** in the **Operation** column of the target instance. After an instance is terminated, no operations are supported.
- To start a failed instance, click **Retry** in the **Operation** column.

  You can retry instances up to 100 times a day in a single workspace. After a retry, the playbook cannot be retried until the current execution is complete.

# 11.8 Layout Management

## 11.8.1 Viewing an Existing Layout Template

### Scenario

There are many management page and details page templates, for example, alert, incident, and vulnerability management templates.

This section describes how to learn what types of layout templates you can have.

### Procedure

**Step 1** Log in to the management console.

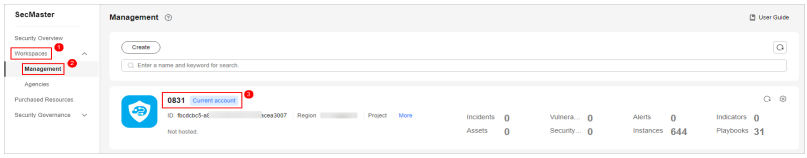
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

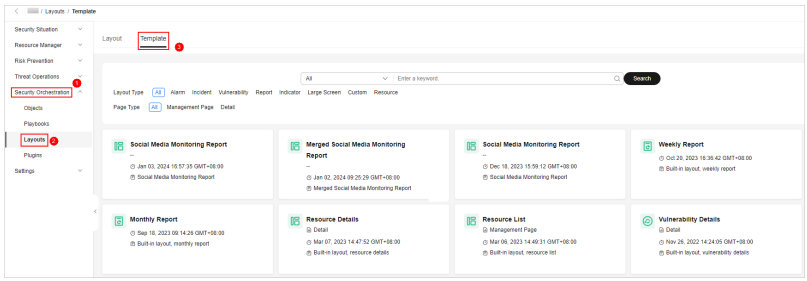
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-133** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Layouts**. On the displayed page, click the **Template** tab.

**Figure 11-134** Layout template tab page




**Step 6** On the **Template** tab, view the template information.

You can search for a specified layout template by **Layout Type** or **Page Type**.

- You can view the name, page type, and creation time of a template.
- You can edit the name and layout of a template.

**----End**

# 11.8.2 View Existing Layouts

## Scenario

This topic describes how to view layouts.

## Viewing an Existing Layout

**Step 1** Log in to the management console.

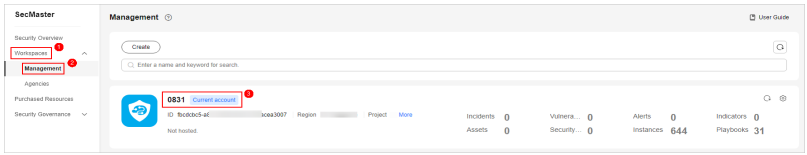
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

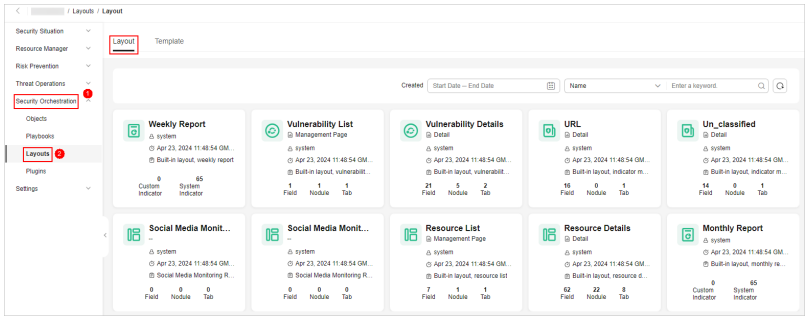
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-135** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Layouts**.

**Figure 11-136** Layouts page




**Step 6** On the layout management page, view existing layouts.

Hover your cursor over the target layout and click  in the upper right corner of the layout. The layout configuration details page is displayed.

**----End**

# 11.9 Plug-in Management

## 11.9.1 Plug-in Management Overview

SecMaster supports unified management of plug-ins used in the security orchestration process.

### Terms

- **Plug-in**: an aggregation of functions, connectors, and public libraries. There are two types of plug-ins: custom plug-ins and commercial plug-ins. Custom plug-ins can be displayed in marts or used in playbooks.
- **Plug-in set**: a set of plug-ins that have the same service scenario.
- **Function**: an executable function that can be selected in a playbook to perform a specific behavior in the playbook.
- **Connector**: connects to data sources and sends security data such as alerts and incidents to SecMaster. Connectors are classified into incident-triggered connectors and scheduled connectors.
- **Public library**: a public module that contains API calls and public functions that will be used in other components.

# 11.9.2 Viewing Plug-in Details

## Scenario

This section describes how to view SecMaster built-in plug-ins and their details.

## Procedure

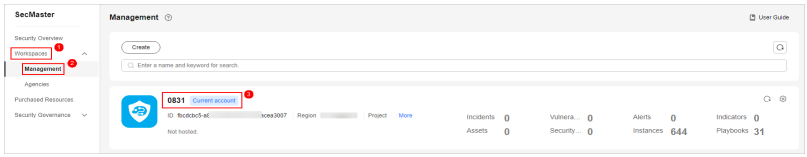
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

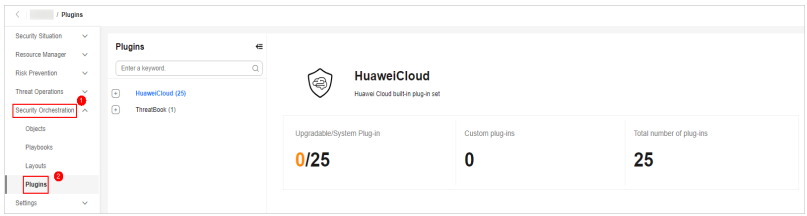
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 11-137** Workspace management page




**Step 5** In the navigation pane on the left, choose **Security Orchestration** > **Plugins**.

**Figure 11-138** Plugins page




**Step 6** On the **Plugins** page, view plug-in details.

- The navigation pane on the left shows information about all built-in plug-in sets, plug-ins, and functions.
- To view details about a plug-in, click its name. Its details will be displayed in the right pane.
- To view details about a function, expand the plug-in and click the function name. The function details will be displayed in the right pane.

**----End**

# 12 Playbook Overview

## 12.1 Credential Leakage Response Solution

### Incident Type: Credential Leakage

Credential leakage means that the identity authentication information, such as the username, password, API key, and access token, of an individual or organization is obtained or disclosed by an unauthorized third party when the individual or organization uses online services, such as cloud services, social media platforms, and emails. This may occur in many cases, including but not limited to phishing, malware, social engineering, and system vulnerabilities. Once credentials are disclosed, attackers may use them to access sensitive data, perform illegal transactions, or damage the system, which severely affects services.

### Response Solution

To address the issues mentioned above, Huawei Cloud launched SecMaster. SecMaster is a next-generation cloud native platform that enables integrated and automatic security operations. You can manage cloud assets, security posture, security information, and incidents in one place and enjoy intelligent threat detection, easy security orchestration, and automatic response.

### Incident Response Process

**Step 1 Identify whether identity credentials are compromised or disclosed**.

1. If you receive any of the following messages, check your identity credentials for damage or leakage:
   - Alerts or metrics from cloud services (such as CCM, SecMaster, and CTS) and external monitoring systems;
   - Prompt messages from the contractor or third-party service provider;
   - Findings through internal or external security researchers
   - Internal system messages;
   - Information anonymously reported to you;

- Information you receive in other ways. For example, an attacker uses leaked credentials to steal your data and modify your public-facing resources.

2. Make sure a service ticket or case has been submitted for the incident. If no service tickets or cases are submitted, submit one manually.
3. Determine and record the impact or experience of the problem on end users.

   From the perspective of users, this scenario may have no direct impact on users. Record the survey result in the ticket or case related to the incident.
4. For automatically created tickets or cases, determine which alarms or metrics are abnormal.

   For example, if an alarm or metric is triggered, the CTS service metric may indicate that some aspects of your IAM configuration are not compliant, or the IAM service alarm may indicate that credentials may be leaked. It may also be a billing alert that triggers an alert and notification when your billing cost exceeds a predefined threshold.
5. Determine the set of credentials that have been leaked.
   - If a ticket or case is created, check whether the user/role name, user/role ID, or access key ID is recorded in the ticket or case.
   - If the alert is generated by SecMaster baseline inspection, you can view the baseline inspection result on the console and find the access key ID of the affected credential. For details, see **Viewing the Baseline Inspection Result**.
   - If the alert is reported by CTS, you can view the tracing result in the event list on the console. The resource name is the access key. The **Credential** field contains **access_key_id**, **account_id**, **user_name**, and other information.
6. Determine when credentials may be compromised or leaked. Any API operation performed after this time shall be considered malicious, and any resource created after this time shall be considered leaked.
7. If your application is interrupted, determine the possible incidents that cause the interruption. If the interrupt event is not related to a credential leak, check the deployment pipeline to determine whether any changes were made before the event occurred. You can use CTS to view logs of all account activities.
8. Communicate incidents:
   - Determine stakeholder roles based on the organization's incident response plan.
   - Notify relevant stakeholders, including legal personnel, technical teams, and developers, and ensure that they are added to the work order and war room for continuous update.
9. Communicate incidents with external parties.
   - Ensure that your legal counsel is aware of the situation and incorporate it into the status update for internal stakeholders, especially external communications.
   - Add colleagues responsible for public or external communication to the work order so that they can receive regular status updates about the incident and fulfill their communication responsibilities.

- If your jurisdiction has regulations that require the reporting of such incidents, ensure that the person responsible for notifying the local or federal law enforcement agency in your organization also receives a notification of the incident/is added to the service ticket. Consult your legal counsel and law enforcement for guidance on the collection and preservation of evidence and regulatory authorities. Even if regulations do not require reporting to open databases, government agencies, or non-governmental organizations, your reports may help track similar activities or help others.

**Step 2 Contain incidents**.

You can disable compromised credentials or revoke permissions related to these credentials to prevent the use of compromised credentials to call APIs.

1. Disable the compromised credentials identified by **Step 1**.
   a. If the user credentials are permanent IAM user credentials, delete them on the IAM console. For details, see **Deleting an IAM User**..
   b. If the user credentials are temporary credentials obtained from IAM, they can be associated with the IAM role. To disable these functions, perform the following steps:
      i. Cancels all sessions of the current role. If the attacker obtains a new temporary security credential and continues the attack, go to **Step 2.1.b.ii**.
      ii. Delete all IAM policies added to the role, modify existing policies to block all access, or modify the policy of the role to prevent attackers from taking the role.

      The credential is still valid for a specified period of time after being issued. Therefore, after the trust policy is modified, the credential can still be used within the validity period. **Step 2.1.b.i** and **Step 2.1.b.ii** will prevent all users from using credentials obtained by taking on roles, including any legitimate users or applications.
2. You can view the credentials that are continuously used on the CTS console within about 30 minutes, regardless of access keys, IAM users, or roles, and confirm that the compromised credentials have been disabled.

**Step 3 Eradicate incidents**.

You need to check which API operations are performed and which resources are created, deleted, or modified after the credential is damaged, and take measures to eliminate the impact.

1. Use your preferred monitoring tool to access CTS and collect all API operations performed by the damaged credential. The log collection time is from the damage time to the current time.
   - If you use a third-party tool (such as Splunk) to collect CTS logs, obtain logs from the tool.
   - If you send logs to OBS instead of using a third-party tool, you can use LTS to collect, query, and store logs.
2. On the LTS console, query all API operations performed after the credential is damaged or leaked.
3. Pick out the API calls that may:

- Access sensitive data, for example, OBS Object.
- Create resources, such as databases and cloud servers.
- Creates resources, including EC auto scaling groups.
- Create or modify permissions, and check API methods including but not limited to CreateUser, CreateRole, AssumeRole*, Get*Token, Attach*Policy, *Image*, *Provider, Tag*, Create*, Delete* and Update*.
- Delete affected cloud resources.
- Modify affected cloud resources.

4. Based on the result of the previous step, identify any applications that might have been affected. Obtain the ID or tag information of each affected resource and notify the resource owner.
5. If additional credentials (such as IAM users and roles) are created, disable and delete all credentials of these resources based on the **Step 2.1**.
6. Repeat **Step 3.1** to **Step 3.5** to check whether additional credentials are found until all credentials are handled.

**Step 4 Recover from incident**.

1. Restore the modified resource.
   - If the resource can be destroyed and replaced, a new resource is added.
   - If the resource cannot be replaced, perform either of the following operations:
     - Restore a resource from a backup.
     - New resources are prepared and configured in the application infrastructure, and damaged resources are isolated and removed from the application infrastructure.
     - Destroy damaged resources or continue to isolate them for evidence.
   - Restore the deleted resource.
     i. Check the application to which the resource belongs. If the resource tag is not listed in the CTS service item and the resource is supported by the cloud, check the configuration.
     ii. If the deleted resource can be restored from the backup, restore it directly. If the deleted resource cannot be restored from the backup, obtain the resource configuration from CMDB, create the resource again, and configure it in the infrastructure of the application.

**Step 5 Post-incident activities.**.

- Investigate and collect evidence on certain compromised resources, analyze the attack methods used by attackers on the compromised resources, and determine whether additional risks and risk mitigation measures need to be taken for related resources or applications.
  a. For any compromised resources that have been segregated for further analysis, forensic activities are performed on those resources and the findings are incorporated into ex post facto reporting.
  b. Ensure that the CMDB is correctly updated to reflect the current status of all affected resources and applications.

- Review the incident itself and its response, determine which measures are effective and which are not, update the improvement process based on the information, and record the investigation results.

**----End**

# 12.2 Ransomware Incident Response Solution

## Incident Type: Ransomware Attacks

Ransomware is a special type of malware designed to deny a user or organization access to files on their computer. So ransomware attacks are classified as denial-of-access (DoS) attacks. Ransomware uses technical means to restrict victims from accessing their own systems or data in the systems, such as documents, emails, databases, and source code. To remove the restrictions, victims have to pay money to attackers.

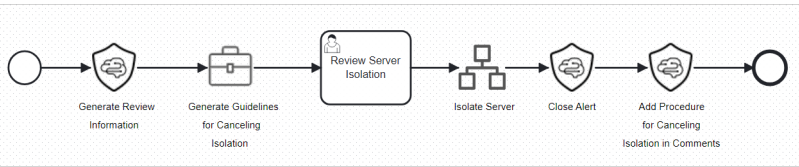
Once a ransomware attack succeeded, it is hard to take measures to interrupt the attack or mitigate the damage. Therefore, it is important to take preventive measures to reduce such attacks.

This document describes a series of steps and strategies designed to effectively manage and respond to ransomware attacks.

## Incident Response Solution: Ransomware Host Isolation Playbook

The **Ransomware host isolation** playbook preconfigured in SecMaster automatically isolates compromised hosts. When a ransomware alarm is triggered, the playbook adds the affected host to the security group and blocks all inbound and outbound traffic to isolate the host. This isolation mode is critical to preventing ransomware from spreading on the network.

**Figure 12-1** Host isolation - Malware




## Incident Response Process

**Step 1 Obtain, store, and record evidence**.

Based on your cloud environment configurations, you can identify potential ransomware according to any of the following symptoms:

1. An IT employee reported that an ECS could not be accessed over SSH or other similar methods.

   New ECSs can be created and no alerts are reported by Cloud Eye, but the ECS is inaccessible.
2. A service ticket is triggered by abnormal metrics or logs of ECS instances and generated in your service ticket system.

3. A network fault error was reported on the ECS console or by Cloud Eye for the ECS.
4. Attackers receive ransomware requests through other communication channels (such as emails).
5. Cloud security services or other security tools detected that the ECS instance was attacked.
6. Your cloud or other third-party monitoring systems generated alerts or reported abnormal metrics.
7. When an incident is identified as a security incident, it is critical to assess its impact scope, including the number of affected resources and the sensitivity of the data involved.
8. Check whether there are any known events that may cause service interruption or affect instance metrics. For example, the number of network metrics in Cloud Eye increases due to ongoing events.
9. Use Cloud Eye or other application performance monitoring tools to compare the recorded performance baseline metrics of the application with the current abnormal metrics to determine whether abnormal behavior exists.
10. Determine the classification level of data stored in ECS instances, OBS buckets, or other storage.
11. Ensure that a ticket has been created for the incident. If no ticket generated automatically, manually create one.
12. If there is a ticket already, determine the alert or metric associated with the problem.

    If a ticket is automatically generated due to an alarm or metric, the reason why the ticket is automatically generated can be specified. If the ticket is not automatically generated, the alarm or notification that causes the problem is recorded. Check whether the service interruption is caused by a known event or other causes. If you cannot determine whether the service interruption is caused by a known event or other causes, record the actual attack medium.
13. Use log search to determine when a ransomware attack occurred.

    You can use Cloud Trace Service (CTS) to collect, store, and query operation records of all cloud resources.
14. Determine and document the impact on end users and their experience.

    If users are affected, record the detailed steps that lead to the attack event in the service ticket to help identify the attack medium and develop appropriate mitigation policies.
15. Determine the roles involved in the incident based on the incident response plan of your enterprise or organization. Notify related roles, including legal affairs personnel, technical teams, and developers, and ensure that they are added to the work order and WarRoom to continuously respond to the incident.
16. Ensure that your organization's legal counsel is aware of and involved in the internal response and external communication of the incident, and add colleagues responsible for public or external communication to the work order so that they can fulfill their communication responsibilities in a timely manner. If local or federal regulations require the reporting of such incidents, please notify the authorities concerned and seek guidance from their legal counsel or law enforcement on the collection of evidence and the

preservation of the chain of custody. Reporting such incidents to open databases, government agencies, or non-governmental organizations may also help to advance the response to such incidents, if not required by regulations.

**Step 2 Contain incidents**.

Early detection of abnormal user behavior or network activities is the key to reducing the impact of ransomware incidents. To help you control events, perform the following steps: If the following steps apply, work with the legal and compliance team of your enterprise/organization to take any necessary response measures and continue the incident response process.

1. Determine the type of ransomware involved in the attack event. Common ransomware types are as follows:
   - Encrypted ransomware: Encrypts files and objects.
   - Lock ransomware: Lock the access to the device.
   - Other types: new types or types that are not recorded before.
2. For workloads affected by attacks, you can modify security groups, OBS bucket policies, or related identity and access management policies to isolate networks or Internet connections, minimizing the possibility of attack spreading, or minimize the chances of attackers accessing these resources.

   Note that sometimes modifying a security group may not achieve the expected effect due to connection tracking.
3. Evaluate whether the ECS instance needs to be restored. If the instance belongs to an auto scaling group, remove the instance from the group. In addition, if the event is related to a vulnerability in the host operating system, update the system and ensure that the vulnerability has been fixed.
4. View operation logs on CTS to check whether there are unauthorized operations, such as creating unauthorized IAM users, policies, roles, or temporary security credentials. If yes, delete any unauthorized IAM users, roles, and policies, and revoke all temporary credentials.
5. If the attack medium is caused by unpatched software, OS updates, expired malware, or antivirus tools, ensure that all ECS instances are updated to the latest OS and all software packages and patches are up to date, in addition, the virus feature codes and definition files on all ECSs are the latest. You can perform the following operations: For a variable architecture, patch it immediately. For an immutable architecture, deploy it again.
6. According to the update in **5**, delete all remaining resources that are identified as at risk of infection (possibly accessing the same medium through which the ransomware is downloaded, whether by email, by visiting infected websites, or by other means). For resources managed through auto scaling, focus on identifying attack media and take measures to prevent other resources from being infected through the same media.

**Step 3 Eradicate incidents**.

1. Assess whether the impact of an incident is limited to a specific part of the environment. If the ransomware data can be restored from the backup or snapshot, restore the data by referring to the backup or snapshot.

   Note that investigating incidents in an isolated environment for root cause analysis is of great value in implementing controls to prevent similar incidents in the future.

2. Consider using the latest antivirus or anti-malware to eliminate ransomware.

   Exercise caution when performing this operation because it may alert attackers. It is recommended that you view locked or encrypted objects in an isolated forensic environment, for example, removing network access permissions from infected ECS instances.

3. Delete all malware addresses identified during forensic analysis and identify intrusion metrics.
4. If a ransomware virus has been identified, check whether there are available third-party decryption tools or other online resources that may help decrypt data.

**Step 4 Recover from incident**.

1. Determine the restoration points of all restoration operations performed from the backup.
2. View the backup policy to determine whether all objects and files can be restored, depending on the lifecycle policy applied to the resource.
3. Use the forensic method to confirm that the data is secure before the restoration, and then restore the data from the backup or restore the data to an earlier snapshot of the ECS instance.
4. If you have successfully restored data using any open-source decryption tool, delete the data from the instance and perform necessary analysis to confirm that the data is secure. Then, restore the instance, terminate or isolate the instance, create a new instance, and restore the data to the new instance.
5. If restoring or decrypting data from a backup is not feasible, evaluate the possibility of restarting in a new environment.

**Step 5 Perform post-incident activities**.

1. Documenting and applying lessons learned from simulations and live events to subsequent processes and procedures will enable the injured party to better understand how the event occurred in the system configuration and processes (e.g., where weaknesses exist, where automation may fail, and where there is a lack of visibility). and how to enhance its overall security posture.
2. If you have identified the initial attack medium or entry point, what is the best way to reduce the risk of recurrence?

   For example, if malware is initially accessed through an unpatched public-facing ECS instance and you have applied the missing patch to all current instances, consider how to improve the patch management process to test and apply the patch more quickly and consistently to prevent similar problems in the future.

3. If you have developed technical steps to address a particular threat, assess the probability that these steps will be automatically performed when the relevant threat is detected. Using automated processing can help mitigate threats more quickly, thereby minimizing the scope and severity of the impact.
4. Collect lessons learned from all roles in the response process and update your incident response plan, disaster recovery plan, and this response plan as needed. New technical capabilities and personnel skills should be considered and funded as well to fill the gaps identified.

**----End**

# 12.3 Attack Link Analysis Alert Notification

## 12.3.1 Playbook Overview

### Background

An attack link is an important concept in the network security field. It refers to a series of attack steps and paths taken by an attacker on a target network or system to achieve an attack purpose. These steps and paths form an attack link, through which an attacker can gradually penetrate into the target system and finally achieve the attack target.

The attack link has great harm to the target network or system. Once an attacker successfully constructs an attack link and breaks through the defense measures of the target system, the attacker can perform any operation on the target system, including stealing sensitive information, damaging system data, and paralyzing system services. These hazards not only cause economic losses, but also may have a serious impact on national security and social stability.

### Response Solution

If a domain name is attacked, the attacker usually further hacks into backend servers. This playbook analyzes attack chains and generates alerts. Once this playbook discovers that attacks are approaching servers, it notifies operations personnel.

The **Attack link analysis alert notification** playbook has been matched the **Attack link analysis alert notification** workflow. This workflow needs to use Simple Message Notification (SMN) to send notifications. So you need to create and subscribe to a notification topic in SMN.

The **Attack link analysis alert notification** workflow queries the list of website assets associated with affected assets that are marked by HSS alerts through asset associations. By default, a maximum of three website assets can be queried.

- If there are associated website assets, the workflow queries WAF alerts generated for each website asset from 3 hours ago to the current time. A maximum of three alerts can be queried. The alert types include XSS, SQL injection, command injection, local file inclusion, remote file inclusion, web shell, and vulnerability exploits.
- If there is an alert generated in WAF, the workflow associates the WAF alert with the corresponding HSS alert and sends a notification the email box you specified through SMN.

### Incident Response

**Step 1 Obtain, store, and record evidence**.

1. Based on the configurations of your Huawei cloud environment, use HSS and WAF to detect alerts.

2. Access affected ECSs over SSH and check the instance status and monitoring information to see if there are any exceptions. Alerts you receive from other channels are supported.
3. Once an attack is confirmed as an incident, the affected scope, attacked machines, affected services, and data information need to be assessed.
4. Use SecMaster to convert alerts to incidents and continue to monitor and record incident details. For details, see **Converting Alerts to Incidents**.
5. In addition, log information can be traced. All related log information can be reviewed through the security analysis capability, and recorded and archived in the event management module for subsequent operation tracing.

**Step 2 Contain incidents**.

1. Determine the attack type, affected hosts, and service processes based on alarms and logs.
2. Scripts such as isolation, killing, and policy blocking are used to perform operations such as process killing and software isolation on involved process software to reduce subsequent impacts.
3. Check the infection scope. If there is an infection risk, check it. If there is an infection risk, handle it in a timely manner.
4. In addition, other playbook processes can be used for risk control, such as host isolation. Security group policies can be used to isolate infected machines from access control and isolate network transmission risks.

**Step 3 Eradicate incidents**.

1. Evaluate whether the affected hosts need to be hardened and restored. If the host has been damaged, you need to harden and restore the host based on the source tracing result. If attacks are caused by security credential leakage, delete any unauthorized IAM users, roles, and policies, and revoke credentials to harden the host.
2. You can check for vulnerabilities, outdated software, and unpatched vulnerabilities on infected machines. These may cause continuous collapse of subsequent machines. You can use the vulnerability management function to check and fix the vulnerabilities of the corresponding machines. Check whether there are risky configurations. You can use the baseline check function to check the host configurations and rectify risky configurations in a timely manner.
3. Evaluate the impact scope. If other hosts have been affected, handle all affected hosts.

**Step 4 Recover from incident**.

1. Determine the restoration points of all restoration operations performed from the backup.
2. View the backup policy to determine whether all objects and files can be restored, depending on the lifecycle policy applied to the resource.
3. Use the forensic method to confirm that the data is secure before the restoration, and then restore the data from the backup or restore the data to an earlier snapshot of the ECS instance.
4. If you have successfully restored data using any open-source decryption tool, delete the data from the instance and perform necessary analysis to confirm

that the data is secure. Then, restore the instance, terminate or isolate the instance, create a new instance, and restore the data to the new instance.

5. If restoring or decrypting data from a backup is not feasible, evaluate the possibility of restarting in a new environment.

**Step 5 Perform post-incident activities**.

1. Analyze alarm details in the entire alarm handling process, continuously operate and optimize the model, and improve the model alarm accuracy. If it is determined that the alarm is related to a service and there is no risk, the alarm can be directly filtered by using a model.
2. By tracing alarms, you can better understand the entire process of an event, continuously optimize asset protection policies, reduce resource risks, and reduce the attack surface.
3. Optimize the automatic processing playbook process based on the actual service scenario. For example, you can replace the manual review policy with the automatic processing policy to improve the alarm accuracy after analysis, improving the processing efficiency and quickly handling risks.
4. Based on risk analysis and attack link alarm analysis, perform risk control before an event occurs.

