

Alibaba Cloud

ServerMigrationCenter User Guide

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Document conventions

Style	Description	Example
 Danger	A danger notice 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.
 Warning	A warning notice 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 restart an instance.
 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
 Note	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings> Network> Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

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1. Migration process

SMC can migrate one or more migration sources to Alibaba Cloud. Migration sources refer to IDC servers, virtual machines, cloud hosts on other platforms, or other types of servers that you want to migrate. Migration sources are also known as source servers. This topic aims to help you understand the migration process of SMC.

When SMC performs a migration, it performs operations both on the migration source and in the SMC console. You must import information from the migration source to the SMC console, and then complete the migration task in the SMC console. The migration process is as follows:

1. **Before you begin**
2. **Step 1: Import the information of a migration source**
 - i. Download and decompress the SMC client package.
 - ii. Run the SMC client.
3. **Step 2: Create and start a migration task**
 - i. Create a migration task.
 - ii. Start the migration task.
 - iii. View the migration status and perform the next step.

2. Before you begin

Before you use Server Migration Center (SMC) to perform migration, you must create an Alibaba Cloud account, add funds to the account, and complete the real-name verification.

Procedure

Before you start a migration task, perform the following steps:

1. On the [Alibaba Cloud official website](#), create an Alibaba Cloud account.
2. Add a credit card or PayPal account to your Alibaba Cloud account.

For more information, see [Add a payment method](#).

3. Before you migrate servers to mainland China, complete the real-name verification.

Use one of the following verification methods:

- Method 1: Go to the [real-name verification](#) page.
- Method 2: Log on to the [SMC console](#). You are prompted to complete the real-name verification.


4. Make sure that Resource Access Management (RAM) is activated and SMC is authorized to access your cloud resources.

Use one of the following methods to authorize SMC:

- Method 1: Log on to the [RAM console](#), and click **Confirm Authorization Policy** to complete authorization.
- Method 2: Log on to the [SMC console](#). You are prompted to authorize a RAM user.

RAM user authorization: Use your Alibaba Cloud account to log on to the [RAM console](#), and grant full access permissions on SMC to your RAM user.

5. Create and obtain the AccessKey pair of your Alibaba Cloud account or RAM user. For more information, see [AccessKey Pairs](#).

 **Notice** AccessKey pairs are credentials that you can use to access Alibaba Cloud API resources, and must be kept strictly confidential. We recommend that you use a RAM user to create a temporary AccessKey pair. Then, you must disable the AccessKey pair after the migration is complete. This prevents your AccessKey pair from being leaked or misused.

6. Make sure that the snapshot service is activated. For more information, see [Activate ECS Snapshot](#).

Precautions

Before you use SMC to perform migration, note the following information:

- Do not perform operations on the intermediate instance.

To run a migration task, SMC creates a temporary intermediate instance named `No_Delete_SMC_Transition_Instance` under your Alibaba Cloud account. For more information, see [What are the specifications available for intermediate instances?](#) Do not stop, restart, or release the intermediate instance during the migration process. Otherwise, the migration task fails. After the migration is complete, the intermediate instance is released.

- By default, the following data directories are migrated:
 - For Windows servers: Only data on the C drive (including shared directories that are attached to the C drive) is migrated as a partition of the system disk. If you need to migrate the data on other partitions such as the D drive, you must select and configure the data disk when you create a migration task. For more information, see [Migration task parameters](#).
 - For Linux servers: Data in all subdirectories (including shared subdirectories) in the root directory (`/`) is migrated as a partition of the system disk. If you need to migrate the data in other directories such as `/disk1`, you must select and configure the data disk when you create a migration task. For more information, see [Migration task parameters](#). If you do not need to migrate the data of multiple directories, see [\(Optional\) Exclude files or directories from migration](#).

