

# Cloud Backup and Recovery

## Getting Started

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<https://securitybulletin.huawei.com/enterprise/en/security-advisory>

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# 1 Creating a Server Backup

## Scenarios

This section describes how to quickly purchase a server backup vault and perform backup. Backing up a server does not impact the server performance.

The backup process for BMSs is the same as that for ECSs.

If you do not need an ECS for the moment, you can back up the ECS and then delete it. When you want an ECS later, you can create an image from the ECS backup and use the image to create ECSs.

## Operation Process

**Table 1-1** Operation process of creating a cloud server backup

| Step   | Description   |
|--|---|
| <a href="#">Making preparations</a>              | Register with Huawei Cloud, complete real-name authentication, and top up your account. |
| <a href="#">Purchasing a server backup vault</a> | Purchase a server backup vault to store server backups.                                 |
| <a href="#">Associating servers</a>              | Associate your servers with a vault to back up and replicate data.                      |
| <a href="#">Creating a cloud server backup</a>   | Create server backups to protect data.  |

## Making Preparations

1. Sign up for Huawei Cloud.
  - To sign up a HUAWEI ID and enable Huawei Cloud services, see [Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services](#).
  - To complete real-name authentication, see [Individual Real-Name Authentication](#).

If you already have a Huawei account, skip this step.

2. Top up your account.
  - To view detailed CBR pricing, see [Product Pricing Details](#).
  - To top up an account, see [Topping Up an Account](#).

## Purchasing a Server Backup Vault

Before backing up data, you need to purchase a server backup vault.

**Step 1** Go to the [Buy Server Backup Vault](#) page.

**Step 2** Set mandatory parameters for the server backup vault based on the parameter description table. For parameters not included in this table, retain the default values.

Complete **Basic Settings** and select a **Protection Type**.

**Basic Settings**

Billing Mode

Yearly/Monthly
  Pay-per-use

Pay-per-use is a postpaid billing mode. You are billed by the hour based on the vault capacity and for how long you use the vault, and vault charges are calculated by the day. You can create or delete vaults at any time.

Region

If you want to change the region, click the region drop-down list on the left of the top menu bar.

Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.

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**Protection Type**

Protection Type

Backup
  Replication (cross-region)

Backup vaults store the backup data of protected resources. If you want to back up servers in a region, create a backup vault in this region.

Application-Consistent Backup

Enable this function to buy a database server backup vault. Install Agent before enabling application-consistent backup. Or, application-consistent backup fails, and a server backup is performed instead.

Backup Data Redundancy

Single-AZ
  Multi-AZ

This setting cannot be changed after the vault is created.

| Parameter    | Example Value | Description  |
|--------------|---------------|--|
| Billing Mode | Pay-per-use   | <ul style="list-style-type: none"> <li>• Pay-per-use is a postpaid billing mode. You are billed based on your resource usage and you can increase or delete resources anytime. Fees are deducted from your account balance.</li> <li>• Yearly/monthly is a prepaid billing mode. You are billed based on the subscription duration you specify. This mode is ideal when the resource use duration is predictable. A longer subscription often means a lower cost.</li> </ul> |

| Parameter              | Example Value       | Description   |
|------------------------|---------------------|---|
| Region                 | <b>CN-Hong Kong</b> | Resources in different regions cannot communicate with each other over an intranet. Select the region closest to you to enjoy low latency.<br>Once the vault is created, its region cannot be changed.  |
| Protection Type        | <b>Backup</b>       | <ul style="list-style-type: none"> <li>• <b>Backup</b>: A server backup vault stores server backups.</li> <li>• <b>Replication (cross-region)</b>: A server replication vault stores replicas of server backups. If you select <b>Replication</b>, you do not need to select a server.</li> </ul> <p>For example, if you want to back up a server, select <b>Backup</b> for the vault protection type. If you want to replicate backups of a server from one region to another, select <b>Replication</b> for the vault in this other region.</p> |
| Backup Data Redundancy | <b>Single-AZ</b>    | <ul style="list-style-type: none"> <li>• <b>Single-AZ</b>: Backup data is stored in a single AZ, with lower costs.</li> <li>• <b>Multi-AZ</b>: Backup data is stored in multiple AZs to achieve higher reliability.</li> </ul> <p>The backup data redundancy policy cannot be changed after a vault is purchased. Plan and select a policy that best suits your service needs.</p>  |

Configure **Resources to Back Up**, **Backup Capacity**, and **Backup Policy**.


**Resources to Back Up**

Associate Server

**Backup Capacity**

Vault Capacity

To ensure continuity, it is recommended that the vault capacity be at least the size of the servers you want to back up.


 If the vault capacity is smaller than the total capacity to be backed up, the backup task will fail.

**Backup Policy**

Auto Backup

Automatic Association

| Parameter            | Example Value | Description   |
|----------------------|---------------|---|
| Resources to Back Up | <b>Skip</b>   | <ul style="list-style-type: none"> <li>• <b>Configure:</b> Select the servers to be associated.</li> <li>• <b>Skip:</b> If no server is available, you can purchase the vault first and associate servers later.</li> </ul>   |
| Backup Capacity      | <b>100 GB</b> | <p>Specify the vault capacity. The capacity ranges from 10 GB to 10485760 GB.</p> <p><b>Properly plan the vault capacity</b>, which must be at least the same as the size of the servers you want to back up. Also, if automatic association is enabled and a backup policy is applied to the vault, more capacity is required.</p> <p>As the vault's used space grows, you can expand the vault capacity if it becomes insufficient.</p> |



