Cloud Server Backup Service

Getting Started

Issue 08

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Contents

1 Scenarios....1
2 Creating a CSBS Backup....3
3 Creating a Dedicated CSBS Backup....7
4 Change History....9

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1 Scenarios

CSBS supports one-off backup and periodic backup. A one-off backup job is manually created by users and takes effect for only one time. Periodic backup jobs are automatically driven by a user-defined backup policy.

Table 1-1 describes the two backup options.

Table 1-1 One-off backup and periodic backup

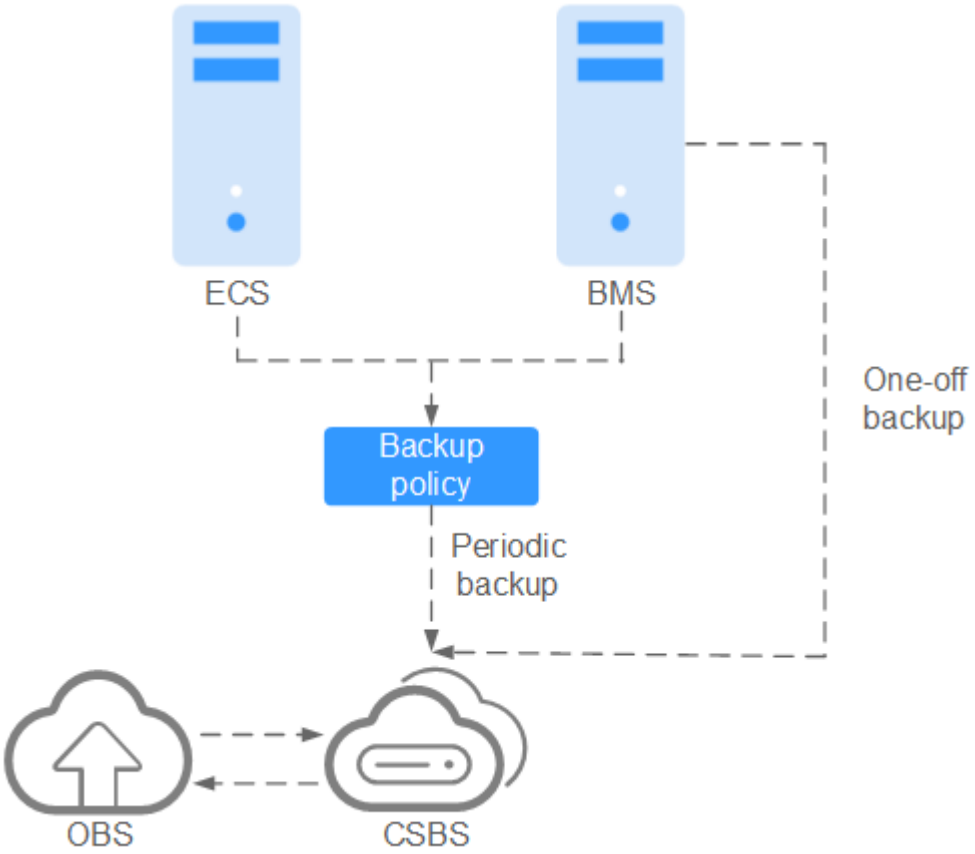
Item	One-Off Backup	Periodic Backup
Backup policy	None	Required
Number of backup operations	Only one, manual	Periodic operations driven by the backup policy
Backup name	User-defined backup name, which defaults to **manualbk**_*xxxx*	System-assigned backup name, which defaults to **autobk**_*xxxx*
Backup method	Full backup at the first time and incremental backup subsequently, by default. CBR allows you to use any backup (no matter it is a full or incremental one) to restore the full data of a server.	Full backup at the first time and incremental backup subsequently, by default. CBR allows you to use any backup (no matter it is a full or incremental one) to restore the full data of a server.
Application scenario	Executed before patching or upgrading the OS or upgrading an application on a server. A one-off backup can be used to restore a server to the original state in case the patching or upgrading fails.	Executed for routine maintenance of a server. The latest backup can be used to restore a server in case an unexpected failure or data loss occurs.

You can also use the two backup options together if needed. For example, associate all servers with a backup policy to execute periodic backup of all servers,

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and manually perform one-off backups for the most important servers to further ensure data security of those servers, as shown in **Figure 1-1**.

Figure 1-1 Intermixed use of the two backup options



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2 Creating a CSBS Backup

This section explains how to create CSBS backup jobs to protect server data.

Prerequisites

- You have installed the required Agent software.
- If you want to use a backup to create an image, perform the following operations before creating a CSBS backup:
  - You have optimized the Linux ECS (referring to **(Optional) Optimizing a Linux Private Image**) and installed Cloud-Init (referring to **Installing Cloud-Init**).
  - You have optimized the Windows ECS (referring to **(Optional) Optimizing a Windows Private Image**) and installed Cloudbase-Init (referring to **Installing Cloudbase-Init**).