3.Step 1: Import the information of a migration source

Migration sources can be physical servers, VMware virtual machines (VMs), Xen, KVM, or Hyper-V VMs, and VMs that run in public clouds. Before you use Server Migration Center (SMC) for server migration, you must run the SMC client with your Alibaba Cloud account on the migration source, and import the migration source information. Then, you can log on to the SMC console to perform migration. This topic describes how to import the information of a migration source.

Prerequisites


The preparations for using SMC are complete. For more information, see [Before you begin](#).

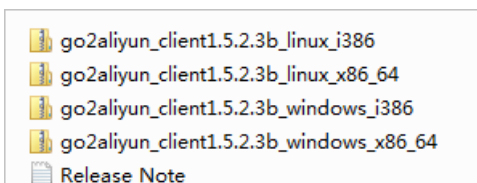
Procedure

1. Download and decompress the SMC client package.
 - i. Download the [SMC client package](#). If the migration source has access to the Internet, you can also download the SMC client package to the migration source.



 **Note** You can log on to the [SMC console](#). In the upper-right corner of the page, click **Download Latest SMC Client** to download the latest version of the SMC client.

- ii. Upload the SMC client package to the migration source.
 - You can build an FTP site to upload files. For more information, see [Manually build an FTP site on a Windows instance](#) or [Manually build an FTP site on a CentOS 7 instance](#).
 - You can also use a remote connection tool that supports file transfer. This allows you to upload the SMC client package to the migration source.
- iii. Decompress the SMC client package. The SMC client is available for Windows and Linux of the 32-bit version (i386) and the 64-bit version (x86_64). Select the version that is compatible with the migration source. The following figure shows the decompressed client folders for Windows.

 **Note** Linux systems run the `unzip <name of the SMC client package>` command. This allows you to decompress the SMC client package. Make sure that the `unzip` utility is installed on the source server. For example, the installation command for CentOS 7 is `yum -y install unzip`.



- iv. Decompress the client package that is compatible with the operating system of your source server. The following figure shows the directories and files in the decompressed folder.

 Excludes	2019/6/21 16:46
 Rsync	2019/6/11 17:42
 client_data	2019/6/19 20:17
 EULA	2019/5/15 15:09
 go2aliyun_client	2019/6/21 17:23
 go2aliyun_gui	2019/6/21 17:34
 user_config	2019/6/19 19:15

SMC client folders and files

Folder or file	Description
go2aliyun_client.exe	The executable file of the command-line interface (CLI) program for Windows.
go2aliyun_gui.exe	The executable file of the graphical user interface (GUI) program for Windows. For more information, see Use the Windows GUI version of an SMC client .
go2aliyun_client	The executable file of the CLI program for Linux.
user_config.json	The configuration file of the migration source and destination.
Excludes	The folder of the files and directories that are excluded from migration.
client_data	The migration data file. This includes the intermediate instance information and migration progress.

2. Optional. Exclude files or directories from migration.

 **Note** If the source server supports block replication, you cannot exclude files or directories from migration.

The configuration files are located in the *Excludes* directory of the SMC client. If a configuration file is lost or deleted by accident, you can create another one.

- System disk configuration file: *rsync_excludes_win.txt* (for Windows servers) or *rsync_excludes_linux.txt* (for Linux servers)
- Data disk configuration file: named by adding a suffix *disk [disk index number]* to the system disk, for example, *rsync_excludes_win_disk1.txt* (for Windows servers) or *rsync_excludes_linux_disk1.txt* (for Linux servers)
- Example 1: Exclude files or directories from migration of a Windows server

- System disk

- Specify the files or directories to be excluded:

```
C:\MyDirs\Docs\Words
C:\MyDirs\Docs\Excels\Report1.txt
```

- Add the following information to the *rsync_excludes_win.txt* file:

```
/MyDirs/Docs/Words/
/MyDirs/Docs/Excels/Report1.txt
```

- Data disk

- Specify the files or directories to be excluded:

```
D:\MyDirs2\Docs2\Words2
D:\MyDirs2\Docs2\Excels\Report2.txt
```

- Add the following information to the *rsync_excludes_win_disk1.txt* file:

```
/MyDirs2/Docs2/Words2/
/MyDirs2/Docs2/Excels2/Report2.txt
```

 Note

To exclude a Windows directory, perform the following operations:

- Remove the prefix of the directory (*scr_path*). In the preceding example, you must remove `D: .`
- Replace `\` with `/`.