| Parameter             | Example Value | Description   |
|-----------------------|---------------|---|
| Auto Backup           | <b>Skip</b>   | <ul style="list-style-type: none"> <li>• <b>Configure:</b> A backup policy can be applied to this vault. Resources associated with this vault will be automatically backed up based on the policy. You can select an existing backup policy or create a new one.</li> <li>• <b>Skip:</b> Resources associated with this vault will not be automatically backed up until you apply a backup policy to the vault. If you need to automatically back up data periodically, you can create a policy and apply it to the vault. For details, see <a href="#">Policy Management</a>.</li> </ul> |
| Automatic Association | <b>Skip</b>   | <ul style="list-style-type: none"> <li>• If you select <b>Configure</b>, in the next backup period, CBR will automatically scan all unprotected servers, associate them with the vault, and then perform backups.</li> <li>• If you select <b>Skip</b> and need to enable automatic association later, see <a href="#">Associating Resources to a Vault</a>.</li> </ul>   |

### Configure Enterprise Project and Advanced Settings.

**Enterprise Project**

--Select-- [Create Enterprise Project](#)

Enterprise projects are created in EPS for cloud resource management. EPS provides a unified method to manage cloud resources by project, including the management of resources, users, and user groups in a project.

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**Advanced Settings**

Vault Name

vault-4ca2

Tags

Vault tags are used for resource management only. It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

Tag key Tag value

You can add 20 more tags.

| Parameter          | Example Value  | Description   |
|--------------------|----------------|---|
| Enterprise Project | <b>default</b> | <p>Add the vault to an existing enterprise project. This parameter is displayed only for enterprise users who have enabled enterprise project management.</p> <p><b>NOTE</b><br/>If the <b>CBR FullAccess</b> permissions have been assigned to IAM users, enterprise projects will not be displayed for you to choose from when you create a vault. Go to the Enterprise Project Management console and assign the <b>CBR FullAccess</b> permissions to the target user group.</p> |

| Parameter  | Example Value     | Description  |
|------------|-------------------|--|
| Vault Name | <b>vault-317a</b> | Name of the vault to be created.<br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). You can also use the default name <b>vault_XXXX</b> . |

**Step 3** Click **Next**.

**Step 4** Click **Submit**. Confirm the order details and complete the payment.

**Step 5** Go back to the **Cloud Server Backups** page. You can view the created vault in the vault list. The vault is in the **Available** state.

----End

## Associating Servers with the Vault

After purchasing a vault, you need to associate resources with the vault.

The selected servers must have not been associated with any vault and must be in the **Running** or **Stopped** state.

**Step 1** On the **Cloud Server Backups** page, locate the target vault and click **Associate Server** in the **Operation** column.

**Step 2** In the resource list, select the resources you want to associate with the vault. After resources are selected, they are added to the list of selected resources.

### Associate Server

If you intend to create a backup image to quickly deploy clones of an existing ECS, optimize the ECS first and install either Cloud-init or Cloudbase-init, depending on your OS. (Backups of BMSs cannot be used to create images.)

Linux documentation: [Optimize the Linux ECS](#) [Install Cloud-init](#)

Windows documentation: [Optimize the Windows ECS](#) [Install Cloudbase-init](#)

| Server List  |         |      |     |                       |  | Selected Servers (1) |            |  |
|--|---------|------|-----|-----------------------|--|----------------------|------------|--|
| Name/ID  | Status  | Type | AZ  | Associated            | Name/ID  | Selected Di...       | Operati... |  |
| <input checked="" type="checkbox"/> ecs-3bd4-wp-w00515905<br>ea67bd2c-6cbd-44ad-acb9-00d7... | Stopped | ECS  | AZ2 | Yes (vault-3a09Deb... | <input checked="" type="checkbox"/> ecs-3bd4-wp-w00515905<br>ea67bd2c-6cbd-44ad-acb... | 1/1                  |            |  |

**NOTICE**

- If a new disk is attached to an associated server, CBR automatically identifies the new disk and includes the new disk in subsequent backup tasks.
- To avoid data inconsistency after restoration, you are advised to back up the entire server.

If you want to back up only some of the disks to reduce costs, ensure that data on the backed up disks does not depend on the disks that are not backed up. Or, data inconsistency may occur.

For example, the data of an Oracle database is scattered across different disks. If only some of the disks are backed up, restoration restores only the data of the disks that have been backed up, with data on the rest of the disks unchanged. As a result, the data may be inconsistent and the Oracle database may fail to start.

**Step 3** Click **OK**. Then on the **Associated Servers** tab page, you can view resources that have been associated.

----End

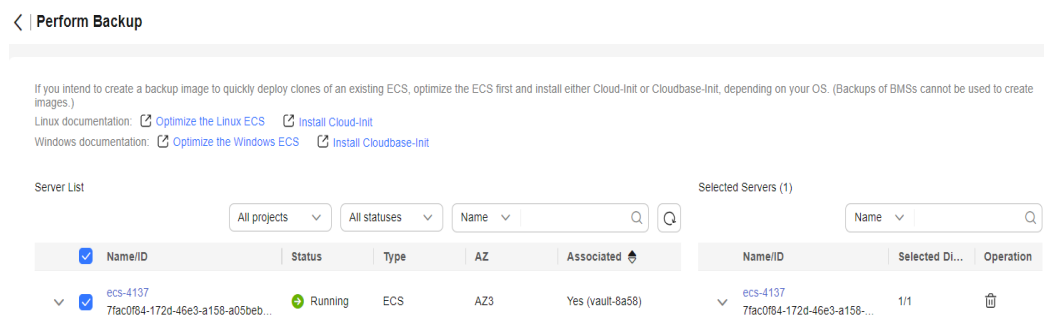
For details about automatic association, see [Associating Resources to a Vault](#).

