# Alibaba Cloud Hybrid Backup

FAQ

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# Generic conventions

Table -1: Style conventions

Style	Description	Example
•	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	Danger: Resetting will result in the loss of user configuration data.
A	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning informatio n, supplementary instructions, and other content that the user must understand.	• Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus , page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the cd / d C :/ windows command to enter the Windows system folder.
Italics	It is used for parameters and variables.	bae log list instanceid Instance_ID
[] or [a b]	It indicates that it is a optional value, and only one item can be selected.	ipconfig [-all -t]

Style	Description	Example
	It indicates that it is a required value, and only one item can be selected.	<pre>swich {stand   slave}</pre>

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## 1 Common issues

#### 1.1 FAQ

How much data can I back up by using Hybrid Backup Recovery (HBR)?

The storage space of Alibaba Cloud vaults is unlimited. The vaults can be expanded to store large amounts of backup data.

How long does it take to back up data by using HBR?

It depends on factors, such as the total size of data, the total number of files, and the network bandwidth. If the network bandwidth is stable, the time it takes to complete a backup job is calculated as follows: The total size of data/The network bandwidth = The required time.

What types of data can I back up by using HBR?

For more information, see What is Hybrid Backup Recovery.

Does HBR encrypt backup data that is stored in the cloud?

Yes, all backups in HBR are protected by using AES-256 encryption.

Does HBR support data compression and data deduplication?

Yes, the compression and deduplication ratio depend on the type of source data. The maximum ratio is 30:1.

#### Does HBR support incremental backups?

Yes, successive copies of the data only contain the changes since the previous backup copy is created.

What can I do if I forget my logon password for a client?

You can re-download a client from the HBR console, install the client, log on to the client, and enter a new password on the registration page.

How can I create a backup plan?

You need to first create backup policies. When creating a backup plan, you need to select the location of a data source and the required policy. After you change a backup policy, the change will be synchronized to the associated backup plan. If you delete a backup policy, the related backup job is also deleted. However, you can continue using completed backups.

Is actual data backed up when I back up symbolic links?

No. Linux symbolic links are similar to Windows shortcuts. When you back up symbolic links, only links are backed up rather than the linked data.

How can I view a failure cause for a backup or restore job?

Move the pointer over the Failed status to view the cause of the failure.

Does Hybrid Backup Recovery (HBR) support a remote data restoration?

Yes. When a failure occurs on a protected host, you can install a backup client on another host. Then, you can download a certificate that is used to restore the protected host from the HBR console. You can use the certificate to register an account and log on to the backup client. Locate the required backup on the Backups list to restore data.

#### 1.2 How can I check the running status of a backup client?

If a backup job fails or you failed to update a backup client, check the status of the backup client. If a client is not running as expected, you can uninstall the client and reinstall the client. This topic describes how to check the status of a backup client.

#### Windows

If a backup client is installed on a Windows system, you can perform the following steps to check the running status of the backup client:

· Check whether the backup service is running as expected

Open the command prompt and run the services.msc command to view the status of local services. If the client is running as expected, the status of the Aliyun hybrid backup service is Started .

View system logs

If the service is not running as expected, open the command prompt and run the eventvwr command. You can check the system logs for errors that are related to the hybridbackup service. · Check whether port 8011 is open for a local backup client

Open the command prompt run the following command.

netstat -ano | findstr "8011"

#### Linux

If a backup client is installed on a Linux system, you can perform the following steps to check the status of the backup client:

- · Check whether the backup service is running as expected
- Open a shell and enter ps axu | grep hybrid. If the status of the service is started, it indicates that the client is running as expected.
- · Check whether port 8011 is open for a local backup client
  - Open a shell and enter lsof i : 8011.

View logs

You can check the status of the backup client based on log files.

```
Log files of a client are located in the client installation folder. The log files are
hybridback up . log and ids_ < a specific date and time >.
log.
```

#### 1.3 Create an AccessKey for a RAM user

The AccessKey ID and AccessKey secret are required when you install the file backup client and the virtual machine backup client. This topic describes how to create an AccessKey for a Resource Access Management (RAM) user.

