Server Migration Service

Getting Started

 Issue
 14

 Date
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Before You Start

Before using SMS, you must:

• Confirm that you have the required permissions.

Your target account must have the **permissions** required to use SMS and its dependent cloud services.

- **Confirm that your source server OS is supported by SMS.** You can learn more about supported OSs from the following links:
 - Supported Windows OSs
 - Supported Linux OSs
- Determine which region you want to migrate to.

You need to know which region you want to migrate to. When you create a migration task, you need to confirm that the preset region is the one you want to migrate to.

• Read the SMS precautions.

SMS Precautions

• Back up data on the target server disks, and ensure that the disks can be formatted.

Disks on the target server will be formatted and re-partitioned based on the source disk settings during the migration. If you choose to use an existing server on the cloud as the target server, make sure that any data on the target server has been backed up and that the disks can be formatted.

• (Recommended) Disable any software in conflict with SMS on the source server.

Any antivirus or conflicting software on the source server may prevent the SMS-Agent from start. It is recommended that you disable the software. If you are not sure whether there is a software conflict with the SMS-Agent, back up your data before the migration.

- Confirm that your account balance is enough.
 - SMS is a free service, but you will still be billed for any other resources used during the migration. For details, see **Billing**.
- Know when the target server can be operated.

Do not operate the target server before the migration is complete, such as renewing the target server or changing its billing mode. • Learn where to find the solutions to common migration issues.

If you encounter any problem during the migration, try to solve the problem by referring to FAQs.

2 Migration Process

The following figure shows the process of using SMS to migrate a server.



Figure 2-1 Migration process

3 Preparing for Migration

Before using SMS, make the following preparations:

1. Register a HUAWEI ID and enable Huawei Cloud services.

D NOTE

Real-name authentication is required for migrating servers to regions within the Chinese mainland.

2. Obtain the required permissions.

If you use a Huawei Cloud account for migration, you have the required permissions by default. If you use an IAM user for migration, you need to obtain the required permissions. For more information, see **Creating a User Group and Assigning Permissions**.

3. Obtain an AK/SK pair for your target account.

The AK/SK pair is used for authentication during the migration. To learn how to obtain an AK/SK pair, see **How Do I Create an AK/SK Pair for an Account?** or **How Do I Create an AK/SK Pair for an IAM User?**

SMS does not support AK/SK-based authentication for federated users (virtual users).

4. Ensure that the source server OS is supported by SMS.

See Supported Windows OSs or Supported Linux OSs.

- 5. Ensure that the following network requirements are met:
 - a. The source server can connect to the Huawei Cloud API Gateway over TCP port 443. For more information, see **Connecting Source Servers to Huawei Cloud API Gateway**.

NOTE

It is recommended that all outbound ports on the source server be opened.

b. If you want to migrate over an IPv6 network, the source environment must support IPv4/IPv6 dual-stack networks.

- c. The source server can connect to the target server. For more information, see **Connecting Source Servers to Target Servers**.
 - For a migration over the Internet, purchase EIPs in the region you are migrating to.
 - For a migration over a private network, request a Direct Connect or VPN connection.
- d. The following ports are enabled in the security group associated with the target server to allow traffic to these ports:
 - Windows: TCP ports 8899, 8900, and 22
 - Linux: TCP port 22 for file-level migration, and ports 8900 and 22 for block-level migration

- For security purposes, you are advised to only allow traffic from the source server to the ECS over these ports.
- The firewall of the target server must allow traffic to these ports.

To learn how to open the ports, see **How Do I Configure Security Group Rules for Target Servers?**

6. Ensure that the following source server requirements are met:

Available Space

- Windows
 - At least 320 MB of available space on a partition not smaller than 600 MB
 - At least 40 MB of available space on a partition smaller than 600 MB
- Linux

At least 200 MB of available space on the root partition

Source Environment

- The system time of the source server must be consistent with the local standard time to avoid Agent registration failures.
- If the source server runs Linux, rsync must be installed on it. You can run the rsync -v command to check whether rsync is installed.

If it is not, install it by running the following command:

- CentOS: **yum -y install rsync**
- Ubuntu: apt-get -y install rsync
- Debian: apt-get -y install rsync
- SUSE: zypper install rsync
- For other distributions, refer to the official website documentation.

rsync comes preinstalled on most distributions by default.

4 Installing the Agent on the Source Server

4.1 Installing the Agent on Windows

Scenarios

You need to install the Agent on the source server to be migrated. During the installation, you need to enter the AK/SK pair of the Huawei Cloud account you are migrating to. After the Agent is started, it automatically reports source server information to SMS. The information is used for migration only. For details, see What Information Does SMS Collect About Source Servers?

Before using SMS to migrate servers, you need to manually install and register the Agent on each server to be migrated. If there are more than 50 servers to migrate, you can **create a server migration workflow** on MgC to automate batch installation and registration of the Agent.

There are two options for Windows:

- GUI-based Windows Agent (Python 3): Windows Server 2019, Windows Server 2016, Windows Server 2012, Windows 10, and Windows 8.1
- CLI-based Windows Agent (Python 2): Windows Server 2008 and Windows 7

You must log in to the source server as user Administrator.

Prerequisites

- You have obtained an AK/SK pair for your Huawei Cloud account.
 - If you use an IAM user for migration, obtain an AK/SK pair by referring to How Do I Create an AK/SK Pair for an IAM User?

- If you use an account for migration, obtain an AK/SK pair by referring to How Do I Create an AK/SK Pair for an Account?
- You have obtained the administrator permissions for the source server.
- You have confirmed that the source server OS is supported by SMS. Learn more about supported Windows OSs.
- There is no antivirus software on the source server. Antivirus software may prevent the Agent from starting up.

If you encounter Agent startup failures due to antivirus software, refer to the instructions in How Do I Fix Error "Failed to start the I/O monitoring module" When I Start the Agent?

Downloading the Agent Installation File

Step 1 Sign in to the **SMS console**.

- **Step 2** In the navigation pane on the left, choose **Agents**.
- Step 3 Select the Windows card, locate the Agent that matches the source server OS,

and click the \perp icon next to **Agent**.