## Creating a Server Backup

After resources are associated, CBR will automatically back up your data, or you can back up data manually. Only servers in the **Running** or **Stopped** state can be backed up.

**Step 1** On the **Cloud Server Backups** page, click the **Vaults** tab and find the vault to which the server is associated.

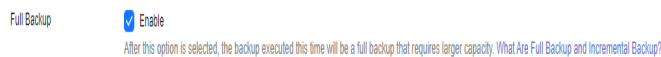
**Step 2** Click **Perform Backup** in the **Operation** column. In the server list, select the server you want to back up. After a server is selected, it is added to the list of selected servers.



**Step 3** Set **Name** and **Description** for the backup. For details, see [#cbr\\_02\\_0028/table4829135361311](#).

| Parameter   | Example Value        | Description  |
|-------------|----------------------|--|
| Name        | <b>manualbk_d819</b> | Name of the backup you are creating.<br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-).<br><b>NOTE</b><br>You can also use the default name <b>manualbk_xxxx</b> .<br>If multiple servers are to be backed up, the system automatically adds suffixes to their backup names, for example, <b>backup-0001</b> and <b>backup-0002</b> . |
| Description | -                    | Description of the backup.<br>It cannot exceed 255 characters.   |

**Step 4** Choose whether to enable full backup. If full backup is enabled, CBR performs a full backup on every associated server, which requires a larger capacity compared to an incremental backup.



**NOTE**

By default, the first backup is a full backup, and subsequent backups are incremental backups.  
To ensure data security, when you perform manual backups, a full backup is performed after 100 incremental backups by default.  
For details, see [What Are Full Backup and Incremental Backup?](#)

**Step 5** Click **OK**. CBR automatically creates a backup for the server.

On the **Backups** tab page, if the status of the backup is **Available**, the backup task is successful.

**NOTE**

- A server can be restarted if the backup progress exceeds 10%. However, to ensure data integrity, restart it after the backup is complete.

----End

**Related Information**

- After the backup is complete, you can use the backup to restore server data. For details, see [Restoring from a Cloud Server Backup](#).
- You can replicate the new vault or expand the vault capacity. For details, see [Vault Management](#).
- If you need to automatically back up data periodically, you can create a policy and apply it to the vault. For details, see [Policy Management](#).
- If you need to back up database servers, change the specifications of the target vault from server backup to application-consistent backup.

- You can create an image from a server backup. For details, see [Creating an Image from a Cloud Server Backup](#).

# 2 Creating a Disk Backup

## Scenarios

This section describes how to quickly purchase a disk backup vault and perform backup.

If the disk to be backed up is encrypted, the backup will also be automatically encrypted. The encryption attribute of backups cannot be changed.

## Operation Process

Table 2-1 Operation process of creating a disk backup

| Step   | Description   |
|--|---|
| <a href="#">Making preparations</a>            | Register with Huawei Cloud, complete real-name authentication, top up your account, and create an IMA user. |
| <a href="#">Purchasing a disk backup vault</a> | Purchase a disk backup vault to store disk backups.   |
| <a href="#">Associating disks</a>              | Associate your disks with a vault to back up and replicate data.  |
| <a href="#">Creating a disk backup</a>         | Create disk backups to protect data.  |

## Making Preparations

1. Sign up for Huawei Cloud.
  - To sign up a HUAWEI ID and enable Huawei Cloud services, see [Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services](#).
  - To complete real-name authentication, see [Individual Real-Name Authentication](#).  
If you already have a Huawei account, skip this step.
2. Top up your account.

- To view detailed CBR pricing, see [Product Pricing Details](#).
- To top up an account, see [Topping Up an Account](#).

## Purchasing a Disk Backup Vault

Before backing up data, you need to purchase a disk backup vault.

**Step 1** Go to the [Buy Disk Backup Vault page](#).

**Step 2** Set mandatory parameters for the disk backup vault based on the parameter description table. For parameters not included in this table, retain the default values.

Configure **Basic Settings**, **Resources to Back Up**, and **Backup Capacity**.

**Basic Settings**

Billing Mode

Yearly/Monthly  Pay-per-use

Pay-per-use is a postpaid billing mode. You are billed by the hour based on the vault capacity and for how long you use the vault, and vault charges are calculated by the day. You can create or delete vaults at any time.

Region

If you want to change the region, click the region drop-down list on the left of the top menu bar.

Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.

---

**Resources to Back Up**

Associate Disk

---

**Backup Capacity**

Vault Capacity

The vault capacity cannot be less than the capacity of the disks to be backed up.

⚠ If the vault capacity is smaller than the total capacity to be backed up, the backup task will fail.

| Parameter    | Example Value | Description  |
|--------------|---------------|--|
| Billing Mode | Pay-per-use   | <ul style="list-style-type: none"> <li>Yearly/monthly is a prepaid billing mode. You are billed based on the subscription duration you specify. This mode is ideal when the resource use duration is predictable. A longer subscription often means a lower cost.</li> <li>Pay-per-use is a postpaid billing mode. You are billed based on your resource usage and you can increase or delete resources anytime. Fees are deducted from your account balance.</li> </ul> |
| Region       | CN-Hong Kong  | Resources in different regions cannot communicate with each other over an intranet. Select the region closest to you to enjoy low latency.   |

| Parameter            | Example Value | Description   |
|----------------------|---------------|---|
| Resources to Back Up | <b>Skip</b>   | <ul style="list-style-type: none"> <li>• <b>Configure:</b> Select the disks to be associated.</li> <li>• <b>Skip:</b> If no disk is available, you can purchase the vault first and associate disks later.</li> </ul>   |
| Backup Capacity      | <b>100 GB</b> | <p>Specify the vault capacity. The capacity ranges from 10 GB to 10485760 GB.</p> <p>This capacity indicates the total size of the disks that you want to associate with this vault. <b>Properly plan the vault capacity</b>, which must be at least the same as the size of the disks you want to back up.</p> <p>As the vault's used space grows, you can expand the vault capacity if it becomes insufficient.</p> |

Configure **Backup Policy**, **Enterprise Project** and **Advanced Settings**.

