

Alibaba Cloud Threat Detection

Access Cloud Security Center

Issue: 20190612

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	It is used for commands.	Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid <i>Instance_ID</i></code>
[] or [a b]	It indicates that it is an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
<code>{}</code> or <code>{a b}</code>	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand slave}</code>

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1 Install the Security Center agent

The Security Center agent is a security plug-in running on servers. To use Security Center to protect your servers, you must first install the agent in the guest operating system of your servers.

Automatically install the Security Center agent through Alibaba Cloud public images

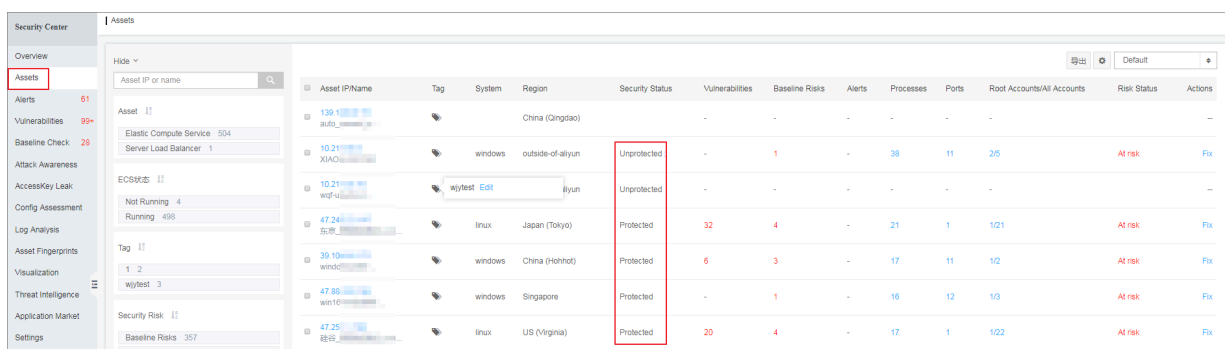
The Security Center agent has been integrated into Alibaba Cloud public images. When you create an ECS instance, select a public image and enable Security enhancement to automatically install the Security Center agent on your instance.

View the security status of your instance

The security status of an instance indicates whether or not the Security Center agent is installed or working properly on the instance.

Log on to the [Security Center console](#), and view the Security Status of all your instances on the Assets page.

- Protected indicates that the Security Center agent is installed on the instance and is online.
- Unprotected indicates that the Security Center agent is not installed on the instance or is offline.



Asset IP/Name	Tag	System	Region	Security Status	Vulnerabilities	Baseline Risks	Alerts	Processes	Ports	Root Accounts/All Accounts	Risk Status	Actions
139.1... elastic_compute_service_504			China (Qingdao)	Protected	-	-	-	-	-	-	-	-
10.21... XIAO...		windows	outside-of-aliyun	Unprotected	-	1	-	39	11	2/5	At risk	Fix
10.21... wdf-u...	wjytest	linux	bjyun	Unprotected	-	-	-	-	-	-	-	-
47.24... 在云...		linux	Japan (Tokyo)	Protected	32	4	-	21	1	1/21	At risk	Fix
39.10... windo...		windows	China (Hohhot)	Protected	6	3	-	17	11	1/2	At risk	Fix
47.88... win16...		windows	Singapore	Protected	-	1	-	16	12	1/3	At risk	Fix
47.25... 腾讯...		linux	US (Virginia)	Protected	20	4	-	17	1	1/22	At risk	Fix

If the security status of your servers appears unprotected, use the following method to manually download and install the Security Center agent on your servers.

Manually install the Security Center agent on a server (including external servers)



Note:

If security software such as Fortinet FortiGate has been installed on your server, the system may fail to install the Security Center agent correctly. We recommend that you check whether security software already exists on your server before installing the Security Center agent. If you have already installed security software to your server, disable or uninstall the software before you install the Security Center agent.

Prerequisites

Before you install the Security Center agent, make sure that your server meets the following requirements:

- If the server has been deployed in Alibaba Cloud, you can directly install the Security Center agent on the server.
- If the server is not in Alibaba Cloud and communicates with Alibaba Cloud over the Internet, make sure that your server has access to the Internet.
- If the server is not in Alibaba Cloud and communicates with Alibaba Cloud through a leased line, add the following lines to the host file in the operating system of your server for Security Center host names to be resolved.

```
- 100 . 100 . 25 . 3 jsrv . aegis . aliyun . com  
- 100 . 100 . 25 . 4 update . aegis . aliyun . com
```

Procedure

Follow these steps to manually install the Security Center agent:

1. Log on to the [Security Center console](#).
2. In the left-side navigation pane, click Settings.
3. Click Install/Uninstall Security Center Agent.