- GUI-based Windows Agent (Python 3): Windows Server 2019, Windows Server 2016, Windows Server 2012, Windows 10, and Windows 8.1
- CLI-based Windows Agent (Python 2): Windows Server 2008 and Windows 7

| SMS | Agents | 🗂 Us |
|---------------|--|--------------------------|
| Dashboard | Source OS | |
| Agents | 🛆 Linux 🕊 Windows | |
| Proxy Servers | O Prepare O Obtain an AVOR pair for the target account. Obtain New C | |
| | O Download the Agent ① | |
| | Windows Agent (Python 3) | |
| | Size 69.2 MB Size 41.8 MB | |
| | Updated Jun 27, 2024, 02:49:03 GMT+08:00 Updated Jun 27, 2024, 02:47:51 GMT+0 | 8:00 |
| | OS Windows Server 2019/Windows Server 2019/Windows Server 2012/Win OS Windows Server 2008/Windows | 7 |
| | Agent https://sms-agent-3-0.obs.c >huawel.com/SMS-Agent & Agent https://sms-agent-3-0.obs.c Py3.exe | .huawei.com/SMS-Agent- |
| | SHA256 File https://sms-agent-3-0.obs.c huavei.com/SMS-Agent- Ju SHA256 File https://sms-agent-3-0.obs Py3.exe.sha256 File Py2.exe.sha256 | huawei.com/SMS-Agent- d. |
| | Verify File Integrity Verify File Integrity | |

- **Step 4** Read and agree to the service disclaimer, and click **Yes** to download the Agent installation file.
- **Step 5** Click the icon next to **SHA256 File** to download the file that contains a hash value to a local directory. Verify the integrity of the Agent installation file. For details, see **How Do I Verify the Integrity of the Agent Installation File**?

| 0 | ownload the Agent @ | | | |
|---|--------------------------|--|-----------------------|---|
| | Windows Agent (Python 3) | | Windows Agent (Py | thon 2) ③ |
| | Size | 69.2 MB | Size | 41.8 MB |
| | Updated | Jun 27, 2024, 02:49:03 GMT+08:00 | Updated | Jun 27, 2024, 02:47:51 GMT+08:00 |
| | os | Windows Server 2019/Windows Server 2016/Windows Server 2012/Windows 10/Windows 8.1 | OS | Windows Server 2006/Windows 7 |
| | Agent | https://sms-agent-3-0.obs.i huawei.com/SMS-Agent-Py3.exe 🗈 | Agent | https://sms-agent-3-0.obs.c huavei.com/SMS-Agent-Py2.exe du |
| | SHA256 File | https://sms-agent-3-0.obs.). huawei.com/SMS-Agent-Py3.exe.sha256 🗼 | SHA255 File | https://sms-agent-3-0.obs.(> huavel.com/SMS-Agent-Py2.eve.sha256 |
| | Verify File Integrity | | Verify File Integrity | |

----End

Installing the Windows Agent (Python 3)

Step 1 Transmit the SMS-Agent-Py3.exe file to the source server.

- Step 2 Log in to the source server as user Administrator and double-click the SMS-Agent-Py3.exe file.
- **Step 3** Click **Install** and wait for the installation to complete.
- Step 4 Click Finish. The SMS-Agent GUI is displayed.
- Step 5 Enter the AK/SK pair for the Huawei Cloud account and the SMS domain name for the region you are migrating to. You can obtain the SMS domain name on the Agents page of the SMS console, as shown in Figure 4-2.
 - If you do not need to use an HTTP/HTTPS proxy, select **Direct Connection**.
 - If you need to use an HTTP/HTTPS proxy, select Use Proxy and enter the IP address, port number, username, and password of the proxy server.

NOTE

- Proxy Server IP: Follow the format https://your-proxy-addr.com. Use the protocol configured for your proxy server. HTTPS is recommended. Replace your-proxy-addr with the IP address of your proxy server, not that of the target server.
- **Port**: Enter the port used by the proxy server.
- Proxy user name: Enter the username required for using the proxy software. If no username is required, leave this parameter blank.
- Password: Enter the password corresponding to the proxy username. If no
 password is required, leave this parameter blank.

Figure 4-1 Starting the Agent

| 🐻 running | - | - | × |
|--|---|---|---|
| Enter an AK. | ł | | |
| Enter an SK. | ******* | | |
| Enter an sms_domain: | | | |
| Direct Connection | C Use Proxy | | |
| Proxy server IP: | | | |
| Port : | | | |
| Proxy user name: | | | |
| Password : | | | |
| Run log | | | |
| Enterprise pro Collecting soun Uploading the s | ect selected cce information source information | ^ | |
| Waiting for the console for the | e SMS instruction, go to the SMS e next step | ~ | |
| start | hide | | |

 SM
 April
 □

 District
 Image: Control of the logic and logic and logic and logic and logic and logic and logic

Figure 4-2 Obtaining the SMS domain name

- **Step 6** If the EPS service has been enabled for the Huawei Cloud account, after you entered the AK/SK pair, the Agent will list all enterprise projects the account is allowed to access. You can select the enterprise project you would like to migrate the source server to. This enables you to isolate permissions, resources, and finance during the migration. For details, see Migrating Servers into an Enterprise Project.
- Step 7 Click start.
- **Step 8** Carefully review the **Privacy Statement** and click **Yes** if you want to continue.

When the message "Upload success. Waiting for the SMS instruction" is displayed, the Agent has been started. You can sign in to the SMS console and perform subsequent operations.

----End

Installing the Windows Agent (Python 2)

- Step 1 Transmit the SMS-Agent-Py2.exe file to the source server.
- Step 2 Log in to the source server as user Administrator and double-click the SMS-Agent-Py2.exe file.
- **Step 3** Click **Install** and wait for the installation to complete.
- **Step 4** Click **Finish**. The SMS-Agent CLI is displayed.

NOTE

If you need to rerun the Agent, double-click **agent-start.exe** in the **C:\SMS-Agent-Py2** directory where the Agent was installed.

Step 5 If you need to use an HTTP/HTTPS proxy, go to 6.

If you do not need to use an HTTP/HTTPS proxy, go to 7.

NOTE

- If your source server cannot access Huawei Cloud over the Internet, you can use a proxy server. You will need to configure the proxy server yourself.
- In a migration over a private line or VPN, a proxy server is used for registering the source server with SMS. It is not used for data migration.

Step 6 (Optional) Configure the HTTP/HTTPS proxy for the Agent.

Go to the directory where the Agent was installed (typically C:\SMS-Agent-Py2\config) and edit the **auth.cfg** file. Do not edit the **auth.cfg** file unless you need to use an HTTP/HTTPS proxy.

[proxy-config] enable = true proxy_addr = https://your-proxy-addr.com proxy_port = proxyport proxy_user = use_password = false

NOTE

- enable: To use a proxy, set this parameter to true.
- **proxy_addr**: Replace *your-proxy-addr* with the IP address of the proxy server, not that of the target server. Use the protocol configured for the proxy. HTTPS is recommended.
- **proxy_user**: Enter the username required for the proxy. If no username is required, leave it blank.
- **use_password**: If a password is required for the proxy, set it to **true**. If no password is required, set it to **false**.
- **Step 7** When prompted, enter the AK/SK pair for the Huawei Cloud account and the SMS domain name for the region you are migrating to. You can obtain the SMS domain name on the **Agents** page of the SMS console, as shown in **Figure 4-3**.