- Example 2: Exclude files or directories from migration of a Linux server

- System disk (root directory/):

- Specify the files or directories to be excluded:

```
/var/mydirs/docs/words
/var/mydirs/docs/excels/report1.txt
```

- Add the following information to the *rsync_excludes_linux.txt* file:

```
/var/mydirs/docs/words/
/var/mydirs/docs/excels/report1.txt
```


- Data disk

- Specify the files or directories to be excluded:

```
/mnt/disk1/mydirs2/docs2/words2  
/mnt/disk1/mydirs2/docs2/excels2/report2.txt
```

- Add the following information to the *rsync_excludes_linux_disk1.txt* file:

```
/mydirs2/docs2/words2/  
/mydirs2/docs2/excels2/report2.txt
```


 **Note** To exclude a Linux directory, you must remove the prefix of the directory (*scr_path*). In the preceding example, you must remove */mnt/disk1*.

3. Run the SMC client to import the migration source information.

i. Enter the SMC client folder and run the SMC client.

- For Windows servers, use one of the following methods to run the SMC client:

- To run the Windows GUI version, double-click the *go2aliyun_gui.exe* file.
 - To run the Windows CLI version, double-click the *go2aliyun_client.exe* file.

 **Note** When you run the program, you must click OK to confirm that you have the administrator privilege.

- For Linux servers, run the SMC client as a root or sudo user.
 - In the directory of the *go2aliyun_client* file, run the following commands as a root user:

```
chmod +x go2aliyun_client
```

```
./go2aliyun_client
```

- In the directory of the *go2aliyun_client* file, run the following commands as a sudo user:

```
sudo chmod +x ./go2aliyun_client
```

```
sudo ./go2aliyun_client
```

If you have required permissions on the migration source system, you can also run the following commands to import the migration source information. In this case, you do not need to enter your AccessKey pair.


- Run the following command as a root user:

```
./go2aliyun_client --accessid=<Your AccessKeyID> --secretkey=<Your AccessKeySecret>
```

- Run the following command as a sudo user:

```
sudo ./go2aliyun_client --accessid=<Your AccessKeyID> --secretkey=<Your AccessKeySecret>
```

ii. Enter the AccessKey pair of your Alibaba Cloud account.

 **Note** If the AccessKey pair you entered is invalid, open the `user_config.json` file, delete the `access_id` and `secret_key` values, and then run the client again.

- For Windows servers
 - If you use the Windows GUI version, enter the AccessKey ID in the Access Id field, enter the *AccessKey secret* in the *Secret Key* field, and then click Start. For more information, see [Use the Windows GUI version of the SMC client](#).
 - If you use the Windows CLI version, enter the *AccessKey ID* and *AccessKey secret*, and then press `Enter`.

- For Linux servers

Enter the *AccessKey ID* and *AccessKey secret*, and then press `Enter`.

```
[2019-06-27 18:51:58] [Info] ===== Run In Daemon Mode =====
[2019-06-27 18:51:58] [Info] Goto Aliyun Begin...
[2019-06-27 18:51:58] [Info] Load User Config...
Please Enter Access Id: 1
Please Enter Secret Key: *****
```


The following prompts may appear:

- The rsync tool is installed in most mainstream migration sources. If rsync is not installed on the migration source, the SMC client displays a prompt. Enter *yes* to install rsync, as shown in the following figure.

```
[2019-06-26 20:20:25] [Info] Generate SSH Key...
[2019-06-26 20:20:25] [Info] Import Source Server...
[2019-06-26 20:20:26] [Info] Import Source Server [s-k-...] Successfully!
Need to install rsync, run 'apt-get -y install rsync' to continue? (yes/no): yes
```