4. Select the installation method that is applicable to the operating system of your server to download and install the latest Security Center agent version.

Or you can select the installation method that is applicable to the operating system of your server to download and install the latest Security Center agent version:

- Windows
 - a. Click Download to download the latest version of Security Center agent package to your PC.
 - b. Upload the Security Center agent package to your server. For example, you can use an FTP client to upload the package to the server.
 - c. Run the package on your server as an administrator.



Note:

The installation of the Security Center agent requires a verification key. The verification key is used to associate the Security Center agent with your Alibaba Cloud account. You can view the verification key on the [Install/Uninstall Security Center Agent](#) page.

- Linux
 - a. Depending on the type of your server, select Alibaba Cloud Servers or External Servers.
 - b. Log on to your Linux instance as an administrator.
 - c. Upload the Security Center agent package to your Linux server, and then select an install command that is applicable to the operating system of your server.
 - d. Run the command to download and install the Security Center agent.



Note:

The install command will download the latest version of Security Center agent package from Alibaba Cloud. Before you run the command, make sure that your server has access to the Internet.

5. The Security Center agent installation may take five minutes to complete. After the Security Center agent has been installed, log on to the Security Center console and verify the server security status on the Assets page:

- If the server is an ECS instance, the security status of the server changes from Unprotected to Protected.
- If the server is an external server, the server is added to the asset list.

Verify Security Center agent installation

Follow these steps to verify the Security Center agent installation:

1. Verify if the Security Center agent processes, including `AliYunDun` and `AliYunDunUpdate`, are running correctly. For more information about the Security Center agent processes, see [Security Center agent](#).
2. Verify that your instance can communicate with Security Center servers by running the following telnet commands on your instance:



Note:

Make sure that your server can access at least one of the following jsrv domain names and one of the following update domain names.

- `telnet jsrv.aegis.aliyun.com 80`
- `telnet jsrv2.aegis.aliyun.com 80`
- `telnet jsrv3.aegis.aliyun.com 80`
- `telnet update.aegis.aliyun.com 80`
- `telnet update2.aegis.aliyun.com 80`
- `telnet update3.aegis.aliyun.com 80`

If the verification fails, follow the instructions in [Troubleshoot the problem of Security Center agent going offline](#) to resolve the issue.

Restrictions and guidelines

For an external server that runs Windows, you must use the Security Center agent package to install the agent. For an external server that runs Linux, you must run the relevant command to install the agent.

To make sure that the agent can run correctly in the following situations, delete the Security Center agent directory and follow the preceding steps to manually reinstall the agent.

- You have used an image that includes the Security Center agent to install the Security Center agent on multiple external servers.
- You have directly copied the Security Center agent files to your external servers.

Security Center agent directory

- **Windows:** `C : \ Program Files (x86) \ Alibaba \ Aegis`
- **Linux:** `/ usr / local / aegis`

2 Install the Security Center agent on servers in private networks

The following sections describe how to install the Security Center agent to connect instances in private networks (such as instances used in Alibaba Cloud's Financial Service Solutions, or instances in Alibaba Cloud VPC) to the Security Center server.

Procedure

Follow these steps to install the Security Center agent on servers in private networks:



Note:

If security software such as Fortinet FortiGate has been installed on your server, the system may fail to install the Security Center agent correctly. We recommend that you check whether security software already exists on your server before installing the Security Center agent. If security software is already installed on your instances, we recommend that you temporarily disable or uninstall the software before you install the Security Center agent.

1. Log on to the [Security Center console](#).
2. Go to the Settings page.
3. Click Install/Uninstall Security Center Agent.
4. Depending on the operating system running on your instance, select the applicable installation method.
 - Windows
 - a. Click Download on the Install/Uninstall Security Center Agent page to download the latest version of Security Center agent package to your PC.
 - b. Upload the Security Center agent package to your instance. For example, you can use an FTP client to upload the package to the instance.
 - c. Run the package on your instance as an administrator.



Note:

The installation of the Security Center agent requires a verification key. The verification key is used to associate the Security Center agent with your

Alibaba Cloud account. You can view the verification key on the Install/Uninstall Security Center Agent page.

- Linux

a. Depending on your system requirements, click one of the following links to download the Security Center agent package to your PC.