If the EPS service has been enabled for the Huawei Cloud account, after you entered the AK/SK pair, the Agent will list all enterprise projects the account is allowed to access. You can select the enterprise project you would like to migrate the source server to. This enables you to isolate permissions, resources, and finance during the migration. For details, see Migrating Servers into an Enterprise Project.

| | Source OS | | | |
|---|--|---|--|--|
| | ∆ Linux | Windows | | |
| | Prepare ③ Coltain an AOSK pair for the larged account. Obtain Nov ④ | | | |
| | Windows Agent (Python 3) () | | Windows Agent (Pytho | n Ə) (Ö) |
| ¢ | Store 49.2 MB Uppended June 22, 2024, 422 vel 33 (sMT-184 pp) OB Windown Sterver 2014/Windown Sterver 2014/WindownS | 15Windows Server 2912Windows 15Windows & 1 I haavet com/0485-Agent Φγ3.ese ⊥ Nuovet com/0485-Agent Φγ3.ese sha255 ⊥ | Size 4 Updated 2 OS V Apent P SHA255 File P Verify File Integrity | nt Blue an 27. 2014 (El 475) SMPT-RESO Manuel Cardfold Agent PJ ene & Tegs (Intra spece 3-644), Annexel Cardfold Agent PJ ene & Tegs (Intra spece 3-644), Named Cardfold Agent PJ ene shadle & |
| | Install and start the Agent Enter the AGENT of the target account and the SMS domain name to | to start the Agent. If the Agent tasks to be started, see Solution | | |

Figure 4-3 Obtaining the SMS domain name

After the authentication succeeds, the Agent starts to report source server information to SMS, and the window is closed. You can go to the **Servers** page on the SMS console to view the record of the source server.

----End

Troubleshooting

- SMS.0202 AK/SK Authentication Failed
- Why Wasn't My Source Server Added to the SMS Console After I Configured the Agent?

4.2 Installing the Agent on Linux

Scenarios

You need to install the Agent on the source server to be migrated. During the installation, you need to enter the AK/SK pair of the Huawei Cloud account you are migrating to. After the Agent is started, it automatically reports source server information to SMS. The information is used for migration only. For details, see What Information Does SMS Collect About Source Servers?

NOTE

Before using SMS to migrate servers, you need to manually install and register the Agent on each server to be migrated. If there are more than 50 servers to migrate, you can **create a server migration workflow** on MgC to automate batch installation and registration of the Agent.

Prerequisites

- You have obtained an AK/SK pair for your Huawei Cloud account.
 - If you use an IAM user for migration, obtain an AK/SK pair by referring to How Do I Create an AK/SK Pair for an IAM User?
 - If you use an account for migration, obtain an AK/SK pair by referring to How Do I Create an AK/SK Pair for an Account?
- You have confirmed that the source server OS is supported by SMS. Learn more about **supported Linux OSs**.

Procedure

- **Step 1** Sign in to the **SMS console**.
- **Step 2** In the navigation pane on the left, choose **Agents**.
- **Step 3** Select the **Linux** card, and in the **Linux Agent** area, click the □¹ icon next to **Agent** to copy the Agent download command. Run the command on the source server to download the Agent installation package.

| shboard | | Source OS | | | |
|--------------------------------------|---|--|---|------------------------------------|--|
| rvers | | 000100 00 | | 1 | |
| Agents Templates Proxy Servers | | Linux | | Windows | |
| ,, | | 0.0 | | 1 | |
| | | Prepare () | | | |
| | | Obtain an AK/SK pair fo | or the target account.Obtain Now 🖸 | | |
| | | | <u>_</u> | | |
| | | Download the Agent | 0 | | |
| | | Linux Agent | | | |
| | | Size | 108.3 MB | | |
| | < | Updated | Dec 20, 2024, 02:42:51 GMT+08:00 | | |
| | | Agent URL | wget -t 3 -T 15 https://sms-resource- | nyhuaweicloud.com/SMS-Agent.tar.gz | |
| | | SHA256 File | wget -t 3 -T 15 https://sms-resource-c Agent.tar.gz.sha256 | .myhuawelcloud.com/SMS- | |
| | | | | | |

Step 4 Copy the command next to **SHA256 File** and run the command on the source server. Use the hash value contained in the SHA256 file to verify the integrity of

the Agent installation package. For details, see **How Do I Verify the Integrity of the Agent Installation File?**

| Linux Agent | | |
|-------------|--|--------------------------------------|
| Size | 106.9 MB | |
| Updated | Jun 27, 2024, 02:40:26 GMT+08:00 | |
| Agent URL | wget -t 3 -T 15 https://sms-agent-3-0.obs | .huawei.com/SMS-Agent.tar.gz |
| SHA256 File | waet -t 3 -T 15 https://sms-agent-3-0.obs. |).huawei.com/SMS-Agent.tar.gz.sha256 |

- Step 5 Decompress the Agent software package. tar -zxvf SMS-Agent.tar.gz
- Step 6 Switch to the SMS-Agent directory on the source server. cd SMS-Agent
- **Step 7** If you need to use an HTTP/HTTPS proxy, go to **8**.

If you do not need to use an HTTP/HTTPS proxy, go to 9.

A CAUTION

- If your source server cannot access Huawei Cloud over the Internet, you can use a proxy server. You will need to configure the proxy server yourself.
- In a migration over a private line or VPN, a proxy server is used for registering the source server with SMS. It is not used for data migration.
- **Step 8** (Optional) Configure the HTTP/HTTPS proxy for the Agent.
 - 1. Go to the **config** directory. cd SMS-Agent/agent/config
 - Open and edit the auth.cfg file. Do not edit the auth.cfg file unless you need to use an HTTP/HTTPS proxy. vi auth.cfg

The values shown here are for reference only.

[proxy-config] enable = true proxy_addr = https://your-proxy-addr.com proxy_port = 3128 proxy_user = root use_password = true

NOTE

- enable: To use a proxy, set it to true.
- proxy_addr: Replace *your-proxy-addr* with the IP address of the proxy server, not that of the target server. Use the protocol configured for the proxy. HTTPS is recommended.
- proxy_user: Enter the username required for the proxy. If no username is required, leave it blank.
- **use_password**: If a password is required for the proxy, set it to **true**. If no password is required, set it to **false**.
- 3. Save the **auth.cfg** file and exit.
 - :wq

Step 9 Start the Agent.

./startup.sh

Step 10 Carefully review what information will be collected by the Agent, enter **y**, and press **Enter**.

Figure 4-4 Entering y



Step 11 Enter the AK/SK pair for the Huawei Cloud account and the SMS domain name for the region you are migrating to. You can obtain the SMS domain name on the Agents page of the SMS console, as shown in Figure 4-6.

