

Cloud Backup and Recovery

Getting Started

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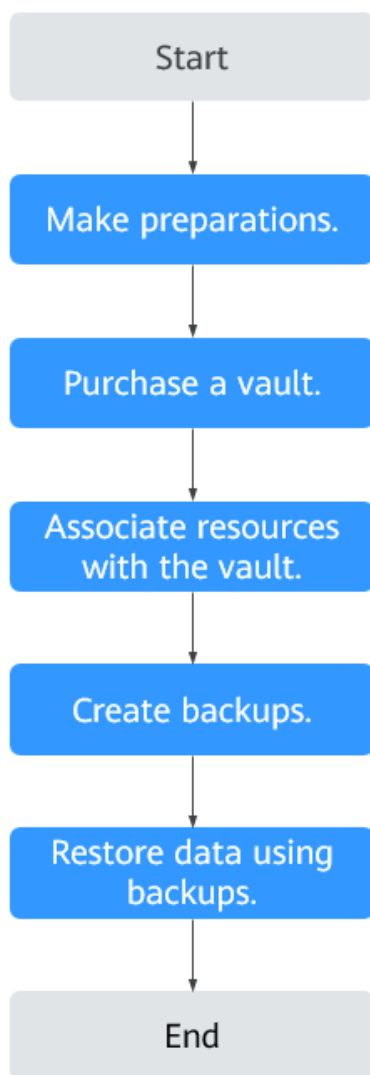
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1 Overview

This section describes how to use CBR to back up cloud servers, cloud disks, on-premises servers, and file systems. The following figure illustrates the process.

Figure 1-1 Backup process



Operation Procedure

Purchase a backup vault of the right type based on the resources you want to protect. Associate resources with the vaults and create backups for the associated resources. See the following sections for more information:

- [Creating a Cloud Server Backup](#)
- [Creating a Cloud Disk Backup](#)
- [Creating an SFS Turbo Backup](#)
- [Creating a Cloud Disk Backup](#)
- [Creating a File Backup](#)
- [Hybrid Cloud Backup Feature Guide](#)

Use backups to restore the resources from virus attacks or accidental deletion. See the following sections for more information:

- [Restoring Data Using a Cloud Server Backup](#)
- [Restoring Data Using a Cloud Disk Backup](#)
- [Restoring from a Hybrid Cloud Backup](#)
- [Restoring from a Desktop Backup](#)
- [Restoring from a File Backup](#)

2 Creating a Cloud Server Backup

Operation Process

Table 2-1 Operation process of creating a cloud server backup

Step	Description
Making preparations	Register with Huawei Cloud, complete real-name authentication, top up your account, and create an IMA user.
Purchasing a server backup vault	Purchase a server backup vault to store server backups.
Associating servers	Associate your servers with a vault to back up and replicate data.
Creating a cloud server backup	Create cloud server backups to protect data.

Making Preparations

Registering with Huawei Cloud

If you already have a Huawei Cloud account, skip this part. If you do not have a Huawei Cloud account, perform the following steps to create one:

1. Log in to the [Huawei Cloud official website](#), and click **Sign Up** in the upper right corner.
2. On the displayed page, register an account as prompted.
After the registration is complete, you will be redirected to your personal information page.

Topping Up Your Account

Ensure that your account has sufficient balance.

To view detailed CBR pricing, see [Product Pricing Details](#).

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

Creating an IAM User

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

If you have registered with the public cloud but have not created an IAM user, you can create one on the IAM console. For example, to create a CBR administrator, perform the following steps:

1. Enter your username and password to log in to the management console.
2. Hover the mouse over the username in the upper right corner and choose **Identity and Access Management** from the drop-down list.
3. In the navigation pane on the left, choose **Users**.
4. On the **Users** page, click **Create User**.
5. Enter user information on the **Create User** page.
 - **Username:** Enter a username, for example, **cbr_admin**.
 - **Email Address:** Email address of the IAM user. This parameter is mandatory if the access type is specified as **Set by user**.
 - (Optional) **Mobile Number:** Mobile number of the IAM user.
 - (Optional) **Description:** Enter the description of the user, for example, **CBR administrator**.
6. Select **Management console access** for **Access Type** and **Set now** for **Password**. Enter a password and click **Next**.

NOTE

A CBR administrator can log in to the management console and manage users. You are advised to select **Set now** for **Password Type** when you create a CBR administrator for your domain. If you create a CBR administrator for other users, you are advised to select **Set by user** for **Password Type** instead so that the users can set their own password.

7. (Optional) Add the user to the **admin** user group and click **Create**.
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 CBR Permissions](#).

The user is displayed in the user list. You can click the IAM user login link to log in to the console.



Purchasing a Server Backup Vault

This section describes how to purchase a server backup vault.

New resources cannot be associated with vaults in AZ2 of the CN North-Beijing1 region to perform backups. Resources already associated are not affected, and backups can still be performed.

Step 1 Log in to the CBR console.

1. [Log in to the management console](#).

2. Click  in the upper left corner and select a region.
3. Click  and choose **Storage > Cloud Backup and Recovery**. Select a backup type from the left navigation pane.