- If SELinux is enabled on the migration source, you are prompted to disable SELinux. Enter *yes* to disable SELinux, as shown in the following figure.

```
[2019-06-27 17:53:00] [Info] Import Source Server...
[2019-06-27 17:53:00] [Info] Import Source Server [s-b-...] Successfully!
Need to disable SELINUX, run 'setenforce 0' to continue? (yes/no): yes
```

 **Notice** Do not close the client until the migration is complete. Otherwise, the migration source will be disconnected from the SMC console and the migration fails.

What's next

- If `Import Source Server [s-bxxxxxxxxxxxxx] Successfully!` appears, the migration source information has been imported to the SMC console. After you import the information of a migration source for the first time, the SMC console generates a migration source record. The migration source is in the Active state. The default migration source name is `<Migration source hostname + Migration source IP address>`, as shown in the following figure.

<input type="checkbox"/>	Migration Source ID/Name	Status	IP Address	Migration Source Tag	Registration Time	Operating S
<input type="checkbox"/>	s- ssi	Active	192.		Mar 06	CentOS

When the client-side program is running, log on to the SMC console to complete the migration. For more information, see [Step 2: Create and start a migration task](#).

```
[2019-07-18 13:53:40] [Info] Import Source Server...
[2019-07-18 13:53:40] [Info] Import Source Server [s-] Successfully!
[2019-07-18 13:53:40] [Info] Check Source Server Status...
[2019-07-18 13:53:40] [Info] Check Replication Job Status...
Wait For New Job To Start, time: 0s
```

When you import a migration source, SMC collects the information of the source server. This includes CPU, memory, CPU utilization, memory usage, and private IP address. You can click the migration source ID to view the information, as shown in the following figure. After the migration task is completed, you can create an ECS instance by using the information of the source server.

Properties	
Hostname	IP Address 192. .95
CPU 2core	CPU 1.51% Utilization
Memory 1.00GiB	Memory 0.40% Usage
Operating System	CentOS

- If `Error` or `Goto Aliyun Not Finished!` appears, the migration source information has failed to be imported, as shown in the following figure. We recommend that you find the root cause of the issue, and then run the client again. For more information, see [SMC FAQ](#).

```
[2019-07-17 18:13:33] [Error] Verify User RAM Role Authority Failed: Code: InvalidAccessKeyId.NotFound Message: Specified access key is not found.
The Access Id Is Not Correct. Please Check It.
[2019-07-17 18:13:33] [Warn] Goto Aliyun Not Finished! See Details Info In Log
File [/root/go2aliyun_client1.5.2.5_linux_x86_64/Logs/go2aliyun_client_20190717.log].
```

4.Step 2: Create and start a migration task

After you import the information of a migration source, Server Migration Center (SMC) automatically generates a record for the migration source. You must create and start a migration task for the migration source in the SMC console. This topic describes how to create and start a migration task.

Prerequisites

- The information of a migration source is imported. For more information, see [Step 1: Import the information of a migration source](#).
- The migration source is in the Active state. If the migration source is not in the Active state, you cannot create a migration task for the migration source. For more information about how to restore a migration source to the Active state, see the "What can I do if I cannot create a migration task because a migration source is not in the Active state?" section in [SMC FAQ](#).

Context

- SMC can obtain the partitioning scheme of a source disk used by the migration source and generate the same partitioning scheme for the destination disk. This also improves the data transmission rate during migration.
- You can use the migration template provided by SMC to create multiple migration tasks at a time. For more information, see [Import multiple migration tasks by using an Excel template](#).