Figure 4-5 Entering the AK/SK pair

| fter being started, the migration Agent collects system configuration information | n and uploads th | ne information | to SMS for migra |
|---|------------------|-----------------|------------------|
| on task creation. The information to be collected includes server IP address and | MAC address. Fo | or details, see | the Server Mig |
| ion Service User Guide. Are you sure you want to collect the information?(y/n)y | | | |
| lease input AK(Access Key ID) of Pulbic Cloud: | | | |
| lease input SK(Secret Access Key) of Pulbic Cloud:******** | | | |
| lease input smsdomain of Public Cloud: sms.(.huawei.com | | | |

Figure 4-6 Obtaining the SMS domain name

| SMS | Agents |
|--------------------------------|--|
| Dashboard Servers Agents | Source OS |
| Templates | |
| Proxy Servers | Prepare ③ Obtain an AAGIX pair for the target account. Other New C Obtain AGIX pair for the target account. Other New C Obtain an AAGIX pair for the target account. Other New C |
| | Linux Agent |
| | Size 106.9 MB Updated Jun 27, 2024, 02:40:26 GMT+08:00 |
| | Agent URL wget -t 3 -T 15 https://sms-agent-3-0.obs. huawei.com/SMS-Agent.tar.gz [] |
| | SIMU250 File wget 4 3 -T 13 https://snrs-agent-3-0.obs >> huaves.com/BMS-Agent.tar.gz.shu256 () Vestly File integrity I install and start the Agent |
| | Enter the AUGK pair of the target account and the SMS domain name to start the Agent. If the Agent fails to be started, see Solution |

If the EPS service has been enabled for the Huawei Cloud account, after you entered the AK/SK pair, the Agent will list all enterprise projects the account is allowed to access. You can select the enterprise project you would like to migrate the source server to. This enables you to isolate permissions, resources, and finance during the migration. For details, see **Migrating Servers into an Enterprise Project**.

When the following information is displayed, the Agent has been started up and will automatically start reporting source server information to SMS. You can go to the **Servers** page on the SMS console to view the record of the source server.

Figure 4-7 Agent running



----End

Troubleshooting

- How Do I Resolve Error "No such file or directory: 'rsync':'rsync" When I Start the Linux Agent?
- SMS.0202 AK/SK Authentication Failed
- Why Wasn't My Source Server Added to the SMS Console After I Configured the Agent?

5 (Optional) Creating a Migration Template

You can create a migration template to quickly define migration settings. In a migration template, you can define several parameters, such as **Network**, **Migration Rate Limit, Continuous Synchronization**, and **Region/Project**. For details, see **Creating a Migration Template**.

6 (Optional) Creating a Server Template

You can create a server template to quickly define target server settings. In a server template, you can define several parameters, such as **VPC**, **Subnet**, and **Security Group**. For details, see **Creating a Server Template**.

7 Configuring the Target Server

Scenarios

Before starting the migration, you need to configure the target server, which will receive data from the source server. You can clone the target server for service testing and launch it once you've confirmed that your services can run properly.

Prerequisites

You can configure the target server when:

- The source server is **Connected** to SMS.
- The migration task is in the **Migration Feasibility Check** stage.
- The migration task is in the **Pending target configuration** status.

Procedure

- **Step 1** Sign in to the **SMS console**.
- Step 2 In the navigation pane on the left, choose Servers.

Figure 7-1 Server list

| SMS | Servers Colo to Did Edition @ Process Plow 🖸 User Oc | 100 |
|---------------|---|-----|
| Dashboard | A If you encounter permissions issues when using SMR, contact the administrator to obtain permissions. Learn more | |
| Agents | After you install and start the Apent on a source server, a record will be automatically generated. | |
| Proxy Servers | Process Flow @ Hou | |
| | 1 Configure Target 2 Start Full Replication 3 Sync Incernential Data | |
| | After the Agent to started, locate the generated migration lask, and click Configure Target to configure the migration settings Click Start to mitiate an full replication. If continuous synchronization is disabled for the task, the migration is complete and target serve Click Start to mitiate an incremental synchronization is exabled for the task, click Launch Target to finish | |
| | S Install Agent Help C Help C | |
| | | |
| | Iodal saisa 13 O Aonomial A A Pantong migrason o A Pantong saiget computation 13 D Rumming 3 O Compared 6 | |
| | Start Pause Launch Target Sync More > | |
| | C. Select a property or enter a keyword. | |
| | Source Name/D 😑 Conne 😔 Source OS/IP A 😝 Target 🖯 Task Status 😔 Migration Stage 😔 Progress 🕀 Operation | |
| | Connect. UGUNTU_24_64BIT A Pending targ. More tool Free Ref. (2) Tool progress Start Pause More Tool progress Start Pause More | |

Step 3 In the server list, locate the source server and click **Configure Target** in the **Migration Stage/Status** column.

You can also choose **More > Configure Target** in the **Operation** column.

NOTICE

If you do not find the record for your source server, check that the account you are currently using is the migration account.

| Total tasks 14 o Abnormal 4 | 4 A Pending migration 0 | A Pending target configuration 12 | Running 3 | o Completed 7 | | | |
|-----------------------------|-------------------------|-----------------------------------|-----------|--------------------|---|----------------|---|
| Stat Pause La | unch Target Sync | More ~ | | | | | |
| | Add filter | | | | | | × O 6 |
| Source Name/ID 🖯 | Connection Θ | Source OS/IP Address () | Target ⊖ | Task Status 😣 | Migration Stage/Status 😑 | Progress Θ | Operation |
| | Connected | CENTOS_8_2_64BIT | - | A Pending target c | Migration Feasibility Check Pending larget configuration Configure Target | Total progress | 10 ⁴ Start Pause Mate A |
| Total Records: 1 | | | | | | | View Delete |
| | | | | | | | < Manage Target |
| | | | | | | | Delete Target Configuration Set Micration Rate |
| | | | | | | | < Manage Migration Settings |

Step 4 On the **Configure Basic Settings** page, configure parameters by referring to **Table 7-1**.

| Area | Parameter | Option | Description |
|-----------------------|-----------------------|---------|---|
| Migration Template | Migration Template | - | You can use the default migration template provided by the system. You can also create a migration template . After you choose a migration template, the system will populate the settings for Network Type , Migration Rate Limit , Migration Method , Enable Continuous Synchronization , Resize Disks and Partitions , Region , and Project based on the template. |
| Network Settings | Network Type | Public | An EIP must be bound to the target server. Public is the default value of Network Type . |
| | | Private | A Direct Connect connection, VPN connection, VPC peering connection, VPC subnet, or Cloud Connect connection must be provisioned. The private IP address of the target server will be used for migration. |
| | IP Version | IPv4 | IPv4 can be used for data migration. |
| | | IPv6 | On a dual-stack network, IPv6 can be used for migration. For details about the preparations and precautions for migration over IPv6, see Migrating Servers over an IPv6 Network . |