Step 2 In the upper right corner of the page, click **Buy Server Backup Vault**.

Step 3 Select a billing mode.

- **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.
- **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.

Step 4 Select a protection type.

- **Backup**: A server backup vault stores server backups.
- **Replication**: A server replication vault stores replicas of server backups. If you select **Replication**, you do not need to select a server.

For example, if you want to back up a server, select **Backup** for the vault protection type. If you want to replicate backups of a server from one region to another, select **Replication** for the vault in this other region.

Step 5 Determine whether to enable application-consistent backup.

- If enabled, the vault can be used to store database server backups. For example, you can back up ECSs running MySQL or SAP HANA databases, because application-consistent backup ensures that the backed-up data is transactionally consistent. If an application-consistent backup task fails, CBR automatically performs a non-database server backup task instead. This non-database server backup will be stored in the database server backup vault.
- If disabled, only non-database server backup is performed on associated servers, which is usually used for ECSs not running databases.

Step 6 Determine whether to enable backup locking.

If enabled, backups in the vault will not be deleted maliciously or by mistake, improving data reliability.

NOTICE

Backup locking cannot be disabled after it is enabled.

Step 7 Select a backup data redundancy policy.

- **Single-AZ**: Backup data is stored in a single AZ, with lower costs.
- **Multi-AZ**: Backup data is stored in multiple AZs to achieve higher reliability.

The backup data redundancy policy cannot be changed after a vault is purchased. Plan and select a policy that best suits your service needs.

Step 8 In the server list, select the servers or disks you want to back up. After the servers or disks are selected, they are added to the list of selected servers. See [Figure 2-1](#). You can also select specific disks on a server and associate them with the vault.

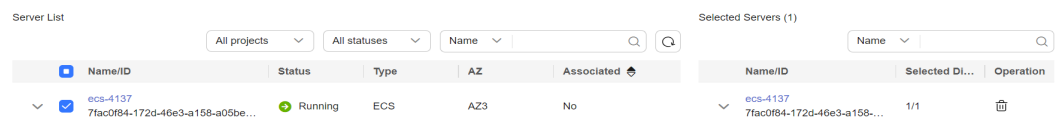
NOTICE

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.

Figure 2-1 Selecting a server



NOTE

- The selected servers must have not been associated with any vault and must be in the **Running** or **Stopped** state.
- You can also associate servers with the vault you are creating later if you skip this step.

Step 9 Specify the vault capacity. The capacity ranges from 10 GB to 10485760 GB. **Properly plan the vault capacity**, 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.

As the vault's used space grows, you can expand the vault capacity if it becomes insufficient.

Step 10 Configure auto backup.

- If you select **Configure**, a backup policy can be applied to this vault. Servers 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.
- If you select **Skip**, servers associated with this vault will not be automatically backed up until you apply a backup policy to the vault.

Step 11 If you have subscribed to Enterprise Project, add the vault to an existing enterprise project.

EPS provides a unified method to manage cloud resources by project, allowing you to manage resources, users, and user groups in your projects. The default enterprise project is **default**.

 **NOTE**

If the **CBR FullAccess** 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 **CBR FullAccess** permissions to the target user group.

Step 12 (Optional) To enable automatic association, see associating a resource with the vault.

Step 13 (Optional) Add tags to the vault. For details, see [managing vault tags](#).

Step 14 Specify a name for the vault.

A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-), for example, **vault-f61e**.

 **NOTE**

You can also use the default name **vault_XXXX**.

Step 15 Specify the required duration if you select yearly/monthly billing. The validity period ranges from 1 month to 5 years.

Determine whether to enable auto renewal. If you select **Auto Renewal**:

- Your subscription will be renewed each month for monthly billing.
- Your subscription will be renewed each year for yearly billing.

Step 16 Complete the payment as prompted.

Step 17 Go back to the **Cloud Server Backups** page. You can see the created vault in the vault list.

You can associate servers with the vault and perform backup for the servers. For details, see [Vault Management](#).

----End

Associating Servers

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

If no resource is associated, see associating a resource with the vault.

Creating a Cloud Server Backup

This section describes how to quickly create a cloud server backup.

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.

Backing up a server does not impact the server 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

- Only servers in the **Running** or **Stopped** state can be backed up.
- At least one server backup vault is available.

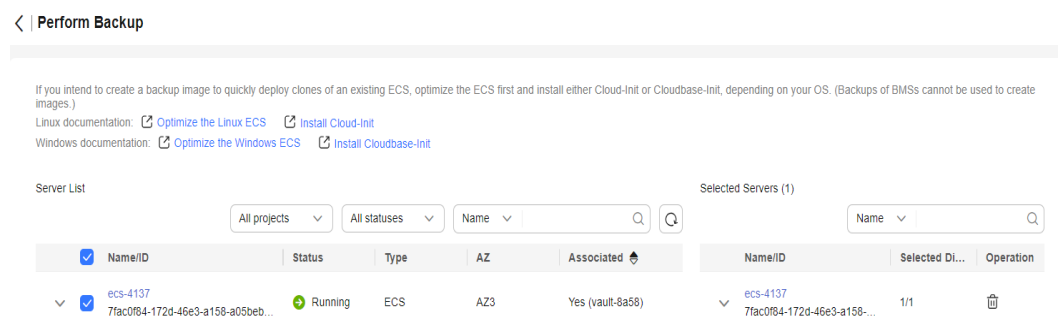
Procedure

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

Step 2 Perform backup in either of the following ways:

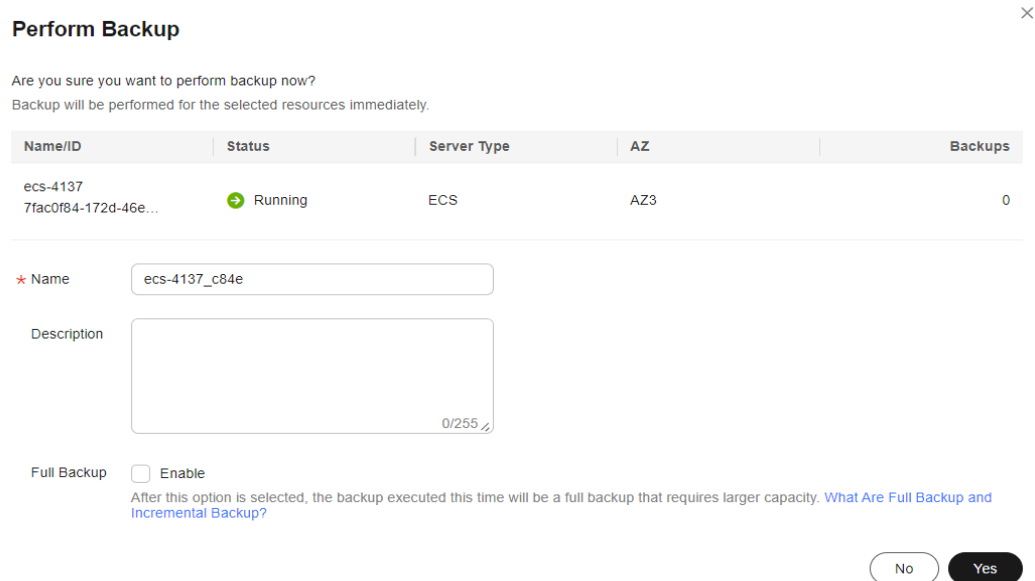
- Choose **More > Perform Backup** in the **Operation** column. In the server list, select the server you want to back up. After a server is selected, it is added to the list of selected servers. See [Figure 2-2](#).

Figure 2-2 Selecting the server to be backed up



- Click the vault name to go to the vault details page. On the **Associated Servers** tab page, locate the target server. Click **Perform Backup** in the **Operation** column of the server. See [Figure 2-3](#).

Figure 2-3 Performing backup



Step 3 Set **Name** and **Description** for the backup. [Table 2-2](#) describes the parameters.

Table 2-2 Parameter description

Parameter	Description	Example Value
Name	Name of the backup you are creating. A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). NOTE You can also use the default name manualbk_XXX . If multiple servers are to be backed up, the system automatically adds suffixes to their backup names, for example, backup-0001 and backup-0002 .	manualbk_d819
Description	Description of the backup. 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. See [Figure 2-4](#).

Figure 2-4 Enabling full 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

- If you need to back up database servers, change the specifications of the target vault from server backup to application-consistent backup.
- 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 create an image from a server backup. For details, see [Creating an Image from a Cloud Server Backup](#).

3 Creating a Cloud Disk Backup

Operation Process

Table 3-1 Operation process of creating a cloud disk backup

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

Making Preparations

Registering with Huawei Cloud

If you already have a Huawei Cloud account, skip this part. If you do not have a Huawei Cloud account, perform the following steps to create one:

1. Log in to the [Huawei Cloud official website](#), and click **Sign Up** in the upper right corner.
2. On the displayed page, register an account as prompted.
After the registration is complete, you will be redirected to your personal information page.

Topping Up Your Account

Ensure that your account has sufficient balance.

To view detailed CBR pricing, see [Product Pricing Details](#).

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

Creating an IAM User

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

If you have registered with the public cloud but have not created an IAM user, you can create one on the IAM console. For example, to create a CBR administrator, perform the following steps:

1. Enter your username and password to log in to the management console.
2. Hover the mouse over the username in the upper right corner and choose **Identity and Access Management** from the drop-down list.
3. In the navigation pane on the left, choose **Users**.
4. On the **Users** page, click **Create User**.
5. Enter user information on the **Create User** page.
 - **Username**: Enter a username, for example, **cbr_admin**.
 - **Email Address**: Email address of the IAM user. This parameter is mandatory if the access type is specified as **Set by user**.
 - (Optional) **Mobile Number**: Mobile number of the IAM user.
 - (Optional) **Description**: Enter the description of the user, for example, **CBR administrator**.
6. Select **Management console access** for **Access Type** and **Set now** for **Password**. Enter a password and click **Next**.

NOTE

A CBR administrator can log in to the management console and manage users. You are advised to select **Set now** for **Password Type** when you create a CBR administrator for your domain. If you create a CBR administrator for other users, you are advised to select **Set by user** for **Password Type** instead so that the users can set their own password.