- 32-bit Linux: [Security Center agent package](#)
- 64-bit Linux: [Security Center agent package](#)

b. Upload the Security Center agent package to your instance. For example, you can use an FTP client to upload the package to the instance.

c. Log on to your Linux instance as an administrator.

d. Locate the directory that stores the uploaded Security Center agent package, depending on your system requirements, run one of the following commands to install the Security Center agent:

- 32-bits Linux:

```
chmod +x AliAqsInst_all_32.sh && ./AliAqsInst_all_32.sh xxxxxx
```
- 64-bits Linux:

```
chmod +x AliAqsInst_all_64.sh && ./AliAqsInst_all_64.sh xxxxxx
```



Note:

Replace `xxxxxx` at the end of each command with the verification key that is provided on the Install/Uninstall Security Center Agent page. This verification key is the same as that used to install the Security Center agent to a Windows running instance. The verification key is used to associate the Security Center agent with your Alibaba Cloud account.

5. Once the Security Center agent is installed and synced with your instances (this process may take up to 5 minutes), you can log on to the Security Center console and view the Security Status of your instances on the Assets page. The Security Status of your instances will change from Unprotected to Protected.

Verify Security Center agent installation

To verify your Security Center agent installation, follow these steps:

1. Verify that the `AliYunDun` and `AliYunDunU pdate` processes of the Security Center agent are running normally. For more information about the Security Center agent processes, see [Security Center agent](#).
2. Verify that your instance can communicate with Security Center servers by running the following telnet commands on your instance:

**Note:**

Make sure that your instance can communicate with the following two Security Center servers properly:

- `telnet jsrv3 . aegis . aliyun . com 80`
- `telnet update3 . aegis . aliyun . com 80`

If your instance cannot communicate with the Security Center servers properly, see [Troubleshoot the problem of Security Center agent going offline](#) to resolve the issue.

3 Uninstall the Security Center agent

You can use the following methods to uninstall the Security Center agent and disable the protection. After you have uninstalled the Security Center agent, there is a waiting period of six hours before the Security Status of the server in the Security Center console changes to unprotected.



Note:

After you have uninstalled the agent, Security Center initializes self protection. The protection duration is 24 hours. During this period, you can only manually reinstall the agent. When you reinstall the agent, you must ignore all the error messages that the system displays and run the install command more than three times.

Automatically uninstall the Security Center agent

Prerequisites

To uninstall the Security Center agent, you must make sure that the status of the agent on the current server is online. An offline server cannot receive the uninstall instruction.

Procedure

Follow these steps to automatically uninstall the Security Center agent:

1. Log on to the [Security Center console](#).
2. In the left-side navigation pane, click Settings.
3. Click Install/Uninstall Security Center Agent.
4. Click Uninstall Agent in the upper-right corner.
5. Specify the server where the Security Center agent runs in the Uninstall Agent dialog box, and click Uninstall Now.
6. Wait for the system to uninstall the Security Center agent on the specified server.

Manually uninstall the Security Center agent

Select a method that is applicable to the operating system of your server to manually uninstall the Security Center agent:

Linux servers

1. Log on to your server.

2. Run the following command to download the script for uninstalling the Security Center agent.

```
wget http://update.aegis.aliyun.com/download/uninstall.sh
```

3. Sequentially run the following commands to uninstall the Security Center agent.
 - `chmod +x uninstall.sh`
 - `./uninstall.sh`

Windows servers

1. Log on to your server.
2. [Download the script for uninstalling the Security Center agent](#) to your server.



Note:

You can also download the script to your computer and use an FTP client to upload the script to your server.

3. Double-click the `uninstall.bat` file to run the script and uninstall the agent.

4 Troubleshoot the problem of Security Center agent going offline

If you have followed instructions in [Install the Security Center agent](#) and successfully installed the Security Center agent on your server, but the security status of the server is still Unprotected, then the agent goes doffline. This article describes how to resolve this issue.

Context

If your Security Center agent is offline, follow these steps to resolve the issue:

Procedure

1. Log on to your server and check whether the Security Center agent processes (`AliYunDun` and `AliYunDunU pdate`) are running.

If the Security Center agent processes are not running, we recommend that you restart your server or reinstall the Security Center agent. For more information, see [Install the Security Center agent](#).

- Windows

Open the Task Manager and check whether the following processes are running.

- Linux

Run the `top` command to check whether the following processes are running.

2. If you have installed the Security Center agent on a server for the first time and the security status of the server is Unprotected after installation, you can restart the Security Center agent using the following methods:

- Linux: Run the following command: `killall AliYunDun && killall AliYunDunU pdate && /usr/local/aegis/aegis_client/aegis_10_x x / AliYunDun .`



Note:

You must replace `xx` with the largest number in the directory.

- Windows: Restart the two services displayed in the following screenshot by right-clicking and selecting Restart.