Table 7-1 Basic parameter settings

| Area | Parameter | Option | Description |
|-------------------------------------|------------------------------|------------------------|--|
| | Migration Rate Limit | - | You can limit the migration rate based on the source bandwidth and service requirements. If you do not want to limit the migration rate, set this parameter to 0. Traffic limiting is unavailable if: The migration uses an IPv6 network. Traffic Control (TC) is missing from the source server. |
| | Overrate Threshold (%) | - | You can regulate how much the migration rate can exceed the configured limit. If the migration rate exceeds the threshold for multiple consecutive times, the migration task is automatically paused. For example, if the migration rate limit is set to 10 Mbit/s and the overrate threshold is set to 10%, the task is automatically paused when the migration rate exceeds 11 Mbit/s (110% of the limit) multiple times consecutively. CAUTION This option is only available for Linux migration. It will not be available or applied if: • The migration uses an IPv6 network. • Traffic Control (TC) is missing from the source server. • The installed SMS-Agent version is earlier than 24.9.0. |
| Migration Settings (Optional) | Migration Method | Linux block-level | Migration and synchronization are performed by block. This method is efficient, but the compatibility is poor. |
| | | Linux file- level | Migration and synchronization are performed by file. This method is inefficient, but the compatibility is excellent. |
| | | Windows block-level | Migration and synchronization are performed by block. This method is very efficient and is the only migration method for Windows servers. |

| Area | Parameter | Option | Description |
|------|---|--------|---|
| | Enable Continuous Synchronizat ion | No | After the full replication is complete, SMS will automatically launch the target server without synchronizing incremental data. To synchronize incremental data, you will need to click Sync in the Operation column. |
| | | Yes | After the full replication is complete, the migration will enter the continuous synchronization stage. During this stage, incremental data will be periodically synchronized from the source server to the target server, and you will be unable to use the target server since it has not been launched yet. To finish this stage, you will need to click Launch Target in the Operation column. |
| | Resize Disks and Partitions | No | The disk and partition settings from the source server will be retained on the target server. |
| | | Yes | You can resize the disks and partitions for the target server. For details, see Resizing disks and partitions . |
| | Start Target Upon | No | The target server will be stopped after the migration is complete. |
| | Launch | Yes | The target server will be started after the migration is complete. |
| | Measure Network | No | Network performance will not be measured. |
| | Performance | Yes | Before the full migration starts, the system will measure the packet loss rate, network jitter, network latency, bandwidth, memory usage, and CPU usage for the source server. For details, see How Do I Measure the Network Performance Before the Migration? |
| | Enable Concurrency | No | By default, one process is used for migration and synchronization. |

| Area | Parameter | Option | Description |
|----------------------|-----------------------------|--------|---|
| | | Yes | You can specify the maximum number of processes the Agent can start concurrently for migration and synchronization tasks, respectively. Enabling concurrency is only available for Linux file-level migrations. For more information, see How Do I Set the Number of Concurrent Processes for Linux File-Level Migrations? |
| | Transit IP Address | - | For a migration over a private line, you can configure the transit IP address. |
| Resource | CPU Limit | - | These options are only available for |
| Limits (Optional) | Memory Limit | | Linux migrations. For details, see How Do I Limit Resource Allocation for the Agent in a Linux Migration? |
| | Disk Throughput Limit | | |

| Area | Parameter | Option | Description | | | | |
|-----------------------------------|--|--|--|--|--|--|--|
| Verify Data Consistenc Y | If this option is consistency aff verification, ar verified. You ca incremental sy | s enabled, the ter the full rep ad only the file an modify the rnchronization | system will automatically verify data lication is complete. This is a quick size and last modification time will be verification policy when you launch an | | | | |
| | • Enable Has will generat verified. Ha are large ar and disk I/C verification | Example Hash Verification : If this option is enabled, the system vill generate and compare hash values for each file to be verified. Hash verification is recommended when individual files are large and important. Enabling this option will increase CPU and disk I/O overheads for the source server and extend the verification time. | | | | | |
| | CAUTION | | | | | | |
| | – Hash va skipped | lues cannot be o during the verif | calculated for files in use, so these files will be ication. | | | | |
| | – Enablin only file | g this option req es in the specified | uires you to specify the verification scope, and d scope will be verified. | | | | |
| | Verification | Scope | | | | | |
| | – Under E x from the Use com data,/va | xclude paths , e verification. <i>A</i> mas (,) to sep or. Leaving it e | enter the paths you want to exclude A maximum of 30 paths can be entered. arate the paths. For example, /root/ mpty will initiate a full verification. | | | | |
| | – Under Ir | clude paths, | enter the paths you want to verify. | | | | |
| | NOTICE | • | | | | | |
| | If the enter in the verif | ed paths are inco ication results. | orrect or empty, 0 will be displayed for them | | | | |
| | The more of take. It is w | lata you need to vise to focus on v | verify, the longer the consistency check will verifying only key paths. | | | | |
| | The followi default: | • The following paths will be excluded from consistency verification by default: | | | | | |
| | – Linux: / selinux | bin, /boot, /dev, , /sys, /usr, /var, | /home, /etc, /lib, /media, /proc, /sbin, / /run, and /tmp | | | | |
| | – Window | vs: top-level dire | ctories of partitions, for example, C:\ and D:\ | | | | |
| | lf you need verification | to include any o , refer to Modify | of the preceding excluded paths in the ring the Default Excluded Paths. | | | | |

Step 5 Click **Next: Configure Target** in the lower right corner.

Step 6 In the **Basic Settings** area, select the region you are migrating to.

| < 🗖 | Configure Migration | | | | | | |
|----------------|-----------------------|-----|--|--|--|--|--|
| | | | | | | | |
| Basic Setting | S | | | | | | |
| Select the red | ion for the target se | ∼ _ | | | | | |

- Step 7 In the Target Server area, choose whether to use an existing cloud server or create a new one as the target server. For details about the requirements on target servers, see Target Server Requirements.
 - Use existing

In the list of existing servers, select one that meets the specifications requirements displayed in the **Recommended Target** row. If no existing server meets the requirements, click **Create ECS** and purchase an ECS with the required specifications. For details, see **Purchasing an ECS**.

NOTE

You can select a pay-per-use or yearly/monthly ECS.

| Target Server | | | | |
|---|--|--|---|---|
| Use existing beed an obting server as the target server. Is ensure that the target server can start properly when the After the singulation is consolid, the target server will use th | Recommended We Create new Automatically ones a payon registron a company, no delia will be itermediated and re eleministration source operations as the source server. | use ECB as the target server, and the regality and network configure | tons will be modified. Before the migration, make sure you have backe | d up data on the larget server. |
| After the migration is complete, you can change the year/vincetity; | a billing mode for the target server, such as from pay-per-use to | | | |
| | Name | IP Advisa | os | Disk |
| Source | | | UBUNTU_10_4_548/T | System Deli: 49 OIB Dela Deli: 15 OIB |
| Recommended Target | Cinate ECS (2) | | LINUX | System Disk: 43 Gill Data Disk: 15 Gill |
| | | | | |
| Use Existing Server | | | | |
| O, Search by name | | | | |
| Name | 05 | Disk | Private IP Address | EIP . |
| | Lina | System Disk: 160 GiB | | _ |

• Create new

The system automatically presets the name, AZ, specifications, disk specifications, EIP, VPC, subnet, and security group for the target server. You can also click **Expand and Modify** to manually modify the server settings.

| Create New Server (Optional) | |
|---|--|
| You can modify the server settings as needed, and the price may c | hange. Expand and Modify |
| Item | Configuration |
| Server Name | |
| Instance Specifications | General computing Sit3.small.1 1 vCPUs 1 GiB |
| Disk | System Disk (High I/O): 40 GiB; Data Disk (High I/O) |
| Image | - |
| Network | VPC:Migrate- |
| EIP | |

 If you select Recommended for Server Template, the system will automatically create a VPC, subnet, and security group and select an AZ and disk type for the target server. You can also manually adjust the settings recommended by the system.

