



Protect SAP HANA systems

Cloud Manager

NetApp

March 25, 2022

Table of Contents

- Protect SAP HANA systems 1
 - Add SAP HANA systems 1
 - Back up SAP HANA systems 2
 - Restore SAP HANA systems 3

Protect SAP HANA systems

Add SAP HANA systems

Manually add the SAP HANA systems. Auto discovery of SAP HANA system is not supported.

While adding the SAP HANA systems, you should add the HDB user store keys. The HDB secure user store key is used to store the connection information of SAP HANA systems securely on the client and HDBSQL client uses the secure user store key to connect to SAP HANA systems.



You cannot add or modify SAP HANA systems if a node in the AKS cluster is down.

Steps

1. On the SnapCenter Service page, click **SAP HANA Systems > Add**.
2. On the System Details page, perform the following actions:
 - a. Select the system type.
 - b. Specify the SID of the SAP HANA system.
 - c. Specify the SAP HANA system name.
 - d. Click HDB Secure User Store Keys text box to add user store keys details.

Specify the key name, system details, username, and password.

- e. Click **Add**.



You should add user store keys for each host if you are adding a multi-host SAP HANA system.

3. Click **Continue**.
4. On the Storage Footprint page, perform the following:
 - a. Select the working environment and specify the NetApp account.
 - b. Select the required volumes.
 - c. Click **Add Storage**.
5. Click **Continue**.
6. Review all the details and click **Add**.

You can also edit or remove the SAP HANA systems that were added to the SnapCenter Service. When you remove the SAP HANA system, all the associated backups and catalog entries will be deleted and no longer be protected.


Add non-data volumes

After adding the multitenant database container or single container type SAP HANA system, you can add the non-data volumes of the HANA system.

Steps

1. On the SnapCenter Service page, click SAP HANA Systems.

All the systems added to the SnapCenter Service are displayed.

2. Click  corresponding to the multitenant database container or single container type system to which you want to add the non-data volumes.
3. Click **Add Non-Data Volumes**.
4. Click **Add New Storage**.

Back up SAP HANA systems

You can either perform an on-demand backup or schedule backups of your SAP HANA system using system-defined or custom policies. SnapCenter Service supports both snapshot-based and file-based backups.

Create backup policies

Policies specify the backup type, backup frequency, schedules, retention type, retention count, and other characteristics of data protection operations. You can create policies using the Cloud Manager UI.

By default, two system-defined policies, one each for snapshot-based and file-based backup operations are available.

Steps

1. On the SnapCenter Service page, click **Policies > Add**.
2. On the Create Backup Policy page, perform the following actions:
 - a. Specify a policy name.
 - b. Select the type of backup you want to create using this policy.
 - c. Specify the backup name.

The suffix timestamp is added by default. You can select the other suffixes that should be included in the backup name and define the order in which the suffixes should appear.

- d. Specify the schedule frequency and the start and end time for the scheduled backups.
 - e. Specify the number of snapshot copies to be retained or specify the days for which the snapshot copies should be retained.
3. Click **Add**.

You can view, edit, or delete policies by clicking  corresponding to the policy.


Create on-demand backups

Create on-demand backups of SAP HANA systems either by associating a policy or by not associating any policy.

Steps

1. On the SnapCenter Service page, click **SAP HANA Systems**.

All the systems added to the SnapCenter Service are displayed.

2. Click  corresponding to the system that you want to protect.
3. Click **On-Demand Backup**.
4. On the On-Demand Backup page, perform one of the following actions:
 - If you want to associate the backup to a policy, select the policy and click **Create Backup**.
 - If you do not want to associate the backup to a policy, perform the following actions:
 - a. In the Policy field, select **None**.
 - b. Select the backup type.

If you are backing up a non-data volume, you can only select **Snapshot Based** as the backup type.

- c. Specify the retention period.
- d. Click **Create Backup**.


Create scheduled backups

Create scheduled backups by associating policies with the SAP HANA system.

Steps

1. On the SnapCenter Service page, click **SAP HANA Systems**.

All the systems added to the SnapCenter Service are displayed.

2. Click  corresponding to the system that you want to protect.
3. Click **Protect**.
4. Select the policies that you want to use to protect the SAP HANA system.
5. Click **Protect**.

Find more information

[SAP HANA backup and recovery on Azure NetApp Files with SnapCenter Service](#)

Restore SAP HANA systems

In the event of data loss, restore the SAP HANA system from one of the backups of that system.

Only storage restore is supported. You should put the HANA system in recovery mode using SAP HANA Studio or SAP HANA Cockpit before restoring because recovery of HANA system is not supported.

Steps

1. On the SnapCenter Service page, click **SAP HANA Systems**.

The systems added to the SnapCenter Service are displayed.

2. Click **...** corresponding to the system that you want to restore.
3. Click **View Backups**.
4. In the Backups section, click **...** corresponding to the backup that you want to use to restore the system.
5. Click **Restore**.
6. Review the message and select **Yes, Restore** to confirm.



After restoring the database, if you do a point-in-time recovery of the SAP HANA system using HANA Studio then the data backup catalog entries which were deleted by SnapCenter Service as per the retention setting, might be restored.

If the deleted data backup catalog entries are restored because of the recovery operation, SnapCenter Service will not be able to detect and delete them. This could result in SnapCenter Service not cleaning the log catalog properly.

You can verify the backup entries in SnapCenter Service to find out which all data backup catalog entries are newly restored and manually delete those entries.

Find more information

[SAP HANA backup and recovery on Azure NetApp Files with SnapCenter Service](#)

Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.