#### Context

Do not use the AccessKey of your Alibaba Cloud account. If it is leaked, the security of all your resources is threatened. We recommend that you use the AccessKey of a RAM user to reduce the risk of leakage.

#### Procedure

To create an AccessKey for a RAM user, perform the following operations:

- 1. Log on to the RAM console by using an Alibaba Cloud account.
- 2. In the left-side navigation pane, click Identities, and click Users.

- 3. In the User Logon Name/Display Name column, click the username of the target RAM user.
- 4. In the User AccessKey Pairs section, click Create AccessKey.



You must enter a verification code if you are creating an AccessKey pair for the first time.

5. Click OK.



- The AccessKey Secret is displayed only once when you first create it. You cannot retrieve the AccessKey Secret if you forget it. We recommend that you save the AccessKey Secret for subsequent use.
- If the AccessKey pair is disclosed or lost, you must create a new one. Currently, you can create a maximum of two AccessKey pairs.

#### 1.4 Where are the logs of a backup client?

• Linux

The path of logs: / opt / alibabaclo ud / hbr / logs

```
<sub>#-</sub>ast login: Fri Feb 22 11:29:38 2019 from 42.120./4.101
 oot@ubuntu32bit:~# cd /opt/alibabacloud/hbr/logs/
 oot@ubuntu32bit:/opt/alibabacloud/hbr/logs# ll
 otal 1680
 rwxr-xr-x 4 root root
                          4096 Feb 22 00:01 ./
 rwxr-xr-x 8 root root
                           4096 Feb 21 11:04 .../
 rwxr-xr-x 2 root root
                           4096 Feb 21 23:04 2019-02-21/
                           4096 Feb 22 13:04 2019-02-22/
 rwxr-xr-x 2 root root
 rw----- 1 root root 1694290 Feb 22 13:42 hybridbackup.log
                           2400 Feb 22 13:42 updater.log
   ----- 1 root root
 oot@ubuntu32bit:/opt/alibabacloud/hbr/logs#
```

· Windows

The path of logs: C :\ Program Files \ Aliyun Hybrid Backup Service \ logs

## 1.5 How can I delete a backup client?

Before deleting a backup client, you must ensure that no running or completed backup job exists on the client.

# 1.6 Differences between user-created backup systems and Hybrid Backup Recovery

This topic describes the differences between user-created backup systems and Hybrid Backup Recovery (HBR) and the advantages of HBR. User-created backup systems include those you build on the cloud or in local data centers.

Item	User-created backup system	Hybrid Backup Recovery
Permission	Not supported	Supported
management	No strict permission	With Resource Access
	management is available to	Management, HBR users are
	performing a manual backup.	categorized multiple permission
	Improper operations such as	groups. This is designed to
	accidental file deletion are prone	reduce data security risks.
	to occur.	
Deduplication	Not supported	Supported
and compressio	Repeated backups increase a	HBR supports deduplication and
	large number of storage costs	compression technologies that
	and reduce backup speed.	are developed by Alibaba Cloud
		. These technologies help you to
		reduce the amount of transmitte
		d data and occupied storage.
		This is designed to reduce costs
		and increase the backup speed.

Item	User-created backup system	Hybrid Backup Recovery
Backup alerts	Not supported	Supported
	You need to manually track	HBR provides users with
	backup processes to identify	notifications, such as when a
	whether backup failures occur	backup fails or when a client is
	. Several backup failures are	disconnected from a server.
	only found when you attempt to	
	restore data from the backups.	
Lifecycle of data backups	Manual management	Automatic management
Data restoratio n	You must manually restore data from multiple data copies.	You only need to select a backup version from which data is restored. You can also set restore rules.
Management	High	Low
cost	Manual backups require custom	With HBR, you do not need to
	scripts to run backups and	be concerned with issues, such
	dedicated backup engineers	as hardware procurement,
	to manage backups. This	configuration, cluster expanding
	brings difficulties for backup	, and security. Instead, you only
	management and administration	need to upload backups onto
	, reduces resource utilization,	cloud vaults.
	and increases management costs	

### 1.7 Can I back up symbolic links by using Hybrid Backup Recovery (HBR)?

When you use HBR to back up symbolic links, only links are backed up rather than linked folders. We recommend that you back up actual folders.