**----End**

# 12.3.2 Configuring Playbooks

## Scenarios

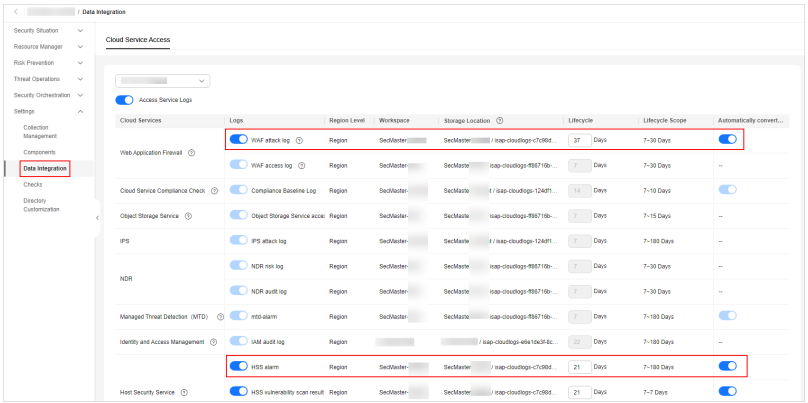
This topic describes how to configure the playbook. After you configure this playbook, once this playbook discovers that attacks are approaching servers, it notifies operations personnel.

## Prerequisites

- You have enabled access to HSS and WAF alerts on the **SecMaster** > **Data Integration**.

  You have enabled the function to automatically convert logs into alerts for HSS and WAF. For details about how to enable HSS and WAF alert access in SecMaster, see **Data Integration**.

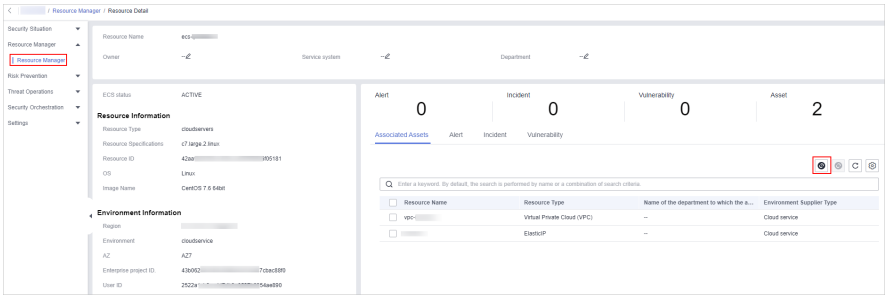
**Figure 12-2** Alert access



- On the **Resource Manager** page in the current SecMaster workspace, click an asset name. On the asset details page displayed, associate the website asset with the server asset.

**Figure 12-3** Associated Assets

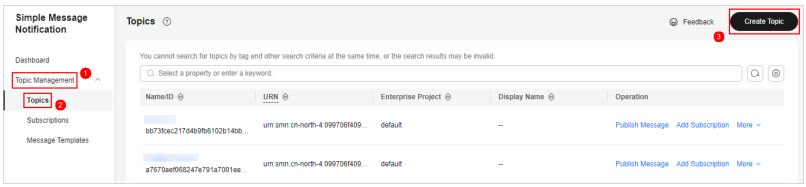


## Step 1: Create and Subscribe to a Topic

The **Attack link analysis alert notification** workflow needs to use Simple Message Notification (SMN) to create and subscribe to a notification topic.

1. Log in to the management console.
2. In the upper left corner of the page, click  and choose **Management & Governance** > **Simple Message Notification**.
3. Create a topic.
   a. In the navigation pane on the left, choose **Topic Management** > **Topics**. In the upper right corner of the displayed page, click **Create Topic**.

   **Figure 12-4** Create Topic

   b. In the **Create Topic** dialog box displayed, configure topic information and click **OK**.
      - **Topic Name**: **SecMaster-Notification** is recommended.
      - **Display Name**: **SecMaster notification topic** is recommended.
      - Retain the default settings for other parameters.
4. Add a subscription.
   a. On the **Topics** page, locate the row that contains the **SecMaster-Notification** topic and click **Add Subscription** in the **Operation** column.
   b. On the displayed **Add Subscription** slide-out panel, configure subscription information and click **OK**.
      - **Protocol**: Select **Email**.

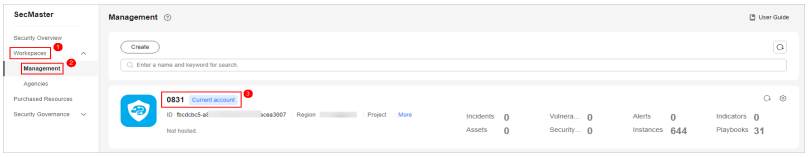
- **Endpoint**: Enter the email address of the subscription endpoint, for example, username@example.com.

## Step 2: Configure and Enable the Playbook

In SecMaster, the initial version (V1) of the **Attack link analysis alert notification** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **attack link analysis alarm notification** playbook is also activated by default. To use it, you only need to enable it.

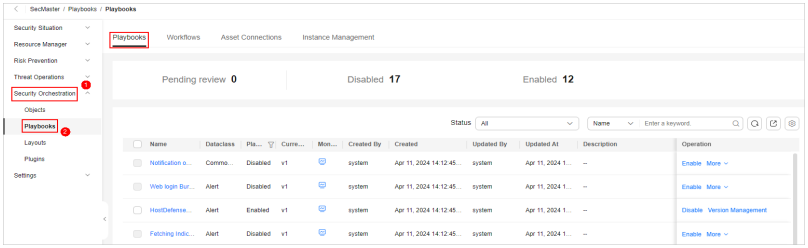
1. Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.
2. In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 12-5** Workspace management page




3. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 12-6** Accessing the Playbooks tab



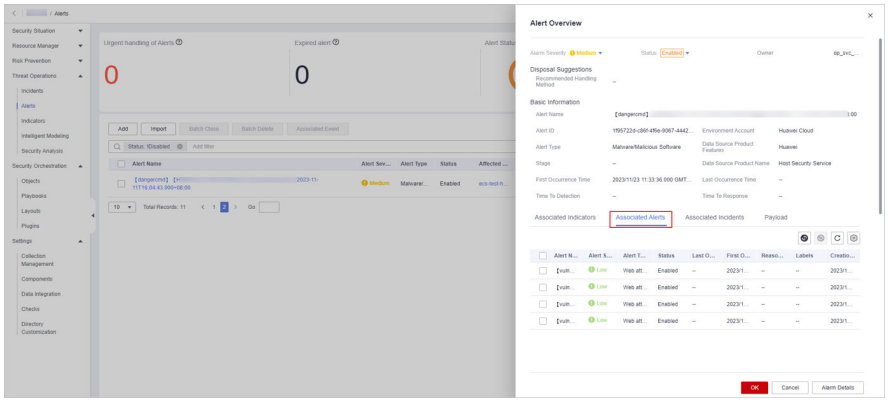

4. On the **Playbooks** page, locate the row that contains the **Attack link analysis alert notification** playbook and click **Enable** in the **Operation** column.
5. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

## Implementation Effect

After the attack link analysis notification playbook is executed, server assets and the website assets will be associated based on corresponding HSS and WAF alerts.

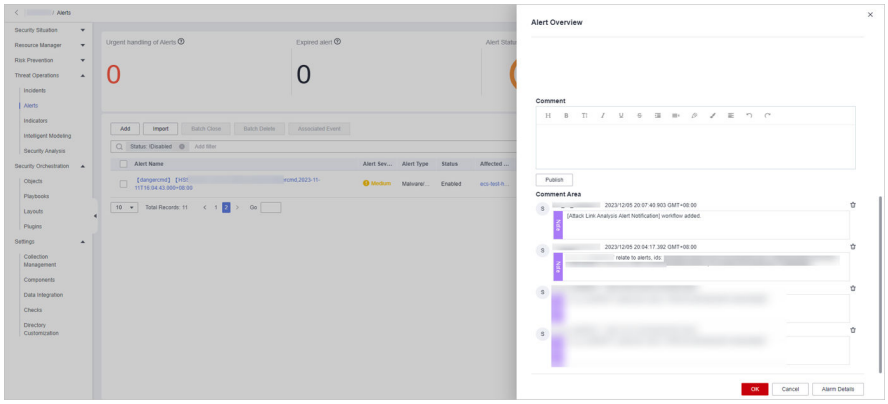
  

**Figure 12-7** Associated alerts



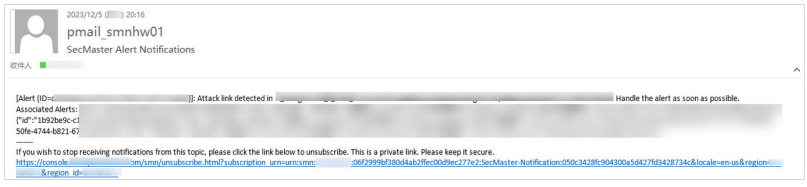

Comments on the corresponding alert added to the playbook

**Figure 12-8** Comment




Alert notification email sent to specified personnel

**Figure 12-9** Email notifications




# 12.4 HSS Isolation and Killing of Malware

## 12.4.1 Playbook Overview

### Background

A malware attack is a process of spreading malware (such as viruses, worms, Trojans, and ransomware) to users through emails, remote downloads, and malicious advertisements, and executing malicious programs on target hosts. In this way, the attacker can manipulate remote hosts, hack the network system,

steal sensitive information, or carry out other malicious activities. Such attacks pose a serious threat to the security of computer systems, networks, and personal devices, and may cause data leakage, system breakdown, personal privacy leakage, financial loss, and other security risks.

To solve the preceding problems, the required solution should effectively identify malicious programs such as backdoors, Trojans, mining software, worms, and viruses, and detect unknown malicious programs and virus variants on hosts through program feature and behavior detection, AI image fingerprint algorithms, and cloud-based antivirus. It can also detect ransomware embedded in media such as web pages, software, emails, and storage media. It is critical to prevent such attacks and reduce risks.

The following describes how this playbook isolates and kills malware and ransomware.

## Response Solutions

This built-in playbook automatically isolates and kills malware detected on servers protected by HSS.

The HSS file isolation and killing playbook has matched the HSS file isolation and killing workflow. When a malware or ransomware alert is generated, the system checks the HSS version used for the attacked asset. If the professional edition or later is used but automatic isolation and killing are not enabled, the isolation and killing conditions are met. After the isolation and killing are manually approved, the alert is handled by this playbook. If the malware is successfully isolated, the alert is closed. If the playbook fails to isolate the malware, a comment is added, indicating that manual actions are required.

## Incident Response

**Step 1 Obtain, store, and record evidence**.

1. Based on your cloud environment configuration, you can configure HSS to detect security threats, such as malware and ransomware, through antivirus and HIPS tests.
2. You can access the ECS using SSH and view the instance status and monitoring information to check whether any exception occurs. You can also check attack information or ransomware indicators you receive through other channels to discover potential threats.
3. Once an attack is confirmed as an incident, the affected scope, attacked machines, affected services, and data information need to be evaluated.
4. Use SecMaster to convert alerts to incidents and continue to monitor and record incident details. For details, see **Converting Alerts to Incidents**.
5. In addition, log information can be traced. All related log information can be reviewed through security analysis, and recorded in the incident management module for subsequent operation tracing.

**Step 2 Contain incidents**.

1. Determine the attack type, affected servers, and service processes based on alerts and logs.
2. Use the HSS file isolation and killing playbook to kill and isolate compromised processes and software. This will reduce the further security risks.

3. Check the infection scope. If there is an infection risk, check and handle it in a timely manner.
4. Other playbooks and workflows can also be used for risk control, such as host isolation. Security group access control policies can be used to isolate infected machines and contain risks from further spreading.

**Step 3 Eradicate incidents**.

1. Evaluate whether the affected servers need to be hardened and restored. If the server has been compromised, you need to harden and restore it based on the source tracing result. If attacks are caused by security credential leakage, delete any unauthorized IAM users, roles, and policies, and revoke credentials to improve host security.
2. Check affected hosts for vulnerabilities, outdated software, and unpatched vulnerabilities. These may cause more hosts to be affected. You can go to the **Vulnerabilities** page and fix the vulnerabilities for the affected hosts. Check for risky configurations. You can go to the **Baseline Inspection** and rectify risky configurations in a timely manner.
3. Evaluate the impact scope. If other hosts have been affected, handle all affected hosts.

**Step 4 Recover from incident**.

1. Determine the restoration points of all restoration operations performed from the backup.
2. View the backup policy to determine whether all objects and files can be restored, depending on the lifecycle policy applied to the resource.
3. Use the forensic method to confirm that the data is secure before the restoration, and then restore the data from the backup or restore the data to an earlier snapshot of the ECS instance.
4. If you have successfully restored data using any open-source decryption tool, delete the data from the instance and perform necessary analysis to confirm that the data is secure. Then, restore the instance, terminate or isolate the instance, create a new instance, and restore the data to the new instance.
5. If restoring or decrypting data from a backup is not feasible, evaluate the possibility of restarting in a new environment.

**Step 5 Perform post-incident activities**.

1. Analyze alert details in the entire alert handling process, continuously operate and optimize the model, and improve the model alarm accuracy. If it is determined that the alarm is related to a service and there is no risk, the alarm can be directly filtered by using a model.
2. By tracing alarms, you can better understand the entire process of an event, continuously optimize asset protection policies, reduce resource risks, and reduce the attack surface.
3. Optimize the automatic processing playbook process based on the actual service scenario. For example, you can replace the manual review policy with the automatic processing policy to improve the alarm accuracy after analysis, improving the processing efficiency and quickly handling risks.
4. Perform risk analysis based on all similar malware and ransomware attack points to control risks before incidents occur.

**----End**

# 12.4.2 Configuring Playbooks

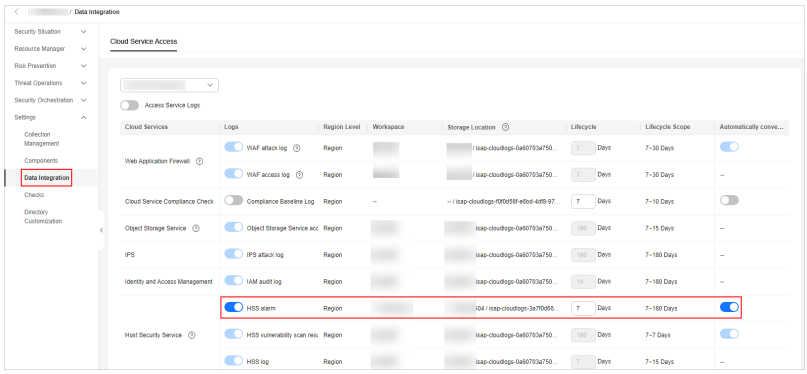
## Scenarios

The following describes how to enable this playbook and use it to handle malware and ransomware alerts.

## Prerequisites

You have enabled access to HSS alerts and toggled on the automatic converting logs to alerts function on the **Settings** > **Data Integration** page in the current workspace. For details, see **Data Integration**.

**Figure 12-10** Accessing HSS alerts




## Configuring and Enabling a Playbook

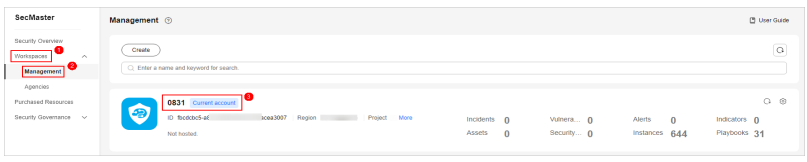
In SecMaster, the initial version (V1) of the **HSS isolation and killing of malware** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **HSS isolation and killing of malware** playbook is also activated by default. To use it, you only need to enable it.

**Step 1** Log in to the management console.

**Step 2** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 3** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

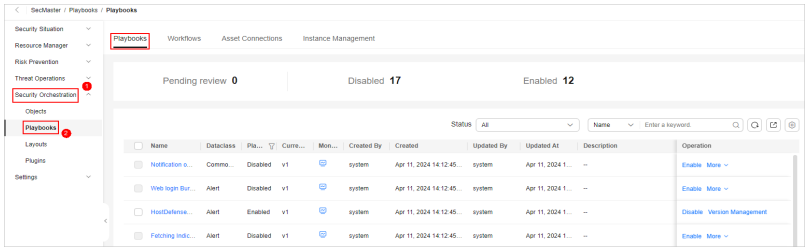
**Figure 12-11** Workspace management page




**Step 4** In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 12-12** Accessing the Playbooks tab




**Step 5** On the **Playbooks** page, locate the row that contains the **HSS isolation and killing of malware** playbook and click **Enable** in the **Operation** column.

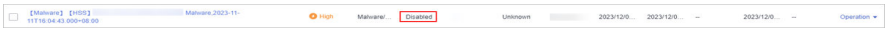
**Step 6** In the dialog box displayed, select the initial playbook version v1 and click **OK**.

**----End**

## Implementation Effect

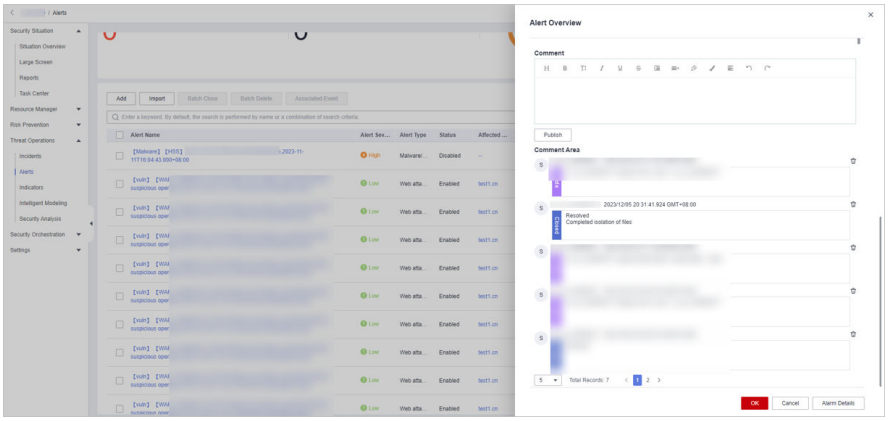
- The malware has been killed and the alert is closed automatically.

  **Figure 12-13** Alerts automatically closed

  If the malware is isolated and killed, a comment will be left indicating that the alert has been cleared.

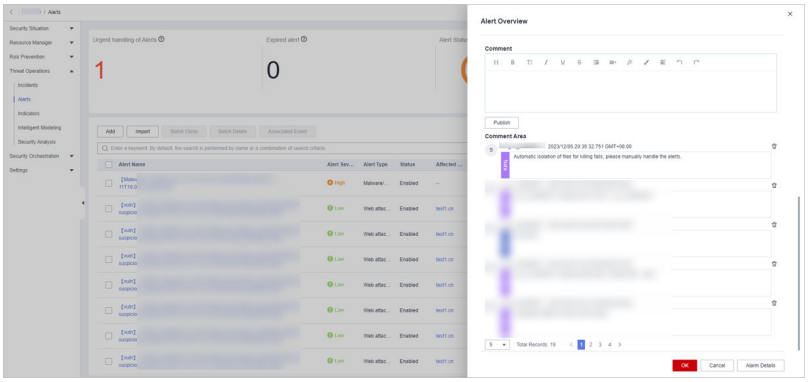
  **Figure 12-14** Comment on succeeded isolation and killing of malware


- If the malware fails to be isolated or killed, a comment will be left indicating that manual handling is required.

**Figure 12-15** Comment on failed isolation and killing of malware



# 12.5 Automatic Renaming of Alert Names

## Playbook Overview

This built-in playbook can automatically rename alerts. You can customize alert names with this playbook to meet your needs.

The **Auto Alert Renaming** playbook has matched the **Auto Alert Renaming** workflow. To configure this playbook, you need to configure the matched workflow and plug-ins the workflow uses.

The **Auto Alert Renaming** workflow has four plug-in nodes, one for obtaining alert type IDs, one for obtaining alert details, one SecMasterBiz node, and one for updating alert names. In this workflow, you only need to configure the SecMasterBiz node. This node is used to customize alert names.

**Figure 12-16** Automatic renaming of alarm names workflow


## Limitations and Constraints

Currently, only names for web shell attack alerts can be modified.

## Configuring and Enabling the Playbook

This topic walks you through on how to configure the SecMasterBiz node, enable the **Auto Alert Renaming** workflow, and enable the **Auto Alert Renaming** playbook.

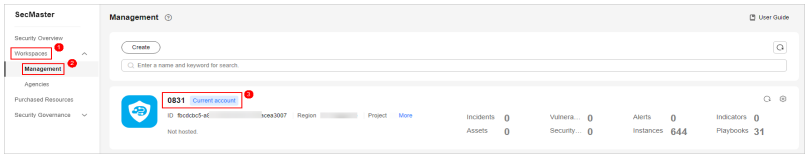
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 3** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

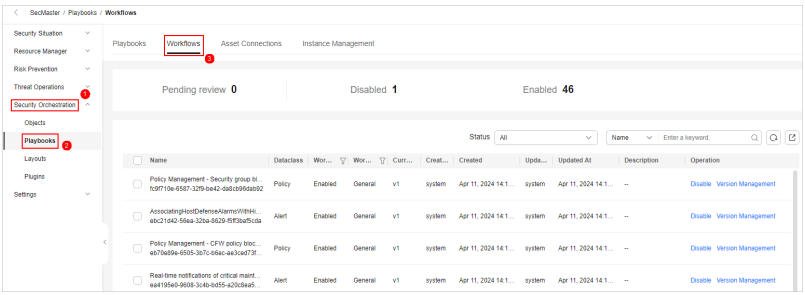
**Figure 12-17** Workspace management page




**Step 4** Configure and enable the workflow.

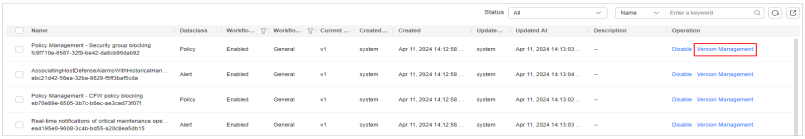
1. Copy a workflow version.
   a. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. Click **Workflows**.

      **Figure 12-18** Workflows tab page

   b. Locate the row containing the **Auto Alert Renaming** workflow. In the **Operation** column, click **Version Management**.

      **Figure 12-19** Version Management page

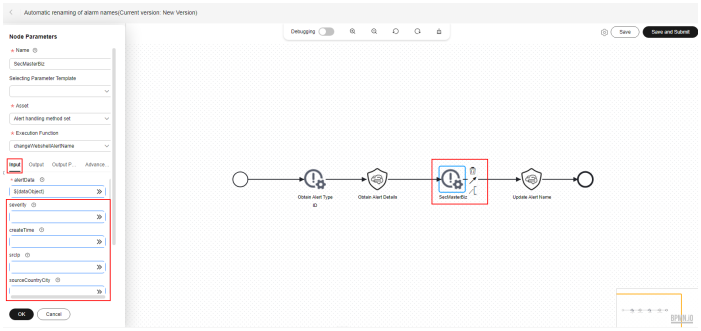
      
      

   c. On the **Version Management** page displayed, go to the **Version Information** area, locate the row where the initial version (v1) is listed, and click **Clone** in the **Operation** column.
   d. In the displayed dialog box, click **OK**.
2. Edit and submit the workflow version.
   a. On the **Version Management** slide-out panel for the **Auto Alert Renaming** workflow, go to the **Version Information** area, locate the row containing the copied workflow version, and click **Edit** in the **Operation** column.
   b. On the drawing page, click the **SecMasterBiz** plug-in and configure **Input** parameters on the pane displayed from the left.

      Details about SecMasterBiz plug-in parameters are listed below.

**Figure 12-20** SecMasterBiz plug-in



SecMasterBiz is a plug-in used in the workflow for automatically renaming alert names. It analyzes and processes web shell alert names. You can combine alert names in the way you want and let the system return the alert names as you configured.

The SecMasterBiz plug-in contains multiple actions. The **changeWebshellAlertName** action provides several input parameters for you to customize. Each input parameter indicates an analysis dimension.

You can select different dimension parameters as required to combine alert names. If a parameter is not selected, then it will not be returned in alert names by default. If you enter **y**, this parameter is selected. If you enter **n**, this parameter is not selected. If you leave this parameter blank, this parameter is not selected.

**Table 12-1** Parameter configuration description

| Parameter | Description | Value Range |
| --- | --- | --- |
| severity | Alert severity. | y/n |
| createTime | Time the alert was created. | y/n |
| srcIp | Attack source IP address. | y/n |
| sourceCountryCity | Country or city from where the attack source IP address originated. | y/n |
| destinationIp | IP addresses attacked. | y/n |
| destinationCountryCity | Country or city where the attacked object locates. | y/n |

c. After the configuration is complete, click **Save and Submit** in the upper right corner. In the dialog box displayed, click **OK**.

3. Review the workflow version.

a. On the **Workflows** page, locate the **Auto Alert Renaming** workflow and click **Version Management** in the **Operation** column.

b. On the displayed **Version Management** page, locate the row that contains the edited workflow version, and click **Review** in the **Operation** column.

c. In the displayed dialog box, set **Comment** to **Passed** and click **OK**.

4. Activate the workflow version.

a. On the **Version Management** page, locate the row that contains the reviewed workflow version and click **Activate** in the **Operation** column.

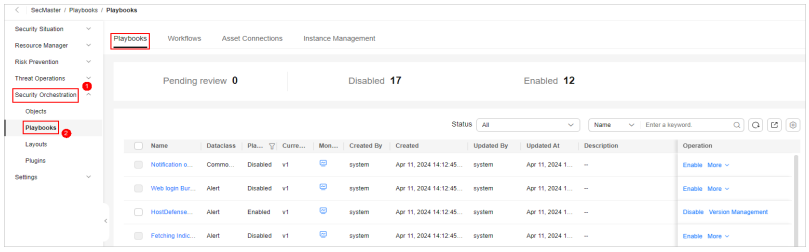
b. In the displayed dialog box, click **OK**.

After a workflow version is activated, the workflow is enabled by default.

**Step 5** Configure and enable the playbook.

1. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 12-21** Accessing the Playbooks tab




2. On the **Playbooks**, locate the row that contains the playbook for automatically renaming alert names, and click **Enable** in the **Operation** column.

3. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

**----End**

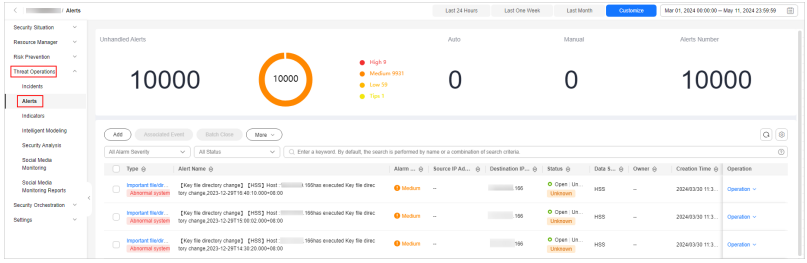
## Verifying the Playbook

If the playbook for **Automatic renaming of alarm names** is enabled, you can verify the playbook status.

This topic describes how to verify a playbook.

**Step 1** In the navigation pane on the left, choose **Threat Operations** > **Alerts**.

**Figure 12-22** Alerts




**Step 2** Click **Add**. Configure parameters in the **Add** slide-out panel.

- **Alert Name**: Enter a name for the alert.

- **Alert Type**: Select **Web attacks** and then **Web shell**.
- First Occurrence Time: Set the time when the alert occurs for the first time.
- **Debugging data**: Select **Yes**.
- **Description**: Description of the custom alert.
- Retain the default values for other parameters.

**Step 3** Click **OK**.

**Step 4** Refresh the page and check whether alert names have been updated.

If the playbook is enabled, the playbook automatically processes new alerts and displays new alert names.

