Installing and configuring required software components

Snap Creator Framework

NetApp
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Installing and configuring required software components

For the SAP HANA backup and restore solution using the Snap Creator Framework and the SAP HANA plug-in, you need to install Snap Creator software components and the SAP HANA hdbsql client software.

You do not need to install the plug-in separately. It is installed with the Agent.

1. Install the Snap Creator Server on a host that shares network connectivity with the host where you install the Agent.
2. Install the Snap Creator Agent on a host that shares network connectivity with the Snap Creator Server host.
   - In a single SAP HANA node environment, install the Agent on the database host. Alternately, install the Agent on another host that has network connectivity to the database host and the Snap Creator Server host.
   - In a multinode SAP HANA environment, you should not install the Agent on the database host; the Agent needs to be installed on a separate host that has network connectivity to the database host and the Snap Creator Server host.
3. Install the SAP HANA hdbsql client software on the host where you installed the Snap Creator Agent.

   Configure the user store keys for the SAP HANA nodes that you manage through this host.

```
mgmtsrv01:/sapcd/HANA_SP5/DATA_UNITS/HDB_CLIENT_LINUXINTEL # ./hdbinst

SAP HANA Database Client installation kit detected.

SAP HANA Database Installation Manager - Client Installation
1.00.46.371989
************************************************************************
***

Enter Installation Path [/usr/sap/hdbclient32]:
Checking installation...
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Preparing package "Product Manifest"...
Preparing package "SQLDBC"...
Preparing package "ODBC"...
Preparing package "JDBC"...
Preparing package "Client Installer"...
Installing SAP HANA Database Client to /usr/sap/hdbclient32...
Installing package 'Product Manifest' ...
Installing package 'SQLDBC' ...
Installing package 'ODBC' ...
Installing package 'JDBC' ...
Installing package 'Client Installer' ...
Installation done
Log file written to '/var/tmp/hdb_client_2013-07-
05_11.38.17/hdbinst_client.log'
mgmtsrv01:/sapcd/HANA_SP5/DATA_UNITS/HDB_CLIENT_LINUXINTEL #
```

Related information

Snap Creator Framework Installation Guide

Setup assumptions in this guide

Though a typical Snap Creator installation assumes that the Server is installed on one host and the Agent is installed on a different host, the setup used in this guide is based on an SAP HANA multinode appliance.

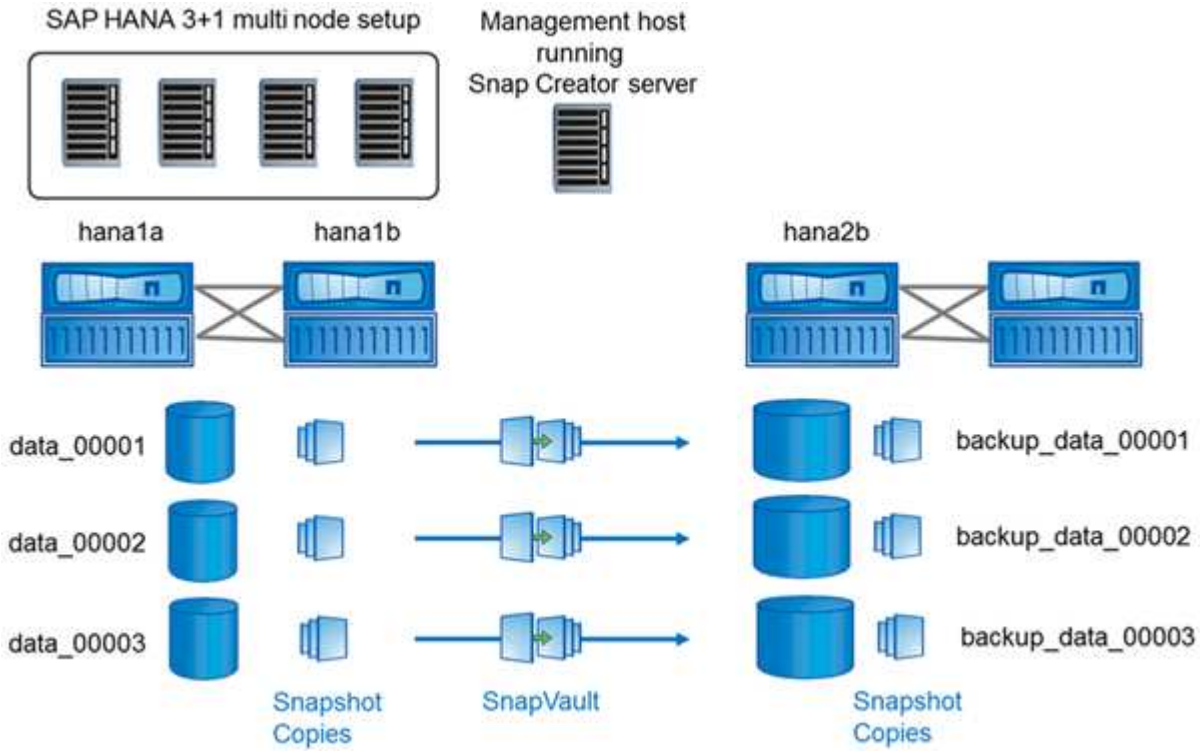
In this configuration, the SAP HANA database runs on a 3+1 database node configuration and all Snap Creator software components—Server, Agent, and plug-in—are installed on the same host.