7. (Optional) Add the user to the **admin** user group and click **Create**.
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 CBR Permissions](#).

The user is displayed in the user list. You can click the IAM user login link to log in to the console.

Purchasing a Disk Backup Vault

This section describes how to purchase a disk backup vault.

Step 1 In the upper right corner of the page, click **Buy Disk Backup Vault**.

Step 2 Select a billing mode.

- 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.

- 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.

Step 3 Determine whether to enable backup locking.

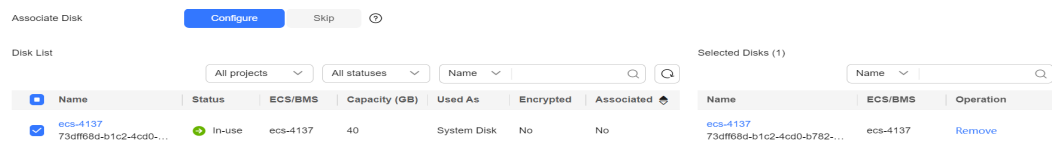
If enabled, backups in the vault will not be deleted maliciously or by mistake, improving data reliability.

NOTICE

Backup locking cannot be disabled after it is enabled.

Step 4 In the disk list, select the disks you want to back up. After disks are selected, they are added to the list of selected disks. See [Figure 3-1](#).

Figure 3-1 Selecting a disk



NOTE

- The selected disks must have not been associated with any vault and must be in the **Available** or **In-use** state.
- You can also associate disks with the vault you are creating later if you skip this step.

Step 5 Specify the vault capacity. This capacity indicates the total size of the disks that you want to associate with this vault. **Properly plan the vault capacity**, which must be at least the same as the size of the disks you want to back up. The capacity ranges from 10 GB to 10485760 GB.

Step 6 Configure auto backup.

- If you select **Configure**, a backup policy can be applied to this vault. Disks 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.
- If you select **Skip**, disks associated with this vault will not be automatically backed up until you apply a backup policy to the vault.

Step 7 (Optional) To enable automatic association, see associating a resource with the vault.

Step 8 If you have subscribed to Enterprise Project, add the vault to an existing enterprise project.

EPS provides a unified method to manage cloud resources by project, allowing you to manage resources, users, and user groups in your projects. The default enterprise project is **default**.

 **NOTE**

If the **CBR FullAccess** 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 to add the permissions.

Step 9 (Optional) Add tags to the vault. For details, see [managing vault tags](#).

Step 10 Specify a name for the vault.

A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-), for example, **vault-612c**.

 **NOTE**

You can also use the default name **vault_xxxx**.

Step 11 Specify the required duration if you select yearly/monthly billing. The validity period ranges from 1 month to 5 years.

Determine whether to enable auto renewal. If you select **Auto Renewal**:

- Your subscription will be renewed each month for monthly billing.
- Your subscription will be renewed each year for yearly billing.

Step 12 Complete the payment as prompted.

Step 13 Go back to the **Cloud Disk Backups** page. You can see the created vault in the vault list.

You can associate disks to the new vault or perform backup for the disks. For details, see [Vault Management](#).

----End

Associating Cloud Disks

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

If no resource is associated, see associating a resource with the vault.

Creating a Cloud Disk Backup

This section describes how to quickly create a cloud disk 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.

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.

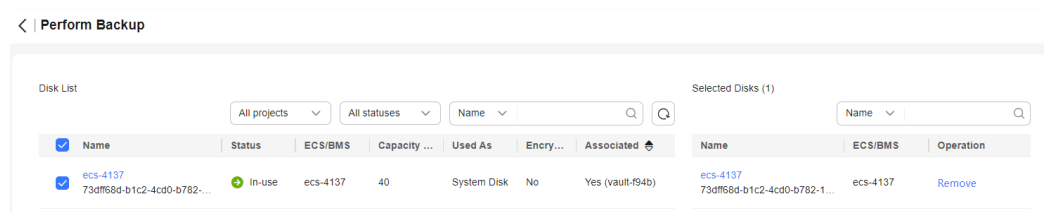
Procedure

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

Step 2 Perform backup in either of the following ways:

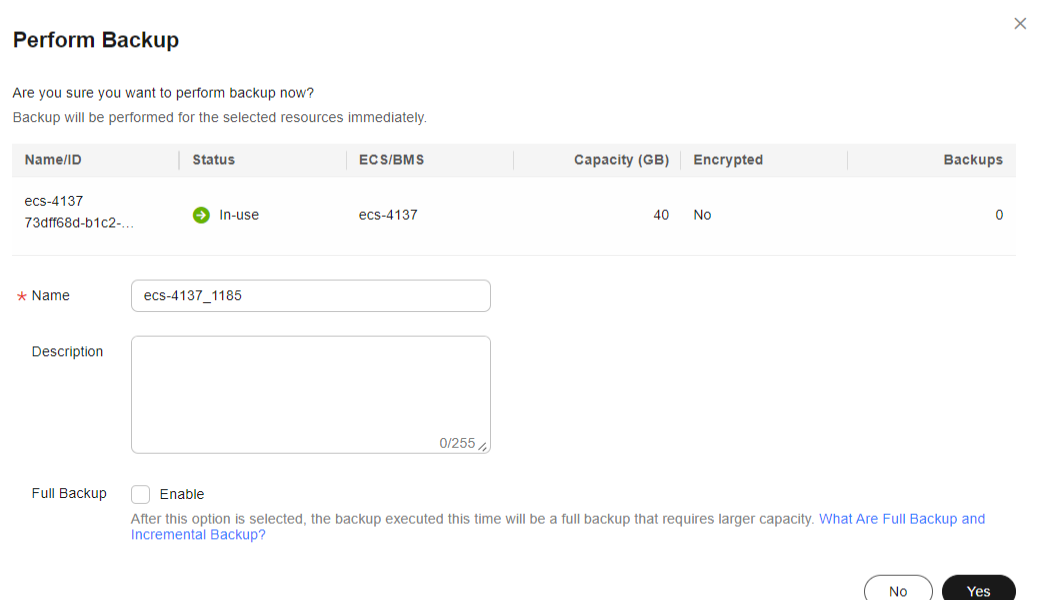
- Click **Perform Backup** in the **Operation** column. In the disk list, select the disk you want to back up. After a disk is selected, it is added to the list of selected disks. See [Figure 3-2](#).

Figure 3-2 Selecting the disk to be backed up



- Click the vault name to go to the vault details page. On the **Associated Disks** tab page, locate the target disk. Click **Perform Backup** in the **Operation** column of the disk. See [Figure 3-3](#).

Figure 3-3 Performing backup



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. [Table 3-2](#) describes the parameters.

Table 3-2 Parameter description

Parameter	Description	Example Value
Name	Name of the backup you are creating. A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-). NOTE You can also use the default name manualbk_XXX . If multiple disks are to be backed up, the system automatically adds suffixes to their backup names, for example, backup-0001 and backup-0002 .	manualbk_d819
Description	Description of the backup. 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. See [Figure 3-4](#).

Figure 3-4 Enabling full backup

Full Backup  Enable

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. Therefore, 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](#).

4 Creating an SFS Turbo Backup

Operation Process

Table 4-1 Operation process of creating an SFS Turbo backup

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

Making Preparations

Registering with Huawei Cloud

If you already have a Huawei Cloud account, skip this part. If you do not have a Huawei Cloud account, perform the following steps to create one:

1. Log in to the [Huawei Cloud official website](#), and click **Sign Up** in the upper right corner.
2. On the displayed page, register an account as prompted.
After the registration is complete, you will be redirected to your personal information page.

Topping Up Your Account

Ensure that your account has sufficient balance.

To view detailed CBR pricing, see [Product Pricing Details](#).

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

Creating an IAM User

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

If you have registered with the public cloud but have not created an IAM user, you can create one on the IAM console. For example, to create a CBR administrator, perform the following steps:

1. Enter your username and password to log in to the management console.
2. Hover the mouse over the username in the upper right corner and choose **Identity and Access Management** from the drop-down list.
3. In the navigation pane on the left, choose **Users**.
4. On the **Users** page, click **Create User**.
5. Enter user information on the **Create User** page.
 - **Username:** Enter a username, for example, **cbr_admin**.
 - **Email Address:** Email address of the IAM user. This parameter is mandatory if the access type is specified as **Set by user**.
 - (Optional) **Mobile Number:** Mobile number of the IAM user.
 - (Optional) **Description:** Enter the description of the user, for example, **CBR administrator**.
6. Select **Management console access** for **Access Type** and **Set now** for **Password**. Enter a password and click **Next**.

NOTE

A CBR administrator can log in to the management console and manage users. You are advised to select **Set now** for **Password Type** when you create a CBR administrator for your domain. If you create a CBR administrator for other users, you are advised to select **Set by user** for **Password Type** instead so that the users can set their own password.


7. (Optional) Add the user to the **admin** user group and click **Create**.
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 CBR Permissions](#).

The user is displayed in the user list. You can click the IAM user login link to log in to the console.

Purchasing an SFS Turbo Backup Vault

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

Step 1 Log in to the CBR console.

1. Log in to the management console.
2. Click  in the upper left corner and select a region.

- Click  and choose **Storage > Cloud Backup and Recovery > SFS Turbo Backups**.

Step 2 In the upper right corner of the page, click **Buy SFS Turbo Backup Vault**.

Step 3 Select a billing mode.

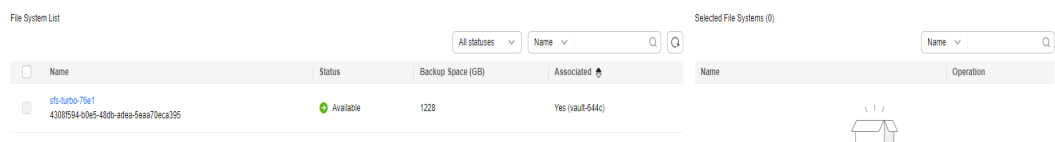
- Yearly/monthly is a prepaid billing mode. You are billed based on the subscription duration you specify. This mode is ideal when the resource use duration is predictable. A longer subscription often means a lower cost.
- Pay-per-use is a postpaid billing mode. You are billed based on your resource usage and you can increase or delete resources anytime. Fees are deducted from your account balance.