NOTICE

You are advised to perform application-consistent backup in off-peak hours.

Procedure

Step 1 Log in to the HUAWEI CLOUD website at **http://www.huaweicloud.com/en-us/**. Register a HUAWEI CLOUD account.

Step 2 Log in to the CSBS management console.

1. Log in to the management console.
2. Under Storage > **Cloud Server Backup Service**.

Step 3 In the upper right corner of the page, click **Create CSBS Backup**.

Step 4 In the available server list, select the servers you want to back up. After servers are selected, they appear in the list of selected servers. See **Figure 2-1**.

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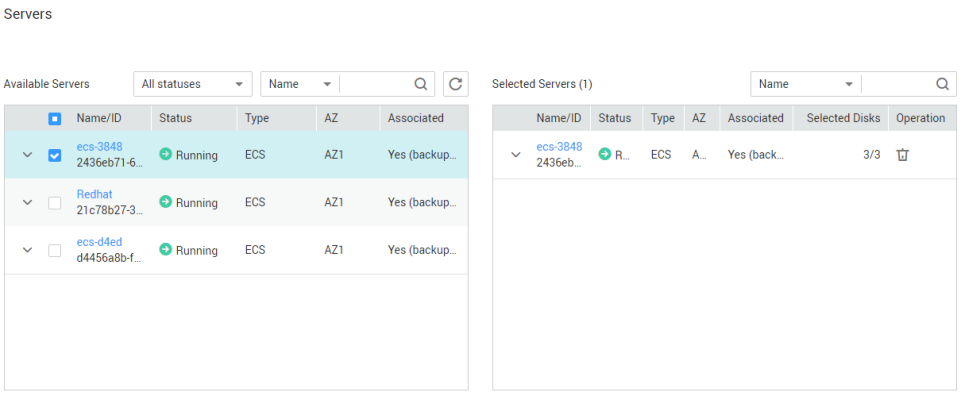
NOTICE

To ensure post-restoration data consistency, you are advised to back up entire servers.

If you want to back up specific disks on a server to reduce costs, ensure that data on these disks is independent of the rest. Otherwise, data inconsistency may occur.

For example, data of the Oracle application 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 the rest of the data unchanged. As a result, data inconsistency occurs and the application cannot be started.

Figure 2-1 Selecting servers

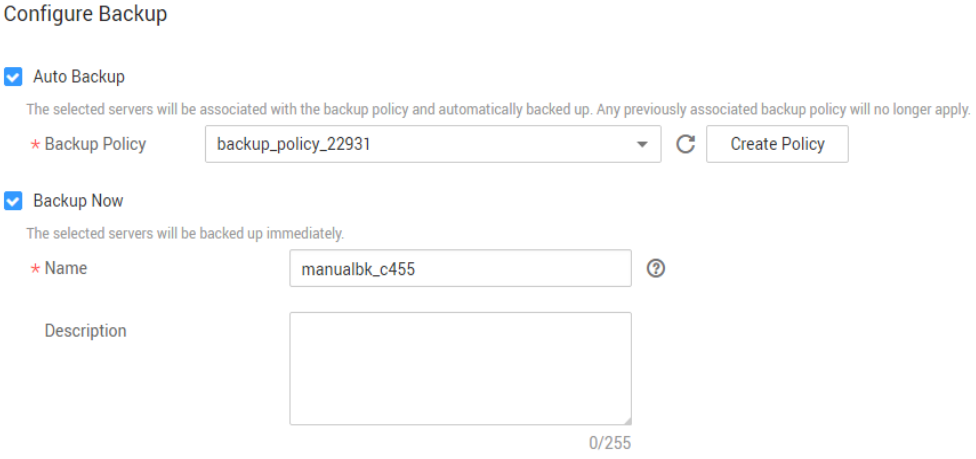


NOTE

- The selected servers must be in the **Running** or **Stopped** state.
- Shared EVS disks in servers can be backed up.

Step 5 In the **Configure Backup** area, configure a backup scheme for the selected servers. See **Figure 2-2**.

Figure 2-2 Configuring backup schemes



- **Auto Backup**:

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In the **Backup Policy** drop-down list, select a backup policy. Alternatively, click **Create Policy** to create a backup policy.

If you have configured a replication policy, backups generated based on the backup policy will be replicated according to the replication policy.

After a backup job is created, the selected servers are associated with the backup policy and will be periodically backed up according to the backup policy.

NOTE

If a selected server has been associated with another backup policy, it will be disassociated from the original backup policy automatically and then associated with the new backup policy.