**Backup Policy**

Auto Backup

Automatic Association

---

**Enterprise Project**

--Select--

Enterprise projects are created in EPS for cloud resource management. EPS provides a unified method to manage cloud resources by project, including the management of resources, users, and user groups in a project.

---

**Advanced Settings**

Vault Name

Tags  
Vault tags are used for resource management only. It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

| Parameter   | Example Value | Description  |
|-------------|---------------|--|
| Auto Backup | <b>Skip</b>   | <ul style="list-style-type: none"> <li>• <b>Configure:</b> A backup policy can be applied to this vault. Resources associated with this vault will be automatically backed up based on the policy. You can select an existing backup policy or create a new one.</li> <li>• <b>Skip:</b> Resources associated with this vault will not be automatically backed up until you apply a backup policy to the vault. If you need to automatically back up data periodically, you can create a policy and apply it to the vault. For details, see <b>Policy Management</b>.</li> </ul> |



| Parameter             | Example Value     | Description   |
|-----------------------|-------------------|---|
| Automatic Association | <b>Skip</b>       | <ul style="list-style-type: none"> <li>If you select <b>Configure</b>, in the next backup period, CBR will automatically scan all unprotected servers, associate them with the vault, and then perform backups.</li> <li>If you select <b>Skip</b> and need to enable automatic association later, see <a href="#">Associating Resources to a Vault</a>.</li> </ul>   |
| Enterprise Project    | <b>default</b>    | <p>Add the vault to an existing enterprise project. This parameter is displayed only for enterprise users who have enabled enterprise project management.</p> <p><b>NOTE</b><br/>If the <b>CBR FullAccess</b> permissions have been assigned to IAM users, enterprise projects will not be displayed for you to choose from when you create a vault. Go to the Enterprise Project Management console and assign the <b>CBR FullAccess</b> permissions to the target user group.</p> |
| Vault Name            | <b>vault-6fa8</b> | <p>Specify a name for the vault.</p> <p>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). You can also use the default name <b>vault_XXXX</b>.</p>   |

**Step 3** Click **Next**.

**Step 4** Click **Submit**. Confirm the order details and complete the payment.

**Step 5** Go back to the **Cloud Disk Backups** page. You can see the created vault in the vault list.

----End

## Associating Disks with the Vault

The selected servers must have not been associated with any vault and must be in the **Running** or **Stopped** state.

If you have associated disks when purchasing a vault, skip this step.

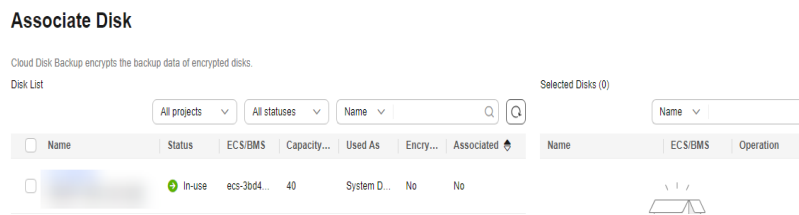
### Prerequisites

- The selected disks must have not been associated with any vault and must be in the **Available** or **In-use** state.

### Procedure

**Step 1** On the **Cloud Disk Backups** page, locate the target vault and click **Associate Disk** in the **Operation** column.

**Step 2** In the resource list, select the resources you want to associate with the vault. After resources are selected, they are added to the list of selected resources.



**Step 3** Click **OK**. Then on the **Associated Disks** tab page, you can view resources that have been associated.

----End

For details about automatic association, see [Associating Resources to a Vault](#).

## Creating a Disk Backup

After resources are associated, CBR will automatically back up your data, or you can back up data manually. Only servers in the **Running** or **Stopped** state can be backed up.

Backing up a server does not impact the disk performance.

Peak hours of the backup service are from 22:00 to 08:00, during which there may be delays. So you are advised to evaluate your service types and schedule backups in discrete time periods.

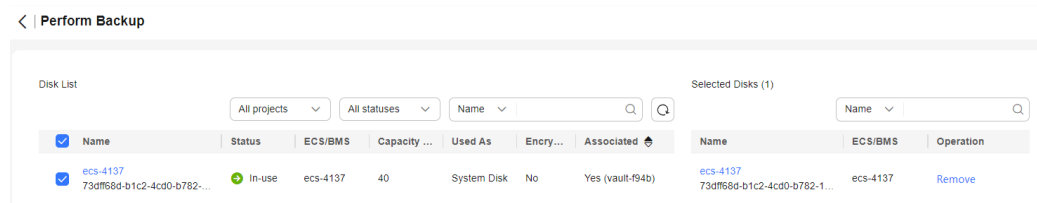
### Prerequisites

A disk can be backed up only when its status is **Available** or **In-use**. If you have performed operations such as expanding, attaching, detaching, or deleting a disk, refresh the page first to ensure that the operation is complete and then determine whether to back up the disk.