**Figure 12-23** Output when no parameters are selected (default)

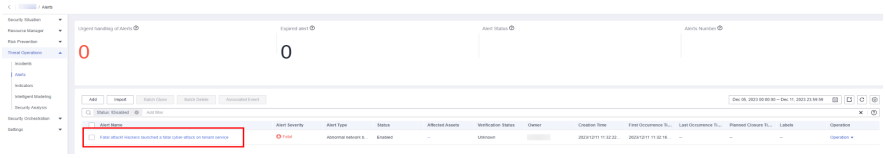
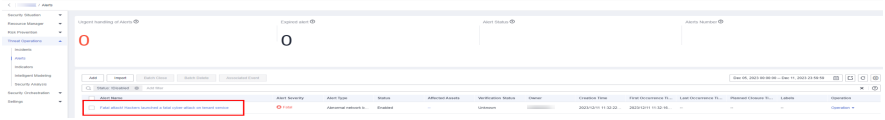


**Figure 12-24** Output when only severity is selected

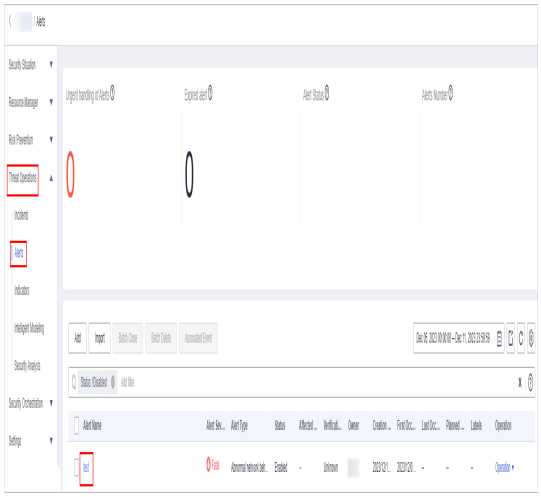


**----End**

## Implementation Effect

The following figure shows default alert names.

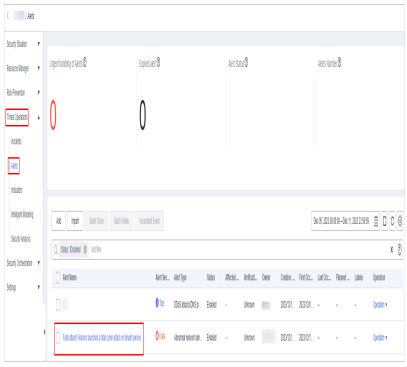
**Figure 12-25** Before processing



The following figure shows customized alert names.

**Figure 12-26** After processing



# 12.6 Auto High-Risk Vulnerability Notification

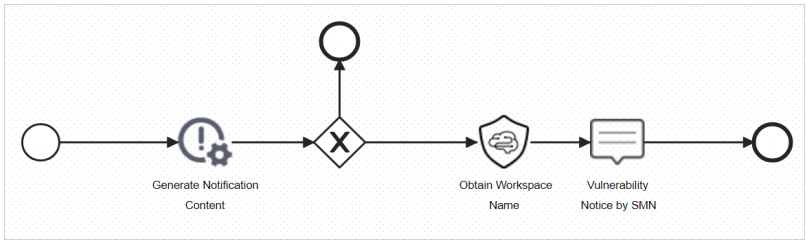
## Playbook Overview

This playbook can automatically notify of high-risk server vulnerabilities to operations personnel.

The **Automatic notification of high-risk vulnerabilities** playbook has been matched the **Auto High-Risk Vulnerability Notification** workflow. This workflow needs to use Simple Message Notification (SMN) to send notifications. So you need to create and subscribe to a notification topic in SMN.

If a high-risk vulnerability was reported by HSS, SMN sends a notification to operations personnel.

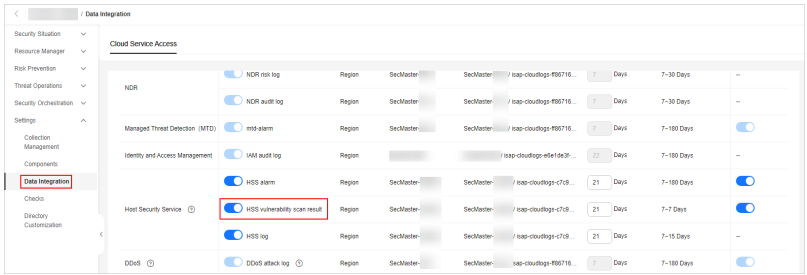
**Figure 12-27** Auto high-risk vulnerability notification workflow




## Prerequisites

You have enabled access to Host Security Service (HSS) alerts on the **Data Integration** page under the **Settings** pane. For details, see **Data Integration**.

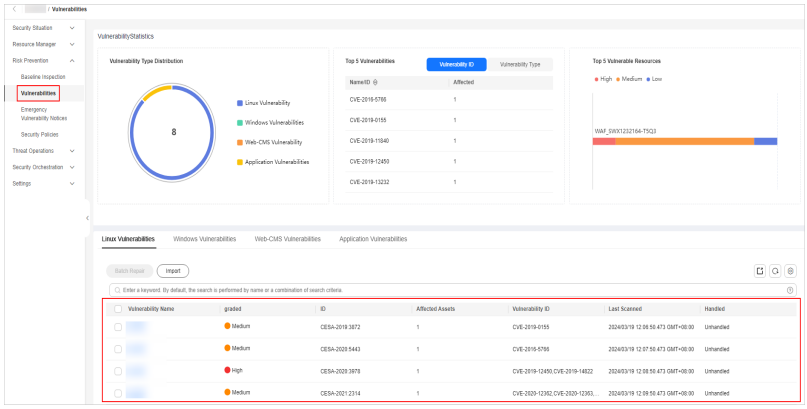
**Figure 12-28** Access to HSS alerts



To view integrated data, choose **Risk Prevention** > **Vulnerabilities**.

**Figure 12-29** Viewing vulnerabilities

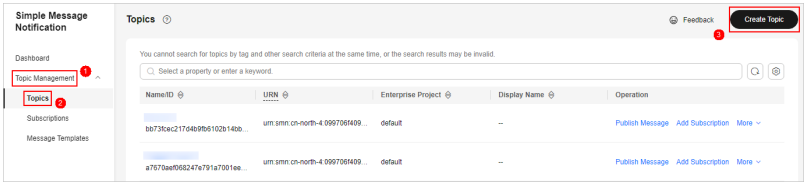


## Step 1: Create and Subscribe to a Topic

The **Auto High-Risk Vulnerability Notification** workflow uses Simple Message Notification (SMN) to send notifications. You need to create and subscribe to a topic for receiving notifications.

1. Log in to the management console.
2. In the upper left corner of the page, click  and choose **Management & Governance** > **Simple Message Notification**.
3. Create a topic.
   a. In the navigation pane on the left, choose **Topic Management** > **Topics**. In the upper right corner of the displayed page, click **Create Topic**.

      **Figure 12-30** Create Topic

   b. In the **Create Topic** dialog box displayed, configure topic information and click **OK**.

      - **Topic Name**: **SecMaster-Notification** is recommended.
      - **Display Name**: **SecMaster notification topic** is recommended.
      - Retain the default settings for other parameters.
4. Add a subscription.
   a. On the **Topics** page, locate the row that contains the **SecMaster-Notification** topic and click **Add Subscription** in the **Operation** column.
   b. On the displayed **Add Subscription** slide-out panel, configure subscription information and click **OK**.

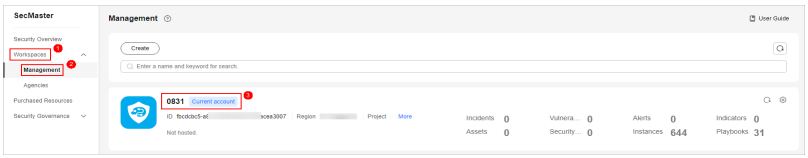
- **Protocol**: Select **Email**.
- **Endpoint**: Enter the email address of the subscription endpoint, for example, username@example.com.

## Step 2: Configure an Asset Connection

Before using the **Auto High-Risk Vulnerability Notification** workflow, you need to configure the **SMN notification token** asset connection first.

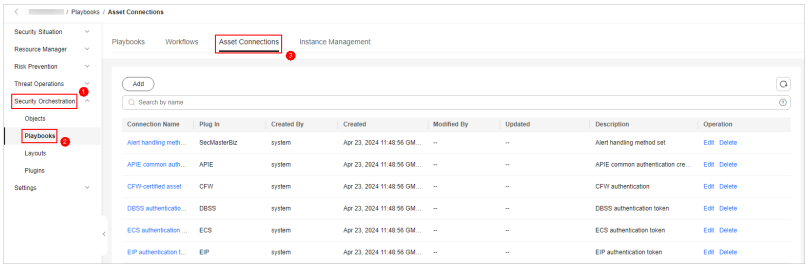
1. Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.
2. In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 12-31** Workspace management page




3. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

**Figure 12-32** Asset connection tab page




4. On the **Asset connection** page, locate the row that contains the **SMN notification token** connection and click **Edit** in the **Operation** column.
5. On the **Edit** panel displayed on the right, set **Attachment Type** to **Other** and configure the endpoint information.

   **endPoint**: Set this field to **https://***{{SMN_ENDPOINT}}***/** v2 **/***{{project_id}}***/notifications/topics/***urn:smn:{{region_id}}:{{project_id}}:SecMaster-Notification***.**

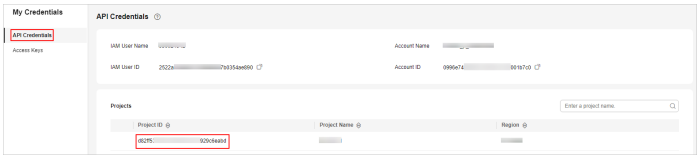
   - *SMN_ENDPOINT*: Enter the domain name for invoking the SMN service. The value is in the format of **endpoint:443**. Obtain the endpoint information from the **Regions and Endpoints**. For example, if you choose **CN North-Beijing4**, enter "smn.cn-north-4.myhuaweicloud.com:443" in this field.
   - *project_id*: Enter the ID of the project that the current workspace belongs to. To view the project ID, take the following steps:

i. Log in to the management console, hover the mouse over the username in the upper right corner, and select **My Credentials** from the drop-down list. The **API Credentials** page is displayed by default.

ii. On the **API Credentials** page, view the project ID in the project list.

**Figure 12-33** Project ID



– *urn:smn:{{region_id}}:{{project_id}}:SecMaster-Notification*: Enter the URN of the SMN topic for sending email notifications. To view the URN, take the following steps:

i. In the upper left corner of the page, click ☰ and choose **Management & Governance** > **Simple Message Notification**.

ii. In the navigation pane on the left, choose **Topic Management** > **Topics**.

iii. In the topic list, view the topic URN of the topic created in **Step 1: Create and Subscribe to a Topic**.

6. Click **OK**.

### Step 3: Configure and Enable the Playbook

In SecMaster, the initial version (V1) of the **Auto High-Risk Vulnerability Notification** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **Automatic notification of high-risk vulnerabilities** playbook is also activated by default. To use it, you only need to enable it.

1. On the **Playbooks** page, locate the row that contains the **Playbooks** playbook and click **Automatic notification of high-risk vulnerabilities** in the **Enable** column.
2. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

## 12.7 Automatic Notification of High-Risk Alerts

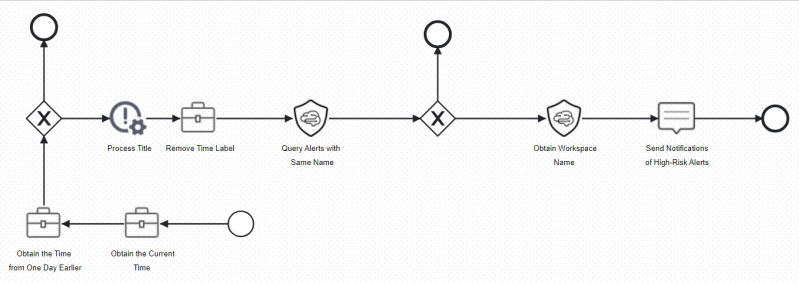
### Playbook Overview

This playbook can automatically notify you of new high-risk alerts after removing repeated ones.

The **Automatic notification of high-risk alerts** playbook has been matched the **Automatic notification of high-risk alerts** workflow. This workflow uses Simple Message Notification (SMN) to send notifications. So you need to create and subscribe to a notification topic in SMN.

**Figure 12-34** Automatic notification of high-risk alerts workflow

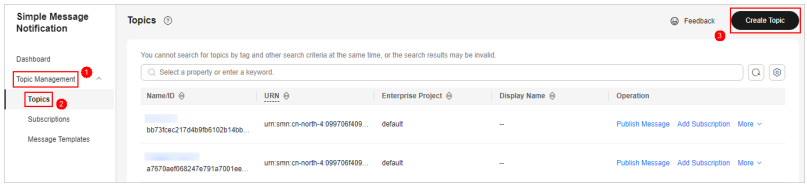



## Step 1: Create and Subscribe to a Topic

The **Automatic notification of high-risk alerts** workflow uses Simple Message Notification (SMN) to send notifications. You need to create and subscribe to a topic for receiving notifications.

1. Log in to the management console.
2. In the upper left corner of the page, click ☰ and choose **Management & Governance** > **Simple Message Notification**.
3. Create a topic.
   a. In the navigation pane on the left, choose **Topic Management** > **Topics**. In the upper right corner of the displayed page, click **Create Topic**.

      **Figure 12-35** Create Topic

   b. In the **Create Topic** dialog box displayed, configure topic information and click **OK**.
      - **Topic Name**: **SecMaster-Notification** is recommended.
      - **Display Name**: **SecMaster notification topic** is recommended.
      - Retain the default settings for other parameters.
4. Add a subscription.
   a. On the **Topics** page, locate the row that contains the **SecMaster-Notification** topic and click **Add Subscription** in the **Operation** column.
   b. On the displayed **Add Subscription** slide-out panel, configure subscription information and click **OK**.
      - **Protocol**: Select **Email**.
      - **Endpoint**: Enter the email address of the subscription endpoint, for example, username@example.com.

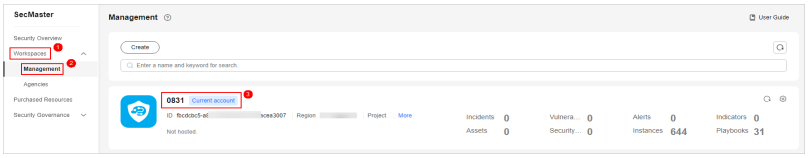
  

## Step 2: Configure and Enable the Playbook

In SecMaster, the initial version (V1) of the **Automatic notification of high-risk alerts** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **Automatic notification of high-risk alerts** playbook is also activated by default. To use it, you only need to enable it.

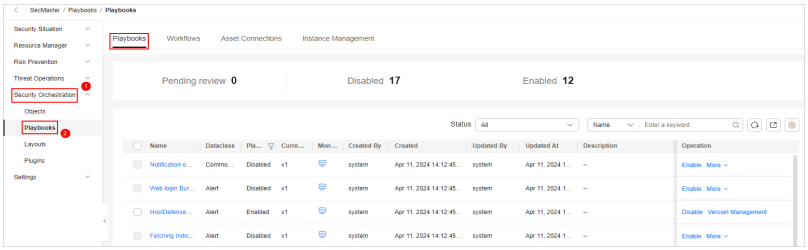
1. Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.
2. In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 12-36** Workspace management page




3. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 12-37** Accessing the Playbooks tab

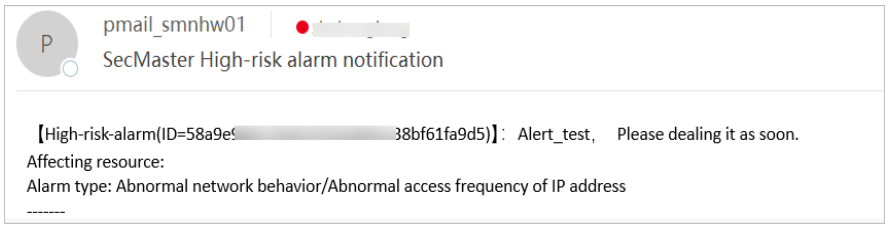



4. On the **Playbooks** page, locate the row that contains the **Automatic notification of high-risk alerts** playbook and click **Enable** in the **Operation** column.
5. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

## Implementation Effect

This following figure shows an email example sent when the playbook was triggered by high-risk alerts.

**Figure 12-38** Alert notification email



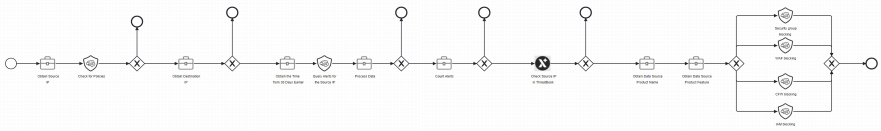
# 12.8 Auto Blocking for High-risk Alerts

## Playbook Overview

This playbook can automatically block source IP addresses identified in high-risk alerts through WAF, CFW, VPC security groups, and IAM.

The **Auto Blocking for High-Risk Alerts** playbook has matched the **Auto Blocking for High-Risk Alerts** workflow.

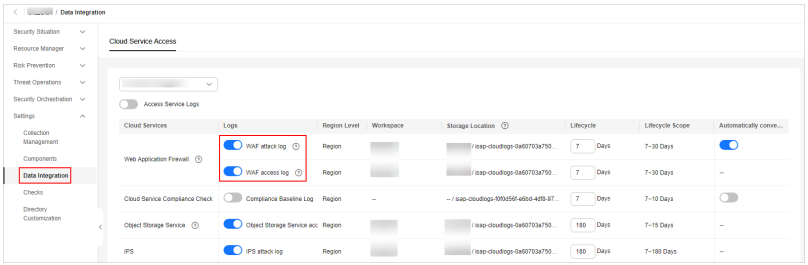
**Figure 12-39** Auto Blocking for High-risk Alerts



## Prerequisites

- You have enabled access to WAF access logs or WAF attack logs on the **Data Integration** page under **Settings** in the current workspace. For details, see **Data Integration**.

  **Figure 12-40** Enabling access to WAF logs

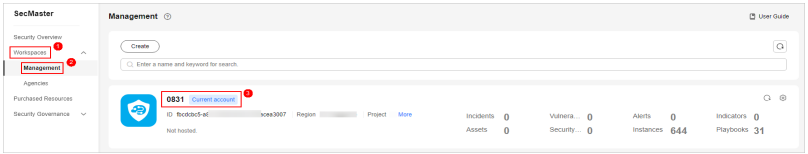
- The ThreatBook quota is sufficient.

## Step 1: Configure an Asset Connection

Before using the **Auto Blocking for High-Risk Alerts** workflow, you need to configure the API key of the ThreatBook plug-in used for the workflow. You can obtain it in the **threatbook authentication token** asset connection.

1. Log in to the management console.
2. Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.
3. In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

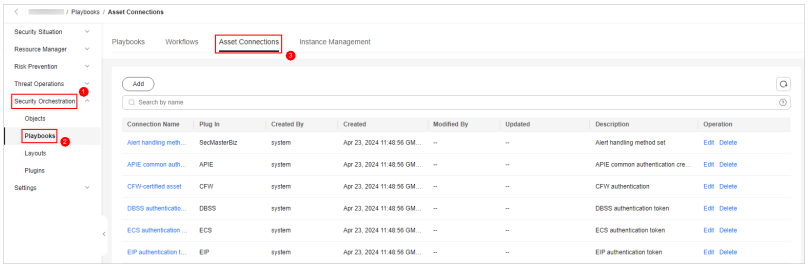
   **Figure 12-41** Workspace management page

4. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**. On the displayed page, click the **Asset Connections** tab.

   **Figure 12-42** Asset connection tab page

5. On the **Asset connection** page, locate the row that contains the **threatbook authentication token** asset connection and click **Edit** in the **Operation** column.
6. On the **Edit** pane sliding out from the right, configure the token.
   - **freeApiKey** or **payApiKey**: Set either of them. The value can be obtained after you buy ThreatBook quota.
   - **redisHost**: IP address of your Redis resources. If there are no IP addresses, leave this parameter blank.
   - **redisPort**: Port of your Redis resources. If there are no such ports, leave this parameter blank.
   - **redisPassword**: Passwords of your Redis resources. If there are no such passwords, leave this parameter blank.
7. Click **OK**.

## Step 2: Configure and Enable the Playbook

In SecMaster, the initial version (V1) of the **Auto Blocking for High-Risk Alerts** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **Auto Blocking for High-Risk Alerts** playbook is also activated by default. To use it, you only need to enable it.

1. On the **Playbooks** page, locate the row that contains the **Auto Blocking for High-Risk Alerts** playbook and click **Enable** in the **Operation** column.
2. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

## Implementation Effect

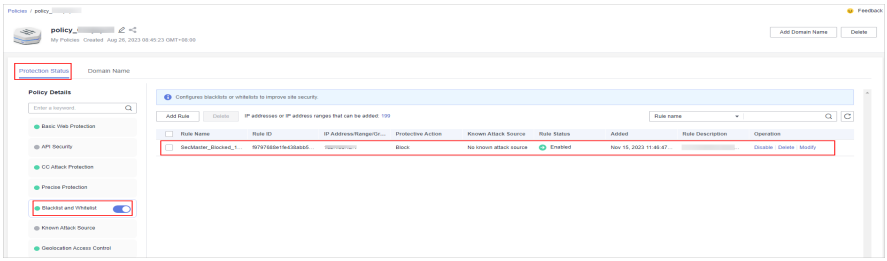
The following uses WAF as an example.

If an IP address is blocked, it will be included in the WAF blacklist. The procedure is as follows:

1. Log in to the WAF console, go to the **Policies** page, and click the name of the target protection policy.
2. On the protection policy details page, click **Blacklist and Whitelist** in the **Protection Details** area. You can see that the IP address is listed in an address group in the WAF blacklist.

**Figure 12-43** Blacklist and Whitelist



# 12.9 Real-time Notification of Critical Organization and Management Operations

## Playbook Overview

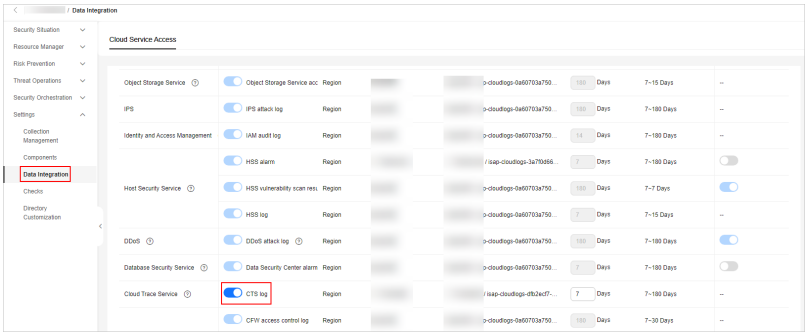
This built-in playbook can notify you of key O&M operations by email in real time.

The **Real-time notification of critical Organization and Management operations** playbook has matched the **Real-time notification of critical Organization and Management operations** workflow. This workflow uses Simple Message Notification (SMN) to send notifications. So you need to create and subscribe to a notification topic in SMN.

## Prerequisites

- You have enabled access to CTS logs on the **Data Integration** page under **Settings** in the current workspace. For details, see **Data Integration**.

**Figure 12-44** Access to CTS logs



- The corresponding O&M defense model has been enabled. For details, see **Step 2: Enable the Alert Model**.

## Step 1: Create and Subscribe to a Topic

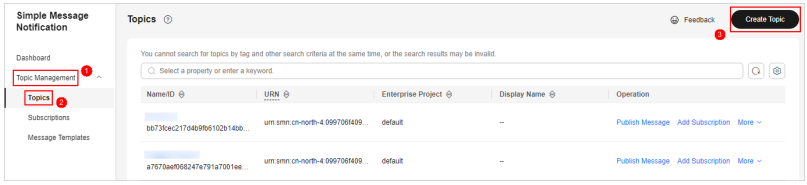
The **Real-time notification of critical Organization and Management operations** workflow uses Simple Message Notification (SMN) to send notifications. You need to create and subscribe to a topic for receiving notifications.

1. Log in to the management console.

2. In the upper left corner of the page, click ☰ and choose **Management & Governance** > **Simple Message Notification**.
3. Create a topic.
   a. In the navigation pane on the left, choose **Topic Management** > **Topics**. In the upper right corner of the displayed page, click **Create Topic**.

      **Figure 12-45** Create Topic

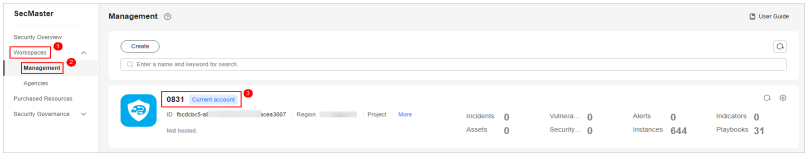
   b. In the **Create Topic** dialog box displayed, configure topic information and click **OK**.
      - **Topic Name**: **SecMaster-Notification** is recommended.
      - **Display Name**: **SecMaster notification topic** is recommended.
      - Retain the default settings for other parameters.
4. Add a subscription.
   a. On the **Topics** page, locate the row that contains the **SecMaster-Notification** topic and click **Add Subscription** in the **Operation** column.
   b. On the displayed **Add Subscription** slide-out panel, configure subscription information and click **OK**.
      - **Protocol**: Select **Email**.
      - **Endpoint**: Enter the email address of the subscription endpoint, for example, username@example.com.

## Step 2: Enable the Alert Model

Before using the **Real-time notification of critical Organization and Management operations** playbook, you need to enable some alert models, including the ones for O&M - Attaching NICs, O&M - Creating VPC peering connections, and O&M- Binding EIPs to resources.

1. Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.
2. In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

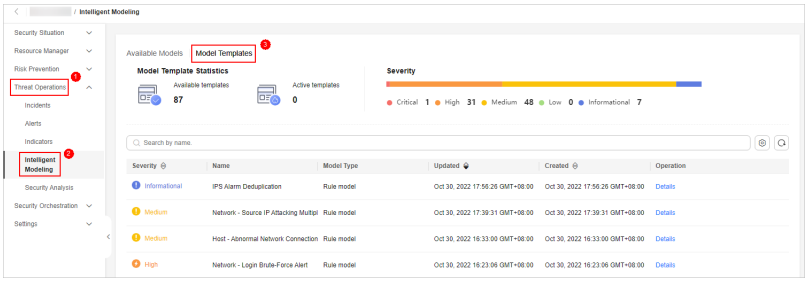
   **Figure 12-46** Workspace management page

3. In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**, and select the **Model Templates** tab.

   **Figure 12-47** Model Templates tab




4. In the model template list, click **Details** in the **Operation** column of the target model template. The template details page is displayed on the right.
5. On the details page, click **Create Model** in the lower right corner. The page for creating an alert model is displayed.
6. On the **Create Threat Model** page, configure basic information about the model.
   - **Pipeline Name**: Select an execution pipeline for the alert model.