Procedure


1. Log on to the [SMC console](#).
2. Create a migration task.
 - i. In the left-side navigation pane, click **Migration Sources**.
 - ii. Find the migration source that you want to migrate. You can obtain the ID of the target migration source from the SMC client, as shown in the following figure. Then, you can use the ID to find the target migration source in the SMC console. For more information, see the "How do I find a migration source in the SMC console?" section in [SMC FAQ](#).

```
[2019-06-24 10:42:13] [Info] Generate SSH Key...
[2019-06-24 10:42:14] [Info] Import Source Server...
[2019-06-24 10:42:15] [Info] Import Source Server [s-l-xxxxxx-xx-xx-xx] Successfully!
```

- iii. Click **Create Migration Task** in the Actions column.
- iv. In the **Create Migration Task** pane, read migration instructions and configure migration task parameters.

The **Basic configuration** section includes the following parameters:


- **Target Region:** required. The ID of the destination region. For more information about Alibaba Cloud regions, see [Regions and zones](#).
- **Task name:** the name of the migration task.


 **Note** The task name must be unique in the destination region.

- **Description:** the description of the migration task.
- **Target Disk Size (GiB):** the disk configuration of the destination server.

The following table describes the parameters.


Parameter	Required	Description
Enable Block Replication	No	<ul style="list-style-type: none"> ■ Selected: Block replication ensures a stable data transmission rate during migration. This also ensures that the source and destination disks use the same partitioning scheme. You cannot modify the size of each partition in the destination disk. When you enable block replication, the Whether to enable block replication switch appears next to Partition <N>. ■ Cleared: SMC uses the default method to migrate the migration source. You can modify the size of each partition in the destination disk.

Parameter	Required	Description
System Disk	Yes	<ul style="list-style-type: none"> ■ System Disk: the system disk size of the destination ECS instance. Unit: GiB. Valid values: 20 to 500. The size of the destination system disk must be greater than that of data in the source system disk. For example, if the total size of the source system disk is 500 GiB but the size of data stored in this disk is only 100 GiB, you must set this parameter to a value greater than 100 GiB. <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin: 10px 0;"> <p> Note The default value of this parameter is the size of the source system disk. We recommend that you retain the default value or specify a greater value.</p> </div> <ul style="list-style-type: none"> ■ Partition <N>: SMC generates a partitioning scheme for the destination system disk based on that of the source system disk. Unit: GiB. Valid values: 0 to 98. N indicates the serial number of the partition. For example, if the system disk of the migration source has only one partition, Partition 0 is generated. ■ Whether to enable block replication: This switch is available only when you select Enable Block Replication. SMC allows or disallows you to turn on the switch based on whether the migration source supports block replication. <ul style="list-style-type: none"> ■ If the migration source does not support block replication for partitions, you are disallowed to turn on this switch. ■ If the migration source supports block replication for partitions, you are allowed to turn on this switch to migrate disk data at the partition level.

Parameter	Required	Description
Data Disk <N>	No	<ul style="list-style-type: none"> ■ Data Disk <N>: the data disk size of the destination ECS instance. Unit: GiB. Valid values: 20 to 32768. <ul style="list-style-type: none"> ■ If you select the Data Disk <N> check box, a destination data disk is generated. ■ N indicates the serial number of the data disk. ■ The size of the destination data disk must be greater than that of existing data in the source data disk. For example, if the total size of the source data disk is 500 GiB but the size of data stored in the disk is only 100 GiB, you must set this parameter to a value greater than 100 GiB. ■ Partition <N>: SMC generates a partitioning scheme for the destination data disk based on that of the source data disk. Unit: GiB. Valid values: 0 to 141. N indicates the serial number of the partition. For example, if a data disk of the migration source has only one partition, Partition 0 is generated. ■ Whether to enable block replication: This switch is available only when you select Enable Block Replication. SMC allows or disallows you to turn on the switch based on whether the migration source supports block replication. <ul style="list-style-type: none"> ■ If the migration source does not support block replication for partitions, you are disallowed to turn on this switch. ■ If the migration source supports block replication for partitions, you are allowed to turn on this switch to migrate disk data at the partition level. <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin-top: 10px;"> <p> Note Data Disk <N> is available only if the migration source has a data disk. For more information, see Why are no data disk parameters displayed in the Create Migration Task pane? How can I resolve this issue?</p> </div>

- **Target Image Type**: the type of the destination image. Valid values:

- **ECS Image.** The following table describes the parameters.

