



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

**SnapCenter Software 4.8**

NetApp  
March 08, 2023

This PDF was generated from [https://docs.netapp.com/us-en/snapcenter/protect-hana/task\\_define\\_a\\_restore\\_and\\_recovery\\_strategy\\_for\\_sap\\_hana\\_resources.html](https://docs.netapp.com/us-en/snapcenter/protect-hana/task_define_a_restore_and_recovery_strategy_for_sap_hana_resources.html) on March 08, 2023. Always check docs.netapp.com for the latest.

# Table of Contents

- Restore and recovery strategy for SAP HANA databases ..... 1
  - Define a restore and recovery strategy for SAP HANA resources ..... 1
  - Types of restore strategies supported for manually added SAP HANA resources ..... 1
  - Types of restore strategies supported for automatically discovered SAP HANA databases ..... 1
  - Types of restore operations for auto discovered SAP HANA databases ..... 2
  - Types of recovery operations supported for SAP HANA databases ..... 3

# 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.

## Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.