### 1.8 How do I uninstall a backup client?

Windows

- 1. Open the client installation folder: C :\ Program Files \ Aliyun Hybrid Backup Service.
- 2. Double-click unins000 . exe .
- 3. In the dialog box, click Yes.

#### Linux

- 1. Navigate to the client installation folder: / opt / alibabaclo ud / hbr /.
- 2. Run the ./ uninstall command to uninstall the client.

```
Last login: Thu Nov 15 09:45:55 2018 from 42.120.74.111
root@Ubuntu:~# cd /opt/alibabacloud/hbr/
root@Ubuntu:/opt/alibabacloud/hbr# ll
total 36
drwxr-xr-x 7 501 staff 4096 Nov 13 14:36 ./
drwx----- 3 root root 4096 Nov 14 15:42 ../
drwxr-xr-x 5 501 staff 4096 Nov 15 10:05 client/
              501 staff 4096 Nov 13 14:36 download/
drwxr-xr-x 2
            501 staff 4096 Nov 15 00:43 logs/
drwxr-xr-x 4
              501 staff
-rwxr-xr-x l
                         508 Nov 13 14:36 setup*
rwxr-xr-x 1
              501 staff
                         233 Nov 13 14:36 uninstall*
drwxr-xr-x 2 501 staff 4096 Nov 14 15:42 update/
              501 staff 4096 Nov 13 14:36 versions/
drwxr-xr-x 2
root@Ubuntu:/opt/alibabacloud/hbr# ./uninstall
Uninstalling Hybrid backup client ...
Complete
root@Ubuntu:/opt/alibabacloud/hbr# cd ...
root@Ubuntu:/opt/alibabacloud# rm -rf hbr/
root@Ubuntu:/opt/alibabacloud# ll
total 8
drwx----- 2 root root 4096 Nov 15 11:33 ./
drwxr-xr-x 3 root root 4096 Oct 24 11:06 .../
root@Ubuntu:/opt/alibabacloud# 🚪
```

#### 1.9 What are resource requirements for backup?

The following table lists resource requirements for backing up data of different volumes.

Backup type	Data volume	CPU	Memory
Back up files	100,000 files	Dual-core	4 GB

Backup type	Data volume	CPU	Memory
	1 million files (8 TB in total)	Dual-core	8 GB
	10 million files	Quad-core	16 GB
Back up SQL Server	2 GB or less	Single-core	4 GB
databases	4 GB	Dual-core	4 GB
	4 GB or more	Quad-core	4 GB
Back up virtual machines	N/A	Quad-core	16 GB

# 2 ECS backups FAQ

# 2.1 What should I do if an error occurs while starting the client fails?

Description

When you install an ECS client, the Installation Failed status is displayed. An error message appears, indicating that you failed to start the client.

#### Troubleshoot

Connect to an ECS instance from a remote client and check whether anti-virus applications such as Qihoo 360 are installed on the ECS instance. Anti-virus software causes the installation failure of an ECS client.

#### Solution

You can uninstall the ECS client from the ECS instance, stop anti-virus software, and then reinstall the ECS client. You can perform the following steps:

- 1. Uninstall an ECS client from an ECS instance.
- 2. Stop anti-virus software.
- 3. Log on to the Hybrid Backup Recovery console.
- 4. In the left-side navigation pane, choose ECS Backup > ECS File Client.
- 5. Locate the ECS instance where the ECS client failed to install. Choose Operations > Reinstall.

#### 2.2 What should I do if an error occurs while using a RAM user to back up data from an ECS instance because the user has insufficient permissions?

