



## **Lab setup**

### **NetApp Solutions**

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# Lab setup

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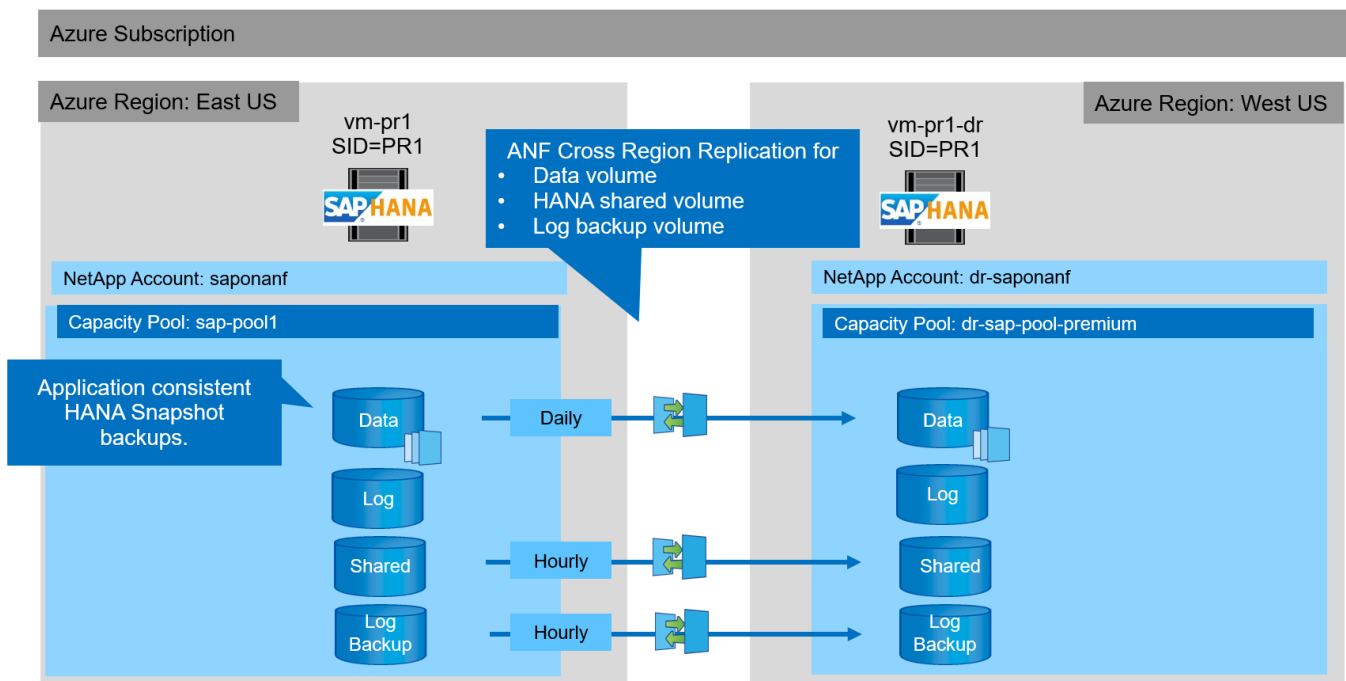
Solution validation has been performed with an SAP HANA single-host system. The Microsoft AzAcSnap Snapshot backup tool for ANF has been used to configure HANA application-consistent Snapshot backups. A daily data volume, hourly log backup, and shared volume replication were all configured. Disaster recover testing and failover was validated with a save point as well as with forward recovery operations.

The following software versions have been used in the lab setup:

- Single host SAP HANA 2.0 SPS5 system with a single tenant
- SUSE SLES for SAP 15 SP1
- AzAcSnap 5.0

A single capacity pool with manual QoS has been configured at the DR site.

The following figure depicts the lab setup.



## Snapshot backup configuration with AzAcSnap

At the primary site, AzAcSnap was configured to create application-consistent Snapshot backups of the HANA system PR1. These Snapshot backups are available at the ANF data volume of the PR1 HANA system, and they are also registered in the SAP HANA backup catalog, as shown in the following two figures. Snapshot backups were scheduled for every 4 hours.

With the replication of the data volume using ANF Cross-Region Replication, these Snapshot backups are replicated to the disaster recovery site and can be used to recover the HANA database.

The following figure shows the Snapshot backups of the HANA data volume.