### Procedure

**Step 1** On the **Cloud Disk Backups** page, click the **Vaults** tab and find the vault to which the disk is associated.

**Step 2** Click **Perform Backup** in the **Operation** column. In the disk list, select the disk you want to back up. After a disk is selected, it is added to the list of selected disks.



### NOTE

CBR will identify whether the selected disk is encrypted. If it is encrypted, the backups will be automatically encrypted.

**Step 3** Set **Name** and **Description** for the backup.

| Parameter   | Description  | Example Value |
|-------------|--|---------------|
| Name        | Name of the backup you are creating.<br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-).<br><b>NOTE</b><br>You can also use the default name <b>manualbk_XXXX</b> .<br>If multiple disks are to be backed up, the system automatically adds suffixes to their backup names, for example, <b>backup-0001</b> and <b>backup-0002</b> . | manualbk_d819 |
| Description | Description of the backup.<br>It cannot exceed 255 characters.   | --            |

**Step 4** Choose whether to enable full backup. If full backup is enabled, CBR performs a full backup on every associated disk, which requires a larger capacity compared to an incremental backup.

Full Backup   Enable

 **NOTE**

By default, the first backup is a full backup, and subsequent backups are incremental backups.

To ensure data security, when you perform manual backups, a full backup is performed after 100 incremental backups by default.

For details, see [What Are Full Backup and Incremental Backup?](#)

**Step 5** Click **OK**. CBR automatically creates a backup for the disk.

On the **Backups** tab page, if the status of the backup is **Available**, the backup task is successful.

 **NOTE**

If you delete data from the disk during the backup, the deleted data may fail to be backed up. To ensure data integrity, delete the target data after the backup is complete, and then perform the backup.

----End

## Related Information

- After the backup is complete, you can use the backup to restore disk data. For details, see [Restoring Data Using a Cloud Disk Backup](#).
- You can use a disk backup to create a disk that contains the same data as the backup. For details, see [Creating a Disk from a Cloud Disk Backup](#).

# 3 Creating an SFS Turbo Backup

## Scenarios

This section describes how to quickly purchase an SFS Turbo backup vault and perform backup.

## Operation Process

**Table 3-1** Operation process of creating an SFS Turbo backup

| Step   | Description   |
|--|---|
| <a href="#">Making preparations</a>                  | Register with Huawei Cloud, complete real-name authentication, top up your account, and create an IMA user. |
| <a href="#">Purchasing an SFS Turbo backup vault</a> | Purchase an SFS Turbo backup vault to store SFS Turbo backups.  |
| <a href="#">Associating SFS Turbo file systems</a>   | Associate your SFS Turbo file systems with a vault to back up and replicate data.                           |
| <a href="#">Creating an SFS Turbo backup</a>         | Create SFS Turbo backups to protect data.   |

## Making Preparations

1. Sign up for Huawei Cloud.
  - To sign up a HUAWEI ID and enable Huawei Cloud services, see [Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services](#).
  - To complete real-name authentication, see [Individual Real-Name Authentication](#).  
If you already have a Huawei account, skip this step.
2. Top up your account.
  - To view detailed CBR pricing, see [Product Pricing Details](#).

- To top up an account, see [Topping Up an Account](#).

## Purchasing an SFS Turbo Backup Vault

Before backing up data, you need to purchase an SFS Turbo backup vault.

**Step 1** Go to the [Buy Disk Backup Vault](#) page.

**Step 2** Set mandatory parameters for the SFS Turbo backup vault based on the parameter description table. For parameters not included in this table, retain the default values.

Configure **Basic Settings**, **Protection Type**, and **Resources to Back Up**.

**Basic Settings**

Billing Mode

Yearly/Monthly  Pay-per-use

Pay-per-use is a postpaid billing mode. You are billed by the hour based on the vault capacity and for how long you use the vault, and vault charges are calculated by the day. You can create or delete vaults at any time.

Region

If you want to change the region, click the region drop-down list on the left of the top menu bar.  
Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.

---

**Protection Type**

Protection Type

Backup  Replication (cross-region)

Backup vaults store the backup data of protected resources. If you want to back up servers in a region, create a backup vault in this region.

Backup Data Redundancy

Single-AZ  Multi-AZ

⚠ This setting cannot be changed after the vault is created.

---

**Resources to Back Up**

Associate File System

| Parameter    | Example Value | Description  |
|--------------|---------------|--|
| Billing Mode | Pay-per-use   | <ul style="list-style-type: none"> <li>Yearly/monthly is a prepaid billing mode. You are billed based on the subscription duration you specify. This mode is ideal when the resource use duration is predictable. A longer subscription often means a lower cost.</li> <li>Pay-per-use is a postpaid billing mode. You are billed based on your resource usage and you can increase or delete resources anytime. Fees are deducted from your account balance.</li> </ul> |
| Region       | CN-Hong Kong  | Resources in different regions cannot communicate with each other over an intranet. Select the region closest to you to enjoy low latency.   |

| Parameter              | Example Value    | Description  |
|------------------------|------------------|--|
| Protection Type        | <b>Backup</b>    | <ul style="list-style-type: none"> <li>• <b>Backup:</b> An SFS Turbo backup vault stores SFS Turbo backups.</li> <li>• <b>Replication (cross-region):</b> An SFS Turbo replication vault stores replicas of SFS Turbo backups. If you select <b>Replication</b>, you do not need to select an SFS Turbo file system.</li> </ul>  |
| Backup Data Redundancy | <b>Single-AZ</b> | <ul style="list-style-type: none"> <li>• <b>Single-AZ:</b> Backup data is stored in a single AZ, with lower costs.</li> <li>• <b>Multi-AZ:</b> Backup data is stored in multiple AZs to achieve higher reliability.</li> </ul> <p>The backup data redundancy policy cannot be changed after a vault is purchased. Plan and select a policy that best suits your service needs.</p> |
| Resources to Back Up   | <b>Skip</b>      | <ul style="list-style-type: none"> <li>• <b>Configure:</b> Select the SFS Turbo file systems to be associated.</li> <li>• <b>Skip:</b> If no SFS Turbo file system is available, you can purchase the vault first and associate SFS Turbo file systems later.</li> </ul>   |

### Configure Backup Capacity, Backup Policy, Enterprise Project and Advanced Settings.

**Backup Capacity**

Vault Capacity

It is recommended that you specify a vault capacity larger than the capacity of file systems you want to back up to guarantee continuity.