Parameter	Required	Description
Image Name	No	Specifies the name of the destination ECS image generated by SMC for the migration source. <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px;"> <p> Note The image name must be unique in the destination region.</p> </div>
Automatic incremental synchronization	No	Specifies whether SMC automatically synchronizes incremental data of the migration source to Alibaba Cloud. <ul style="list-style-type: none"> ■ To enable this feature, you must configure the following parameters: <ul style="list-style-type: none"> ■ Synchronization Interval: the interval at which SMC automatically synchronizes incremental data to Alibaba Cloud ■ Maximum mirror retention: the maximum number of images that can be retained during incremental migration <p>SMC automatically synchronizes incremental data to Alibaba Cloud at the specified interval. For more information about best practices for incremental migration, see Migrate incremental data from a source server.</p> <ul style="list-style-type: none"> ■ If you disable this feature, incremental data is not synchronized.

- **Container Image.** The following table describes the parameters.

 **Note** SMC does not allow you to migrate Windows servers to Container Registry. For more information, see [Migrate source servers to Container Registry](#).

Parameter	Required	Description
Namespace	Yes	The namespace of the destination container image
Repository Name	Yes	The name of the repository that stores the destination container image
Version	No	The version of the destination container image
RAM Role	Yes	The instance RAM role that is attached to the intermediate instance

- **Method to Run:** specifies whether to run a task immediately after it is created and whether to automatically run the task.
 - **Run Now:** The migration task runs immediately after it is created.
 - **Run Later:** The migration task automatically runs at the specified time after it is created.

? **Note** The earliest time that you can specify to run a migration task is 10 minutes after its creation.

- **Create Only:** After the task is created, you must manually start the task.

Default value: Run Now.

Tag and Network (Optional):

- **Migration Task Tag:** the tags that you specify for the migration task. Each tag contains a key and a value. You can use tags to query and manage migration tasks.

? **Note** You can specify a maximum of 20 tags for a migration task.

- **Network Type:** the type of the network that is used to migrate data to an intermediate instance. During migration, SMC creates an intermediate instance that connects to a VSwitch in a virtual private cloud (VPC). When you select Public Network, a public IP address is assigned to the intermediate instance.

▼ Tag and Network (Optional)

Migration Task Tag Select an existing or new k...▼ Select existing or new valu...▼

You can specify up to 20 tags for one resource.

Network Type ? Public Network Private network



▼
Refresh
Create

▼
Refresh
Create

An intermediate instance will be created under the selected VPC and VSwitch.

The following table describes the valid values.