- **Immediate Backup**:

  After a backup job is created, all selected servers will be backed up immediately for once.

  Set the **Name** and **Description** of the backup, as described in **Table 2-1**.

  Table 2-1 Parameter description

Parameter	Description	Remarks
Name	Name of the backup you are creating. It is a string of 1 to 255 characters that can contain only digits, letters, underscores (_), and hyphens (-). **NOTE** You can use the default name, which is in the format of **manualbk**_*xxxx*. If multiple servers are to be backed up, the system automatically adds suffixes to their names, for example, **backup-0001** and **backup-0002**.	manualbk_cbf0
Description	Supplementary information about the backup. It cannot exceed 255 characters.	--

You can select both the backup methods at the same time.

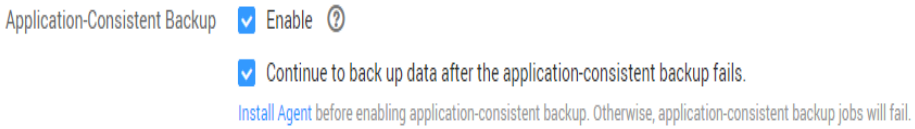
Step 6 Determine whether to select **Enable** next to **Application-Consistent Backup**. (This option is available for one-off backup.) If selected, the system will perform application-consistent backups. If you select **Continue to back up data after the application-consistent backup fails.** at the same time, the system will perform crash-consistent backup if the application-consistent backup job fails. Otherwise, the whole backup operation fails. **Figure 2-3** displays an example.

NOTE

Before using application-consistent backup, change the security group and install the Agent. For details, see **Enabling Application-Consistent Backup**.

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Figure 2-3 Application-consistent backup



Step 7 Click **Next**.

Step 8 On the **Confirm** page, confirm resource details and click **Submit**.

Step 9 Return to the CSBS page as prompted.

- Auto Backup

  On the **Policies** tab page, click ⌄ on the left of the backup policy name. If all selected servers are displayed under **Associated Servers**, they are associated with the backup policy successfully, and automatic backup will be periodically performed as scheduled.

- Immediate Backup

  On the **Backups** tab page, if the generated backups are in the **Available** state, the one-off backup job is successful.

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3 Creating a Dedicated CSBS Backup

This section explains how to create Dedicated CSBS backup jobs to protect server data.

Constraints and Limitations

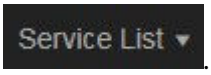
- Dedicated CSBS does not support application-consistent backup.
- If Dedicated OBS is insufficient in capacity, Dedicated CSBS backups cannot be created.

Prerequisites

Dedicated OBS has been enabled.

Procedure

Step 1 Log in to the Dedicated OBS console.

1. Log in to the management console.
2. Click 

. Under **Dedicated Cloud**, click **Dedicated Cloud Server Backup Service**.

Step 2 Click **Apply for Resource**. Configure the backup as instructed. **Table 3-1** describes related parameters.

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Table 3-1 Parameter description

Parameter	Description	Example
Type	Backup type, which must be consistent with the bucket storage class in the Dedicated OBS storage pool. Currently, only **Standard backup** is supported. Standard backups will be saved in Standard buckets in the Dedicated OBS storage pool.	Standard backup
Capacity	Total capacity of disks. When the disk size of your ECS exceeds this value, the excessive part cannot be backed up using CSBS. Your Dedicated CSBS backups are stored in the Dedicated OBS storage pool.	500 TB
Validity Period	Possible options are 1, 2, 3, 4, and 5 years. Select a period as needed. We recommend you to set it not longer than the validity period of your Dedicated OBS.	5 years

Step 3 Click **Next**. Confirm the settings and click **Submit**.

Step 4 Return to the **Dedicated CSBS backups** tab page. You can view information about the Dedicated CSBS you have purchased.

Step 5 Click **Go to CSBS Console**. The CSBS console is displayed. For details about how to create a CSBS backup, see **Creating a CSBS Backup**.

----End

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4 Change History

Release Date	What's New
2019-03-22	This is the eighth official release. Modified the following content: Optimized the document structure and content.
2019-02-14	This issue is the seventh official release. Modified the following content: Added content related to application-consistent backup.
2018-10-17	This is the sixth official release. Modified the following content: Added the description about the cross-region replication feature.
2018-10-16	This issue is the fifth official release. Modified the following content: Added descriptions of Dedicated CSBS.
2018-09-29	This issue is the fourth official release. Modified the following content: Added the description of support for backing up servers with shared disks.
2018-08-06	This issue is the third official release. Modified the following content: Added descriptions of BMSs.
2018-05-30	This issue is the second official release. Modified the following content: Added the feature for creating images.
2018-04-30	This issue is the first official release.

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