**⚠ If the vault capacity is smaller than the total capacity to be backed up, the backup task will fail.**

Auto Capacity Expansion

---

**Backup Policy**

Auto Backup

---

**Enterprise Project**

Enterprise projects are created in EPS for cloud resource management. EPS provides a unified method to manage cloud resources by project, including the management of resources, users, and user groups in a project.

---

**Advanced Settings**

Vault Name

Tags

Vault tags are used for resource management only. It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

| Parameter          | Example Value     | Description  |
|--------------------|-------------------|--|
| Backup Capacity    | <b>100 GB</b>     | Specify the vault capacity. The capacity ranges from 10 GB to 10485760 GB.<br><br>This capacity indicates the total size of the file systems that you want to associate with this vault. You need to <b>properly plan the vault capacity</b> , which must be at least the same as the size of the file systems you want to back up.<br><br>As the vault's used space grows, you can expand the vault capacity if it becomes insufficient.  |
| Auto Backup        | <b>Skip</b>       | <ul style="list-style-type: none"> <li>• <b>Configure:</b> A backup policy can be applied to this vault. Resources associated with this vault will be automatically backed up based on the policy. You can select an existing backup policy or create a new one.</li> <li>• <b>Skip:</b> Resources associated with this vault will not be automatically backed up until you apply a backup policy to the vault. If you need to automatically back up data periodically, you can create a policy and apply it to the vault. For details, see <b>Policy Management</b>.</li> </ul> |
| Enterprise Project | <b>default</b>    | Add the vault to an existing enterprise project.<br><br>This parameter is displayed only for enterprise users who have enabled enterprise project management.<br><br><b>NOTE</b><br>If the <b>CBR FullAccess</b> permissions have been assigned to IAM users, enterprise projects will not be displayed for you to choose from when you create a vault. Go to the Enterprise Project Management console and assign the <b>CBR FullAccess</b> permissions to the target user group.   |
| Vault Name         | <b>vault-f9ed</b> | Specify a name for the vault.<br><br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). You can also use the default name <b>vault_XXXX</b> .  |

**Step 3** Click **Next**.

**Step 4** Click **Submit**. Confirm the order details and complete the payment.

**Step 5** Go back to the **SFS Turbo Backups** page. You can see the created vault in the vault list.

----End

## Associating SFS Turbo File Systems

The selected servers must have not been associated with any vault and must be in the **Running** or **Stopped** state.

If you have associated file systems when purchasing a vault, skip this step.

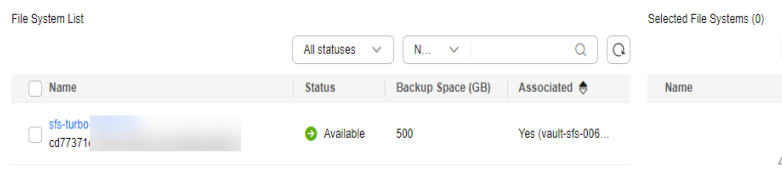
### Prerequisites

- The selected file systems must have not been associated with any vault and must be in the **Available** state.

### Procedure

- Step 1** On the **SFS Turbo Backups** page, locate the target vault and click **Associate File System** in the **Operation** column.
- Step 2** In the resource list, select the resources you want to associate with the vault. After resources are selected, they are added to the list of selected resources.

#### Associate File System



- Step 3** Click **OK**. Then on the **Associated File Systems** tab page, you can view resources that have been associated.

----End

For details about automatic association, see [Associating Resources to a Vault](#).

## Creating an SFS Turbo Backup

After resources are associated, CBR will automatically back up your data, or you can back up data manually. Only servers in the **Running** or **Stopped** state can be backed up.

To ensure data integrity, you are advised to back up the file system during off-peak hours when no data is written to the file system.

Peak hours of the backup service are from 22:00 to 08:00, during which there may be delays. So you are advised to evaluate your service types and schedule backups in discrete time periods.

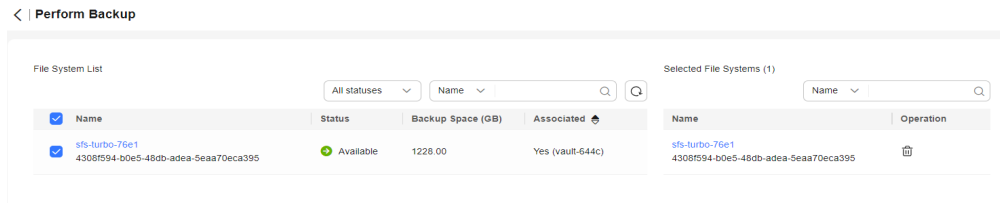
### Prerequisites

A file system can be backed up only when its status is **Available** or **In-use**. If you have performed operations such as expanding, mounting, unmounting, or deleting a file system, refresh the page first to ensure that the operation is complete and then determine whether to back up the file system.