D NOTE

If Create during migration is selected for VPC, SMS automatically creates a VPC for the target server based on the following rules:

If the source server's IP address is 192.168.*X*.*X*, SMS creates a VPC and a subnet that both belong to network range 192.168.0.0/16.

If the source IP address is 172.16.*X.X*, SMS creates a VPC and a subnet that both belong to network range 172.16.0.0/12.

If the source server's IP address is 10.*X.X*, SMS creates a VPC and a subnet that both belong to network range 10.0.0.0/8.

If Create during migration is selected for Security Group, the system automatically creates a security group for the target server and allows traffic to the target server over certain ports:

Windows: ports 8899, 8900, and 22

Linux (file-level migration): port 22

Linux (block-level migration): ports 8900 and 22

- If you prefer, you can choose your own server template, and the VPC, subnet, security group, AZ, and disk settings will be preconfigured based on that template. You have the flexibility to adjust these preset settings as needed. To learn how to create a server template, see Creating a Server Template.
- Configure advanced disk settings.
 - Data disks must be either VBD or SCSI. VBD is the default device type for data disks. For details about disk device types, see Device Types and Usage Instructions.
 - Data disks can be created as shared disks. For details about shared disks, see Shared EVS Disks and Usage Instructions.
 - For target servers newly created by the system, system and data disks can be encrypted. For details about shared disks, see Shared EVS Disks and Usage Instructions. To enable disk encryption, you need to create an agency to authorize EVS to access KMS. After the authorization is successful, configure the following parameters:
 - Select an existing key

Select a key from the drop-down list. You can select one of the following keys:

Default keys: After the KMS access permissions have been granted to EVS, the system automatically creates a default key and names it **evs/default**.

Custom keys: You can choose an existing key or create a new one. For details about how to create a key, see **Creating a Key**.

• Enter a key ID

Enter the ID of a key shared from another user. Ensure that the key is in the target region. For details, see **Creating a Grant**.

NOTICE

- Before the migration is complete, do not disable or delete the key used, or the migration will fail.
- The encryption attribute of a disk cannot be modified after the disk is created.
- Keys can be shared with accounts, not users.
- If KMS encryption is used, you will be billed for what you use beyond the free quota given by KMS. For details, see **DEW Billing**.

Step 8 Click Next: Confirm in the lower right corner.

Figure 7-2 The configuration confirmation page

| K 👩 Configure Migration COVID CE 6804 () Configure Ence Setting | | | | | | | |
|---|---|-----------------------|--|-----------------------|--|--|--|
| Source Server | | | | | | | |
| Name | | Private IP Address | | Added | | | |
| 09 | URUNTU_S_4_HERT | Specifications | 1 vCPUs 0.95 GIR | Disk | System Dark 40 Gell, Data Dark 15 Gell, Data Dark 1 | | |
| | | | | | | | |
| Configure Basic Settings Enterprise Project | orisut | Network Type | Prvate Pv4 | Migration Rate Limit | 200 Moles | | |
| Migration Method | FileItent | Partition Reciping | No | Continuous Synchroniz | No | | |
| Start Target Upon Laureth | 749 | Measure Network Perfs | No | | | | |
| Network | | | | | | | |
| VPC | | Subret | | Security Group | | | |
| Private IP Address | Automatically assigned | CP | Not required | Sandwidth | None | | |
| Target Server (To be purch | nesed) | | | | | | |
| Report | | AZ | A22 | Namo | | | |
| 05 | USUNTU_16_4_6481T | Opecifications | Overenal computing (583 small.1) 1 vCPUs (1 0/8 | Dak | System Disk (High 1/0): 48 OB; Geta Disk (High 1/0): | | |
| Save as Server Temps | 60 | | | | | | |
| | | | | | | | |
| Sets Proce Free You pay o | andard free for the EVS class used during the migration. Learn more | encerra bira | ar 0. | | Pressue Serve and Sant | | |

Step 9 (Optional) Click Save as Server Template. In the displayed Create Server
 Template dialog box, enter a template name and click OK to save the target server settings as a template.

NOTE

Save as Server Template is available only when you select Create new for Server.

Figure 7-3 Create Server Template

| Create Server Template | | | | | | | | |
|---|-----------------------------------|-----|--------|----|--|--|--|--|
| $\textcircled{1}$ The VPC, subnet, security group, and disk attributes of the target server $\qquad\times$ will be saved as a new template. | | | | | | | | |
| Template Name | plate Name Enter a template name. | | | | | | | |
| Configuration \mathscr{A} | | | | | | | | |
| Region/Project | | | | | | | | |
| VPC | Create during migrati | ion | | | | | | |
| Subnet | Create during migrati | ion | | | | | | |
| Security Group | Create during migrati | ion | | | | | | |
| AZ | Random | AZ2 | | | | | | |
| | AZ1 | AZ3 | | | | | | |
| Disk | High I/O | | | | | | | |
| | | (| Cancel | ок | | | | |

Step 10 Confirm the configuration and click **Save**. In the displayed dialog box, read the migration conditions and click **OK**.

If you want to start the migration immediately, click **Save and Start**. In the displayed dialog box, read the migration conditions and click **OK**.

 \geq

 \times

Figure 7-4 Saving the configuration

Are you sure you want to save the configuration and start migration? Migration Checklist \times The system automatically checks the migration feasibility of the source server, but you must check the following items manually: Do not restart the Agent during the migration. Make sure that you select a target server with the same OS as the source server. After the migration, make sure that you create a mirror for each target server disk. Note that after the migration, reinstalling or changing the target server OS or modifying its specifications may fail or make the server unavailable · Make sure that TCP ports 22, 8899, and 8900 are enabled for Windows target servers, and ports 22 and 8900 are enabled for Linux target servers. · Before the migration is complete, do not perform any operations on the target server, such as changing or reinstalling the OS. Otherwise, the migration may fail and additional pricing may apply. Learn more

Figure 7-5 Saving the configuration and starting the migration

start migration?
Migration Checklist ×
The system automatically checks the migration feasibility of the source server, but you must check the following items manually:
Do not restart the Agent during the migration.
Make sure that you select a target server with the same OS as the source server.
After the migration, make sure that you create a mirror for each target server disk. Note that after the migration, reinstalling or changing the target server OS or modifying its specifications may fail or make the server unavailable.
Make sure that TCP ports 22, 8899, and 8900 are enabled for Windows target servers, and ports 22 and 8900 are enabled for Linux target servers.
Before the migration is complete, do not perform any operations on the target server, such as changing or reinstalling the OS. Otherwise, the migration may fail and additional pricing may apply. Learn more

Are you sure you want to save the configuration and

ок

D NOTE

If **Target Configuration** and **Ready** show up in the **Migration Stage/Status** column, the target server has been configured.