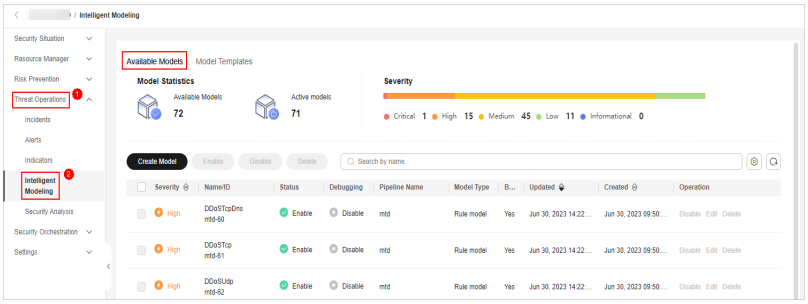
     **Table 12-2** Available pipelines

| Alert Template | Execution Pipeline |
| --- | --- |
| O&M - Attaching a NIC | sec-cts-audit |
| O&M - Creating a VPC peering connection | |
| O&M - Binding EIPs to resources | |

   - Retain default values for other parameters.
7. After the setting is complete, click **Next** in the lower right corner of the page. The page for setting the model logic is displayed.
8. Set the model logic. You are advised to retain the default settings.
9. Complete all settings and click **Next** in the lower right corner of the page.
10. Review all settings and click **OK** in the lower right corner of the page.
11. Repeat **4** to **10** to create alert models with other templates.
12. In the navigation pane on the left, choose **Threat Operations** > **Intelligent Modeling**.

**Figure 12-48** Available Models




13. To enable models in batches, select all models you want to enable and click **Enable** in the upper left corner of the list.

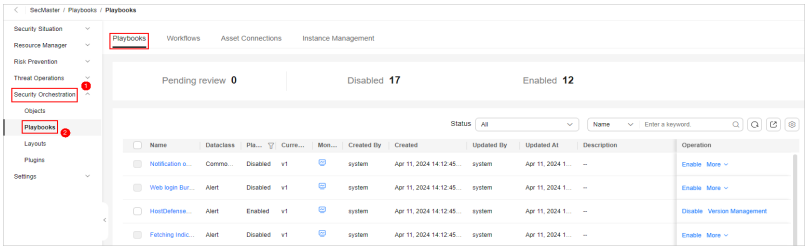
    If the model status changes to **Enable**, the model is successfully started.

## Step 3: Configure and Enable the Playbook

In SecMaster, the initial version (V1) of the **Real-time notification of critical Organization and Management operations** workflow is enabled by default. You do not need to manually enable it. The initial version (V1) of the **Real-time notification of critical Organization and Management operations** playbook is also activated by default. To use it, you only need to enable it.

1. In the navigation pane on the left, choose **Security Orchestration** > **Playbooks**.

**Figure 12-49** Accessing the Playbooks tab



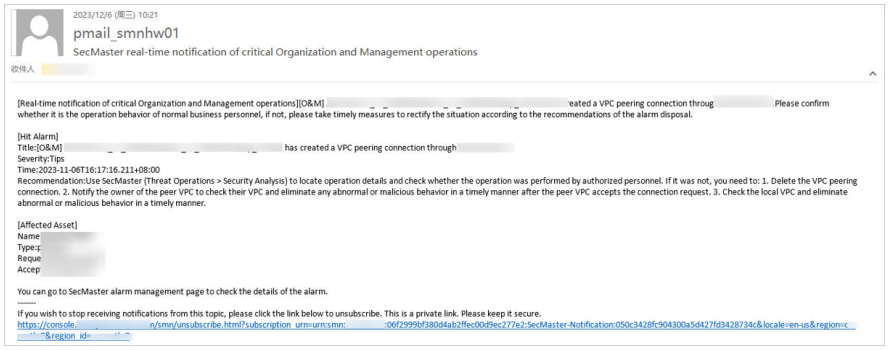

2. On the **Playbooks** page, locate the row that contains the **Real-time notification of critical Organization and Management operations** playbook and click **Enable** in the **Operation** column.
3. In the dialog box displayed, select the initial playbook version v1 and click **OK**.

## Implementation Effect

When a key O&M operation is performed, this playbook is triggered. The playbook will send an email notification as configured. The following is an example.

**Figure 12-50** Operation notifications



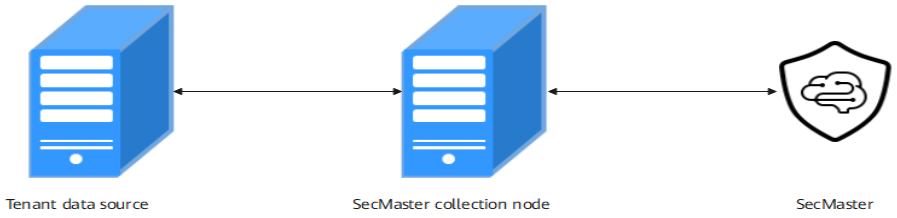
# 13 Settings

## 13.1 Data Collection

### 13.1.1 Data Collection Overview

You can enable access to third-party (non-Huawei Cloud) logs in SecMaster. SecMaster uses Logstash to collect logs from many types of sources. Logs are comprehensively collected for historical data analysis, associated data analysis, and unknown threat detection.

**Figure 13-1** Data Collection

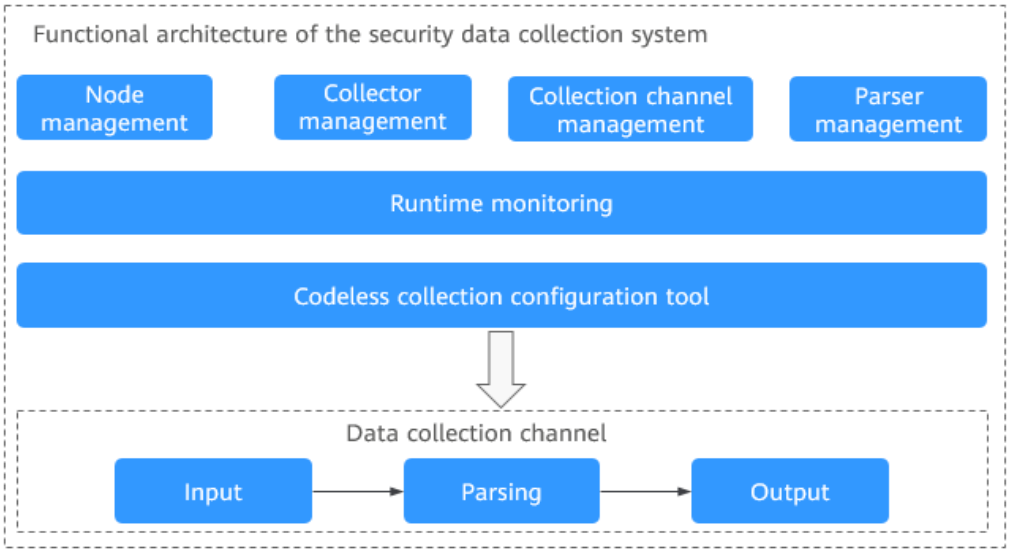



#### Data Collection Principles

The basic principle of data collection is as follows: SecMaster uses a component controller (isap-agent) that is installed on your ECSs to manage the collection component Logstash, and Logstash transfer security data in your organization or between you and SecMaster.

**Figure 13-2** Functional architecture of the collection system




## Description

- Collector: custom Logstash. A collector node is a custom combination of Logstash+ component controller (isap-agent).
- Node: If you install SecMaster component controller isap-agent on an ECS and use IAM to authorize SecMaster to manage the ECS, the ECS is called a node. You need to deliver data collection engine Logstash to managed nodes on the **Components** page.
- Component: A component is a custom Logstash that works as a data aggregation engine to receive and send security log data.
- Connector: A connector is a basic element for Logstash. It defines the way Logstash receives source data and the standards it follows during the process. Each connector has a source end and a destination end. Source ends and destination ends are used for data inputs and outputs, respectively. The SecMaster pipeline is used for log data transmission between SecMaster and your devices.
- Parser: A parser is a basic element for configuring custom Logstash. Parsers mainly work as filters in Logstash. SecMaster preconfigures varied types of filters and provides them as parsers. In just a few clicks on the SecMaster console, you can use parsers to generate native scripts to set complex filters for Logstash. In doing this, you can convert raw logs into the format you need.
- Collection channel: A collection channel is equivalent to a Logstash pipeline. Multiple pipelines can be configured in Logstash. Each pipeline consists of the input, filter, and output parts. Pipelines work independently and do not affect each other. You can deploy a pipeline for multiple nodes. A pipeline is considered one collection channel no matter how many nodes it is configured for.

## Limitations and Constraints

- Currently, the data collection component controller can run on ECSs running the Linux x86_64 or Arm64 architecture.

- Only IAM users can be used to install component controller and check details on the console. The IAM user can have only the minimum permissions assigned. For details, see **Preparations**.

## Collector Specifications

The following table describes the specifications of the ECSs that are selected as nodes in collection management.

**Table 13-1** Collector Specifications

| vCPUs | Memory | System Disk | Data Disk | Referenced Processing Capability |
|---|---|---|---|---|
| 4 vCPUs | 8 GiB | 50 GiB | 100 GiB | 2,000 EPS @ 1 KB<br>4,000 EPS @ 500 B |
| 8 vCPUs | 16 GiB | 50 GiB | 100 GiB | 5,000 EPS @ 1 KB<br>10,000 EPS @ 500 B |
| 16 vCPUs | 32 GiB | 50 GiB | 100 GiB | 10,000 EPS @ 1 KB<br>20,000 EPS @ 500 B |
| 32 vCPUs | 64 GiB | 50 GiB | 100 GiB | 20,000 EPS @ 1 KB<br>40,000 EPS @ 500 B |
| 64 vCPUs | 128 GiB | 50 GiB | 100 GiB | 40,000 EPS @ 1 KB<br>80,000 EPS @ 500 B |

**NOTE**

The ECS must have at least two vCPUs and 4 GB of memory. A disk of at least 100 GB must be attached as the directory disk.

The log volume usually increases in proportion to the server specifications. Generally, you are advised to increase the log volume based on the specifications in the table. If there is huge pressure on a collector, you can deploy multiple collectors and manage them in a unified manner through collection channels. This can distribute the log forwarding pressure across collectors.

Before installing the component controller, you are advised to mount a disk and use the disk partitioning script to allocate the disk. To ensure the installation and running of Logstash, the directory partition must have more than 100 GB of free space.

## Log Source Limit

You can add as many as log sources you need to the collectors as long as your cloud resources can accommodate those logs. You can scale cloud resources anytime to meet your needs.

## Data Collection Process

**Figure 13-3** Data collection process

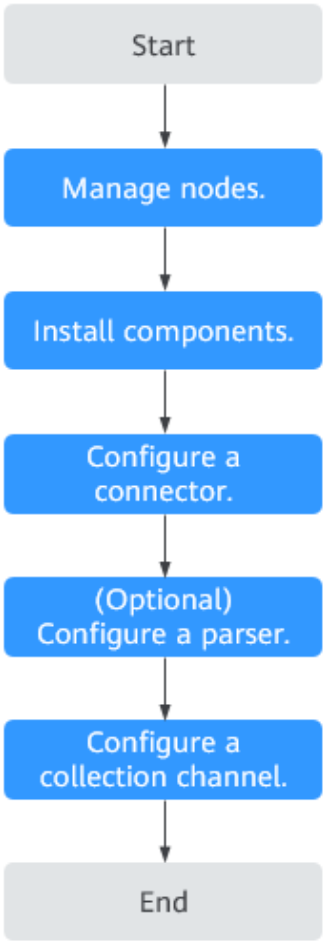



**Table 13-2** Description of the data collection process

| No. | Step | Description |
| --- | --- | --- |
| 1 | **Managing Nodes** | Select or purchase an ECS and install the component controller on the ECS to complete node management. |
| 2 | **Installing Components** | Install data collection engine Logstash on the **Components** tab to complete component installation. |
| 3 | **Configuring Connectors** | Configure the source and destination connectors. Select a connector as required and set parameters. |
| 4 | **(Optional) Configuring a Parser** | Configure codeless parsers on the console based on your needs. |

| No. | Step | Description |
| --- | --- | --- |
| 5 | Configuring a Collection Channel | Configure the connection channels, associate it with a node, and deliver the Logstash pipeline configuration to complete the data collection configuration. |
| 6 | Verifying the Collection Result | After the collection channel is configured, check whether data is collected.<br>If logs are sent to the SecMaster pipeline, you can query the result on the SecMaster **Security Analysis** page. |

## Data Collection Configuration Removal Process

**Figure 13-4** Data collection configuration removal process

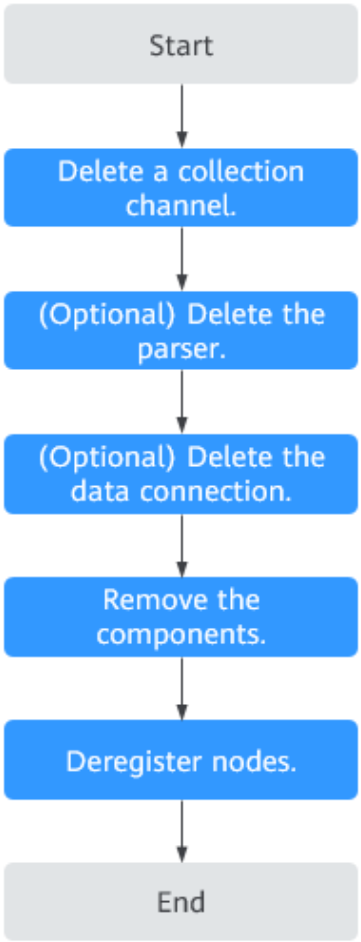


**Table 13-3** Description of the data collection configuration removal process

| No. | Step | Description |
| --- | --- | --- |
| 1 | Deleting a collection channel | On the **Collection Channels** page, stop and delete the Logstash pipeline configuration.<br>Note: All collection channels on related nodes must be stopped and deleted first. |
| 2 | (Optional) Deleting a parser | If a parser is configured, delete it on the **Parsers** tab. |
| 3 | (Optional) Deleting a data connection | If a data connection is added, delete the source and destination connectors on the **Connections** tab. |
| 4 | Removing a component | Delete the collection engine Logstash installed on the node and remove the component. |
| 5 | Deregistering a node | Remove the component controller to complete node deregistration.<br>Note: Deregistering a node does not delete the ECS and endpoint resources. If the data collection function is no longer used, you need to manually release the resources. For details, see **How Do I Release an ECS or VPC Endpoint?** and **Deleting a VPC Endpoint**. |

# 13.1.2 Component Management

## 13.1.2.1 Creating and Editing a Node

### Scenario

This topic describes how to create and edit a data collection node.

**CAUTION**

The recommended installation path is **/opt/cloud**. This section also uses this path as an example. You can use other installation paths. Make sure change the path when you refer to the example here. For example, if the installation path is **/tmp**, change the installation path in this section to **/tmp**.

### Preparations

- **Creating an IAM user with the minimum permission**

  IAM is used for data collection authorization. You need to create an IAM user with the minimum permission to access SecMaster APIs and disable verification rules such as MFA for the user.

a. Log in to the management console.

b. Click  in the upper left corner of the page and choose **Management & Governance** > **Identity and Access Management**.

c. Create a user group.

   i. In the navigation pane on the left, choose **User Groups**. On the displayed page, click **Create User Group** in the upper right corner.

   ii. On the **Create User Group** page, specify user group name and description.

   - **Name**: Set this parameter to **Tenant collection**.
   - **Description**: Enter a description.

   iii. Click **OK**.

d. Assign permissions to the user group.

   i. In the navigation pane on the left, choose **Permissions** > **Policies/Roles**. In the upper right corner of the displayed page, click **Create Custom Policy**.

   ii. Configure a policy.

   - **Policy Name**: Set this parameter to **Least permission policy for tenant collection**.
   - **Policy View**: Select **JSON**.
   - **Policy Content**: Copy the following content and paste it in the text box.

```
{
   "Version": "1.1",
   "Statement": [
      {
         "Effect": "Allow",
         "Action": [
            "secmaster:workspace:get",
            "secmaster:node:create",
            "secmaster:node:monitor",
            "secmaster:node:taskQueueDetail" ,
            "secmaster:node:updateTaskNodeStatus"
         ]
      }
   ]
}
```

   iii. Click **OK**.

e. Assign permissions to the created user group.

   i. In the navigation pane on the left, choose **User Groups**. On the displayed page, click **Tenant collection**.

   ii. On the **Permissions** tab, click **Authorize**.

   iii. On the **Select Policy/Role** page, search for and select the **Least permission policy for tenant collection** added in **d**, and click **Next**.

   iv. Set the minimum authorization scope. Select **All resources** for **Scope**. After the setting is complete, click **OK**.

   v. Verify the authorization. The policy will be listed on the page.

f. **Create a user**.

   During the creation, enable **Programmatic access**, **Access key**, and **Password**.

g. Add the operation account to the user group.

i. In the navigation pane on the left, choose **User Groups**.

ii. In the **Tenant collection** user group row, click **Manage User** in the **Operation** column.

iii. In the displayed **Manage User** dialog box, select users added in **f**.

iv. Click **OK**.

- **Checking the disk space**

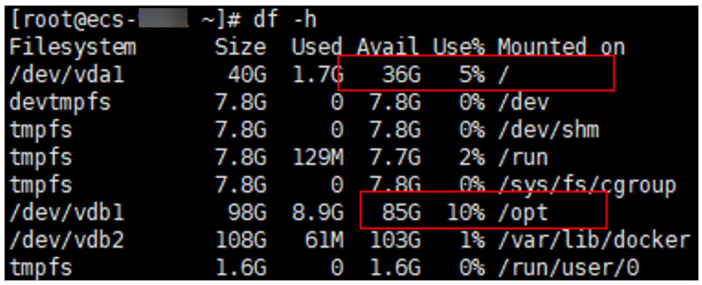
  Check the disk space in the **/opt** directory of the ECS where you will install the component controller and make sure the space is not smaller than 100 GB.

  a. Remotely log in to the ECS where you want to install the component controller.

  - Log in to the ECS console, locate the target server, and click **Remote Login** in the **Operation** column to log in to the server. For details, see **Login Using VNC**.
  - If your server has an EIP bound, you can also use a remote management tool, such as PuTTY or Xshell, to log in to the server and install the component controller on the server as user **root**.

  b. Run the **df -h** command to check whether more than 100 GB space is reserved in the **/opt** directory of the disk. At least 2 vCPUs and 4 GB of memory are required.

  **Figure 13-5** Checking disks




  If the memory is insufficient, stop some applications with high memory usage or expand the memory capacity before the installation. For details about capacity expansion, see **Modifying ECS Specifications**.

  To ensure that the **/opt** directory has more than 100 GB free disk space allocated, you can use the disk partitioning script to allocate the disk. For details, see **Partitioning a Disk**.

## Creating a Node

**Step 1** Check operations in **Preparations** and log in to the management console.

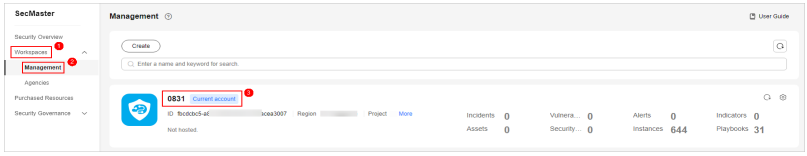
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

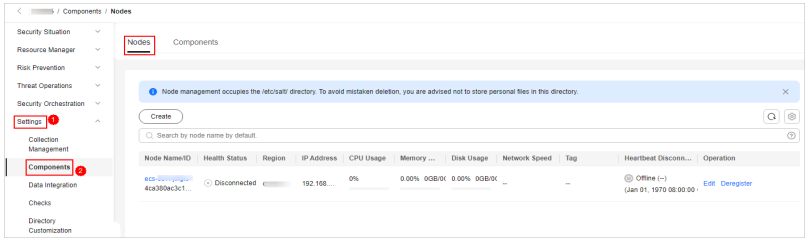
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-6** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**.

**Figure 13-7** Node management page




**Step 6** On the **Nodes** tab, click **Create**. The **Create Node** page is displayed on the right.

**Step 7** On the **Create Node** page, configure a channel.

1. In the **Network Channel Settings** area, select the VPC and subnet the target ECS belongs to.
2. In the network channel list, click **Config** in the **Operation** column of each channel. In the displayed confirmation dialog box, click **Confirm**.

NOTE

VPC endpoints you use for log collection are billed. For details about pricing, see **Billing Overview**.

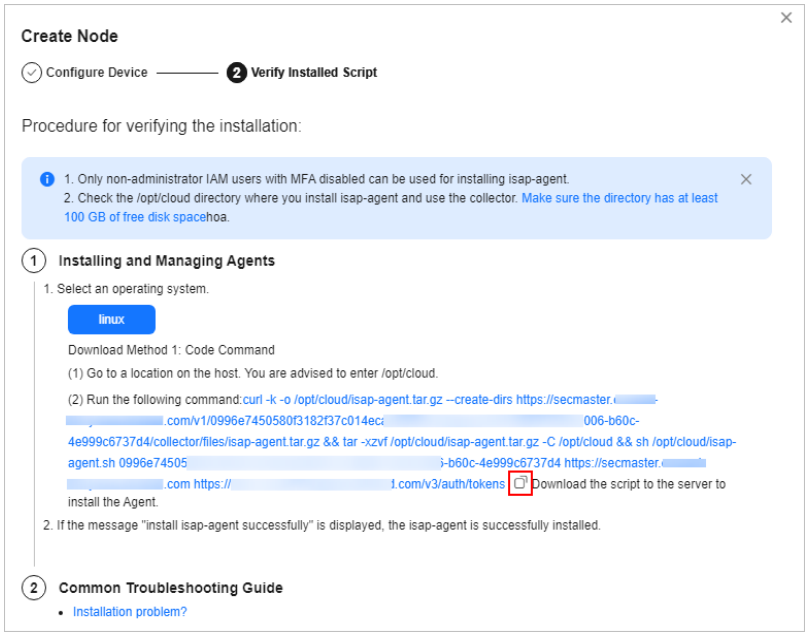
If you no longer need to collect log data, you need to manually release the VPC endpoints used. For details, see **Deleting a VPC Endpoint**.

**Step 8** Click **Next** in the lower right corner of the page to go to the **Script Installation Verification** page.

**Step 9** Select the ECS OS, follow the step, and click ⧉ to copy the command for installing the component controller.

**Figure 13-8** Copying the installation command

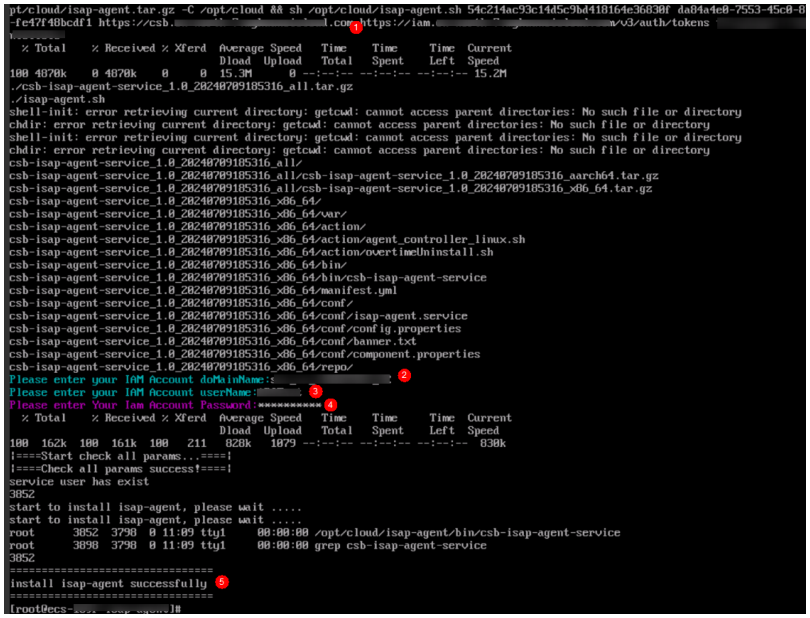



**Step 10** Install the component controller.

1. Remotely log in to the ECS where you want to install the component controller.
   - Log in to the ECS console, locate the target server, and click **Remote Login** in the **Operation** column to log in to the server. For details, see **Login Using VNC**.
   - If your server has an EIP bound, you can also use a remote management tool, such as PuTTY or Xshell, to log in to the server and install the component controller on the server as user **root**.
2. Run the command copied in **Step 9** as user **root** to install the controller on the ECS.
3. Enter the IAM username and password created in **Preparations** as prompted.
4. If **install isap-agent successfully** is displayed, the component controller is installed.

**Figure 13-9** Installed

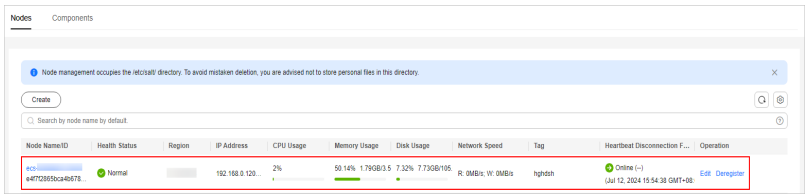



If the installation fails, rectify the fault by referring to **Troubleshooting the Component Controller Installation Failure**. If the system displays a message indicating that the memory is insufficient, rectify the fault by referring to **Partitioning a Disk**.

**Step 11** After confirming that installation has been completed, return to the page for adding nodes and click **Confirm** in the lower right corner of the page.

You can view new nodes on the **Nodes** tab.

**Figure 13-10** New node added




**----End**

## Editing a Node

After a node is added, you can only modify the supplementary information about the node.

**Step 1** Log in to the management console.

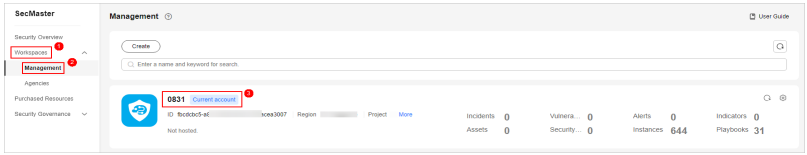
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

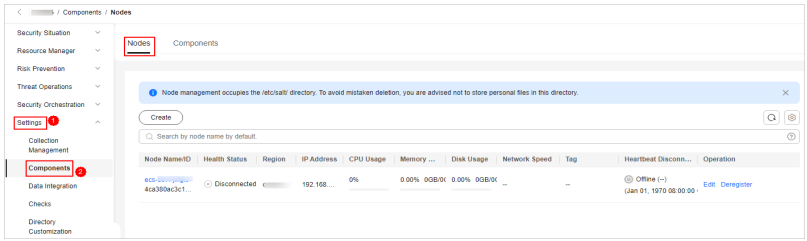
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-11** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**.

**Figure 13-12** Node management page




**Step 6** On the **Nodes** tab, locate the row that contains the target node and click **Edit** in the **Operation** column.