### Procedure

- Step 1** On the **SFS Turbo Backups** page, click the **Vaults** tab and find the vault to which the file system is associated.
- Step 2** Click **Perform Backup** in the **Operation** column. In the file system list, select the file system to be backed up. After a file system is selected, it is added to the list of selected file systems.





**Step 3** Set Name and Description for the backup.

| Parameter   | Description   | Example Value |
|-------------|---|---------------|
| Name        | Name of the backup you are creating.<br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-).<br><b>NOTE</b><br>You can also use the default name <b>manualbk_XXXX</b> .<br>If multiple file systems are to be backed up, the system automatically adds suffixes to their backup names, for example, <b>backup-0001</b> and <b>backup-0002</b> . | manualbk_d819 |
| Description | Description of the backup.<br>It cannot exceed 255 characters.  | --            |

**Step 4** Click **OK**. CBR automatically creates a backup for the file system.

On the **Backups** tab page, if the status of the backup is **Available**, the backup task is successful.

 **NOTE**

If you delete data from the file system during the backup, the deleted data may fail to be backed up. To ensure data integrity, delete the target data after the backup is complete, and then perform the backup.

To ensure data security, when you perform manual backups, a full backup is performed after 100 incremental backups by default.

----End

**Related Information**

- After the backup is complete, you can create a new SFS Turbo file system using the backup. For details, see [Using a Backup to Create a File System](#).

# 4 Creating a Desktop Backup

## Scenarios

This section describes how to quickly create a desktop backup vault and perform backup.

## Operation Process

**Table 4-1** Operation process of creating a desktop backup

| Step  | Description   |
|---|---|
| <a href="#">Making preparations</a>               | Register with Huawei Cloud, complete real-name authentication, top up your account, and create an IMA user. |
| <a href="#">Purchasing a desktop backup vault</a> | Create a desktop backup vault to store desktop backups.   |
| <a href="#">Associating desktops</a>              | Associate your desktops with a vault to back up and replicate data.   |
| <a href="#">Creating a desktop backup</a>         | Create desktop backups to protect data.   |

## Making Preparations

1. Sign up for Huawei Cloud.
  - To sign up a HUAWEI ID and enable Huawei Cloud services, see [Signing Up for a HUAWEI ID and Enabling Huawei Cloud Services](#).
  - To complete real-name authentication, see [Individual Real-Name Authentication](#).  
If you already have a Huawei account, skip this step.
2. Top up your account.
  - To view detailed CBR pricing, see [Product Pricing Details](#).

- To top up an account, see [Topping Up an Account](#).

## Purchasing a Desktop Backup Vault

This section describes how to create a desktop backup vault.

- Step 1** Go to the [Buy Desktop Backup Vault page](#).
- Step 2** Set mandatory parameters for the desktop backup vault based on the [parameter description](#). For parameters not included in this table, retain the default values.

Configure **Basic Settings**, **Protection Type**, and **Resources to Back Up**.

**Basic Settings**

Billing Mode  
 Yearly/Monthly  Pay-per-use  
Pay-per-use is a postpaid billing mode. You are billed by the hour based on the vault capacity and for how long you use the vault, and vault charges are calculated by the day. You can create or delete vaults at any time.

Region  
 CN-Hong Kong  
If you want to change the region, click the region drop-down list on the left of the top menu bar.  
 Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.

---

**Resources to Back Up**

Associate Desktop  
 Configure  Skip

---

**Backup Capacity**

Vault Capacity  
 GB  
The vault capacity cannot be less than the size of the Workspace desktops to be backed up.

**Warning:** If the vault capacity is smaller than the total capacity to be backed up, the backup task will fail.

Auto Capacity Expansion  
 Configure  Skip

| Parameter            | Example Value | Description  |
|----------------------|---------------|--|
| Billing Mode         | Pay-per-use   | <ul style="list-style-type: none"> <li>Pay-per-use is a postpaid billing mode. You are billed based on your resource usage and you can increase or delete resources anytime. Fees are deducted from your account balance.</li> <li>Yearly/monthly is a prepaid billing mode. You are billed based on the subscription duration you specify. This mode is ideal when the resource use duration is predictable. A longer subscription often means a lower cost.</li> </ul> |
| Region               | CN-Hong Kong  | Resources in different regions cannot communicate with each other over an intranet. Select the region closest to you to enjoy low latency.   |
| Resources to Back Up | Skip          | <ul style="list-style-type: none"> <li><b>Configure:</b> Select the desktops to be associated.</li> <li><b>Skip:</b> If no desktop is available, you can purchase the vault first and associate desktops later.</li> </ul>   |

| Parameter       | Example Value | Description   |
|-----------------|---------------|---|
| Backup Capacity | 100 GB        | Specify the vault capacity. The capacity ranges from 10 GB to 10485760 GB.<br><br>This capacity indicates the total size of the desktops that you want to associate with this vault. You need to <b>properly plan the vault capacity</b> , which must be at least the same as the size of the desktops you want to back up.<br><br>As the vault's used space grows, you can expand the vault capacity if it becomes insufficient. |

Configure **Backup Policy**, **Enterprise Project** and **Advanced Settings**.

**Backup Policy**

Auto Backup

Configure

---

**Enterprise Project**

--Select--

Enterprise projects are created in EPS for cloud resource management. EPS provides a unified method to manage cloud resources by project, including the management of resources, users, and user groups in a project.