Step 4 Select a protection type.

- Backup:** An SFS Turbo backup vault stores SFS Turbo backups.
- Replication:** An SFS Turbo replication vault stores replicas of SFS Turbo backups. If you select **Replication**, you do not need to select any SFS Turbo file system.

Step 5 In the file system list, select the file systems to be backed up. After file systems are selected, they are added to the list of selected file systems. See [Figure 4-1](#).

Figure 4-1 Selecting file systems



File System List				Selected File Systems (0)	
Name	Status	Backup Space (GB)	Associated	Name	Operation
sfs-turbo-7561 4308594-90e5-480b-edea-5ea77eca395	Available	1228	Yes (vault-644c)		

 **NOTE**

- The selected file systems must have not been associated with any vault and must be in the **Available** state.
- You can also associate file systems with the vault you are creating later if you skip this step.

Step 6 Specify the vault capacity. This capacity indicates the total size of the file systems that you want to associate with this vault. You need to **properly plan the vault capacity**, which must be at least the same as the size of the file systems you want to back up. The capacity ranges from 10 GB to 10485760 GB.

Step 7 Configure auto backup.

- If you select **Configure**, a backup policy can be applied to this vault and all file systems 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.
- If you select **Skip**, file systems associated with this vault will not be automatically backed up until you apply a backup policy to the vault.

Step 8 If you have subscribed to Enterprise Project, add the vault to an existing enterprise project.

EPS provides a unified method to manage cloud resources by project, allowing you to manage resources, users, and user groups in your projects. The default enterprise project is **default**.

 **NOTE**

If the **CBR FullAccess** 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 to add the permissions.

Step 9 (Optional) Add tags to the vault. For details, see [managing vault tags](#).

Step 10 Specify a name for the vault.

A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-), for example, **vault-612c**.

 **NOTE**

You can also use the default name **vault_XXXX**.

Step 11 Specify the required duration if you select yearly/monthly billing. The validity period ranges from 1 month to 5 years.

Determine whether to enable auto renewal. If you select **Auto Renewal**:

- Your subscription will be renewed each month for monthly billing.
- Your subscription will be renewed each year for yearly billing.

Step 12 Complete the payment as prompted.

Step 13 Go back to the **SFS Turbo Backups** page. You can see the created vault in the vault list.

You can associate file systems to the new vault or perform backup for the file systems. For details, see [Vault Management](#).

----End

Associating SFS Turbo File Systems

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

If no resource is associated, see associating a resource with the vault.

Creating an SFS Turbo Backup

This section describes how to quickly create an SFS Turbo file system backup.

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.

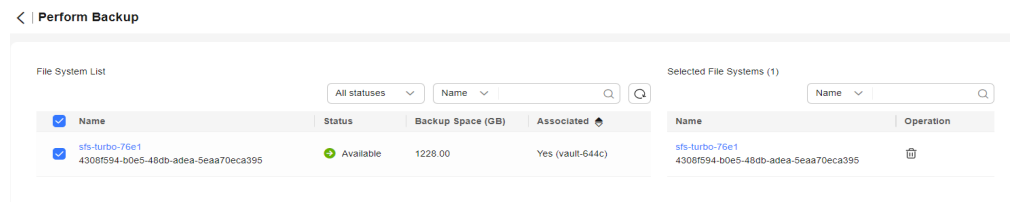
Procedure

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 Perform backup in either of the following ways:

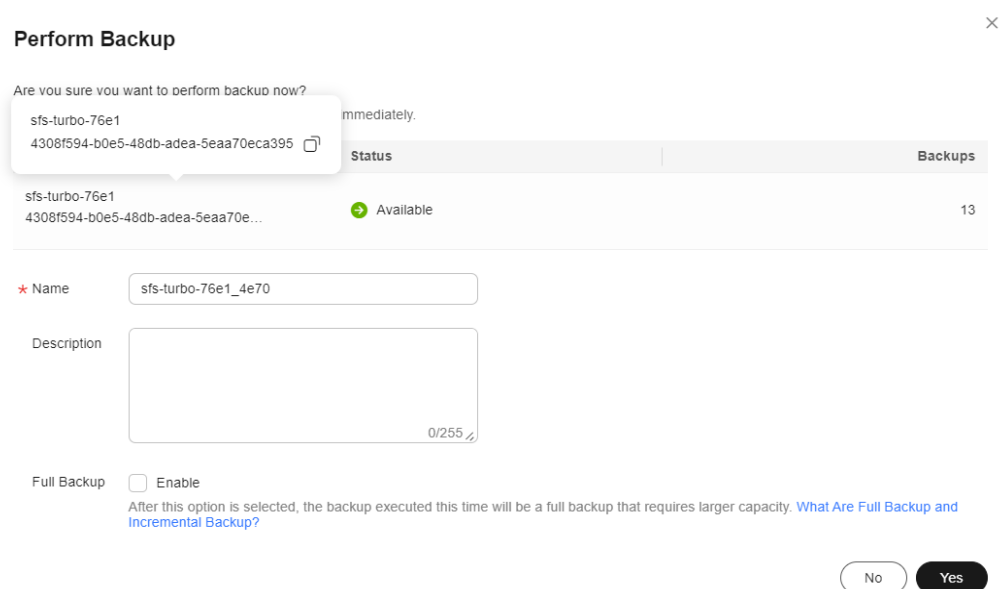
- Click **Perform Backup** in the **Operation** column. In the file system list, select the file system to be backed up. After a file system is selected, it is added to the list of selected file systems. See **Figure 4-2**.

