



Other back up operations

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Other back up operations

Back up Oracle databases using UNIX commands

The backup workflow includes planning, identifying the resources for backup, creating backup policies, creating resource groups and attaching policies, creating backups, and monitoring the operations.

What you will need

- You should have added the storage system connections and created the credential using the commands *Add-SmStorageConnection* and *Add-SmCredential*.
- You should have established the connection session with the SnapCenter Server using the command *Open-SmConnection*.

You can have only one SnapCenter account login session and the token is stored in the user home directory.



The connection session is valid only for 24 hours. However, you can create a token with the `TokenNeverExpires` option to create a token that never expires and the session will always be valid.

About this task

You should execute the following commands to establish the connection with the SnapCenter Server, discover the Oracle database instances, add policy and resource group, backup and verify the backup.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running `Get-Help command_name`. Alternatively, you can also refer to the [SnapCenter Software Command Reference Guide](#).

Steps

1. Initiate a connection session with the SnapCenter Server for a specified user: *Open-SmConnection*
2. Perform host resources discovery operation: *Get-SmResources*
3. Configure Oracle database credentials and preferred nodes for backup operation of a Real Application Cluster (RAC) database: *Configure-SmOracleDatabase*
4. Create a backup policy: *Add-SmPolicy*
5. Retrieve the information about the secondary (SnapVault or SnapMirror) storage location : *Get-SmSecondaryDetails*

This command retrieves the primary to secondary storage mapping details of a specified resource. You can use the mapping details to configure the secondary verification settings while creating a backup resource group.

6. Add a resource group to SnapCenter: *Add-SmResourceGroup*
7. Create a backup: *New-SmBackup*

You can poll the job using the `WaitForCompletion` option. If this option is specified, then the command

continues to poll the server until the completion of the backup job.

8. Retrieve the logs from SnapCenter: *Get-SmLogs*

Cancel backup operations of Oracle databases

You can cancel backup operations that are either running, queued, or non-responsive.

You must be logged in as the SnapCenter Admin or job owner to cancel backup operations.

About this task

When you cancel a backup operation, the SnapCenter Server stops the operation and removes all the Snapshots from the storage if the backup created is not registered with SnapCenter Server. If the backup is already registered with SnapCenter Server, it will not roll back the already created Snapshot even after the cancellation is triggered.


- You can cancel only the log or full backup operation that are queued or running.
- You cannot cancel the operation after the verification has started.

If you cancel the operation before verification, the operation is canceled, and the verification operation will not be performed.

- You cannot cancel the backup operation after the catalog operations has started.
- You can cancel a backup operation from either the Monitor page or the Activity pane.
- In addition to using the SnapCenter GUI, you can use CLI commands to cancel operations.
- The **Cancel Job** button is disabled for operations that cannot be canceled.
- If you selected **All members of this role can see and operate on other members objects** in Users\Groups page while creating a role, you can cancel the queued backup operations of other members while using that role.

Step

Perform one of the following actions:

From the...	Action
Monitor page	<ol style="list-style-type: none">a. In the left navigation pane, click Monitor > Jobs.b. Select the operation and click Cancel Job.
Activity pane	<ol style="list-style-type: none">a. After initiating the backup job, click  on the Activity pane to view the five most recent operations.b. Select the operation.c. In the Job Details page, click Cancel Job.

Results

The operation is canceled, and the resource is reverted to the original state.

If the operation you canceled is non-responsive in the canceling or running state, you should run the `Cancel-SmJob -JobID <int> -Force` to forcefully stop the backup operation.




View Oracle database backups and clones in the Topology page

When you are preparing to back up or clone a resource, you might find it helpful to view a graphical representation of all backups and clones on the primary and secondary storage.

About this task

In the Topology page, you can see all of the backups and clones that are available for the selected resource or resource group. You can view the details of those backups and clones, and then select them to perform data protection operations.

You can review the following icons in the Manage Copies view to determine whether the backups and clones are available on the primary or secondary storage (Mirror copies or Vault copies).




-  displays the number of backups and clones that are available on the primary storage.
-  displays the number of backups and clones that are mirrored on the secondary storage using SnapMirror technology.
-  displays the number of backups and clones that are replicated on the secondary storage using SnapVault technology.

The number of backups displayed includes the backups deleted from the secondary storage. For example, if you created 6 backups using a policy to retain only 4 backups, the number of backups displayed is 6.



Clones of a backup of a version-flexible mirror on a mirror-vault type volume are displayed in the topology view, but the mirror backup count in the topology view does not include the version-flexible backup.

If you have secondary relationship as SnapMirror active sync (initially released as SnapMirror Business Continuity [SM-BC]), you can see following additional icons:

-  implies that the replica site is up.
-  implies that the replica site is down.
-  implies that the secondary mirror or vault relationship has not been re-established.

Steps

1. In the left navigation pane, click **Resources**, and then select the appropriate plug-in from the list.

2. In the Resources page, either select the resource or resource group from the **View** drop-down list.
3. Select the resource either from the resource details view or from the resource group details view.

If the resource is protected, the Topology page of the selected resource is displayed.

4. Review the Summary card to see a summary of the number of backups and clones available on the primary and secondary storage.

The Summary Card section displays the total number of backups and clones and total number of log backups.

Clicking the **Refresh** button starts a query of the storage to display an accurate count.

If SnapLock enabled backup is taken, then clicking the **Refresh** button refreshes the primary and secondary SnapLock expiry time retrieved from ONTAP. A weekly schedule also refreshes the primary and secondary SnapLock expiry time retrieved from ONTAP.

When the application resource is spread across multiple volumes, the SnapLock expiry time for the backup will be the longest SnapLock expiry time that is set for a Snapshot in a volume. The longest SnapLock expiry time is retrieved from ONTAP.

For SnapMirror active sync, clicking the **Refresh** button refreshes the SnapCenter backup inventory by querying ONTAP for both primary and replica sites. A weekly schedule also performs this activity for all databases containing SnapMirror active sync relationship.

- For SnapMirror active sync and only for ONTAP 9.14.1, Async Mirror or Async MirrorVault relationships to the new primary destination should be manually configured after failover. From ONTAP 9.15.1 onwards Async Mirror or Async MirrorVault is auto configured to the new primary destination.
 - After failover, a backup should be created for SnapCenter to be aware of the failover. You can click **Refresh** only after a backup has been created.
5. In the Manage Copies view, click **Backups** or **Clones** from the primary or secondary storage to see details of a backup or clone.

The details of the backups and clones are displayed in a table format.

6. Select the backup from the table, and then click the data protection icons to perform restore, clone, mount, unmount, rename, catalog, uncatalog, and delete operations.



You cannot rename or delete backups that are on the secondary storage.

- If you have selected a log backup, you can only perform rename, mount, unmount, catalog, uncatalog, and delete operations.
 - If you have cataloged the backup using Oracle Recovery Manager (RMAN), you cannot rename those cataloged backups.
7. If you want to delete a clone, select the clone from the table, and then click

If the value assigned to SnapmirrorStatusUpdateWaitTime is less, the Mirror and Vault backup copies are not listed on the topology page even if data and log volumes are successfully protected. You should increase the value assigned to SnapmirrorStatusUpdateWaitTime using *Set-SmConfigSettings* PowerShell cmdlet.

The information regarding the parameters that can be used with the command and their descriptions can be obtained by running Get-Help *command_name*.

Alternatively, you can also refer to the [SnapCenter Software Command Reference Guide](#) or [SnapCenter Software Cmdlet Reference Guide](#).

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