---

**Advanced Settings**

Vault Name

Tags

Vault tags are used for resource management only. It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

| Parameter   | Example Value | Description  |
|-------------|---------------|--|
| Auto Backup | Skip          | <ul style="list-style-type: none"> <li>● <b>Configure:</b> A backup policy can be applied to this vault. Resources associated with this vault will be automatically backed up based on the policy. You can select an existing backup policy or create a new one.</li> <li>● <b>Skip:</b> Resources associated with this vault will not be automatically backed up until you apply a backup policy to the vault. If you need to automatically back up data periodically, you can create a policy and apply it to the vault. For details, see <b>Policy Management</b>.</li> </ul> |

| Parameter          | Example Value     | Description  |
|--------------------|-------------------|--|
| Enterprise Project | <b>default</b>    | Add the vault to an existing enterprise project.<br>This parameter is displayed only for enterprise users who have enabled enterprise project management.<br><b>NOTE</b><br>If the <b>CBR FullAccess</b> permissions have been assigned to IAM users, enterprise projects will not be displayed for you to choose from when you create a vault. Go to the Enterprise Project Management console and assign the <b>CBR FullAccess</b> permissions to the target user group. |
| Vault Name         | <b>vault-105d</b> | Specify a name for the vault.<br>A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). You can also use the default name <b>vault_XXXX</b> .  |

**Step 3** Click **Next**.

**Step 4** Click **Submit**. Confirm the order details and complete the payment.

**Step 5** Return to the **Desktop Backups** page. You can see the created vault in the vault list.

----End

## Associating Desktops

The selected servers must have not been associated with any vault and must be in the **Running** or **Stopped** state.

### Prerequisites

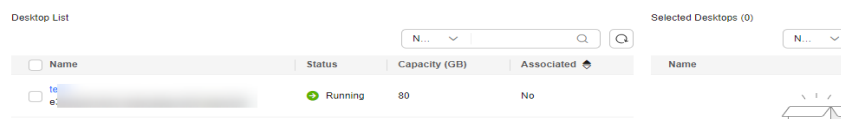
- The selected desktops must have not been associated with any vault and must be in the **Available** or **In-use** state.

### Procedure

**Step 1** On the **Desktop Backups** page, locate the target vault and click **Associate Desktop** in the **Operation** column.

**Step 2** In the resource list, select the resources you want to associate with the vault. After resources are selected, they are added to the list of selected resources.

#### Associated Desktops



**Step 3** Click **OK**. Then on the **Associated Desktops** tab page, you can view resources that have been associated.

----End

For details about automatic association, see [Associating Resources to a Vault](#).

## Creating a Desktop Backup

After resources are associated, CBR will automatically back up your data, or you can back up data manually. Only servers in the **Running** or **Stopped** state can be backed up.

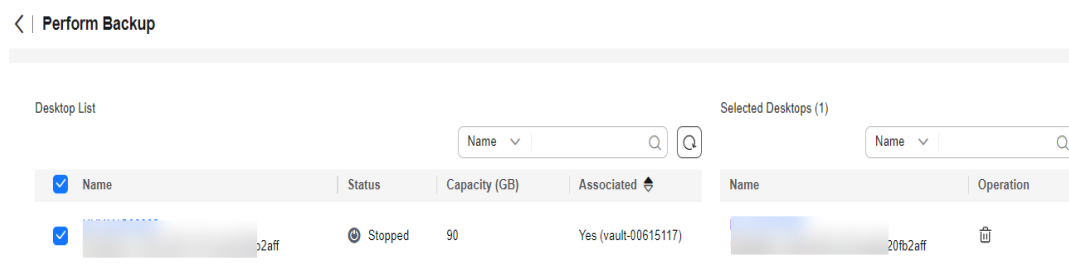
Peak hours of the backup service are from 22:00 to 08:00, during which there may be delays. So you are advised to evaluate your service types and schedule backups in discrete time periods.

### Prerequisites

A Workspace desktop can be backed up only when its status is **Available** or **In-use**. If you have performed operations such as expanding, attaching, detaching, or deleting a desktop, refresh the page first to ensure that the operation is complete and then determine whether to back up the desktop.

### Procedure

- Step 1** On the **Desktop Backups** page, click the **Vaults** tab and find the vault to which the desktop is associated.
- Step 2** Click **Perform Backup** in the **Operation** column. In the desktop list, select the desktop you want to back up. After a desktop is selected, it is added to the list of selected desktops.



- Step 3** Set **Name** and **Description** for the backup. For details, see [#cbr\\_02\\_0031/table4829135361311](#).

| Parameter | Description  | Example Value |
|-----------|--|---------------|
| Name      | <p>Name of the backup you are creating. A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-).</p> <p><b>NOTE</b><br/>You can also use the default name <b>manualbk_XXXX</b>.</p> <p>If multiple desktops are to be backed up, the system automatically adds suffixes to their backup names, for example, <b>backup-0001</b> and <b>backup-0002</b>.</p> | manualbk_d819 |

| Parameter   | Description  | Example Value |
|-------------|--|---------------|
| Description | Description of the backup.<br>It cannot exceed 255 characters. | --            |

**Step 4** Click **OK**. CBR automatically creates a backup for the desktop.

On the **Backups** tab page, if the status of the backup is **Available**, the backup task is successful.

 **NOTE**

If you delete data from the desktop during the backup, the deleted data may fail to be backed up. Therefore, to ensure data integrity, delete the target data after the backup is complete, and then perform the backup.

To ensure data security, when you perform manual backups, a full backup is performed after 100 incremental backups by default.

----End

## Related Information

- After the backup is complete, you can use the backup to restore desktop data. For details, see [Restoring from a Desktop Backup](#).