Figure 4-2 Selecting the file system to be backed up



- Click the vault name to go to the vault details page. On the **Associated File Systems** tab page, locate the target file system. Click **Perform Backup** in the **Operation** column of the file system. See **Figure 4-3**.

Figure 4-3 Performing backup



Step 3 Set **Name** and **Description** for the backup. **Table 4-2** describes the parameters.

Table 4-2 Parameter description

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

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. Therefore, 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 create a new SFS Turbo file system using the backup. For details, see [Using a Backup to Create a File System](#).

5 Creating a Desktop Backup

Operation Process

Table 5-1 Operation process of creating a desktop backup

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

Making Preparations

Registering with Huawei Cloud

If you already have a Huawei Cloud account, skip this part. If you do not have a Huawei Cloud account, perform the following steps to create one:

1. Log in to the [Huawei Cloud official website](#), and click **Sign Up** in the upper right corner.
2. On the displayed page, register an account as prompted.
After the registration is complete, you will be redirected to your personal information page.

Topping Up Your Account

Ensure that your account has sufficient balance.

To view detailed CBR pricing, see [Product Pricing Details](#).

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

Creating an IAM User

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

If you have registered with the public cloud but have not created an IAM user, you can create one on the IAM console. For example, to create a CBR administrator, perform the following steps:

1. Enter your username and password to log in to the management console.
2. Hover the mouse over the username in the upper right corner and choose **Identity and Access Management** from the drop-down list.
3. In the navigation pane on the left, choose **Users**.
4. On the **Users** page, click **Create User**.
5. Enter user information on the **Create User** page.
 - **Username:** Enter a username, for example, **cbr_admin**.
 - **Email Address:** Email address of the IAM user. This parameter is mandatory if the access type is specified as **Set by user**.
 - (Optional) **Mobile Number:** Mobile number of the IAM user.
 - (Optional) **Description:** Enter the description of the user, for example, **CBR administrator**.
6. Select **Management console access** for **Access Type** and **Set now** for **Password**. Enter a password and click **Next**.

NOTE

A CBR administrator can log in to the management console and manage users. You are advised to select **Set now** for **Password Type** when you create a CBR administrator for your domain. If you create a CBR administrator for other users, you are advised to select **Set by user** for **Password Type** instead so that the users can set their own password.



7. (Optional) Add the user to the **admin** user group and click **Create**.
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 CBR Permissions](#).

The user is displayed in the user list. You can click the IAM user login link to log in to the console.

Purchasing a Desktop Backup Vault

This section describes how to create a desktop backup vault.

Step 1 Log in to the CBR console.

1. Log in to the management console.
2. Click  in the upper left corner and select a region.
3. Click  and choose **Storage > Cloud Backup and Recovery > Desktop Backups**.

Step 2 In the upper right corner of the page, click **Buy Desktop Backup Vault**.

Step 3 Select a billing mode.

- 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.
- 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.

Step 4 In the desktop list, select the Workspace desktops you want to back up. After desktops are selected, they are added to the list of selected desktops. See [Figure 5-1](#).

Figure 5-1 Selecting desktops

The screenshot shows two panels: 'Desktop List' and 'Selected Desktops (1)'. The 'Desktop List' panel has a search bar and a table with columns: Name, Status, Capacity (GB), and Associated. The 'Selected Desktops (1)' panel has a search bar and a table with columns: Name and Operation.

Desktop List				Selected Desktops (1)	
Name	Status	Capacity (GB)	Associated	Name	Operation
<input checked="" type="checkbox"/> K3003059301 17d55592-5dbf-4aa3-a3fd-24422e87ab1f	Running	90	No	K3003059301 17d55592-5dbf-4aa3-a3fd-24422e87ab1f	
<input type="checkbox"/> ANDY01 37ab0e88-5dfc-4e5a-9b39-75fd27c9a99c	Restoring	100	No		
<input type="checkbox"/> HUAYANG00001 67c752c3-625a-4a5a-ac87-e96172da07e9	Stopped	90	Yes (vault-00615117)		

NOTE

- The selected desktops must have not been associated with any vault and must be in the **Available** or **In-use** state.
- You can also associate desktops with the vault you are creating later if you skip this step.

Step 5 Specify the vault capacity. This capacity indicates the total size of the desktops that you want to associate with this vault. You need to **properly plan the vault capacity**, which must be at least the same as the size of the desktops you want to back up. The capacity ranges from 10 GB to 10485760 GB.

As the vault's used space grows, you can expand the vault capacity if it becomes insufficient.

