



# **Restore and recovery strategy for SAP HANA databases**

**SnapCenter Software 4.5**

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# Restore and recovery strategy for SAP HANA databases

## Define a restore and recovery strategy for SAP HANA resources

You must define a strategy before you restore and recover your database so that you can perform restore and recovery operations successfully.

### Steps

1. Determine the restore strategies supported for manually added SAP HANA resources
2. Determine the restore strategies supported for auto discovered SAP HANA databases
3. Decide the type of recovery operations that you want to perform.

## Types of restore strategies supported for manually added SAP HANA resources

You must define a strategy before you can successfully perform restore operations using SnapCenter. There are two types of restore strategies for manually added SAP HANA resources. You cannot recover manually added SAP HANA resources.



You cannot recover manually added SAP HANA resources.

### Complete resource restore

- Restores all volumes, qtrees, and LUNs of a resource



If the resource contains volumes or qtrees, the Snapshot copies taken after the Snapshot copy selected for restore on such volumes or qtrees are deleted and cannot be recovered. Also, if any other resource is hosted on the same volumes or qtrees, then that resource is also deleted.

### File level restore

- Restores files from volumes, qtrees, or directories
- Restores only the selected LUNs

## Types of restore strategies supported for automatically discovered SAP HANA databases

You must define a strategy before you can successfully perform restore operations using SnapCenter. There are two types of restore strategies for automatically discovered SAP HANA databases.

## Complete resource restore

- Restores all volumes, qtrees, and LUNs of a resource
  - The **Volume Revert** option should be selected to restore the entire volume.



If the resource contains volumes or qtrees, the Snapshot copies taken after the Snapshot copy selected for restore on such volumes or qtrees are deleted and cannot be recovered. Also, if any other resource is hosted on the same volumes or qtrees, then that resource is also deleted.

## Tenant Database

- Restores the tenant database

If **Tenant Database** option is selected, then HANA studio or HANA recovery scripts external to SnapCenter must be used to perform the recovery operation.

## Types of restore operations for auto discovered SAP HANA databases

SnapCenter supports volume-based SnapRestore (VBSR), Single File SnapRestore, and connect-and-copy restore types for automatically discovered SAP HANA databases.

### Volume-based SnapRestore (VBSR) is performed in NFS environments for the following scenarios:

- When the backup selected for restore is taken on releases earlier than SnapCenter 4.3, and only if the **Complete Resource** option is selected
- When the backup selected for restore is taken in SnapCenter 4.3, and if the **Volume Revert** option is selected

### Single File SnapRestore is performed in NFS environments for the following scenarios:

- When the backup selected for restore is taken in SnapCenter 4.3, and if only the **Complete Resource** option is selected
- For multitenant database containers (MDC), when the backup selected for restore is taken on SnapCenter 4.3, and the **Tenant Database** option is selected
- When the backup selected is from a SnapMirror or SnapVault secondary location, and the **Complete Resource** option is selected

### Single File SnapRestore is performed in SAN environments for the following scenarios:

- When backups are taken on releases earlier than SnapCenter 4.3, and only if the **Complete Resource** option is selected
- When backups are taken in SnapCenter 4.3, and only if the **Complete Resource** option is selected
- When the backup is selected from a SnapMirror or SnapVault secondary location, and the **Complete**

**Resource** option is selected

## **Connect-and-copy based restore is performed in SAN environments for the following scenario:**

- For MDC, when the backup selected for restore is taken in SnapCenter 4.3, and the **Tenant Database** option is selected



**Complete Resource, Volume Revert, and Tenant Database** options are available on the Restore Scope page.

## **Types of recovery operations supported for SAP HANA databases**

SnapCenter enables you to perform different types of recovery operations for SAP HANA databases.

- Recover the database up to the most recent state
- Recover the database up to a specific point in time

You must specify the date and time for recovery.

- Recover the database up to a specific data backup

SnapCenter also provides the No recovery option for SAP HANA databases.

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