**Step 7** On the **Edit Node** panel, edit the node information.

**Table 13-4** Parameters of node information

| Parameter | Description |
| --- | --- |
| Data Center | User-defined data center name |
| Network Plane | Select the network plane of the node. |
| Tag | Set the tag for the node. |
| Description | Description of a user-defined node. |
| Maintained By | Select a node owner. |

**Step 8** Click **Confirm**.

**----End**

## 13.1.2.2 Partitioning a Disk

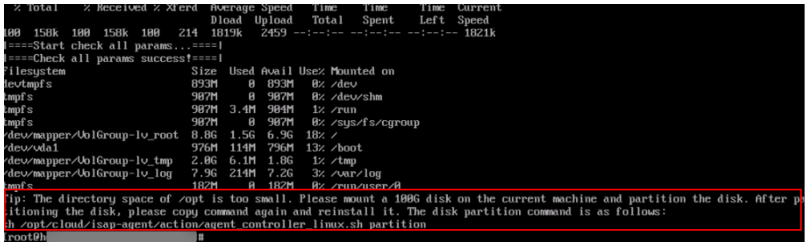
To keep collectors healthy for you to collect security data, there are some limitations and constraints.

- Only non-administrator IAM users can be used for installing isap-agent.
- Make sure the **/opt/cloud** directory where you install isap-agent and use the collector has at least 100 GB of free disk space.

When you install the isap-agent in the **/opt** directory on an ECS, if the message shown in **Figure 13-13** is displayed, the space of the **/opt** directory is insufficient.

**Figure 13-13** Insufficient disk space error




To ensure at least 100 GB space is available in the directory where the component controller isap-agent is installed, you may need to partition the disk.

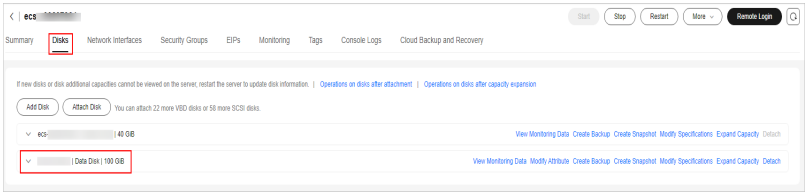
The procedure is as follows:

**Step 1** Buy and attach a disk.

1. Log in to the management console.
2. Click  in the upper left corner and select the region and project.
3. In the upper left corner of the page, click  and choose **Compute** > **Elastic Cloud Server**. In the ECS list, click the name of the ECS where isap-agent is installed to go to the ECS details page.
4. Click the **Disks** tab. On the displayed page, click **Add Disk**.
5. On the displayed page, buy a disk with **Disk Specifications** set to **100 GiB**.

   For more details, see **Purchasing an EVS Disk**.
6. After the disk is successfully attached, you can view the attached disk on the **Disks** tab for the ECS.

   **Figure 13-14** Disks attached

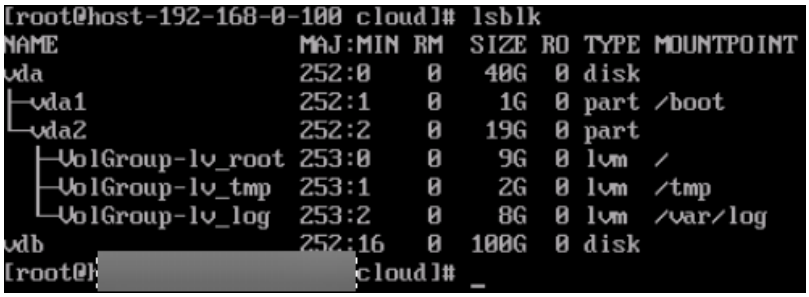
   After a data disk is attached to a server, you must log in to the server and initialize the disk before you can use the disk. For details about how to initialize a data disk, see **Initializing an EVS Data Disk**.

**Step 2** Partition the disk.

1. Log in to the node where isap-agent is installed and run the following command to check the disk usage:

   **lsblk**

**Figure 13-15** Checking the disk size on a node

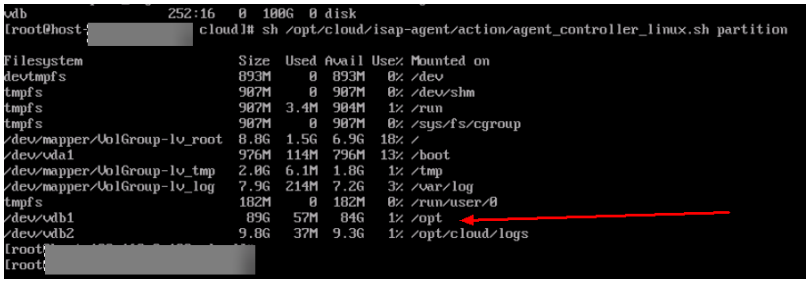



2. Run the following command to partition the disk:

   **sh /opt/cloud/isap-agent/action/agent_controller_linux.sh partition**

   If the following information is displayed, the disk is partitioned successfully.

**Figure 13-16** Disk partitions




**Step 3** Reinstall the component controller isap-agent. For details, see **Managing Nodes**.

**----End**

## 13.1.2.3 Managing Nodes

## Scenarios

This topic describes how to perform operations such as **Viewing Nodes** and **Deregistering a Node**.

## Viewing Nodes

**Step 1** Log in to the management console.

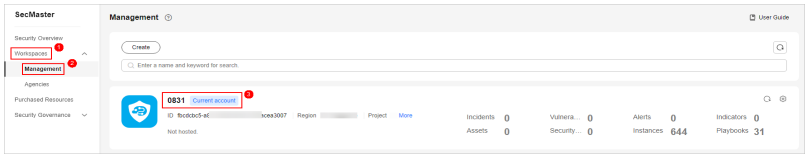
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

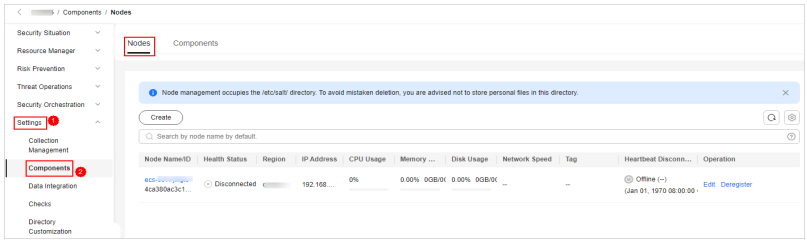
  

**Figure 13-17** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**.

**Figure 13-18** Node management page




**Step 6** On the **Nodes** tab, view the details about nodes.

If there are many nodes displayed, use filters to search for a specific one.

**Table 13-5** Collection node parameters

| Parameter | Description |
| --- | --- |
| Node Name/ID | Name or ID of a node |
| Health Status | Node health status |
| Region | Region where the node is located |
| IP Address | Node IP address |
| CPU Usage | CPU usage of the node |
| Memory Usage | Memory usage of the node |
| Disk Usage | Node disk usage |
| Network Speed | Network rate of a node |
| Label | Label information of a node |
| Heartbeat Expiration Mark | Indicates whether the node is disconnected due to heartbeat expiration.<br>If no heartbeat message is sent within 15 minutes, the node is marked as **Disconnected**. |

**Step 7** To view details about a node, click the node name.

**----End**

## Deregistering a Node

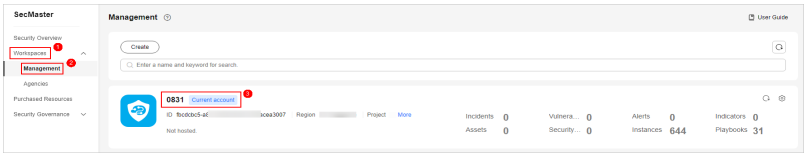
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

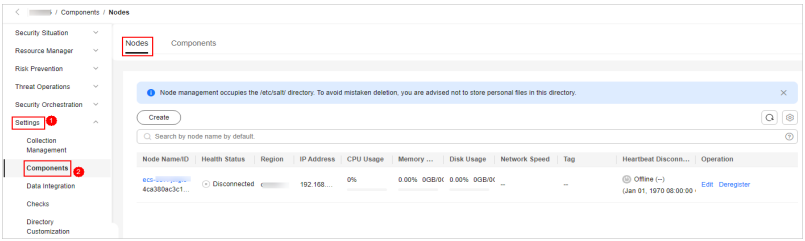
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-19** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**.

**Figure 13-20** Node management page




**Step 6** On the **Nodes** tab, locate the row that contains the target node and click **Deregister** in the **Operation** column.

**Step 7** In the displayed dialog box, click **OK**.

NOTE

Only the node is deregistered. The ECS and endpoint interface resources are not deleted. If you no longer need the data collection function, you need to manually release those resources. For details, see **Deleting ECSs** and **Deleting a VPC Endpoint**.

**----End**

## 13.1.2.4 Configuring a Component

## Scenario

This topic describes how to configure a component.

## Procedure

**Step 1** Log in to the management console.

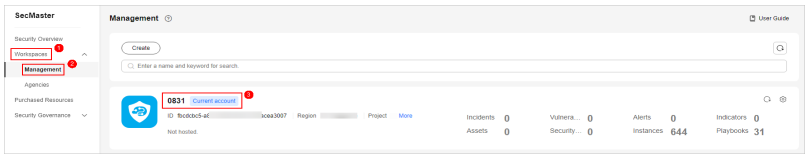
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

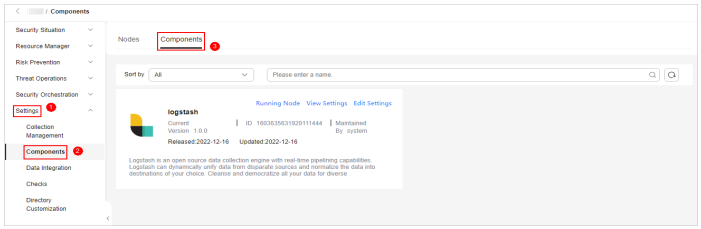
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-21** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**. Then, select the **Components** tab.

**Figure 13-22** Accessing the Components tab




**Step 6** On the **Components** tab page, click **Edit Settings** in the upper right corner of the component to be viewed. The configuration management page of the component is displayed on the right.

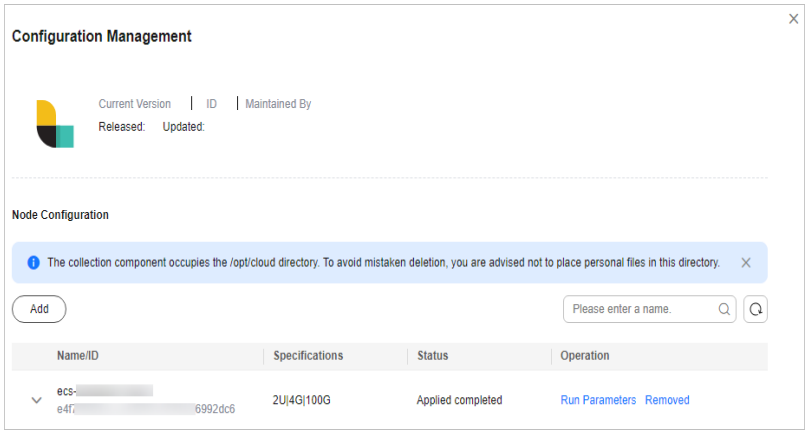
**Step 7** In the **Node Configuration** area, click **Add** in the upper left corner of the node list. In the **Add Node** dialog box displayed, select a node and click **OK**.

**Step 8** Click **Save and Apply** in the lower right corner of the page.

Wait for a period of time. When the component status changes to **Applied completed**, the Logstash collector has been installed on the current node.

**Figure 13-23** Configuration completed




**----End**

## 13.1.2.5 Logstash Configuration Description

The data collector Logstash for tenant-side collection is customized by SecMaster. In different transmission scenarios, you can adjust parameter settings to obtain an optimal performance. This topic mainly covers how to tune log4j2.properties and jvm.options.

## JVM Running Memory Configuration

**Figure 13-24** jvm.options

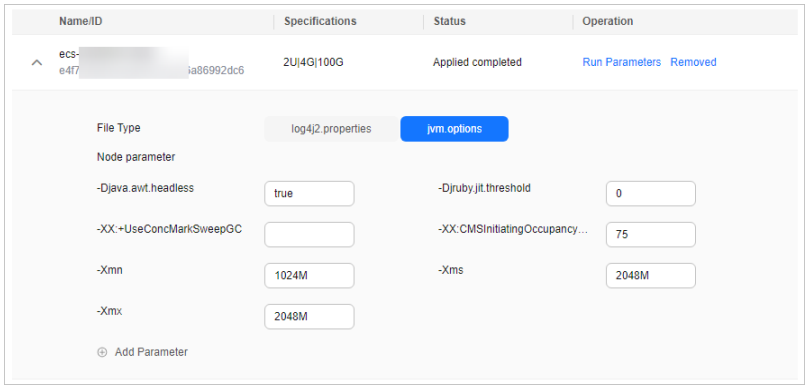



**Table 13-6** JVM running memory configuration

| Parameter | Configuration Type | Default Value | Description |
| --- | --- | --- | --- |
| -Djava.awt.headless | boolean | true | Server side configuration. If it is set to "true", you can run an application in headless mode (without a keyboard or display). This parameter is used for data related services. |

| Parameter | Configuration Type | Default Value | Description |
| --- | --- | --- | --- |
| -XX:+UseConcMarkSweepGC | boolean | false | Concurrent Mark Sweep (CMS) garbage collector for the old generation. |
| -Xmn | String | 1024M | The size of the heap for the young generation. If the collection pressure is high, adjust this value. The larger the heap size for the young generation, the smaller the number of garbage collection times, and the higher the collection efficiency. **Xmn** must be smaller than **Xmx**. |
| -Xmx | String | 2048M | The total (maximum) heap size. A proper **Xmx** can prevent JVM from using excessive system resources to keep the application available and stable. If this parameter is set to a very small value, the collector will start garbage collection over and over again. This will affect collector performance. |
| -Djruby.jit.threshold | number | 0 | The specified method invocation count. When this threshold is reached, the JIT compiler of JRuby attempts to compile the local code of the method. You can adjust this value to obtain an optimal balance between startup time (compilation cost) and execution time performance |
| -XX:CMSInitiatingOccupancyFraction | number | 75 | CMS garbage collector. When the old generation usage reaches 75%, CMS garbage collection is triggered. |
| -Xms | String | 20248M | The initial Java heap size. When JVM starts, it attempts to allocate the specified amount of memory to the heap. A proper initial heap size will free you from frequent heap size adjustments while the application is running. |

## log4j2 log configuration

**Figure 13-25** log4j2.properties

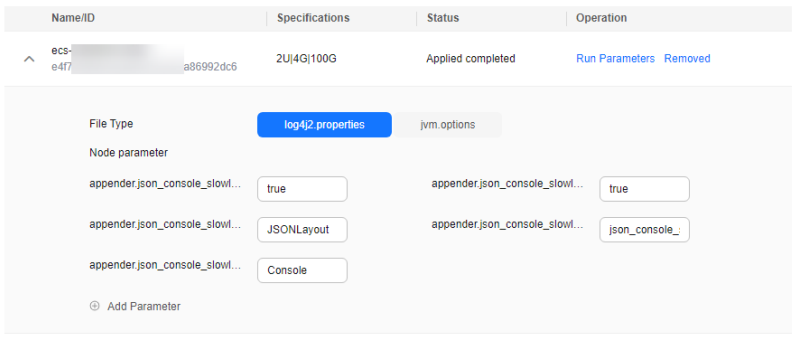



**Table 13-7** log4j2 log configuration

| Parameter | Configuration Type | Default Value | Description |
| --- | --- | --- | --- |
| appender.json_console_slowlog.layout.compact | boolean | true | JSON slow query log output. |
| appender.json_console_slowlog.layout.type | String | JSONLayout | Layout type of JSON slow query logs. Retain the default value. |
| appender.json_console_slowlog.type | String | Console | Type of JSON slow query logs. Default value: **Console**, which means that logs are directly displayed on the console. |
| appender.json_console_slowlog.layout.eventEol | boolean | true | JSON slow query log output. |
| appender.json_console_slowlog.name | String | json_console_slowlog | Name of the JSON slow query log. Retain the default value. |

## 13.1.2.6 Viewing Component Details

### Scenarios

This topic describes how to view component details.

### Procedure

**Step 1** Log in to the management console.

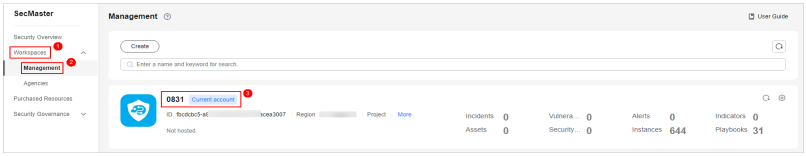
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

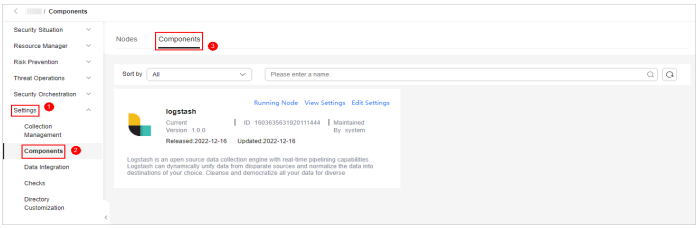
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-26** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Components**. Then, select the **Components** tab.

**Figure 13-27** Accessing the Components tab




**Step 6** On the **Components** page, view the component details.

- **Running Node**

  Click the **Running Node** in the upper right corner of a component. The running node information of the component is displayed on the right.

- **View Settings**

  Click **View Settings** in the upper right corner of the component to be viewed. The configuration details about the component are displayed on the right.

- **Edit Settings**

  a. Click **Edit Settings** in the upper right corner of the component to be viewed. The **Configuration Management** panel of the component is displayed on the right.

  b. In the **Node Configuration** area, edit the node configuration information.

  - Adding a node: Click **Add** in the upper left corner of the node list. In the **Add Node** dialog box displayed, select a node and click **OK**.
  - Editing node parameters: Click next to the node name to expand the node configuration information and edit the node parameters.
  - Running parameters: Locate the row that contains the target node, click **Run Parameter** in the **Operation** column.
  - Removing a node: Locate the row that contains the target node and click **Removed** in the **Operation** column.

- Batch deletion: Select the nodes you want to remove and click **Batch Remove** in the upper left corner of the list.
- Viewing historical versions: Click **Historical Version** in the lower right corner of the panel.

c. Click **Save and Apply** in the lower right corner of the page.

**----End**

# 13.1.3 Collection Management

## 13.1.3.1 Adding and Editing a Connection

### Scenario

This topic describes how to add and edit a connection.

### Limitations and Constraints

- After a data connection is added, only the parameters of the selected data source type can be modified. The data source type cannot be changed.

### Adding a Connection

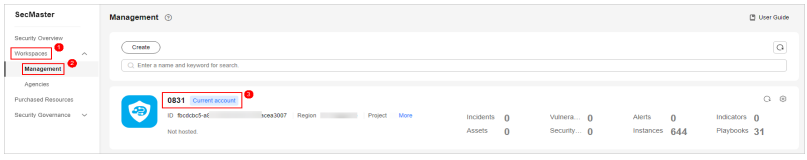
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

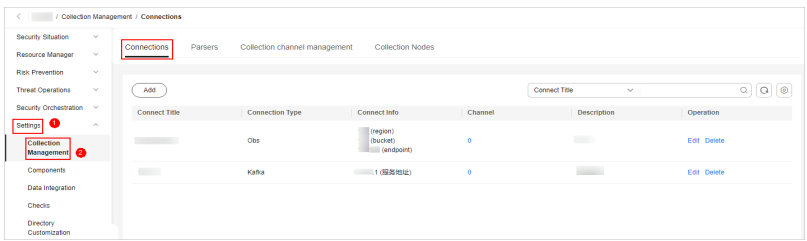
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-28** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**.

**Figure 13-29** Accessing the connection management page



**Step 6** Add a data connection source.

1. On the **Connections** tab, click **Add**.
2. Configure the data connection source details.
   - **Connection Method**: Select **Source**.
   - **Connection Type**: Select the type of the data source.
   - Set other parameters based on the selected connection type. For details about the parameters, see **Source Connectors**.
3. After the setting is complete, click **Confirm** in the lower right corner of the page.

**Step 7** Add a data connection destination.

1. On the **Connections** tab, click **Add**.
2. Configure the data connection destination details.
   - **Connection Method**: Select **Destination**.
   - **Connection Type**: Select the type of the data destination.
   - Set other parameters based on the selected connection type. For details about the parameters, see **Destination Connectors**.
3. After the setting is complete, click **Confirm** in the lower right corner of the page.

**----End**

## Editing a Data Connection

NOTE

After a data connection is added, only the parameters of the selected data source type can be modified. The data source type cannot be changed.

For example, if you select **File** as the data source type when adding a data connection, you can modify only the parameters in the file type but cannot change the **File** type.

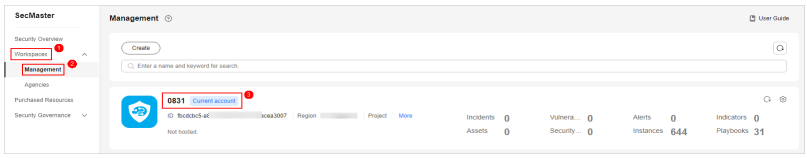
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

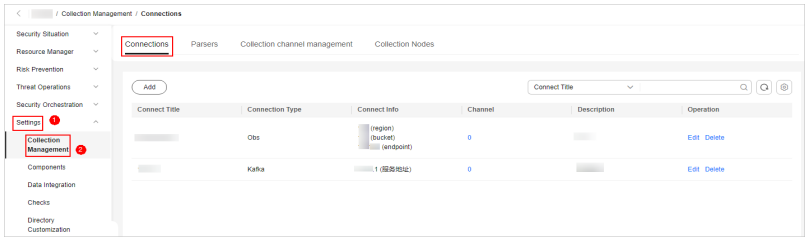
**Figure 13-30** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**.

**Figure 13-31** Accessing the connection management page




**Step 6** On the **Connections** page, locate the row that contains the target connection and click **Edit** in the **Operation** column.

**Step 7** On the displayed page, edit the data source type.

**Step 8** Check the settings and click **Confirm** in the lower right corner of the page.

**----End**

## 13.1.3.2 Rules for Configuring Connectors

## Source Connectors

SecMaster provides a wide range of source connectors for you to collect security data from your security products.

**Table 13-8** Source connector types

| Connector Type | In-use Logstash | Description |
| --- | --- | --- |
| TCP | tcp | This collector is used to receive TCP logs. For details about the configuration rules, see **Table 13-9**. |
| User file | file | This collector is used to receive logs in local files. For details about the configuration rules, see **Table 13-10**. |
| UDP | udp | This collector is used to receive UDP logs. For details about the configuration rules, see **Table 13-11**. |
| OBS | obs | This collector is used to obtain log data from an OBS bucket. For details about the configuration rules, see **Table 13-12**. |
| Kafka | kafka | This collector is used to obtain Kafka network log data. For details about the configuration rules, see **Table 13-13**. |

| Connector Type | In-use Logstash | Description |
| --- | --- | --- |
| SecMaster | pipe | This collector is used to transfer SecMaster data to you. For details about the configuration rules, see **Table 13-14**. |
| Elasticsearch | elasticsearch | This collector is used to read data from the Elasticsearch cluster. For details about the configuration rules, see **Table 13-15**. |

**Table 13-9** TCP connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
| --- | --- | --- | --- | --- | --- |
| Port | port | number | 1025 | Yes | Port number of the collection node. |
| Codec | codec | string | plain | Yes | Encoding format<br>• **Plain**: Read the original content.<br>• **Json**: processes the content in JSON format. |
| Packet label | type | string | tcp | Yes | Used to label logs. |
| SSL_enable | ssl_enable | boolean | false | No | Whether to enable SSL verification. |
| SSL certificate | ssl_cert | file | null | No | Certificate. |
| SSL key | ssl_key | file | -- | No | SSL key file. |
| SSL key passphrase | ssl_key_passphrase | string | -- | No | SSL certificate key. |

**Table 13-10** File connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| File path | path | array | /opt/cloud/logstash/config/in.txt | Yes | Path to obtain files. |
| Start position | start_position | string | beginning | Yes | Read start position. |
| Decoding type | codec | string | json | Yes | Decoding type<br>• **Plain**: Read the original content.<br>• **Json**: Processes the content in JSON format. |
| Packet label | type | string | file | No | Packet label, which is used for subsequent processing. |
| Enable metric | enable_metric | boolean | true | No | Whether to enable metrics. |

**Table 13-11** UDP connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Port | port | number | 1025 | Yes | Port for the collection node. |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Codec | codec | string | plain | Yes | Decoding type<br>• **Plain**: Read the original content.<br>• **Json**: Processes the content in JSON format. |
| Packet label | type | string | udp | No | Packet label, which is used for subsequent processing. |
| Queue size | queue_size | number | 20000 | No | Queue size. |
| Number of bytes in the receiving buffer | receive_buffer_bytes | number | 20000 | No | Number of bytes in the receiving buffer |
| Buffer size | buffer_size | number | 10000 | No | Buffer size |
| Worker thread | workers | number | 1 | No | Number of worker threads |

**Table 13-12** OBS connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| region | region | string | -- | Yes | region |
| Bucket | bucket | string | demo-obs-sec-mrd-datas | Yes | OBS bucket name |
| endpoint | endpoint | string | https://obs.huawei.com | Yes | Endpoint address. Note that https must be added. |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| AK | ak | string | -- | No | AK |
| SK | sk | string | -- | No | SK |
| Prefix | prefix | string | /test | No | Prefix of the folder for log reads |
| Cache folder | temporary_directory | string | /temp | No | Cache folder for log reads |
| Packet label | type | string | -- | No | Packet label |
| Memory path | sincedb_path | string | /opt/cloud/logstash/pipeline/file_name | No | Log read position. This parameter is used to prevent full-text traversal caused by restart. |

**Table 13-13** Kafka connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Service address | bootstrap_servers | string | -- | Yes | Service address |
| Topics | topics | array | logstash | Yes | Topics. Multiple topics can be consumed at the same time. |
| Consumer threads | consumer_threads | number | 1 | Yes | Consumer threads |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
| --- | --- | --- | --- | --- | --- |
| Auto offset reset | auto_offset_reset | string | latest | No | Offset reset<br>• **Earliest**: Read the earliest message.<br>• **Latest**: Read the latest messages. |
| SSL certificate | ssl_truststore_location | file | -- | No | SSL certificate<br>This parameter is mandatory when SSL is selected. |
| SSL private key | ssl_truststore_password | string | -- | No | SSL private key<br>This parameter is mandatory when SSL is selected. |
| Security protocol | security_protocol | string | SASL_SSL | No | Security protocol |
| SASL connection configuration | sasl_jaas_config | string | -- | No | SASL connection configuration |
| Encrypted | is_pw_encrypted | string | false | No | Encrypted |
| SASL mechanism | sasl_mechanism | string | PLAIN | No | sasl_mechanism |
| Group ID | group_id | string | -- | No | group_id |

Set **sasl_jaas_config** based on the Kafka specifications. Example:

- Plaintext connection configuration
  org.apache.kafka.common.security.plain.PlainLoginModule required username='*kafka user*'password='*kafka password*';
- Ciphertext connection configuration
  org.apache.kafka.common.security.scram.ScramLoginModule required username='*kafka user* name'password='*kafka password*';

**Table 13-14** Pipe connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Type | type | string | Tenant | Yes | Type |
| Pipeline | pipeId | string | -- | Yes | Pipeline ID |
| domain_name | domain_name | string | domain_name | Yes | Domain name of the IAM user |
| User_name | user_name | string | user_name | Yes | Username of the IAM user |
| Password | user_password | string | -- | Yes | Username of the IAM user |
| Subscription type | subscription_type | string | true | No | Subscription type<br>• **Shared**: shared mode<br>• **Exclusive**: exclusive mode<br>• **Failover**: disaster recovery mode |
| Subscription Start | subscription_initial_position | string | true | No | Subscription Start |

**Table 13-15** Elasticsearch connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Hosts | hosts | array | -- | Yes | Host IP address |
| Index | index | string | -- | Yes | Index |
| Retrieval statement | query | string | -- | Yes | Retrieval statement |
| User_name | user | string | -- | Yes | User_name |
| Password | user_password | string | -- | Yes | Password |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Queries | size | number | 20 | Yes | Queries |
| Scroll | scroll | string | 5m | Yes | Volume |
| Docinfo | docinfo | boolean | true | Yes | Document |
| Is pw encrypted | is_pw_encrypted | boolean | true | Yes | Whether to enable encryption |
| Whether to enable SSL | ssl | boolean | true | No | Whether to enable SSL |
| Ssl | ca_file | file | -- | No | Certificate file |
| SsL_certificate_verification | ssl_certificate_verification | boolean | true | No | SSL certificate verification |

## Destination Connectors

SecMaster provides a wide range of destination connectors for you to collect security data from your security products.