Step 6 Configure auto backup.

- If you select **Configure**, a backup policy can be applied to this vault. Desktops 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.
- If you select **Skip**, desktops associated with this vault will not be automatically backed up until you apply a backup policy to the vault.

Step 7 If you have subscribed to Enterprise Project, add the vault to an existing enterprise project.

EPS provides a unified method to manage cloud resources by project, allowing you to manage resources, users, and user groups in your projects. The default enterprise project is **default**.

 **NOTE**

If the **CBR FullAccess** 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 **CBR FullAccess** permissions to the target user group.

Step 8 (Optional) Add tags to the vault. For details, see [managing vault tags](#).

Step 9 Specify a name for the vault.

A name must contain 1 to 64 characters including digits, letters, underscores (_), or hyphens (-), for example, **vault-612c**.

 **NOTE**

You can also use the default name **vault_XXXX**.

Step 10 Specify the required duration if you select yearly/monthly billing. The validity period ranges from 1 month to 5 years.

Determine whether to enable auto renewal. If you select **Auto Renewal**:

- Your subscription will be renewed each month for monthly billing.
- Your subscription will be renewed each year for yearly billing.

Step 11 Complete the payment as prompted.

Step 12 Return to the **Desktop Backups** page. You can see the created vault in the vault list.

You can associate Workspace desktops to the new vault or perform backup for the desktops. For details, see [Vault Management](#).

----End

Associating Desktops

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

If no resource is associated, see associating a resource with the vault.

Creating a Desktop Backup

This section describes how to quickly create a desktop backup.

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.

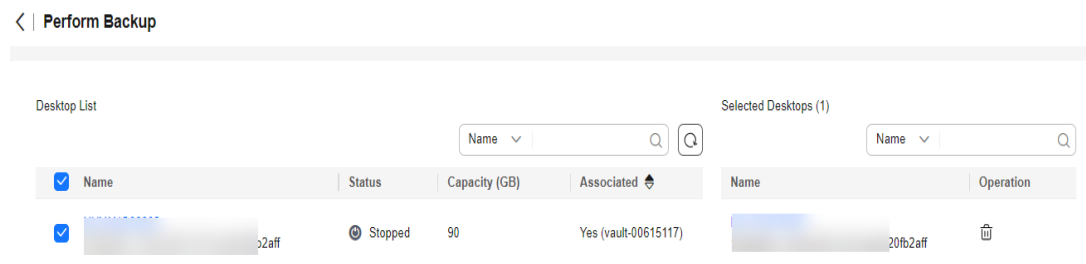
Prerequisites

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. See [Figure 5-2](#).

Figure 5-2 Selecting desktops



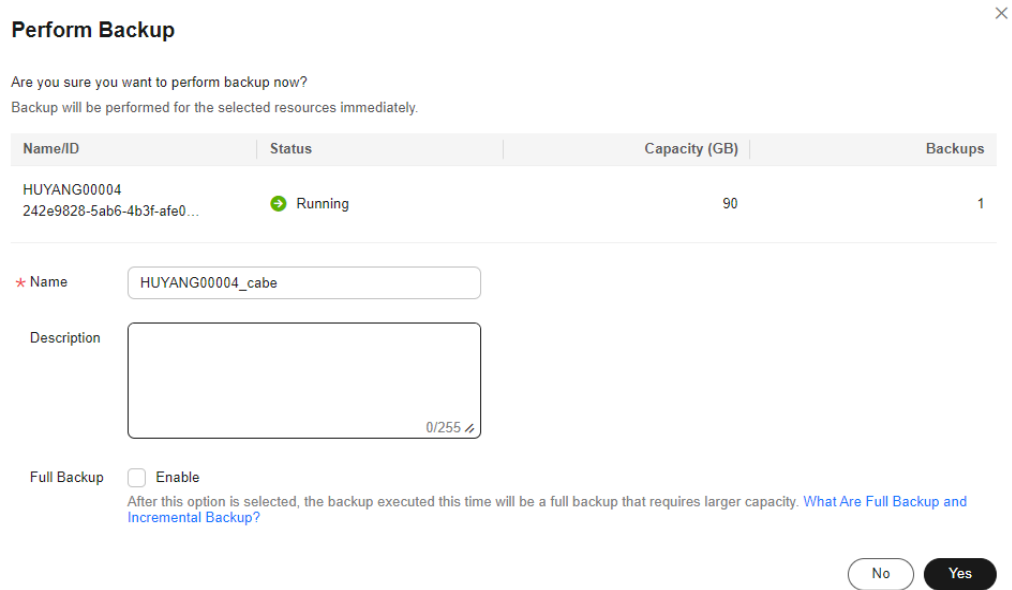
- Step 3** Set **Name** and **Description** for the backup. [Table 5-2](#) describes the parameters.

Table 5-2 Parameter description

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

- Step 4** Click the vault name to go to the vault details page. On the **Associated Desktops** tab page, locate the target desktop. Click **Perform Backup** in the **Operation** column of the desktop. See [Figure 5-3](#).

Figure 5-3 Performing backup



Step 5 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.

----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](#).