----End

Resizing Disks and Partitions

Step 1 When you create a migration task, on the Configuring Basic Settings tab page, expand Migration Settings (Optional), enable Resize Disks and Partitions, and click Resize Disks and Partitions. In the Resize Disks and Partitions dialog box, configure disks and partitions as needed.

Figure 7-6 Resizing disks and partitions (Windows)

| Resize F | Partition | | | | | | | | | | |
|------------|----------------|----------------|---------------------------|--------------------------|-----------------------|----------|---------|----------------|-------|-------------------|-----------|
| | | | | 1 Con | ligure Disks | — (2) Co | nfirm | | | | |
| Source Dis | ik | Target Disk | A In a block-le | vel migration, disk size | can only be increased | L X | | | | | |
| Disk | Disk 0 | | Disk: Disk 0 | P | artition Style: MBR | | Size: | 40 GiB 0 MB | | Allocated: 39 Gil | B 1022 MB |
| Size | 40 GIB 0 MB | Partition | File Syster | Current Size | Used | Mount | Migrate | New Size | | | |
| Allocated | 39 GIB 1022 MB | (Reserved) | NTFS | 500 MB | 392 MB | | Yes 🗸 | - 0 | + GiB | - 500 + | мв |
| | | C:\ | NTFS | 39 GiB 522 MB | 35 GIB 240 MB | | Yes 🗸 | - 39 | + GiB | - 522 + | МВ |
| | | Resize the dis | sk to fit the partition s | ze. Resize Disk | | | | | | | |
| Disk | Disk 1 | | Disk: Disk 1 | P | artition Style: MBR | | Size: | 19 GiB 1023 MB | | Allocated: 19 Gil | B 1021 MB |
| Size | 19 GiB 1023 MB | Partition | File Syster | Current Size | Used | Mount | Migrate | New Size | | | |
| Allocated | 19 GiB 1021 MB | D:\ | NTFS | 19 GiB 1021 | 539 MB | | Yes 🗸 | - 19 | + GiB | - 1,021 + | МВ |
| | | Resize the dis | sk to fit the partition s | ze. Resize Disk | | | | | | | |
| Disk Overv | view 😞 | | | | | | | | | | |
| Diek | | | | Current Size | | | | Now Siza | | | |
| | | | | | | | | | | Next: Confir | m Cancel |

Figure 7-7 Resizing disks and partitions (Linux)

| Resize Partition | |
|--------------------------|---|
| Source Disk | Configure Volume Groups Configure Disks S Configure Disks S Configure Disks S Configure Volume Groups Configure Disks S Configure Volume Groups S Configure Disks S Configure Disks _ |
| Disk /dev/vda | Disic /dev/vda Partition Style: MBR Size: 40 GiB 0 MB Allocated: 39 GiB 1023 MB |
| Size 40 GIB 0 MB | Partition File System Current Size Used Mount Migrate New Size |
| Allocated 39 GiB 1023 MB | /dev/vda1 ext4 39 G/B 1023 MB 5 G/B 26 MB / Yes v (- 39 + G/B (- 1,023 + MB |
| | Resize the disk to fit the partition size. Resize Dipk |
| Disk Overview | |
| Disk | Current Size New Size |
| /dev/vda | 40 GIB 0 MB 40 GIB 0 MB |
| | Nect Contem Previous Cancel |

NOTE

- You can choose whether to migrate source partitions and then resize the paired target partitions.
- For a Linux server using LVM, you can choose whether to migrate physical or logical volumes and resize the paired target volumes.

- In a Windows migration, the system and boot partitions are migrated by default.
- In a Windows migration, you can upsize partitions, but you cannot downsize them.
- Partition resizing is not available for Btrfs partitions on Linux.
- In a Linux migration, the system and swap partitions are migrated by default.
- You can choose to migrate all or none volume groups by using the **Migrate All Volume Groups** option.
- If you choose to migrate none of the logical volumes in a volume group, their physical volumes will not be migrated by default.
- In a Linux block-level migration, you can upsize partitions, but you cannot downsize them.
- In a Linux file-level migration, you can upsize or downsize partitions. When downsizing a partition, the new partition size must be at least 1 GB larger than the used partition space. If the current size does not meet this condition, downsizing is not possible. If the current size does not meet this condition, downsizing is not possible. For details, see What Are the Rules for Resizing Volume Groups, Disks, and Partitions?
- If the total partition size after resizing is larger than the disk size, you need to expand the disk capacity to fit the partition size.
- If the total partition size after resizing is much smaller than the disk size, you can downsize the disk.
- **Step 2** Click **Next: Configure Disks**. Resize the disks as needed. Then confirm the configurations and click **OK**.

After you click **OK**, disk and partition resizing cannot be disabled in this task. If you want to restore the original disk and partition settings, locate the source server and choose **More** > **Delete** in the **Operation** column. Then restart the Agent on the source server, and configure the target server again.

----End

8 Starting a Full Replication

Scenarios

A full replication replicates all data from the source server to the target server. The replication speed depends on the outbound bandwidth of the source server or the inbound bandwidth of the target server, whichever is smaller.

Constraints

After a full replication starts, do not restart the source server or Agent, or the migration will fail.

Prerequisites

- The target server has been configured. For details, see **Configuring the Target Server**.
- The migration task is in the **Full Replication** stage and the status is **Ready**.

Procedure

- **Step 1** Sign in to the **SMS console**.
- **Step 2** In the navigation pane on the left, choose **Servers**.
- Step 3 Locate the source server and click Start in the Migration Stage/Status or Operation column. In the displayed Start Migration window, click OK to start a full replication.

You can also select the source server and click **Start** above the server list. In the displayed **Start Migration** window, click **OK**.

Figure 8-1 Starting a full replication

| Total tasks 12 o Abro | rmal 3 🔺 Pending migration 0 | A Pending target configuration 13 | Running 3 O Completes | 16 | | | |
|-----------------------|------------------------------|-----------------------------------|-----------------------|---------------|----------------------------------|-------------------|--------------------|
| Start Pause | Launch Target Sync | Mare ~ | | | | | |
| | × Add filter | | | | | | × Q 0 |
| Source Name ID 🖯 | Connection 8 | Source O SIP Address 😣 | Target 🖯 | Task Status 😣 | Migration Stage/Status 🕀 | Progress 😣 | Operation |
| | Connected | UBUNTU_24_4_64BIT | Existing | C Running | Full Replication Paused Start | Total progress 65 | Start Pause More V |
| Total Records: 1 | | | | | | | 10 ~ (1) |

D NOTE

During the full replication, the target server is locked by default, and you are not allowed to perform any operations on it. After the migration is complete, the target server will be automatically unlocked. If you need to perform operations on the target server during the replication, **unlock the target server**.