Volume

Search (Ctrl+/)



Add snapshot



Refresh

Overview

Activity log

Access control (IAM)

Tags

Settings

Properties

Locks

Storage service

Mount instructions

Export policy

Snapshots

Replication

Monitoring

Metrics

Search snapshots

Name	↑↓	Location	↑↓	Created	↑↓
azacsnap__2021-02-12T145015-1799555Z		East US		02/12/2021, 03:49:48 PM	***
azacsnap__2021-02-12T145227-1245630Z		East US		02/12/2021, 03:51:24 PM	***
azacsnap__2021-02-12T145828-3863442Z		East US		02/12/2021, 03:58:01 PM	***
azacsnap__2021-02-16T134021-9431230Z		East US		02/16/2021, 02:39:18 PM	***
azacsnap__2021-02-16T134917-6284160Z		East US		02/16/2021, 02:48:55 PM	***
azacsnap__2021-02-16T135737-3778546Z		East US		02/16/2021, 02:56:32 PM	***
azacsnap__2021-02-16T160002-1354654Z		East US		02/16/2021, 04:59:40 PM	***
azacsnap__2021-02-16T200002-0790339Z		East US		02/16/2021, 08:59:42 PM	***
azacsnap__2021-02-17T000002-1753859Z		East US		02/17/2021, 12:59:32 AM	***
azacsnap__2021-02-17T040001-5454808Z		East US		02/17/2021, 04:59:31 AM	***
azacsnap__2021-02-17T080002-2933611Z		East US		02/17/2021, 08:59:40 AM	***

The following figure shows the SAP HANA backup catalog.

n-pr1 Instance: 01 Connected User: SYSTEM System Usage: Custom System - SAP HANA Studio



Help

SYSTEMDB@PR1 ... Backup SYSTE... SYSTEMDB@PR1 ... SYSTEMDB@PR1 ... SYSTEMDB@PR1 ... Backup SYSTE... SYSTEMDB@PR1 ... SYSTEMDB@PR1 ... SYSTEMDB@PR1 ...

Backup SYSTEMDB@PR1 (SYSTEM) PR1 SystemDB

Last Update: 9:07:38 AM

Overview | Configuration | Backup Catalog

Backup Catalog

Database: SYSTEMDB

☐ Show Log Backups ☐ Show Delta Backups

Status	Started	Duration	Size	Backup Type	Destination...
	Feb 17, 2021 8:00:02 ...	00h 00m 42s	3.13 GB	Data Backup	Snapshot
	Feb 17, 2021 4:00:01 ...	00h 00m 35s	3.13 GB	Data Backup	Snapshot
	Feb 17, 2021 12:00:00 ...	00h 00m 36s	3.13 GB	Data Backup	Snapshot
	Feb 16, 2021 8:00:02 ...	00h 00m 34s	3.13 GB	Data Backup	Snapshot
	Feb 16, 2021 4:00:02 ...	00h 00m 38s	3.13 GB	Data Backup	Snapshot
	Feb 16, 2021 1:57:37 ...	00h 00m 32s	3.13 GB	Data Backup	Snapshot
	Feb 16, 2021 1:49:17 ...	00h 00m 32s	3.13 GB	Data Backup	Snapshot
	Feb 16, 2021 1:40:22 ...	00h 00m 34s	3.13 GB	Data Backup	Snapshot
	Feb 12, 2021 2:58:28 ...	00h 00m 32s	3.13 GB	Data Backup	Snapshot
	Feb 12, 2021 2:52:27 ...	00h 00m 32s	3.13 GB	Data Backup	Snapshot
	Feb 12, 2021 2:50:15 ...	00h 00m 32s	3.13 GB	Data Backup	Snapshot

Backup Details

ID: 1613141415533

Status: Successful

Backup Type: Data Backup

Destination Type: Snapshot

Started: Feb 12, 2021 2:50:15 PM (UTC)

Finished: Feb 12, 2021 2:50:48 PM (UTC)

Duration: 00h 00m 32s

Size: 3.13 GB

Throughput: n.a.

System ID:

Comment: Snapshot prefix: azacsnap  
Tools version: 5.0 Preview (20201214.65524)

Additional Information: <ok>

Location: /hana/data/PR1/mnt00001/

Host	Service	Size	Name	Source ...	EBID
vm-pr1	nameserver	3.13 GB	hdb00001	volume	azacsnap__2021-02-12T145015...

Next: Configuration steps for ANF Cross-Region Replication.

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