This issue occurs when you do not grant the RAM user the AliyunHBRDefaultRole and AliyunECSAccessingHBRRole roles by using an Alibaba Cloud account.

Log on to the Hybrid Backup Recovery console with an Alibaba Cloud account, choose ECS Backup > ECS File Backup, and grant the RAM user the roles. You can also grant the AliyunRAMFullAccess and AliyunSTSAssumeRoleAccess permissions to a RAM user.

# 2.3 What should I do if an error occurs while installing a client because the installation process times out or the client failed to start?

This issue occurs when anti-virus software such as Qihoo 360 blocks the installation process. You can stop anti-virus software and reinstall the client.

# 2.4 Why am I prompted an error message indicating the checksum fails on the client after I update the client on an ECS instance?

The client is uninstalled or the ECS instance is stopped. If the client is uninstalled , reinstall the client in the HBR console. If the instance is stopped, restart the ECS instance.

## 2.5 What should I do if updating a client fails?

If you fail to update a client, you must ensure that the hbrupdater service is running on an ECS instance. If the service is not running, you must start the hbrupdater service and update the client again.

# 2.6 What should I do if a backup job fails to run after I restart the Cloud Assistant client?

When you use Hybrid Backup Recovery to back up data, you need to install the Cloud Assistant client on the ECS instance if the instance is located in a classic network. After the Cloud Assistant client is installed, you need to configure the region - id file and then restart the Cloud Assistant client.

# 2.7 What should I do if an error occurs while installing the client because the AliyunECSAccessingHBRRolePolicy policy is not authorized for a RAM user?

You can perform the following steps to solve the issue.

- 1. Log on to the Resource Access Management (RAM) console.
- 2. In the left-side navigation bar, select RAM Roles and locate the RAM role that is authorized for the target ECS instance, and click Add Permissions.

- 3. In the Select Policy field, enter AliyunECSAccessingHBRRolePolicy, and click OK.
- 4. Go to the HBR console, uninstall and reinstall the client.

#### 2.8 What can I do if the backup client fails to be installed for an SAP HANA instance because multiple /usr/sap/<SID>/SYS/ global/hdb/opt directories exist?

You can perform the following operations to resolve the issue:

- 1. Log on to the target Elastic Compute Service (ECS) instance remotely.
- 2. Modify the / usr / sap /< SID >/ SYS / global / hdb / opt directory of SAP HANA instances that do not require backup to / usr / sap /< SID >/ SYS / global / hdb / opt\_backup .
- 3. Go back to the Hybrid Backup Recovery (HBR) console, and reinstall the backup client for the SAP HANA instance.

## 3 On-premises backup FAQ

# 3.1 How can I change the number of the logon port for a file client?

When you install a file client, port 8011 is the default port that you use to log on to the file client. If port 8011 is occupied by other applications, you can change the logon port of the file client when installing the client.

#### Windows

If Windows is running on a server or virtual machine from which you want to back up data, you can perform the following steps to install a client and specify a logon port:

- 1. Download a client to the server or virtual machine.
- 2. Extract the client installation package.
- 3. Open the command prompt.
- 4. Navigate to the directory where the client installation file is located.
- 5. Enter the name of the client installation file and add the / p =< a specified

port number > parameter. For example, hbr - install - 1 . 5 . 2 windows - amd64 . exe / p = 8022 . Press Enter and follow the instructions

to install the client.

C:\Users\wb-cy387076\Downloads\hbr-install-1.5.2-windows-amd64>hbr-install-1.5.2 -windows-amd64.exe /p=8022

After the client is installed, open a browser and enter http://localhost:< a

specified port number > in the address bar. Press Enter to activate the client.

#### Linux

If Linux is running on a server or virtual machine from which you want to back up data, you can perform the following steps to install a client and specify a port to log on to the client:

- 1. Download a client to the target server or virtual machine.
- 2. Extract the client installation package to a directory and run the ./ setup p
  - < a specified port number > command to start the Hybrid Backup

Recovery service. For example, if you want to set the logon port number of the

client to 8022, run the ./ setup - p 8022 command.