**Table 13-16** Destination connectors

| Connector Type | In-use Logstash | Description |
|---|---|---|
| File | file | This collector is used to write data to local files on nodes. For details about the configuration rules, see **Table 13-17**. |
| TCP | tcp | This collector is used to send TCP logs. For details about the configuration rules, see **Table 13-18**. |
| UDP | udp | This collector is used to send UD logs. For details about the configuration rules, see **Table 13-19**. |
| Kafka | kafka | This collector is used to write logs to Kafka message queues. For details about the configuration rules, see **Table 13-20**. |
| OBS | obs | This collector is used to write logs to OBS buckets. For details about the configuration rules, see **Table 13-21**. |

| Connector Type | In-use Logstash | Description |
| --- | --- | --- |
| SecMaster pipeline | pipe | This collector is used to write logs to the SecMaster pipeline. For details about the configuration rules, see Table 13-22. |

**Table 13-17** File connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
| --- | --- | --- | --- | --- | --- |
| Path | path | string | /opt/cloud/logstash/config/out.txt | Yes | File path on the output node |
| Create if deleted | create_if_deleted | boolean | true | Yes | If the file does not exist, create one. |
| Decoding type | codec | string | json_lines | Yes | Codec<br>• plain: Read the original content.<br>• **Json_lines**: Processes the content in JSON format. |

**Table 13-18** TCP connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
| --- | --- | --- | --- | --- | --- |
| Port | port | number | 1025 | Yes | Port |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Decoding type | codec | string | plain | Yes | Decoding type, which can be **json_lines** or **Plain**.<br>• plain: Read the original content.<br>• **Json_lines**: Processes the content in JSON format. |
| Hosts | host | string | 192.168.0.66 | Yes | Host address<br>Note: The network between the host and the node is normal. |
| SSL certificate | ssl_cert | file | -- | No | SSL certificates |
| Whether to enable SSL | ssl_enable | boolean | false | No | Whether to enable SSL authentication |
| SSL key | ssl_key | file | -- | No | SSL certificate file |
| SSL key passphrase | ssl_key_passphrase | string | -- | No | SSL certificate key |

**Table 13-19** UDP connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Hosts | host | string | -- | Yes | Host IP address.<br>Note: The network between the host and the node is normal. |
| Port | port | number | 1025 | Yes | Port |
| Decoding type | codec | string | json_lines | Yes | Decoding type, which can be **Json_lines** or **Plain**.<br>• plain: Read the original content.<br>• **Json_lines**: Processes the content in JSON format. |
| Retry count | retry_count | number | 3 | No | Time of retry attempts |
| Retry backoff (ms) | retry_backoff_ms | number | 200 | No | Retry backoff (ms) |

**Table 13-20** Kafka connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Service address | bootstrap_servers | string | -- | Yes | Service address, for example, 192.168.21.21:9092,192.168.21.24:9999. |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Topics | topic_id | string | logstash | Yes | Topics |
| Decoding type | codec | string | plain | Yes | Decoding type, which can be **Json** or **Plain**. |
| Maximum length of the request | max_request_size | number | 10485760 | Yes | Maximum length of the request |
| SSL certificate | ssl_truststore_location | file | -- | No | SSL certificates<br>This parameter is mandatory when SSL is selected. |
| SSL private key | ssl_truststore_password | string | -- | No | SSL private key<br>This parameter is mandatory when SSL is selected. |
| Security protocol | security_protocol | string | PLAINTEXT | No | Security protocol |
| SASL connection configuration | sasl_jaas_config | string | -- | No | SASL connection configuration |
| is_pw_encrypted | is_pw_encrypted | string | true | No | Whether to encrypt the value. |
| SASL mechanism | sasl_mechanism | string | PLAIN | No | sasl_mechanism |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Set **Sasl_jaas_config** based on the Kafka specifications. The following is an example:<br>• Plaintext connection configuration<br>org.apache.kafka.common.security.plain.PlainLoginModule required username='*kafka user*'password='*kafka password*';<br>• Ciphertext connection configuration<br>org.apache.kafka.common.security.scram.ScramLoginModule required username='*kafka user* name'password='*kafka password*'; | | | | | |

**Table 13-21** OBS connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| region | region | string | -- | Yes | region |
| Bucket | bucket | string | demo-obs-sec-mrd-datas | Yes | Bucket name |
| endpoint | endpoint | string | https://obs.huawei.com | Yes | endpoint |
| Cache folder | temporary_directory | string | /temp/logstash/ | Yes | Cache path |
| Encoding type | codec | string | plain | No | Encoding format: plain or JSON |
| AK | ak | string | -- | No | AK |
| SK | sk | string | -- | No | SK |
| Prefix | prefix | string | test | No | Path prefix. |
| Encoding format | encoding | string | gzip | No | Encoding format: gzip or pure file |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Memory path | sincedb_path | string | /opt/cloud/logstash/pipeline/file_name | No | Log read position. This parameter is used to prevent full-text traversal caused by restart. |

**Table 13-22** Pipe connector configuration rules

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Type | type | string | Tenant | Yes | Type |
| Pipeline | pipeId | string | -- | Yes | Pipeline |
| AK | ak | string | -- | Yes | AK<br>This parameter is mandatory when the platform type is selected. |
| SK | sk | string | -- | Yes | SK<br>This parameter is mandatory when the platform type is selected. |
| domain_name | domain_name | string | domain_name | Yes | Domain name of the IAM user<br>This parameter is mandatory when the tenant type is selected. |

| Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| User_name | user_name | string | user_name | Yes | Username of the IAM user<br>This parameter is mandatory when the tenant type is selected. |
| Password | user_password | string | -- | Yes | Password of the IAM user<br>This parameter is mandatory when the tenant type is selected. |
| Compression type | compression_type | string | NONE | No | Packet compression type |
| Block if the queue is full | block_if_queue_full | boolean | true | No | Whether to block the access if the queue is full. |
| Enable batch processing | enable_batching | boolean | true | No | Whether to enable batch processing. |

## 13.1.3.3 Managing Connections

### Scenarios

This section describes how to perform the following operations: **Deleting a Data Connection** and **Deleting a Data Connection**.

### Viewing Connections

**Step 1** Log in to the management console.

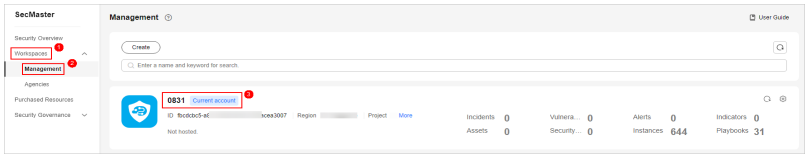
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

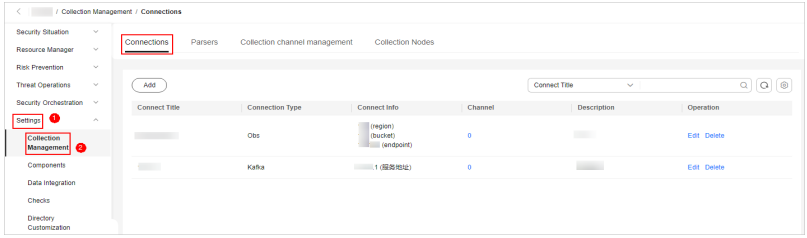
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-32** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**.

**Figure 13-33** Accessing the connection management page




**Step 6** On the **Connections** tab, view connection details.

**Table 13-23** Connection parameters

| Parameter | Description |
| --- | --- |
| Connection Name | Connection name |
| Connection Type | Connection type |
| Connection Info | Information about the connection |
| Channel | Number of channels that are used by the connection |
| Description | Description of the connection |
| Operation | Operations such as editing or deleting connections |

**----End**

## Deleting a Data Connection

**Step 1** Log in to the management console.

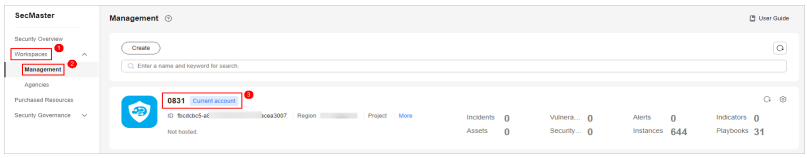
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

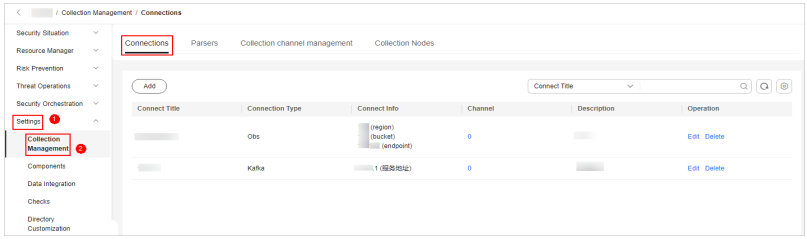
  

**Figure 13-34** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**.

**Figure 13-35** Accessing the connection management page




**Step 6** On the Connections page, locate the row that contains the target connection and click **Delete** in the **Operation** column.

**Step 7** In the displayed dialog box, click **OK**.

**----End**

## 13.1.3.4 Creating and Editing a Parser

## Scenario

By default, SecMaster has a built-in quick access parser. You can select a parser as required.

**Table 13-24** Parser scenario description

| Type | Scenario |
| --- | --- |
| Quick access | The source data can be directly transmitted without being processed. |
| Template | When you need to clear data sources or process fields, you can select a template based on the application scenario and create a parser. |
| Custom | You can create custom parsers and configure parsing rules to meet your needs, such as clearing data sources, processing fields, and more. |

This topic describes how to create and edit a parser.

## Creating a Parser

**Step 1** Log in to the management console.

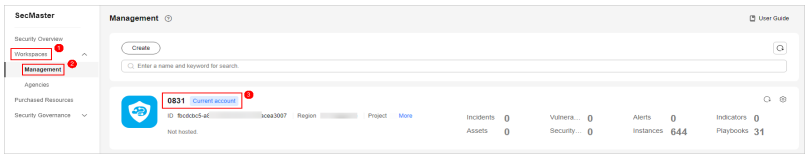
  

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

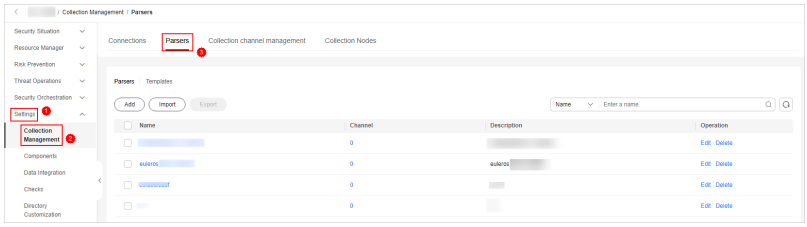
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-36** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-37** Accessing the Parsers tab




**Step 6** **Customize a parser** or **create a parser from a template**.

- **Customizing a parser**
  a. On the **Parsers** tab page, click **Add**.
  b. On the **Parsers** tab page, set parameters.

**Table 13-25** Parameters for adding a parser

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Parser Name | Set the parser name. |
| | Description | Enter the parser description. |

| Parameter | Description |
| --- | --- |
| Rule list | Set the parsing rule of the parser. Perform the following steps:<br>1. Click **Add** and select a rule type.<br>○ **Parsing rule**: Select the parsing rule of the parser. For details about the parameters, see **Rules for Configuring Parsers**.<br>○ **Conditional control**: Select the conditions for the parser. You can select **If**, **Else**, or **Else if**.<br>2. Set parameters based on the selected rule. |

c. After the setting is complete, click **OK** in the lower right corner of the page to confirm the setting.

- **Creating a parser from a template**

a. On the **Parsers** tab page, click the **Templates** tab.

b. On the displayed page, locate the row that contains the target template, click **Created by Template** in the **Operation** column.

c. On the **Parsers** tab page, set parameters.

**Table 13-26** Parameters for adding a parser

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Parser Name | Parser name, which is automatically generated by the system based on the template and can be changed. |
| | Description | Parser description, which is automatically generated by the system based on the template and can be modified. |
| Rule list | | Parsing rule, which is automatically generated by the system based on the template and can be modified.<br>To add a rule, click **Add**, select a rule type, and set parameters based on the selected rule.<br>■ **Parsing rule**: Select the parsing rule of the parser. For details about the parameters, see **Rules for Configuring Parsers**.<br>■ **Conditional control**: Select the conditions for the parser. You can select **If**, **Else**, or **Else if**. |

d. After the setting is complete, click **OK** in the lower right corner of the page to confirm the setting.

**----End**

## Editing a Parser

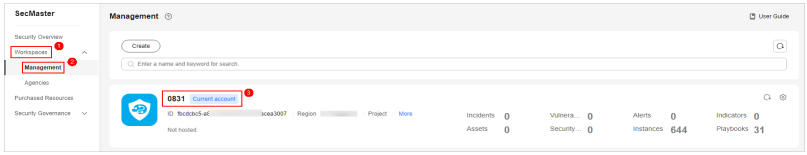
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

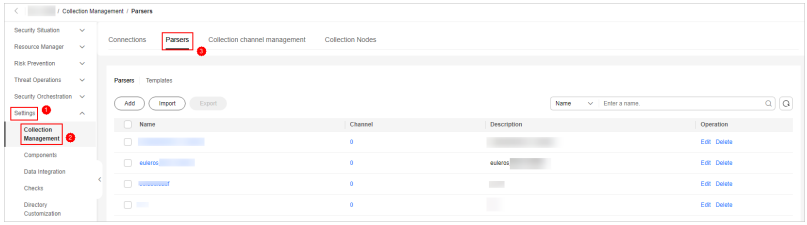
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-38** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-39** Accessing the Parsers tab




**Step 6** On the **Parsers** tab, locate the row containing your desired parser and click **Edit** in the **Operation** column.

**Step 7** In the **Edit Parser** dialog box, edit the parser information.

**Table 13-27** Editing a parser

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Parser Name | Set the parser name. |
| | Description | Enter the parser description. |

| Parameter | Description |
| --- | --- |
| Rule list | Set the parsing rule of the parser. Perform the following steps:<br>Click **Add** and select a rule type.<br>• **Parsing rule**: Select the parsing rule of the parser. For details about the parameters, see **Rules for Configuring Parsers**.<br>• **Conditional control**: Select the conditional control principle of the parser. |

**Step 8** After the setting is complete, click **OK** in the lower right corner of the page to confirm the setting.

**----End**

## 13.1.3.5 Rules for Configuring Parsers

The tenant-side data collection uses custom Logstash collectors for data transmission. Parsers mainly work as codeless filters in Logstash. Currently, the following types of Logstash filter plugins are supported.

**Table 13-28** Supported types

| Parser | Plug-in in Logstash | Description |
| --- | --- | --- |
| Key-Value filter | kv | Parses key-value pairs. For details about parsing rules, see **Table 13-29**. |
| Mutate filter | mutate | Performs general mutations on fields. For details about parsing rules, see **Table 13-30**. |
| Grok filter | grok | Parses regular expressions. For details about parsing rules, see **Table 13-31**. |
| Date filter | date | Parses the date. For details about parsing rules, see **Table 13-32**. |
| Drop filter | drop | Deletes packets. There is no specific rule. If you use this parser, logs received will be deleted. |
| Prune filter | prune | Parses blacklists and whitelists. For details about parsing rules, see **Table 13-33**. |
| CSV filter | csv | Parses the CSV data. For details about parsing rules, see **Table 13-34**. |

| Parser | Plug-in in Logstash | Description |
| --- | --- | --- |
| Function filter | ruby | Executes ruby code. For details about parsing rules, see **Table 13-35**. |
| JSON filter | json | Converts the JSON data. For details about parsing rules, see **Table 13-36**. |
| Split filter | split | Splits data. For details about parsing rules, see **Table 13-37**. |
| Clone filter | clone | Duplicates data. For details about parsing rules, see **Table 13-38**. |
| UUID filter | uuid | Parses UUIDs. For details about parsing rules, see **Table 13-39**. |

**Table 13-29** Kv filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
| --- | --- | --- | --- | --- | --- |
| Source | source | string | source | Yes | Defines the fields to be translated. |
| Target | target | string | message | No | Defines the target fields. |
| Field_split | field_split | string | , | No | Splits fields. |
| Value_split | value_split | string | = | No | Splits fields. |
| Trim_key | trim_key | string | -- | No | Removes spaces from the key. |
| Trim_value | trim_value | string | -- | No | Removes spaces from the value. |
| Allow_duplicate_values | allow_duplicate_values | boolean | true | No | Allows duplicate values. |
| Default_keys | default_keys | array | -- | No | Adds keys. |
| Exclude_keys | exclude_keys | array | -- | No | Excludes certain keys. |
| Include_keys | include_keys | array | -- | No | Includes certain keys. |

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Prefix | prefix | string | -- | No | Performs prefix matches. |
| Recursive | recursive | boolean | true | No | Performs Recursive parsing. |
| Transform_key | transform_key | string | -- | No | Transforms keys. |
| Add_field | add_field | hash | -- | No | Adds fields. |
| add_tag | add_tag | array | -- | No | Adds tags. |
| Remove_field | remove_field | array | -- | No | Removes fields. |
| Remove_tag | remove_tag | array | -- | No | Removes tags. |
| Id | id | string | -- | No | ID. |
| Whitespace | whitespace | string | strict/ lenient | No | Allows whitespace characters. |
| Remove_char_key | remove_char_key | string | <>[](), | No | Removes characters from the key. |

**Table 13-30** Mutate filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Convert | convert | hash | -- | No | Converts a field's value into a different type. |
| Join | join | hash | -- | No | Joins arrays. |
| Lowercase | lowercase | array | -- | No | Converts characters into its lowercase equivalent. |

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Coerce | coerce | hash | -- | No | Sets the default value of a field. |
| Rename | rename | hash | -- | No | Renames fields. |
| Replace | replace | hash | -- | No | Replaces the value of a field with a new value. |
| Split | split | hash | -- | No | Split a field to an array. |
| Strip | strip | array | -- | No | Strips spaces from fields. |
| Update | update | hash | -- | No | Updates fields. |
| Uppercase | uppercase | array | -- | No | Converts characters into its uppercase equivalent. |
| Add_field | add_field | hash | -- | No | Adds fields. |
| Add_tag | add_tag | array | -- | No | Adds tags. |
| Remove_field | remove_field | array | -- | No | Removes fields. |
| Remove_tag | remove_tag | array | -- | No | Removes tags. |
| ID | id | string | -- | No | Id |
| Copy | copy | hash | -- | No | Copies fields. |
| Gsub | gsub | array | -- | No | Replaces the gsub value. |

**Table 13-31** Grok filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| match | match | hash | -- | Yes | Performs regex matches. |
| Break_on_match | break_on_match | boolean | true | No | Breaks on the first match. |
| Overwrite | overwrite | array | message | No | Overwrites fields. |
| Add_field | add_field | hash | -- | No | Adds fields. |
| Add_tag | add_tag | array | -- | No | Adds tags. |
| Remove_field | remove_field | array | -- | No | Removes fields. |
| Remove_tag | remove_tag | array | -- | No | Removes tags. |
| Id | id | string | -- | No | Id |

**Table 13-32** Date filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Match | match | array | -- | Yes | Performs regex match. |
| Target | target | string | timestamp | Yes | Target fields. |
| Add_field | add_field | hash | -- | No | Adds fields. |
| Add_tag | add_tag | array | -- | No | Adds tags. |
| Remove_field | remove_field | array | -- | No | Removes fields. |
| Remove_tag | remove_tag | array | -- | No | Removes tags. |
| Id | id | string | test | No | Id |
| Locale | locale | string | -- | No | Locale |
| Timezone | Specifies the time zone. | string | +8:00 | No | Specifies the time zone. |

**Table 13-33** Prune filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Blacklist_names | blacklist_names | array | -- | No | Excludes fields whose names match specified regular expressions. |
| Blacklist_values | blacklist_values | array | -- | No | Excludes specified fields if their values match one of the supplied regular expressions. |
| Whitelist_names | whitelist_names | array | -- | No | Includes specified fields only if their names match specified regular expressions. |
| Whitelist_values | whitelist_values | array | -- | No | Includes specified fields only if their values match one of the supplied regular expressions. |

**Table 13-34** CSV filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Source | source | string | message | No | Defines the fields to be parsed. |
| Columns | columns | array | -- | No | Defines a list of column names. |

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Separator | separator | string | , | No | Defines the column separator value. |
| Skip_empty_columns | skip_empty_columns | boolean | true | No | Defines whether empty columns can be skipped. |

**Table 13-35** Function filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Filter_length | filter_length | number | 10 | No | Controls the field length. |
| Set_time | set_time | ruby_time | 123 | No | Sets a time. |

**Table 13-36** JSON filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Source | source | string | message | Yes | Defines source fields. |
| Skip_on_invalid_json | skip_on_invalid_json | boolean | true | No | Skips invalid json fields. |
| Add_field | add_field | hash | null | No | Adds fields. |
| Add_tag | add_tag | array | null | No | Adds tags. |
| Remove_field | remove_field | array | null | No | Removes fields. |
| Remove_tag | remove_tag | array | null | No | Removes tags. |
| Target | target | string | message | No | Defines target fields. |

**Table 13-37** Split filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Field | field | string | message | Yes | Defines fields to be splited. |

**Table 13-38** Clone filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Clone | clones | array | -- | Yes | Defines the list of fields to be cloned. |

**Table 13-39** UUID filter

| Parsing Rule | Logstash Settings | Type | Default Value | Mandatory | Description |
|---|---|---|---|---|---|
| Target | target | string | uuid | Yes | Target fields. |
| Overwrite | overwrite | boolean | true | Yes | Defines whether to overwrite. |

## 13.1.3.6 Managing Parsers

### Scenarios

This topic describes how to perform the following operations: **Viewing Parsers**, **Importing a Parser**, **Exporting a Parser**, and **Deleting a Parser**.

### Viewing Parsers

**Step 1** Log in to the management console.

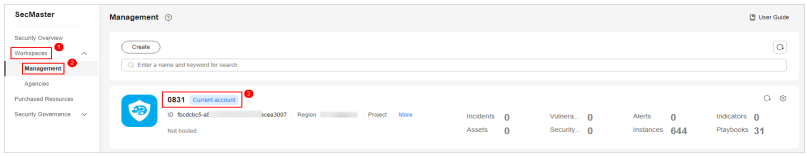
**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

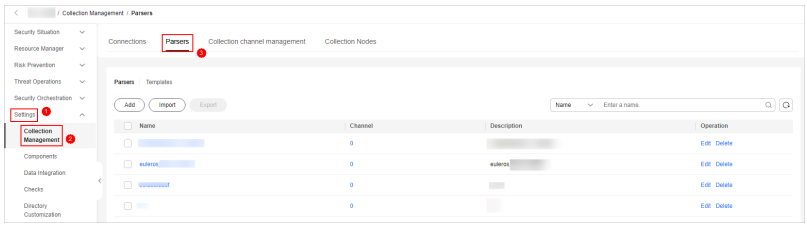
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-40** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-41** Accessing the Parsers tab




**Step 6** On the **Parsers** page, view the detailed information about parsers.

**Table 13-40** Parsers parameters

| Parameter | Description |
| --- | --- |
| Name | Name of the parser. |
| Channel | Number of channels that are used by the parser |
| Description | Description of the parser. |
| Operation | Operations such as editing or deleting the parser |

**Step 7** On the **Parsers** page, click the **Templates** tab.

**Step 8** On the **Templates** tab displayed, view the parser templates you can use.

**Table 13-41** Parser template parameters

| Parameter | Description |
| --- | --- |
| Name | Name of a parser template |
| Description | Description of the parser template |
| Operation | Creating a parser from a template. |

**----End**

## Importing a Parser

NOTE

- Only .json files no larger than 1 MB can be imported.
- A maximum of five parser files can be imported at a time, and each parser file can contain a maximum of 100 parsers.

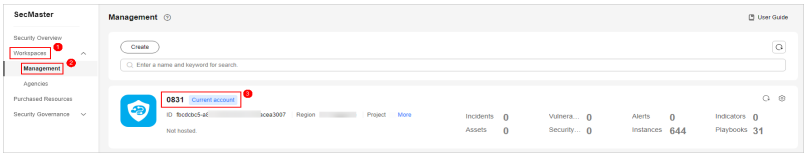
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

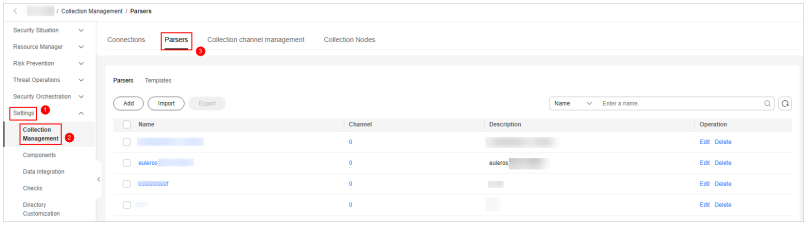
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-42** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-43** Accessing the Parsers tab




**Step 6** On the **Parsers** tab, click **Import** in the upper left corner above the parser list.

**Step 7** In the displayed **Import** dialog box, click **Select File** and select the JSON file you want to import.

CAUTION

- Only .json files no larger than 1 MB can be imported.
- A maximum of five parser files can be imported at a time, and each parser file can contain a maximum of 100 parsers.

**Step 8** Click **OK**.

You can view imported parsers in the parser list.