3. Check whether the network connection on your server is normal.

- Servers with public IP addresses (for example, servers connected to classic networks, EIPs, or external hosts)
 - Windows: Run the following command: `ping jsrv . aegis . aliyun . com - l 1000`
 - Linux: Run the following command: `ping jsrv . aegis . aliyun . com - s 1000`
- Servers without public IP addresses (for example, servers connected to the Financial Cloud, or VPCs)
 - Windows: Run the following command: `ping jsrv3 . aegis . aliyun . com - l 1000`
 - Linux: Run the following command: `ping jsrv3 . aegis . aliyun . com - s 1000`

4. If the ping command does not work, try the following methods:

- a. Make sure that the DNS service is running on your server. If the DNS service is not running, restart your server or check whether a DNS error has occurred.
- b. Check whether firewall ACL rules or Alibaba Cloud security group rules have been configured on your server. If firewall rules or security group rules have been configured, make sure that the IP address of the Security Center server is added to the whitelist (both in the inbound and outbound directions).



Note:

Allow the following network segments to access your server on port 80. For the last network segment, both port 80 and 443 must be enabled.

- 140.205.140.0/24 80
- 106.11.68.0/24 80
- 110.173.196.0/24 80
- 106.11.68.0/24 80

- 100.100.25.0/24 80 443

c. Check whether the public network bandwidth on your server is zero. If the public network bandwidth on your server is zero, try the following methods:

A. Add the following name resolution rules to the hosts file on your server:

- Domestic classic websites: 100 . 100 . 110 . 61 jsrv . aegis . aliyun . com , 100 . 100 . 45 . 131 jsrv . aegis . aliyun . com , 100 . 100 . 110 . 62 update . aegis . aliyun . com and 100 . 100 . 45 . 29 update . aegis . aliyun . com
- International classic websites: 100 . 100 . 103 . 52 jsrv . aegis . aliyun . com , 100 . 100 . 30 . 54 jsrv . aegis . aliyun . com , 100 . 100 . 30 . 55 update . aegis . aliyun . com and 100 . 100 . 103 . 54 update . aegis . aliyun . com

B. After changing the hosts file, run the following command: ping jsrv . aegis . aliyun . com .



Note:

If 100 . 100 . 25 . 3 is not returned, restart your server or check whether a DNS error has occurred.

C. If the ping command does not return expected results, change the values of t_srv_doma in and h_srv_doma in in the network_co nfig file under the Security Center agent installation directory (conf) to 100 . 100 . 25 . 3 and 100 . 100 . 25 . 4 respectively. After making the changes, restart the Security Center agent.



Note:

You must create a copy of the network_co nfig file before making the changes.

This method only applies when the public network bandwidth on the server is zero and the Security Center agent is offline.

d. If the ping command returns the correct IP address, run the following telnet command to verify connectivity: telnet 140 . 205 . 140 . 205 80 . If no connectivity is found, check firewall restrictions.

5. Check whether high CPU or memory usage (maintained at 95% or higher for a long period) has occurred. High CPU or memory usage may prevent the Security Center agent from running properly.
6. Check whether third-party security products (such as Fortinet FortiGate) have been installed on your server. Some third-party security software may prevent the Security Center agent from accessing the network.

If security software is installed on your servers, we recommend that you temporarily disable or uninstall the software before reinstalling the Security Center agent.

5 Security Center agent

How Security Center agent works

The Security Center agent automatically sends online data to the Security Center server at an interval of five hours.

If the Security Center server has not received any information from the agent for 12 hours, the server determines that the server where the agent runs is offline. The Security Center server then changes the security status of the server to Unprotected in the console.

Agent processes

Security Center runs the following Security Center agent processes on a server:



Note:

Security Center uses the root account to run the Security Center agent processes on a Linux server. Security Center uses the system account to run the Security Center agent processes on a Windows server.

- AliYunDun

Security Center runs this process on a server to establish a connection to the Security Center server.

The directory of the process file varies by operating system, as follows:

- Windows 32-bits: `C : \ Program Files \ Alibaba \ aegis \ aegis_client`
- Windows 64-bits: `C : \ Program Files (x86) \ Alibaba \ aegis \ aegis_client`
- Linux: `/usr/local/aegis/aegis_client`

- **AliYunDunUpdate**

Security Center periodically runs this process on a server to verify if an update is available for the Security Center agent.

The path of the process file varies depending on the operating system, as follows:

- **Windows 32-bits:** `C : \ Program Files \ Alibaba \ aegis \ aegis_upda te`
- **Windows 64-bits:** `C : \ Program Files (x86) \ Alibaba \ aegis \ aegis_upda te`
- **Linux:** `/ usr / local / aegis / aegis_upda te`