

## Image Management Service

# Getting Started

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# 1 Preparations

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Before using the IMS service, you need to make the following preparations:

- [Register with HUAWEI CLOUD and Complete Real-Name Authentication](#)
- [Top Up an Account](#)
- [Create an IAM User](#)

## Register with HUAWEI CLOUD and Complete Real-Name Authentication

If you already have a HUAWEI CLOUD account, skip this part. Otherwise, perform the following steps to create one:

1. Visit <https://www.huaweicloud.com/intl/en-us/> and click **Register**.
2. On the displayed page, register an account as prompted.  
After the registration, the system automatically redirects you to your personal information page.
3. Complete real-name authentication by following the instructions in [Individual Real-Name Authentication](#).

## Top Up an Account

Private images are free of charge, but the services associated with them are charged. For example, cross-region image replication is charged for replication traffic and storage. Before using the IMS service, ensure that your account has sufficient balance.

- For details about the billing standards of IMS, see [Pricing Details](#).
- To top up an account, see [Topping Up an Account](#).

## Create an IAM User

If you want to allow multiple users to manage your resources without sharing your password or key, you can create users using IAM and grant permissions to the users. These users can use specified login links and their own accounts to access the public cloud and help you efficiently manage resources. You can also set account security policies to ensure the security of these accounts and reduce enterprise information security risks.

If you have registered on the public cloud platform but have no IAM user, you can create one on the IAM console. For example, to create an IMS administrator, perform the following steps:

1. Enter your username and password to log in to the management console.
2. In the upper right corner of the page, click the username and select **Identity and Access Management**.
3. In the navigation pane, choose **Users**. In the right pane, click **Create User**.
4. Enter the user information on the **Create User** page.
  - **Username**: Enter a username, for example, **ims\_administrator**.
  - **Email Address**: Email address bound to the IAM user. This parameter is mandatory if the access type is specified as **Set by user**.
  - (Optional) **Mobile Number**: Mobile number bound to the IAM user.
  - (Optional) **Description**: Enter description of the IAM user, for example, **IMS administrator**.
5. In the **Access Type** area on the **Create User** page, select **Management console access**, select **Set now** for **Console Password**, enter a password, and click **Next**.

**Figure 1-1** Selecting the access type

★ Access Type You are advised to select only one access type for security purposes.

☐ Programmatic access  
Access HUAWEI CLOUD services using development tools (including APIs, CLI, and SDKs) that support key authentication. An access key will be automatically generated for each user. [Learn more](#)

☒ Management console access  
Log in to HUAWEI CLOUD management console using the username and a password.

**Console Password**

☐ Set by user  
A one-time login URL will be emailed to the user. The user can then click on the link to set a password.

☐ Automatically generated  
A password will be automatically generated by the system. If you choose not to download the password, you can set a new password later.

☒ Set now  
Set a password now.  
[Password input field with eye icon]

☒ Require password reset at first login

**Login Protection**

☐ Enable

☒ Disable

#### NOTE

An IMS administrator can log in to the management console and manage users. You are advised to select **Set now** for **Console Password** when you create an IMS administrator for your domain. If you create an IMS administrator for another user, you are advised to select **Set by user** for **Console Password** instead so that the user can set their own password.

6. (Optional) Click **Next** to add the user to the **admin** user group.  
User group **admin** has all the operation permissions. If you want to grant fine-grained permissions to IAM users, see [Creating a User and Granting Permissions](#).

After being created successfully, the IAM user is displayed in the user list. You can click the IAM user login link above the list and use the created user to log in to the console.

# 2 Creating a Private Image

IMS provides full-lifecycle management for private images, including creating, replicating, sharing, and exporting private images. You can choose a proper method to migrate services to the cloud or on the cloud with the cooperation of other services, such as ECS and OBS.

Private images include system disk images, data disk images, and full-ECS images. Private images are created from ECSs or external image files. A private image is available only to the user who created it and the user with whom it has been shared.

**Table 2-1** Methods of creating private images

Private Image Type	Description	Method
System disk image	A system disk image contains an OS and applications for running services. You can use a system disk image to create ECSs and migrate your services to the cloud.	<ul style="list-style-type: none"><li>• <a href="#">Creating a System Disk Image from a Windows ECS/Creating a System Disk Image from a Linux ECS</a></li><li>• <a href="#">Creating a Windows System Disk Image from an External Image File/Creating a Linux System Disk Image from an External Image File</a></li><li>• <a href="#">Creating a Windows System Disk Image from an ISO File/Creating a Linux System Disk Image from an ISO File</a></li></ul>
Data disk image	A data disk image contains only service data. You can use a data disk image to create EVS disks and migrate your service data to the cloud.	<ul style="list-style-type: none"><li>• <a href="#">Creating a Data Disk Image from an ECS</a></li><li>• <a href="#">Creating a Data Disk Image from an External Image File</a></li></ul>



Private Image Type	Description	Method
Full-ECS image	A full-ECS image contains an OS, applications, and service data for running services.	<ul style="list-style-type: none"><li>• <a href="#">Creating a Full-ECS Image from an ECS</a></li><li>• <a href="#">Creating a Full-ECS Image from a CSBS Backup</a></li><li>• <a href="#">Creating a Full-ECS Image from a CBR Backup</a></li></ul>

The following sections use examples to describe how to create a system disk image.

- [Scenario 1: Creating a System Disk Image from a Windows ECS](#)
- [Scenario 2: Creating a Linux System Disk Image from an External Image File](#)

# 3

## Scenario 1: Creating a System Disk Image from a Windows ECS

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This guide describes how to create a system disk image from a Windows ECS.

# 4

## Scenario 2: Creating a Linux System Disk Image from an External Image File

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If you have an external image file that contains a Linux OS and the image format and OS meet requirements, you can use the image file to create a Linux system disk image.

# 5 Practices

Common practices are provided to help you easily use IMS.

## Create a Private Image

Practice	Description
<a href="#">Creating a Windows Image Using VirtualBox and an ISO File</a>	Describes how to create a Windows image using VirtualBox. To do so, you need to install VirtualBox, use it to create a VM from an ISO file, configure the VM, and generate a VHD image using the configured VM.
<a href="#">Creating a Linux Image Using VirtualBox and an ISO File</a>	Describes how to create a Linux image using VirtualBox. To do so, you need to install VirtualBox, use it to create a VM from an ISO file, configure the VM, and generate a VHD image using the configured VM.
<a href="#">Creating a Private Image Using Packer</a>	Describes how to create an Ubuntu 22.04 Server 64-bit private image from a CentOS 8.2 ECS using Packer and upload it to the cloud platform.
<a href="#">Converting the Image Format</a>	Describes how to use qemu-img or Huawei qemu-img-hw to convert the image format. qemu-img can be used for mutual conversion of formats VHD, VMDK, QCOW2, RAW, VHDX, QCOW, VDI, and QED but cannot be used for the format conversion to ZVHD or ZVHD2. To convert an image file to any of the two formats, use qemu-img-hw.

## Optimize Images

Practice	Description
<a href="#">Cleaning Up the Disk Space of a Windows ECS</a>	Describes how to clean up the disk space of a Windows ECS.

## Migrate Images

Practice	Description
<a href="#">Migrating ECSs Across Accounts and Regions</a>	Describes how to migrate an ECS with a website deployed across regions and accounts.
<a href="#">Migrating Service Data Across Accounts (Data Disks)</a>	Generally, service data is stored on data disks. To migrate service data across accounts, you need to create data disk images and share them with the target account.