**----End**

## Exporting a Parser

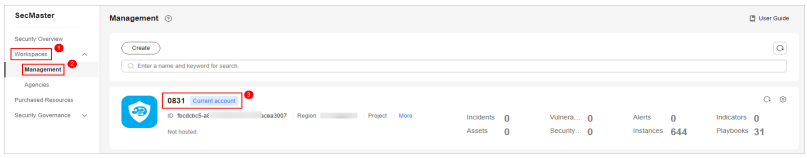
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

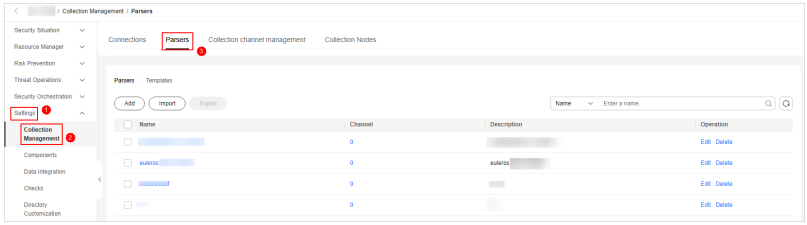
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-44** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-45** Accessing the Parsers tab




**Step 6** On the **Parsers** page, select the parsers you want to export and click **Export** above the list.

The system automatically downloads the parser file in .json format to your local PC.

**----End**

## Deleting a Parser

**Step 1** Log in to the management console.

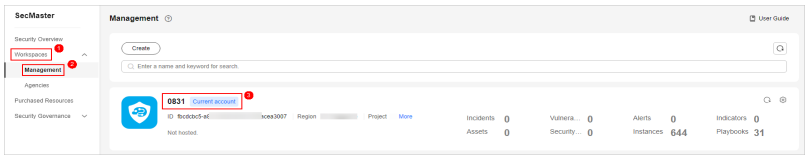
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

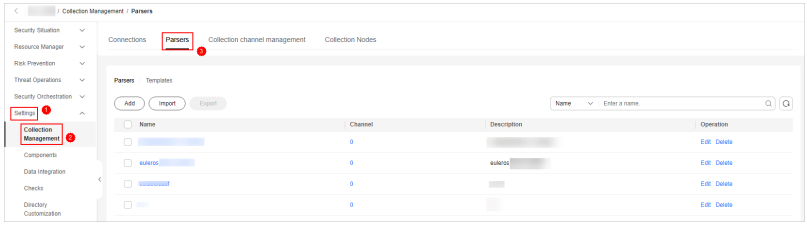
  

**Figure 13-46** Workspace management page



**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Parsers** tab.

**Figure 13-47** Accessing the Parsers tab



**Step 6** On the **Parsers** tab, locate the row that contains the target parser and click **Delete** in the **Operation** column.

**Step 7** In the displayed dialog box, click **OK**.

**----End**

## 13.1.3.7 Adding and Editing a Collection Channel

## Scenario

This topic describes how to add and edit a collection channel.

## Adding a Channel Group

Before adding a collection channel, you need to add a connection group.

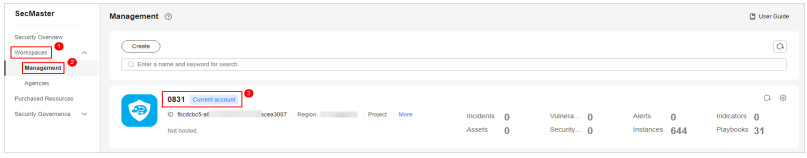
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner of the management console and select a region or project.

**Step 3** Click  in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

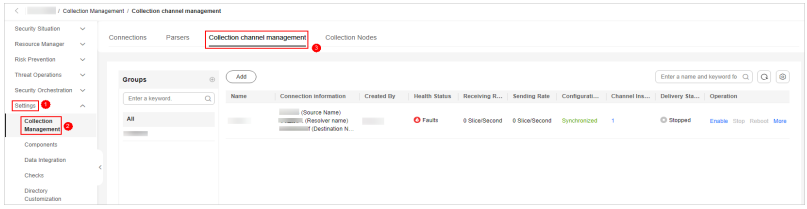
**Figure 13-48** Workspace management page



**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-49** Collection channel management tab page



**Step 6** Add a channel group.

1. On the **Collection Channels** tab, click ⊕ on the right of **Groups**.
2. Enter a group name and click ✓.

To edit or delete a group, hover the cursor over the group name and click the edit or deletion icon.

**----End**

## Adding a Collection Channel

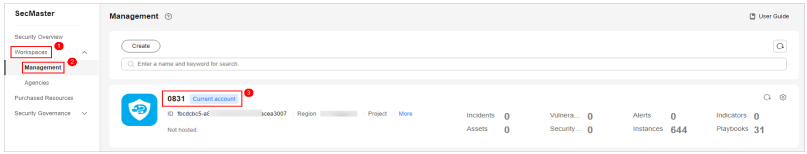
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click ☰ in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

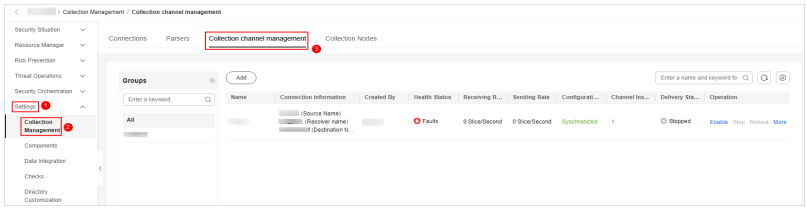
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-50** Workspace management page



**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-51** Collection channel management tab page



**Step 6** On the right of the group list, click **Add**.

**Step 7** On the displayed page, in the **Basic Configuration** phase, configure basic information.

**Table 13-42** Basic configuration parameters

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Title | User-defined collection channel name. |
| | Channel grouping | Select the group to which the collection channel belongs. |
| | (Optional) Description | (Optional) Enter the description of the collection channel. |
| Configure Source | Source Name | Select the source name of the collection channel.<br>After you select a source, the system automatically generates the information about the selected source. |
| Destination | Destination Name | Select the destination name of the collection channel.<br>After you select a destination, the system automatically generates the information about the selected destination. |

**Step 8** After the basic configuration is complete, click **Next** in the lower right corner of the page.

**Step 9** On the **Configure Parser** page, select a parser. You can check its details.

If no parser is available or you want to create a parser, click **Create** and create one. For details, see **Creating and Editing a Parser**.

**Step 10** After the parser is configured, click **Next** in the lower right corner of the page.

**Step 11** On the **Select Node** page, click **Create**. In the **Add Node** dialog box displayed, select a node and click **OK**.

- Running parameters: You can configure running parameters for added nodes by taking the following steps:
  a. In the node list, locate the row that contains the target node, and click **Running parameters** in the **Operation** column.
  b. Click **Add Configuration** and select a key and value.

     If you need to optimize the running parameters of a collection channel, SecMaster provides optimization parameters **pipeline.batch.size**, **pipeline.workers**, and **pipeline.batch.delay** for your choice. If no optimizations are required, delete related configurations.

**Table 13-43** Parameter configuration description

| Parameter | Type | Description |
| --- | --- | --- |
| pipeline.batch.size | int | This parameter specifies the number of events that can be collected by each worker thread each time. A larger value indicates a higher efficiency. However, the memory overhead also increases. You can increase the heap space in **jvm.options**. |
| pipeline.workers | int | This parameter specifies the number of worker threads in the pipeline. The default value is the number of CPU cores. |
| pipeline.batch.delay | int | This parameter specifies the delay to submit the current pipeline. You can use this parameter to increase message submission times and system consumption efficiency. |

- To remove an added node, locate the row that contains the target node, click **Remove** in the **Operation** column.

**Step 12** After the running node is selected, click **Next** in the lower right corner of the page.

**Step 13** On the **Preview Channel Details** page, confirm the configuration and click **Save and Execute**.

If the collection channel healthy status is **Normal**, all collection channels are successfully delivered. The following table describes the statuses of collection channels.

**Table 13-44** Health status of a collection channel

| Monitoring Status | Description |
| --- | --- |
| Healthy | The collection channel is successfully delivered. |
| Abnormal | Some collection channels are successfully delivered, and some are abnormal. |
| Faulty | The collection channel has not been delivered. This status changes according to the heartbeat status, and there is a delay. Generally, the monitoring status is reported every 30 seconds. |

**----End**

## Editing a collection channel

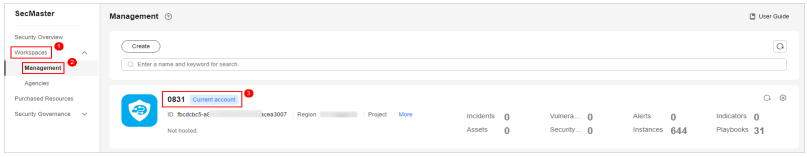
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

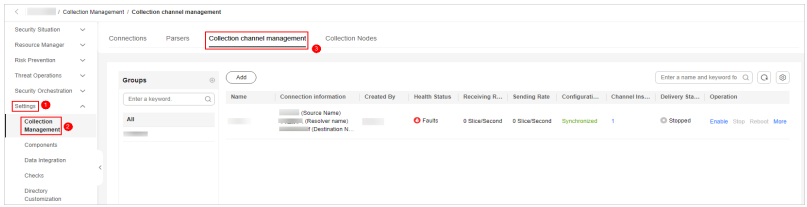
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-52** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-53** Collection channel management tab page




**Step 6** In the collection channel list, locate the row that contains the target channel, click **More** > **Edit** in the **Operation** column. The **Edit Collection Channel** page is displayed.

**Step 7** On the displayed page, in the **Basic Configuration** phase, configure basic information.

**Table 13-45** Basic configuration parameters

| Parameter | | Description |
| --- | --- | --- |
| Basic Information | Channel Name | User-defined collection channel name. |
| | Channel grouping | Select the group to which the collection channel belongs. |
| | (Optional) Description | (Optional) Enter the description of the collection channel. |

| Parameter | | Description |
| --- | --- | --- |
| Source Configuration | Source Name | Select the source name of the collection channel.<br>After you select a source, the system automatically generates the information about the selected source. |
| | Destination Name | Select the destination name of the collection channel.<br>After you select a destination, the system automatically generates the information about the selected destination. |

**Step 8** After the basic configuration is complete, click **Next** in the lower right corner of the page.

**Step 9** On the parser configuration page, select a parser to view its details.

If no parser is available or you want to create a parser, choose **Create** to create a parser. For details, see **Creating and Editing a Parser**.

**Step 10** After the parser is configured, click **Next** in the lower right corner of the page.

**Step 11** On the **Select Node** page, click **Add**. In the **Add Node** dialog box displayed, select a node and click **OK**.

- **Running parameters**: After a node is added, if you want to configure parameters for the added node, perform the following steps:
  a. In the node list, locate the row that contains the target node, and click **Running parameters** in the **Operation** column.
  b. Click **Add Configuration** and select a key and value.
- To remove an added node, locate the row that contains the target node, click **Remove** in the **Operation** column.

**Step 12** After the running node is selected, click **Next** in the lower right corner of the page.

**Step 13** On the **Preview Channel Details** page, confirm the configuration and click **Save and Execute**.

**----End**

## 13.1.3.8 Managing Collection Channels

## Scenarios

This topic describes how to perform the following operations: **Viewing Collection Channels**, **Deleting a Collection Channel**, and **Enabling, Disabling, and Restarting a Collection Channel**.

## Viewing Collection Channels

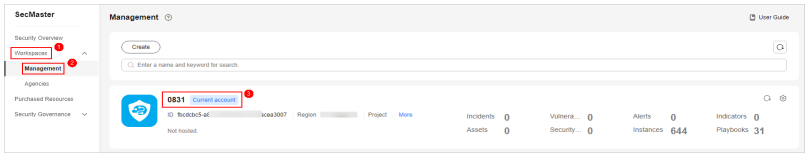
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

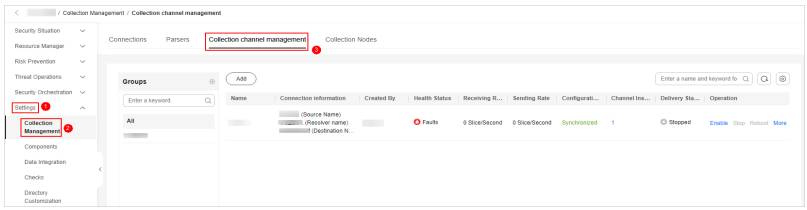
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-54** Workspace management page



**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-55** Collection channel management tab page



**Step 6** On the **Collection Channels** page, view the detailed information about collection channels.

**Table 13-46** Collection channel parameters

| Parameter | Description |
| --- | --- |
| Groups | List of collection channel groups and group names. |
| Name | Name of the collection channel. |
| Connection information | Collect channel connection information. |
| Created By | Creator of the collection channel. |
| Health Status | Health status of the collection channel. |
| Receiving Rate | Data receiving rate of the collection channel. |
| Sending Rate | Data sending rate of the collection channel. |
| Configuration Status | Configuration status of the collection channel. |

| Parameter | Description |
| --- | --- |
| Channel Instance | Number of collection channels. |
| Delivery Status | Status of a collection channel. |
| Operation | Operations such as editing and disabling a collection channel. |

**----End**

## Deleting a Collection Channel

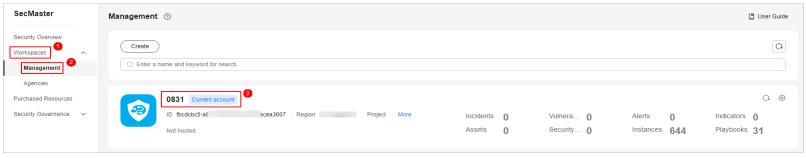
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

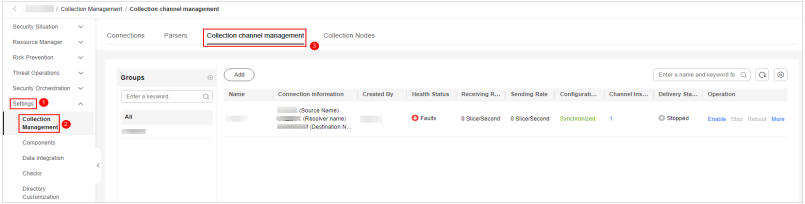
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-56** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-57** Collection channel management tab page




**Step 6** In the collection channel list, locate the row that contains the target channel, click **More** > **Delete** in the **Operation** column.

NOTE

You can delete a collection channel only when it is stopped.

**Step 7** In the displayed dialog box, click **OK**.

**----End**

## Enabling, Disabling, and Restarting a Collection Channel

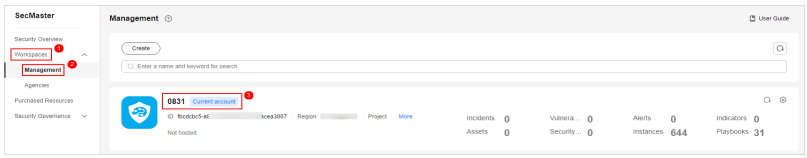
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

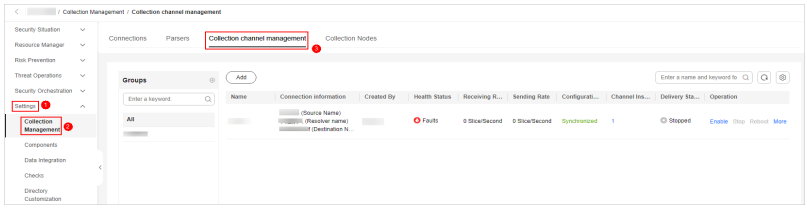
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-58** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Channels** tab.

**Figure 13-59** Collection channel management tab page




**Step 6** In the collection stream management list, locate the row that contains the target stream and click **Enable**, **Stop**, or **Restart** in the **Operation** column.

**Step 7** In the displayed dialog box, click **OK**.

**----End**

## 13.1.3.9 Viewing Collection Nodes

## Scenario

This topic describes how to view collection nodes details.

## Procedure

**Step 1** Log in to the management console.

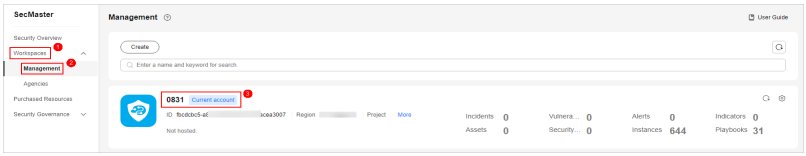
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

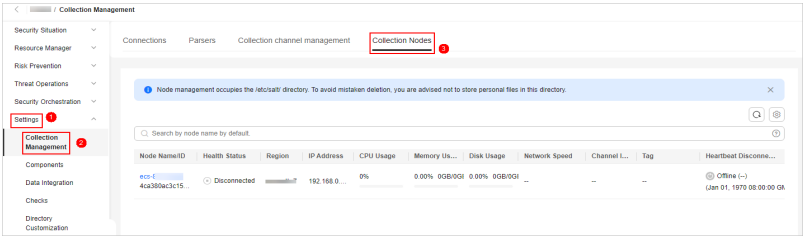
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-60** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Collections**. Then, select the **Collection Nodes** tab.

**Figure 13-61** Accessing the Collection Nodes page




**Step 6** On the **Collection Nodes** page, view the detailed information about collection nodes.

If there are many nodes displayed, use filters to search for a specific one.

To view details about a node, click its name to go to its details page.

**Table 13-47** Collection node parameters

| Parameter | Description |
| --- | --- |
| Node Name/ID | Name or ID of a node |
| Health Status | Node health status |
| Region | Region where the node is located |
| IP Address | Node IP address |
| CPU Usage | CPU usage of the node |
| Memory Usage | Memory usage of the node |
| Disk Usage | Node disk usage |
| Network Speed | Network rate of a node |
| Label | Label information of a node |
| Heartbeat Expiration Mark | Indicates whether the node is disconnected due to heartbeat expiration.<br>If no heartbeat message is sent within 15 minutes, the node is marked as **Disconnected**. |

**----End**

# 13.1.4 Upgrading the Component Controller

## Scenarios

This topic describes how to upgrade the component controller from salt-minion to isap-agent for tenant-side data collection. salt-minion was used as component controller in earlier tenant-side data collection.

NOTE

The upgrade does not affect the data plane.

## Preparing for the Upgrade

IAM is used for data collection authorization. You need to create an IAM user with the minimum permission to access SecMaster APIs and disable verification rules such as MFA for the user.

1. Log in to the management console.
2. Click  in the upper left corner of the page and choose **Management & Governance** > **Identity and Access Management**.
3. Create a user group.
   a. In the navigation pane on the left, choose **User Groups**. On the displayed page, click **Create User Group** in the upper right corner.
   b. On the **Create User Group** page, specify user group name and description.
      - **Name**: Set this parameter to **Tenant collection**.
      - **Description**: Enter a description.
   c. Click **OK**.
4. Assign permissions to the user group.
   a. In the navigation pane on the left, choose **Permissions** > **Policies/Roles**. In the upper right corner of the displayed page, click **Create Custom Policy**.
   b. Configure a policy.
      - **Policy Name**: Set this parameter to **Least permission policy for tenant collection**.
      - **Policy View**: Select **JSON**.
      - **Policy Content**: Copy the following content and paste it in the text box.

```
{
   "Version": "1.1",
   "Statement": [
      {
         "Effect": "Allow",
```

```
            "Action": [
                "secmaster:workspace:get",
                "secmaster:node:create",
                "secmaster:node:monitor",
                "secmaster:node:taskQueueDetail" ,
                "secmaster:node:updateTaskNodeStatus"
            ]
        }
    ]
}
```

c. Click **OK**.

5. Assign permissions to the created user group.
   a. In the navigation pane on the left, choose **User Groups**. On the displayed page, click **Tenant collection**.
   b. On the **Permissions** tab, click **Authorize**.
   c. On the **Select Policy/Role** page, search for and select the **Least permission policy for tenant collection** added in **4**, and click **Next**.
   d. Set the minimum authorization scope. Select **All resources** for **Scope**. After the setting is complete, click **OK**.
   e. Verify the authorization. The policy will be listed on the page.
6. **Create a user**.

   During the creation, enable **Programmatic access**, **Access key**, and **Password**.
7. Add the operation account to the user group.
   a. In the navigation pane on the left, choose **User Groups**.
   b. In the **Tenant collection** user group row, click **Manage User** in the **Operation** column.
   c. In the displayed **Manage User** dialog box, select users added in **6**.
   d. Click **OK**.

## Procedure

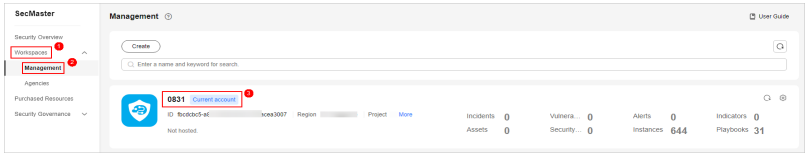
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

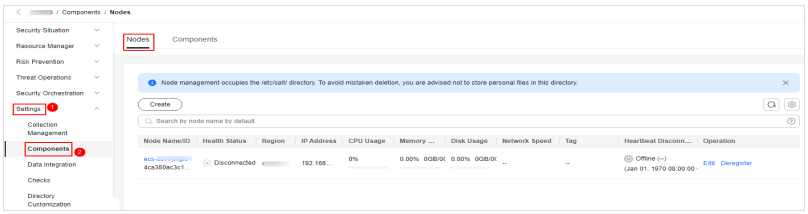
**Figure 13-62** Workspace management page



**Step 5** Deregister a node.

1. In the navigation pane on the left, choose **Settings** > **Components**. On the displayed **Nodes** tab, locate the row that contains the target node and click **Deregister** in the **Operation** column.

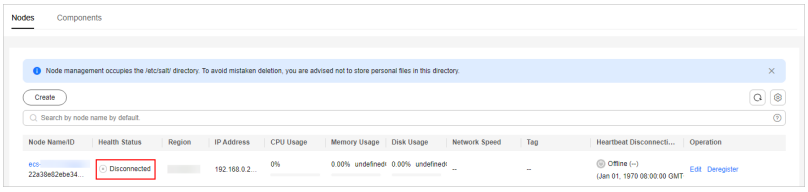
   **Figure 13-63** Deregistering a node

2. In the displayed dialog box, click **OK**.

   The node is deregistered successfully, and its **Health Status** changes to **Disconnected**.

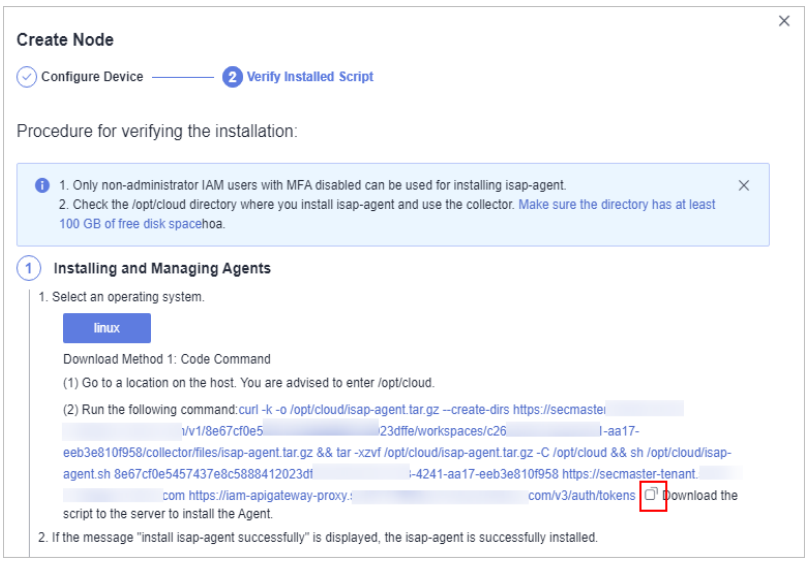
   **Figure 13-64** Health Status

**Step 6** Copy the script.

1. On the **Nodes** page, click **Create**.
2. On the **Create Node** page, click **Next**. On the **Verify installed Script** page, copy the script.

   **Figure 13-65** Copying the installed script

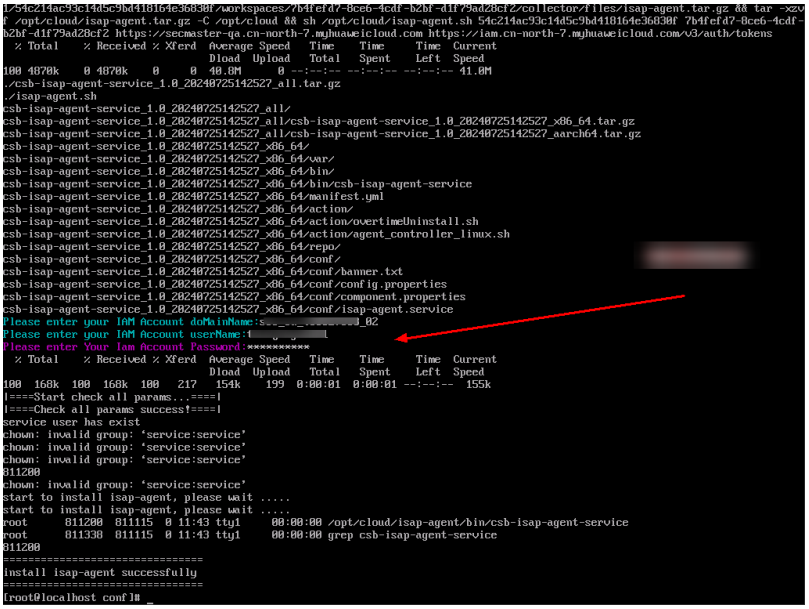
**Step 7** Install the component controller.

1. Use a remote management tool, such as Xftp, SecureFX, WinSCP, PuTTY, or Xshell, to log in to the disconnected ECS node.

2. Run the command copied in **Step 6.2** as user **root** to install the Agent on the ECS.

**Figure 13-66** Installing the agent

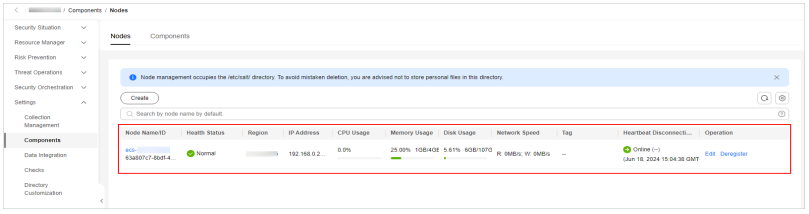



3. Enter the IAM username and password created in **Preparing for the Upgrade** as prompted.
4. If information similar to the following is displayed, the agent is successfully installed:

```
install isap-agent successfully
```

5. Go to the SecMaster console and check the node status on the **Nodes** page under **Settings**.

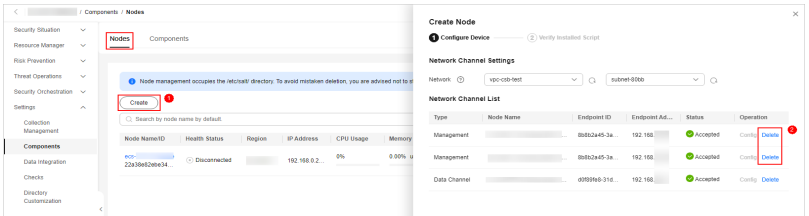
**Figure 13-67** Checking node status



**Step 8** Delete the old management channel.

1. Choose **Settings** > **Components** > **Nodes** and click **Create**. On the **Create Node** pane displayed, click **Delete** in the **Operation** column in the row of each the management.