Parameter value	Description

Parameter value	Description
Public Network	<p>SMC migrates data to the intermediate instance over the Internet. If you select Public Network, make sure that the migration source can access the Internet. You can choose whether to specify a VPC and a VSwitch based on your requirements.</p> <ul style="list-style-type: none"> ■ If you specify a VPC and a VSwitch, SMC creates an intermediate instance that connects to the specified VPC and VSwitch. <p>When you migrate multiple migration sources at a time, you can specify the same VPC and VSwitch for migration tasks. This improves the usage of VPC resources. You can migrate a maximum of 100 migration sources at a time.</p> <ul style="list-style-type: none"> ■ If you do not specify a VPC or a VSwitch, SMC automatically creates a VPC and a VSwitch and creates an intermediate instance that connects to the VPC and the VSwitch. <p>If you do not specify a VPC or a VSwitch before you migrate multiple migration sources at a time, SMC creates a VPC for each intermediate instance.</p> <div style="background-color: #e6f2ff; padding: 10px; border: 1px solid #d9e1f2;"> <p> Note Each Alibaba Cloud account can have a maximum of 10 VPCs in a region, including the VPCs that you create and the VPCs that are automatically created by SMC. Therefore, you can migrate a maximum of 10 migration sources at a time. To increase the VPC quota, submit a ticket.</p> </div>
VPC	<p>SMC migrates data to the intermediate instance through a VPC. If you select VPC, you must specify a VPC and a VSwitch and make sure that the migration source can connect to the VPC.</p> <div style="background-color: #e6f2ff; padding: 10px; border: 1px solid #d9e1f2;"> <p> Note If your server in the on-premises data center, virtual machine, or cloud host can connect to a VPC, we recommend that you select this mode to migrate data. Compared with data migration over the Internet, VPC-based data migration is more efficient and stable. You can use VPN Gateway, Express Connect, and Smart Access Gateway to connect a migration source to a VPC. For more information, see Connect an on-premises data center to a VPC network.</p> </div>

Advanced Settings (Optional):

- **Transmission speed limit (KB/S):** the maximum bandwidth for data transmission during migration. Unit: Kbit/s.

The default value is 0, which indicates that the bandwidth is not limited.

- **Compression Level:** the compression ratio of data to be migrated. Set the compression ratio based on your requirements.
 - If the bandwidth is limited, a high compression ratio improves the transmission efficiency.
 - If a high bandwidth is available, we recommend that you do not compress data. Data compression consumes CPU resources of the migration source.


The default value is 0, which indicates that data to be migrated is not compressed.

- **Checksum:** This feature enhances the verification of data consistency between the migration source and the destination server, but may compromise the data transmission rate.

By default, this feature is disabled.

v. After the configuration is complete, click **OK**.

3. Start the migration task.


 **Note** If you set the Method to Run parameter to **Run Now**, skip this step. If you set the Method to Run parameter to **Create Only** or **Run Later**, you can perform the following steps to start the migration task.

- i. In the left-side navigation pane, click **Migration Tasks**.
- ii. Find the target migration task and click **Start** in the **Actions** column.
 - To start multiple migration tasks at a time, select the target tasks and click **Start/Retry** in the lower part of the Migration Tasks page. The status of the selected tasks must be **Ready**, **Stopped**, or **Error**.
 - To suspend a migration task in the **Syncing** state, click **Pause** in the **Actions** column.

What's next


- On the **Migration Tasks** page, wait until the migration task is complete. If the task enters the **Completed** state, the migration is successful.
 - If you set **Target Image Type** to **ECS Image** during the creation of the migration task, you can perform the following operations:

- a. Click **Create Instance** in the **Actions** column.



Migration Task ID/Name	Status	Migration Task Tag	Migration Source ID/Name	Target Region	Migration Result	Actions
j-...	Completed 100%		s-...	China (Shanghai)	ECS Image: m-...	Create Instance View Logs Delete

- b. Configure parameters to create the destination instance. For more information, see [Create an ECS instance by using a custom image](#).
 - c. Connect to the destination instance and check its system. For more information, see the [How do I check my system after I migrate a Windows server?](#) or [How do I check my system after I migrate a Linux server?](#) section in **SMC FAQ**.
- If you set **Target Image Type** to **Container Image**, you can use a container image to deploy applications. For more information, see [Migrate source servers to Container Registry](#).
- If the migration task enters the **Error** state, the migration fails. You must perform the following steps:
 - i. Click **View Logs** in the **Actions** column. For information about common errors and solutions, see [SMC FAQ](#).
 - ii. On the **Migration Tasks** page, restart the migration task. The migration task resumes from the point where it was suspended.

 **Note** If the intermediate instance is released, you must create another migration task. For more information, see the "What can I do if I have released an intermediate instance by mistake?" section in [SMC FAQ](#).