- **Step 4** In the server list, click the name of the source server to view the migration progress.
- **Step 5** Wait for the full replication to complete.
 - If you set Enable Continuous Synchronization to No when you defined the migration settings, after the full replication is complete, the migration will go to the Target Launch stage, and the target server will be launched to complete the migration automatically.
 - If you set **Enable Continuous Synchronization** to **Yes** when you defined the migration settings, after the full replication is complete, the migration will enter a **Continuous sync** status, and any new or modified data will be automatically synchronized from the source server to the target server. You will need to manually launch the target server to complete the migration. For details, see **Launching the Target Server**.

After the migration and service cutover are complete, you need to adjust the configurations of the target server based on service requirements. For details, see **What Configuration Items Need to Be Manually Modified After a Server Is Migrated?**

----End

9 Launching the Target Server

If you set **Continuous Synchronization** to **Yes** when configuring the migration settings, after the full replication is complete, you will need to manually launch the target server to complete the migration.

NOTE

If you set **Continuous Synchronization** to **No**, skip this section as the system will automatically launch the target server after the full replication is complete.

Scenarios

You can launch the target server when the migration is in the **Continuous sync** status, and continuous synchronization will be interrupted. After the target server is launched, you can start an incremental synchronization by clicking **Sync** in the operation column.

Before launching the target server, you can clone the target server for service testing, and only launch the target server after tests confirm there are no issues.

NOTE

The cloned server must be in the same AZ as the target server but can be in a different VPC.

Procedure

- Step 1 Sign in to the SMS console.
- Step 2 In the navigation pane on the left, choose Servers.
- **Step 3** Locate the target server you want to launch, and click **Launch Target** in the **Migration Stage/Status** column.

Alternatively, select the server you want to launch, and click **Launch Target** above the server list.

Figure 9-1 Launch Target

| Total tasks 9 o Abnormal 1 | A Pending migration 1 | A Pending target configuration 4 | Running 4 | o Completed 3 | | | | | |
|----------------------------|-----------------------|----------------------------------|-----------------|---------------|----------------------|---|----------------|-----------------|---------|
| Start Pause Laure | ch Target Sync | More ~ | | | | | | | |
| | Add filter | | | | | | | × | 0 |
| Source Name1D 🖯 | Connection 0 | Source OS/IP Address () | Target Θ | | Task Status Θ | Migration Stage/Status Θ | Progress ⊖ | Operation | |
| ₩in2008 | Connected | WINDOWS2008_R2_64BIT | Existing | C | C Running | Continuous Synchronization Continuous sync Launch Target | Total progress | Sync Pause More | ~ |
| Total Records: 1 | | | | | | | | 10 🗸 | < (1) > |

Step 4 In the displayed Launch Target window, click OK.

If **Finished** appears in the **Migration Stage/Status** column, the target server has been launched and the migration is complete.

Figure 9-2 Completed migration

| Total tasks 9 O Abnormal 1 🛆 | Pending migration 1 | A Pending target configuration 4 | Running 3 | o Completed 4 | | | |
|------------------------------|---------------------|----------------------------------|-----------|---------------|--------------------------|--------------------|-------------------|
| Start Pause Launch Ta | irget Sync | Mare v | | | | | |
| QI | Add filter | | | | | | × Q 🛛 |
| Source Name1D @ | Connection Θ | Source OS/IP Address 😑 | Tarpet ⊖ | Task Status 😑 | Migration Stage/Status ⊖ | Progress () | Operation |
| | Connected | WINDOWS2016_64BIT | Existing | o Completed | Finished Go to ECS [2] | Total progress 100 | Sync Pause More ~ |
| Total Records: 1 | | | | | | | 10 ~ (1) > |

After the migration and service cutover are complete, you need to adjust the configurations of the target server based on service requirements. For details, see **What Configuration Items Need to Be Manually Modified After a Server Is Migrated?**

----End

10 Synchronizing Incremental Data

Scenarios

After the target server is launched, if there are data changes on your source server, you can synchronize the incremental data from the source server to the target server.

The data changes on the target server will be overwritten by the data synchronized from the source server. For details, see **Will an Incremental Synchronization Overwrite the Existing Data on a Launched Target Server?**

NOTE

Only tasks in the **Finished** status can be synchronized.

Procedure

- Step 1 Sign in to the SMS console.
- Step 2 In the navigation pane on the left, choose Servers.
- **Step 3** In the server list, locate the source server you want to synchronize and click **Sync** in the **Operation** column.

| Total tasks 11 O Abno | rmal 3 A Pending migration 0 | A Pending target configuration | 13 D Running 2 | Comple | ted 6 | | | | |
|-----------------------|------------------------------|--------------------------------|----------------|----------------------------|-------------------------------|--------------------------|-------------------|-------------------|---|
| Start Pause (| Launch Target Sync | More ~ | | | | | | | |
| | : Add filter | | | | | | | ×Q | ۲ |
| Source Name 1D 😣 | Connection 0 | Source OSIP Address \ominus | Target O | | Task Status 🖯 | Migration Stage/Status 🖯 | Progress 🖯 | Operation | |
| | Connected | WINDOW/S2016_64BIT | Existing | C | Completed | Finished Go to ECS 🕐 | Total progress 10 | Sync Pause More 🗸 | |
| Total Records: 1 | | | | | | | | 10 🗸 (1 | |

Step 4 In the Sync Incremental Data dialog box, carefully read the tips, enable Verify Consistency if needed, and click OK. For details about this option, see How Do I Verify Data Consistency Between the Source and Target Servers? Synchronize Incremental Data

| 🗹 Verify Data Co | nsistency |
|--|--|
| If selected, data consis synchronization. This i policy when you launcl | tency will be verified upon the completion of the full replication and every manually-initiated incremental a quick verification, and only the file size and last modification time will be verified. You can modify the verification a synchronization. |
| Enable Hash Verit | cation |
| In addition to comparin you specify in the box CPU and disk I/O over files will be skipped du | g the file size and last modification time, the system will generate and compare hash values for each file in the paths below. Hash verification is recommended when individual files are large and important. Enabling this option will increase heads for the source server and extend the verification time. Hash values cannot be calculated for files in use, so these ing the verification. |
| Verification Scope | |
| Exclude paths | Include paths |
| /tmp | AT 200 A |
| Leaving it empty will in | titate a full verification. A maximum of 30 paths can be entered. Separate them with commas (.). |
| Verify Inconsisten | iec |
| If selected, the system | will only verify files that failed a previous verification. If not selected, a full verification will be performed. |
| If more than 10 verifying that for | 0 files in a specific folder fail verification, the system will stop ider and revently it druing the next verification. |
| A Consistency ve | rification increases disk I/O overheads for the source server. |

 \times

----End