After the client is installed, open a browser and enter <a href="http://localhost:<a href="http://localhost:</a>
I the address bar. Press Enter to activate the client">http://localhost:<a href="http://localhost:<a href="http://localhost:<a href="http://localhost:<a href="http://localhost:<a href="http://localhost:</a>
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### 3.2 FAQ about local virtual machines

Why do I fail to import an OVA template for a virtual machine client?

You can only deploy an OVA template on a web client that runs vCenter Server 5.5, 6.0 , or 6.5. If an error occurs when you import an OVA template, you need to check that the version of vCenter Server is supported by Hybrid Backup Recovery (HBR). Why do I fail to add a vCenter Server instance to HBR when the IP address, account, and password are correct?

The password of the vCenter account may contain special characters. We recommend that you create a vCenter account dedicated for backup, and ensure that the password of the account does not contain any special characters.

# 3.3 What should I do if backing up Windows local files fails with an error message showing "Access is denied"?

Description

When you use a backup client to back up local Windows files, the backup fails, and the number of errors is displayed.

Click the number of errors next to the backup job to download a full report. The report contains error messages that indicate "Access is denied".

Solution

This issue occurs when users in the SYSTEM group are not granted full access to failed files. To resolve this issue, grant the SYSTEM group full access to these failed files.

# 3.4 How can I install a Hybrid Backup Recovery (HBR) client on Windows 2016?

You can use the Windows 2016 built-in tool to extract a client installation package. Right-click the extracted installation file, select Properties, select Unlock, and then click OK to install the client.

#### 3.5 Reactivate a file client

If you fail to activate a file client, you can perform the following steps to reactivate the client.

Reactivate a client in the console

- 1. Log on to the Hybrid Backup Recovery console.
- 2. On the File Client page, locate the failed client.
- 3. In the Actions column, click Activate Client.

4. In the Create Client dialog box, enter the required information based on the descriptions provided in the following table.

Name	Description	
Client IP Address	The IP address of the server or virtual machine that hosts the client.	
	Note: The IP address must be accessible by a browser.	
AccessKey ID	Download the AccessKey ID and AccessKey Secret of the Alibaba Cloud account where the Hybrid Backup Recovery ( HBR) service is activated.	
AccessKey Secret	Download the AccessKey ID and AccessKey Secret of the Alibaba Cloud account where the HBR service is activated.	
Create Client Password	Set the logon password of the client. The password must be a minimum of six characters in length.	

5. Click Activate Client to open a web page. You can use this web page to operate the file client. You can use a file client to back up data.

#### Reactivate a client on a web page

- 1. Log on to the HBR console.
- 2. On the File Client page, locate the failed client.
- 3. In the Actions column, clickDownload Certificate, and then save the certificate.
- 4. Open a browser, enter http://localhost: 8011 in the address bar to open the Initialize Register window, and configure the required settings based on the descriptions provided in the following table.

## Note:

 If you perform a backup operation on an intermediate host, you must change localhost to the IP address of the server or virtual machine from which you back up data. Port 8011 is the default port that you can use to logon to a file client. If port 8011 on the server or virtual machine is occupied by another application, you can specify another port number for a file client.

Name	Description
Upload Certificate	You can upload the token you have downloaded from the console. The token is used as a certificate. The validity period of each certificate is two days. You must download a new certificate to register a client when the certificate in use expires.
AccessKey ID and AccessKey Secret	Download the AccessKey ID and AccessKey Secret of the Alibaba Cloud account where the HBR service is activated.
Network Type	<ul> <li>VPC: Select this option when the server or virtual machine is located in a Virtual Private Network (VPC) and in the same region where the backup source is located.</li> <li>Classic: Select this option when VPCs are not applicable.</li> </ul>
Password	Set the logon password of the client. The password must be a minimum of six characters in length.
Encrypt AccessKey	If you use the password to encrypt the AccessKey, you must enter the password after each restart.

5. Click Register to activate the client.