**Figure 13-68** Deleting a management channel



2. In the displayed dialog box, click **OK**.

**----End**

# 13.2 Data Integration

## 13.2.1 Log Access Supported by SecMaster

SecMaster can integrate logs of multiple Huawei Cloud services, such as Web Application Firewall (WAF), Host Security Server (HSS), and Object Storage Service (OBS). You can search for and analyze all collected logs in SecMaster. By default, the logs are stored for 7 days.

**Table 13-48** Log access supported by SecMaster

| Category | Service | Service Type | Log | Log Description | Supported Region |
|---|---|---|---|---|---|
| Host security | Host Security Service (HSS) | Tenant-side cloud service | hss-alarm | HSS security alarms | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2 (converged in LA-Mexico City1), LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |
| | | | hss-vul | HSS vulnerability scan results | |
| | | | hss-log | HSS security logs | |
| | | | hss-baseline | HSS baseline check | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |
| Application security | Web Application Firewall (WAF) | Tenant-side cloud service | waf-attack | WAF attack logs | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |
| | | | waf-access | WAF access logs | |
| | API Gateway (APIG) | Tenant-side cloud service | apig-access | APIG request logs | NA |

| Category | Service | Service Type | Log | Log Description | Supported Region |
|---|---|---|---|---|---|
| | Cloud Trace Service (CTS) | Tenant-side cloud service | cts-audit | CTS logs | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |
| Network security | NIP | Huawei device | nip-attack | IPS attack logs | AP-Singapore and AF-Johannesburg |
| | DDoS | Huawei device | ddos-attack | Anti-DDoS attack logs | AF-Johannesburg and AP-Jakarta |
| | Cloud Firewall (CFW) | Tenant-side cloud service | cfw-block | Access control logs | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |
| | | | cfw-flow | Traffic logs | |
| | | | cfw-risk | Attack logs | |
| O&M security | Cloud Bastion Host (CBH) | Tenant-side cloud service | cbh-audit | Bastion host audit logs | NA |
| Data security | Object Storage Service (OBS) | Tenant-side cloud service | obs-access | OBS access logs | LA-Mexico City2 |
| | Database Security Service (DBSS) | Tenant-side cloud service | dbss-alarm | DBSS alarm logs | NA |
| | Data Security Center (DSC) | Tenant-side cloud service | dsc-alarm | DSC alarm logs | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |

| Category | Service | Service Type | Log | Log Description | Supported Region |
|---|---|---|---|---|---|
| Identity security | Identity and Access Management (IAM) | Tenant-side cloud service | iam-audit | IAM audit logs | NA |
| Cloud security | Managed Threat Detection (MTD) | Tenant-side cloud service | mtd-alarm | MTD alarm logs | AP-Singapore, CN-Hong Kong, AP-Bangkok, AF-Johannesburg, LA-Sao Paulo1, and LA-Santiago |
| | SecMaster | Tenant-side cloud service | secmaster-baseline | SecMaster baseline inspection | AP-Singapore, CN-Hong Kong, TR-Istanbul, AP-Bangkok, AF-Johannesburg, LA-Mexico City2, LA-Sao Paulo1, LA-Santiago, AP-Jakarta, ME-Riyadh, and AF-Cairo |

## 13.2.2 Enabling Log Access

### Scenario

SecMaster can access logs of Huawei Cloud services with your authorization, services such as Web Application Firewall (WAF), Host Security Server (HSS), and Object Storage Service (OBS). After you authorize the access, you can manage logs centrally and search and analyze all collected logs. For details, see **Log Access Supported by SecMaster**.

For the first workspace of each region, most types of logs recommended by SecMaster will be automatically loaded. No manual actions are required. For non-first workspaces, you need to configure log data access manually.

This topic describes how to access logs and view where logs are stored.

### Limitations and Constraints

It takes about 10 minutes for the log access settings to take effect.

### Allowing SecMaster to Access Service Logs

**Step 1** Log in to the management console.

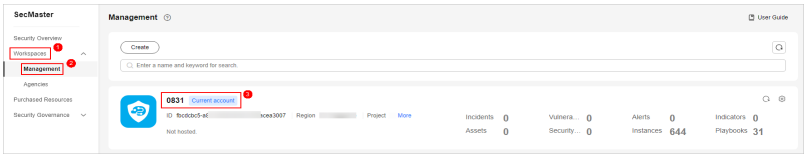
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

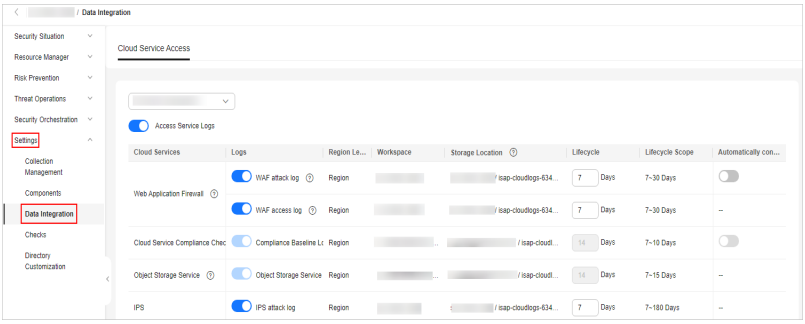
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-69** Workspace management page




**Step 5** In the navigation pane on the left, choose **Settings** > **Data Integration**.

**Figure 13-70** Data Integration page




**Step 6** Locate the cloud service from which you want to collect logs, click  in the **Logs** column to enable log access.

To access logs of cloud services supported in the current region, click  on the left of **Access Service Logs**.

**Step 7** Set the lifecycle.

By default, data is stored for 7 days. You can set the storage period as required.

**Step 8** Set **Automatically converts alarms**.

Locate the row containing the target security products. In the **Automatically converts alarms** column of that row, click  to enable the function. After that, SecMaster will automatically convert cloud service logs into alerts when the logs meet certain alert rules. Those alerts will be displayed on the **Alerts** page.

NOTE

- If this function is disabled, logs that meet certain alert rules will not be converted to alerts or displayed on the **Alerts** page.
- You can access host vulnerability scan results on the **Vulnerabilities** page of SecMaster. If such results have been accessed during data integration but this conversion function is disabled, the results will not be displayed on the **Vulnerabilities** page.

**Step 9** Click **Save**. In the displayed dialog box, click **OK**.

NOTE

It takes about 10 minutes for the log access settings to take effect. After the access completes, a default data space and pipeline are created.

**----End**

## Viewing the Log Storage Location

**Step 1** Log in to the management console.

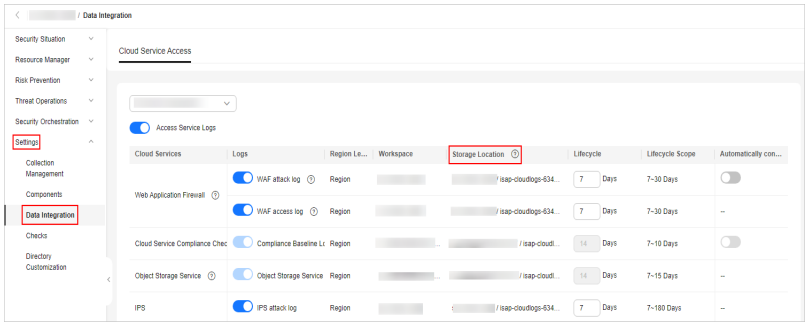
**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

**Step 4** In the navigation pane on the left, choose **Settings** > **Data Integration**. On the displayed **Cloud Service Access** tab, view the log data storage location in the **Storage Location** column.

You can go to the corresponding pipeline in the target workspace to view the accessed logs.

**Figure 13-71** Viewing the log storage location




**----End**

## Related Operations

- Canceling Data Access
  a. In the **Log** column of the target cloud services, click to disable the access to cloud service logs.
  b. Click **Save**.
- Editing the Data Access Lifecycle
  a. In the **Lifecycle** column of the target cloud services, enter the data storage period.
  b. Click **Save**.
- Canceling Automatic Converting Logs to Alarms
  a. In the **Automatically converts alarms** column of the target cloud products, click to disable the alarms.

b. Click **Save**.

# 13.3 Customizing Directories

## Scenario

You can customize directories on SecMaster. This section includes the following content:

- **Viewing Existing Directories**
- **Changing Layout**

## Limitations and Constraints

- Built-in directories **cannot** be edited or deleted.

## Viewing Existing Directories

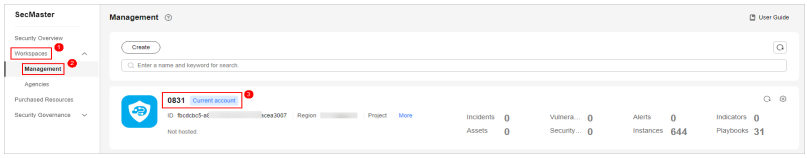
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

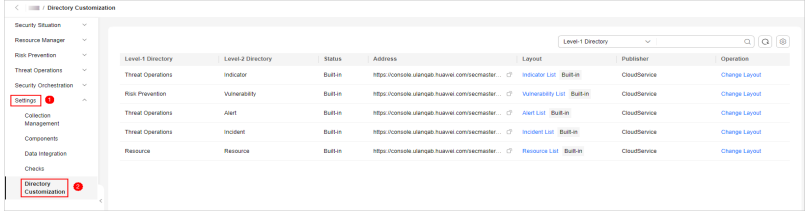
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-72** Workspace management page




**Step 5** In the navigation tree on the left, choose **Settings** > **Directory Customization**.

**Figure 13-73** Directory Customization page




**Step 6** In the directory list, view the directory details.

**Table 13-49** Directory parameters

| Parameter | Description |
| --- | --- |
| Level-1 Directory | Name of the level-1 directory to which the directory belongs |
| Level-2 Directory | Name of the level-2 directory to which the directory belongs |
| Status | Type of the directory. |
| Address | Address of the directory. |
| Layout | Layout associated with the directory. |
| Publisher | Publisher of the directory. The default publisher of a built-in directory is **Huawei Cloud**. |
| Operation | Operations you can do for the directory, such as changing the layout. |

**----End**

## Changing Layout

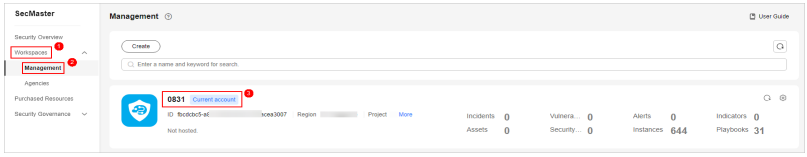
**Step 1** Log in to the management console.

**Step 2** Click in the upper left corner of the management console and select a region or project.

**Step 3** Click in the upper left corner of the page and choose **Security & Compliance** > **SecMaster**.

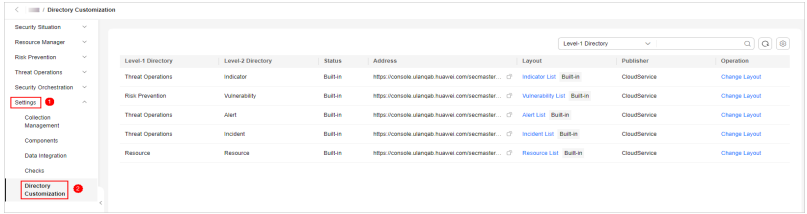
**Step 4** In the navigation pane on the left, choose **Workspaces** > **Management**. In the workspace list, click the name of the target workspace.

**Figure 13-74** Workspace management page




**Step 5** In the navigation tree on the left, choose **Settings** > **Directory Customization**.

**Figure 13-75** Directory Customization page



**Step 6** Click **Changing layout** in the **Operation** column of the target directory.

**Step 7** On the **Changing layout** page, select the layout to be changed.

**Step 8** Click **OK**.

**----End**

# 14 Permissions Management

## 14.1 Creating a User and Granting Permissions

This topic describes how to use **IAM** to implement fine-grained permissions control for your SecMaster. With IAM, you can:

- Create IAM users for employees based on your enterprise's organizational structure. Each IAM user will have their own security credentials for accessing SecMaster resources.
- Grant only the permissions required for users to perform a task.
- Entrust an account or cloud service to perform professional and efficient O&M on your SecMaster resources.

If your account does not require individual IAM users, skip over this section.

The following walks you through how to grant permissions. **Figure 14-1** shows the process.

### Prerequisites

Learn about the permissions supported by SecMaster and choose policies or roles based on your requirements. For details, see **SecMaster Permissions**.

**Table 14-1** lists all the system-defined roles and policies supported by SecMaster.

**Table 14-1** System-defined permissions supported by SecMaster

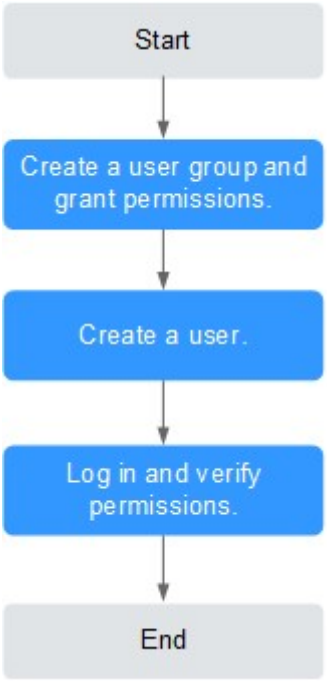
| Policy Name | Description | Type | Dependency |
| --- | --- | --- | --- |
| SecMaster FullAccess | All permissions of SecMaster. | System-defined policy | None |

| Policy Name | Description | Type | Dependency |
| --- | --- | --- | --- |
| SecMaster ReadOnlyAccess | SecMaster read-only permission. Users granted with these permissions can only view SecMaster data but cannot configure SecMaster. | System-defined policy | None |

## Permission Granting Process

**Figure 14-1** Process for granting permissions




1. **Create a user group and assign permissions**.

   Create a user group on the IAM console, and assign the **SecMaster FullAccess** permission to the group.

2. **Create a user and add the user to the user group**.

   Create a user on the IAM console and add the user to the group created in **1**.

3. **Log in to the management console as the created user** and verify the permissions.

   Log in to the SecMaster console as the created user, and verify that the user only has read permissions for SecMaster.

   Choose any other service from **Service List**. If a message appears indicating that you do not have permissions to access the service, the **SecMaster FullAccess** policy has already taken effect.

# 14.2 SecMaster Custom Policies

Custom policies can be created to supplement the system-defined policies of SecMaster. For the actions that can be added to custom policies, see **SecMaster Permissions and Supported Actions**.

You can create custom policies in either of the following ways:

- Visual editor: Select cloud services, actions, resources, and request conditions. This does not require knowledge of policy syntax.
- JSON: Edit JSON policies from scratch or based on an existing policy.

For details, see **Creating a Custom Policy**. The following section contains examples of common SecMaster custom policies.

## Example Custom Policies

- Example 1: Authorization for alert list search permission and permission execution analysis

```
{
   "Version": "1.1",
   "Statement": [
      {
         "Effect": "Allow",
         "Action": [
            "secmaster:alert:list",
            "secmaster:search:createAnalysis"
         ]
      }
   ]
}
```

- Example 2: Preventing users from modifying alert configurations

  A deny policy must be used together with other policies. If the policies assigned to a user contain both Allow and Deny actions, the Deny actions take precedence over the Allow actions.

  The following method can be used to create a custom policy to disallow users who have the **SecMaster FullAccess** policy assigned to modify alert configurations. Assign both **SecMaster FullAccess** and the custom policies to the group to which the user belongs. Then the user can perform all operations except modifying alert configurations on SecMaster. The following is an example of a deny policy:

```
{
       "Version": "1.1",
   "Statement": [
      {
         "Effect": "Deny",
         "Action": [
            "secmaster:alert:updateType"
         ]
      }
   ]
}
```

- Example 3: Defining permissions for multiple services in a policy

  A custom policy can contain the actions of multiple services that are of the global or project-level type. The following is an example policy containing actions of multiple services:

```
{
   "Version": "1.1",
   "Statement": [
      {
         "Effect": "Allow",
         "Action": [
            "secmaster:alert:get",
            "secmaster:alert:update"
         ]
      },
      {
         "Effect": "Allow",
         "Action": [
            "hss:vuls:set",
            "hss:vuls:list"
         ]
      }
   ]
}
```

# 14.3 SecMaster Permissions and Supported Actions

This topic describes fine-grained permissions management for your SecMaster. If your account does not need individual IAM users, then you may skip over this section.

By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using roles and policies. Roles: A type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies: A type of fine-grained authorization mechanism that defines permissions required to perform operations on specific cloud resources under certain conditions.

## Supported Actions

SecMaster provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control.

- Permission: A statement in a policy that allows or denies certain operations.
- Action: Specific operations that are allowed or denied.

# 15 Key Operations Recorded by CTS

## 15.1 SecMaster Operations Recorded by CTS

Cloud Trace Service (CTS) provides you with a history of SecMaster operations. After enabling CTS, you can view all generated traces to query, audit, and review performed SecMaster operations. For details, see *Cloud Trace Service User Guide*.

**Table 15-1** shows the details about the SecMaster operations on CTS.

**Table 15-1** SecMaster operations recorded by CTS

| Operation | Resource Type | Trace Name |
| --- | --- | --- |
| Reviewing a Playbook | playbook | approvePlaybook |
| Creating a Playbook Action | playbook | createPlaybookAction |
| Modifying a Playbook Action | playbook | updatePlaybookAction |
| Deleting a Playbook Action | playbook | deletePlaybookAction |
| Creating a Playbook | playbook | createPlaybook |
| Modifying a Playbook | playbook | updatePlaybook |
| Deleting a Playbook | playbook | deletePlaybook |
| Operating a Playbook Instance | playbook | operatePlaybookInstance |
| Exporting a Playbook Instance | playbook | exportPlaybookInstance |
| Exporting a Playbook | playbook | exportPlaybook |
| Importing a Playbook | playbook | importPlaybook |

| Operation | Resource Type | Trace Name |
| --- | --- | --- |
| Adding a Playbook Triggering Rule | playbook | createPlaybookRule |
| Updating a Playbook Triggering Rule | playbook | updatePlaybookRule |
| Deleting a Playbook Triggering Rule | playbook | deletePlaybookRule |
| Creating a Playbook Version | playbook | createPlaybookVersion |
| Updating a Playbook Version | playbook | updatePlaybookVersion |
| Deleting a Playbook Version | playbook | deletePlaybookVersion |
| Cloning a Playbook Version | playbook | clonePlaybookVersion |
| Creating a Workflow | workflow | createWorkflow |
| Modifying a Workflow | workflow | updateWorkflow |
| Deleting a Workflow | workflow | deleteWorkflow |
| Creating a Workflow Version | workflow | createWorkflowVersion |
| Modifying a Workflow Version | workflow | updateWorkflowVersion |
| Reviewing a Workflow Version | workflow | approveWorkflowVersion |
| Deleting a Workflow Version | workflow | deleteWorkflowVersion |
| Exporting a Workflow | workflow | exportWorkflow |
| Importing a Workflow | workflow | importWorkflow |
| Creating an Asset Connection | asset | createAsset |
| Creating an Asset Connection | asset | updateAsset |
| Deleting an Asset Connection | asset | deleteAsset |
| Uploading an Attachment | component | uploadAttachement |
| Creating a Plug-in Template | component | createComponentTem-plate |

| Operation | Resource Type | Trace Name |
| --- | --- | --- |
| Updating a Plug-in Template | component | updateComponentTem-plate |
| Deleting a Plug-in Template | component | deleteComponentTem-plate |
| Adding Comments | task | commentTask |
| Submitting a To-Do Task | task | commitTask |
| Creating a Workspace | workspace | createWorkspace |
| Deleting a Workspace | workspace | deleteWorkspace |
| Updating a Workspace | workspace | updateWorkspace |
| Recollecting Subservice Statistics | workspace | recollectServiceStatistics |

# 15.2 Querying Real-Time Traces

## Scenarios

After you enable CTS and the management tracker is created, CTS starts recording operations on cloud resources. After a data tracker is created, the system starts recording operations on data in OBS buckets. CTS stores operation records generated in the last seven days.

This section describes how to query and export operation records of the last seven days on the CTS console.

- **Viewing Real-Time Traces in the Trace List of the New Edition**
- **Viewing Real-Time Traces in the Trace List of the Old Edition**

## Constraints

- Traces of a single account can be viewed on the CTS console. Multi-account traces can be viewed only on the **Trace List** page of each account, or in the OBS bucket or the **CTS/system** log stream configured for the management tracker with the organization function enabled.
- You can only query operation records of the last seven days on the CTS console. To store operation records for more than seven days, you must configure an OBS bucket to transfer records to it. Otherwise, you cannot query the operation records generated seven days ago.
- After performing operations on the cloud, you can query management traces on the CTS console 1 minute later and query data traces on the CTS console 5 minutes later.

## Viewing Real-Time Traces in the Trace List of the New Edition

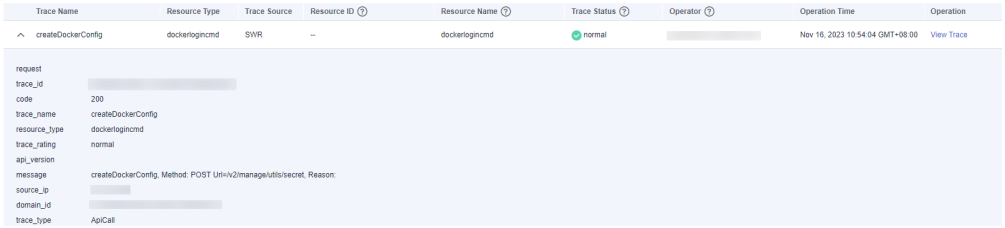
1. Log in to the management console.
2. Click  in the upper left corner and choose **Management & Governance** > **Cloud Trace Service**. The CTS console is displayed.
3. Choose **Trace List** in the navigation pane on the left.
4. On the **Trace List** page, use advanced search to query traces. You can combine one or more filters.
   - **Trace Name**: Enter a trace name.
   - **Trace ID**: Enter a trace ID.
   - **Resource Name**: Enter a resource name. If the cloud resource involved in the trace does not have a resource name or the corresponding API operation does not involve the resource name parameter, leave this field empty.
   - **Resource ID**: Enter a resource ID. Leave this field empty if the resource has no resource ID or if resource creation failed.
   - **Trace Source**: Select a cloud service name from the drop-down list.
   - **Resource Type**: Select a resource type from the drop-down list.
   - **Operator**: Select one or more operators from the drop-down list.
   - **Trace Status**: Select **normal**, **warning**, or **incident**.
     - **normal**: The operation succeeded.
     - **warning**: The operation failed.
     - **incident**: The operation caused a fault that is more serious than the operation failure, for example, causing other faults.
   - **Enterprise Project ID**: Enter an enterprise project ID.
   - **Access Key**: Enter an access key ID, including temporary access credentials and permanent access keys.
   - Time range: Select **Last 1 hour**, **Last 1 day**, or **Last 1 week**, or specify a custom time range.
5. On the **Trace List** page, you can also export and refresh the trace list, and customize the list display settings.
   - Enter any keyword in the search box and press Enter to filter desired traces.
   - Click **Export** to export all traces in the query result as an .xlsx file. The file can contain up to 5000 records.
   - Click  to view the latest information about traces.
   - Click  to customize the information to be displayed in the trace list. If **Auto wrapping** is enabled (  ), excess text will move down to the next line; otherwise, the text will be truncated. By default, this function is disabled.
6. For details about key fields in the trace structure, see **Trace Structure** and **Example Traces**.

7. (Optional) On the **Trace List** page of the new edition, click **Go to Old Edition** in the upper right corner to switch to the **Trace List** page of the old edition.

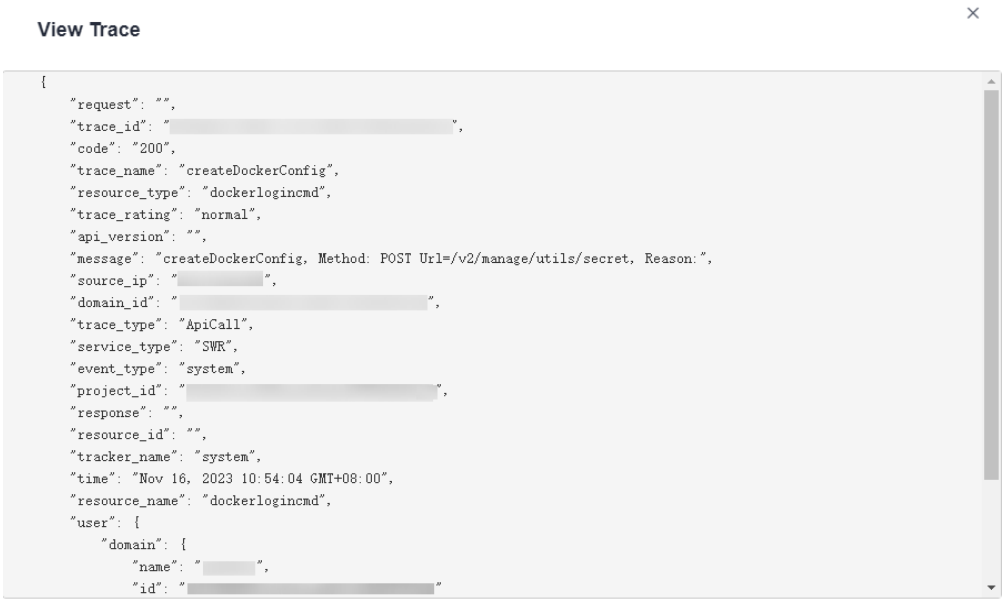
## Viewing Real-Time Traces in the Trace List of the Old Edition

1. Log in to the management console.
2. Click in the upper left corner and choose **Management & Governance** > **Cloud Trace Service**. The CTS console is displayed.
3. Choose **Trace List** in the navigation pane on the left.
4. Each time you log in to the CTS console, the new edition is displayed by default. Click **Go to Old Edition** in the upper right corner to switch to the trace list of the old edition.
5. Set filters to search for your desired traces. The following filters are available:
   - **Trace Type**, **Trace Source**, **Resource Type**, and **Search By**: Select a filter from the drop-down list.
     - If you select **Resource ID** for **Search By**, specify a resource ID.
     - If you select **Trace name** for **Search By**, specify a trace name.
     - If you select **Resource name** for **Search By**, specify a resource name.
   - **Operator**: Select a user.
   - **Trace Status**: Select **All trace statuses**, **Normal**, **Warning**, or **Incident**.
   - Time range: You can query traces generated during any time range in the last seven days.
   - Click **Export** to export all traces in the query result as a CSV file. The file can contain up to 5000 records.
6. Click **Query**.
7. On the **Trace List** page, you can also export and refresh the trace list.
   - Click **Export** to export all traces in the query result as a CSV file. The file can contain up to 5000 records.
   - Click to view the latest information about traces.
8. Click on the left of a trace to expand its details.




9. Click **View Trace** in the **Operation** column. The trace details are displayed.




10. For details about key fields in the trace structure, see **Trace Structure** and **Example Traces** in the *CTS User Guide*.
11. (Optional) On the **Trace List** page of the old edition, click **New Edition** in the upper right corner to switch to the **Trace List** page of the new edition.