The NetApp storage systems used in this setup are running Data ONTAP operating in 7-Mode. One high-availability (HA) controller pair is used on the storage layer. The data and log volumes of the three SAP HANA database nodes are distributed to both storage controllers. With the example setup, one storage controller of another HA controller pair is used as the secondary storage. Each data volume is replicated to a dedicated backup volume on the secondary storage. The size of the backup volumes depend on the number of backups

that will be kept at the secondary storage.

All Snap Creator and SAP HANA Studio operations described here are the same with storage systems running clustered Data ONTAP. However, the initial SnapVault configuration on the storage systems and all SnapVault commands that need to be executed directly on the storage are different with clustered Data ONTAP. The differences are highlighted and described in this guide.

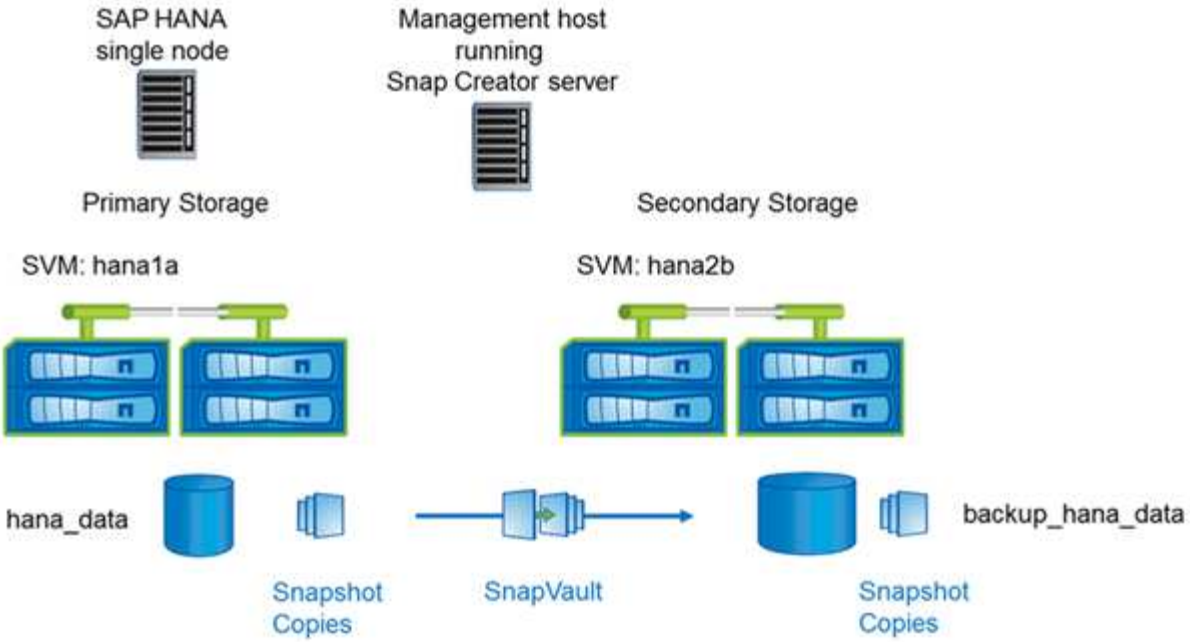
The following figure shows the data volumes on the primary storage and the replication path to the secondary storage:



All volumes that need to be backed up must be created on the secondary storage controller. In this example, the volumes backup_data_00001, backup_data_00002, and backup_data_00003 are created on the secondary storage controller.

Setup used with clustered Data ONTAP

The following figure shows the setup that has been used with clustered Data ONTAP. The setup is based on a single-node SAP HANA configuration with the storage virtual machines (SVMs) and volume names shown in the following illustration.



The way you prepare, start, resume, and restore SnapVault operations is different in clustered Data ONTAP and Data ONTAP operating in 7-Mode. These differences are called out in the corresponding sections of this guide.

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