



Installing SnapManager for SAP

SnapManager for SAP

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Installing SnapManager for SAP

You can download and install SnapManager for SAP in your environment and perform operations such as database backup, restore, recovery, and cloning.

The SnapManager for SAP installation package includes the host server software and the graphical user interface (GUI) client software.

Preparing to install SnapManager for SAP

The environment in which you are installing SnapManager for SAP must meet certain software, hardware, browser, database, and operating system requirements. For the latest information about the requirements, see the Interoperability Matrix.

[Interoperability Matrix](#)

Preinstallation tasks

Before installing SnapManager for SAP, you must perform some additional tasks to set up your environment. The tasks that you have to perform depend on the operating system and the database version you want to use.

- Install licensed operating system with the appropriate patches.
- Set the operating system's and the Oracle database's languages to English.

For example, to set the language of the Oracle database to English assign `NLS_LANG = AMERICAN_AMERICA.WE8MSWIN1252`. For more information about how to set the language, see the *Troubleshooting SnapManager for SAP* section.

- Install Data ONTAP with licenses enabled for SnapRestore and the supported protocols such as Fibre Channel (FC) and Internet Small Computer System Interface (iSCSI) on all the storage systems.
- Install the following Oracle patches, if you are using Oracle databases 11.2.0.2 and 11.2.0.3:
 - 13413167 for Windows 32-bit
 - 13555974 for Windows 64-bit
- Install SAP BR* Tools.

Related information

[NetApp Interoperability Matrix](#)

[SnapManager for SAP Best Practices](#)

Download the SnapManager for SAP installation package

You can download the SnapManager for SAP installation package from the NetApp Support Site.

Steps

1. Log in to the NetApp Support Site.
2. On the the NetApp Support Site page, click **Downloads > Software**.
3. In the Software Download table, go to the SnapManager product row and select **SAP (Windows)** from the **Select Platform** drop-down list.
4. Click **Go**.

The SnapManager releases are listed.

5. Click **View & Download** for the SnapManager release that you want to install.

The description page is displayed.



You should read the information available on this page.

6. At the bottom of this page, click **Continue**.

The license agreement page is displayed.



You should read the information available on this page.

7. Click **Accept**.

The download page is displayed.

8. Download the installation package for your host.

You can download the installation file to any location on the machine on which you want to install SnapManager for SAP.

Related information

NetApp Support Site: mysupport.netapp.com

Install SnapManager for SAP

You can install SnapManager on the host that has one or more databases to be managed. You can install only one SnapManager instance per host.

What you'll need

- You must have completed the required preinstallation tasks.
- The latest latest SnapManager installation package must be downloaded.
- The appropriate version of SnapDrive for Windows must be installed and configured on all the target hosts.

For information about installing and configuring SnapDrive for Windows, see *SnapDrive for Windows Installation and Administration Guide*.

Steps

1. Double-click the SnapManager installation file:

If the operating system is...	Then use...
Windows x86	netapp.smsap.windows-x86-version.exe
Windows x64	netapp.smsap.windows-x64-version.exe

The following message is displayed: The publisher could not be verified. Are you sure you want to run this software?

2. Click **OK**.
3. In the **Introduction** window, click **Next**.
4. In the **Choose Install Folder** window, either click **Next** to accept the default installation location or select a new location.

The default location is: C:\Program Files\NetApp\SnapManager for SAP.

5. In the **Menu Availability** window, click **Next**.
6. In the **Specify Service Properties** window, enter the account and password information for Windows service.

The specified account must be a member of the following groups:

- The storage system's local administration group
- The local administrator's group
- The ORA_DBA group You can specify whether the service must start automatically after reboot or should be started manually.

7. In the **Pre-Installation Summary** window, click **Install**.
8. In the **Install Complete** window, click **Next**.
9. In the **Important Information** window, click **Done** to exit the installer.

After you finish

After completing the installation, you can verify that the installation was successful:

1. Start the SnapManager server:
 - a. In the Windows Services window, select **NetApp SnapManager version for SAP**.
 - b. In the left panel, click **Start**.
2. Verify that the SnapManager system is running correctly:
 - a. Click **Start > Programs > NetApp > SnapManager for SAP > Start SMSAP Command Line Interface (CLI)**.
 - b. In the command-line interface (CLI), enter the following command:
smsap system verify

The following message is displayed: Operation Id number succeeded.

number is the operation ID number.

Related information

[Documentation on the NetApp Support Site](#)

Integrate with SAP BR* Tools

The SAP BR* Tools that contains SAP tools for Oracle database administration, for example, BRARCHIVE, BRBACKUP, BRCONNECT, BRRECOVER, BRRESTORE, BRSPACE, and BRTOOLS uses the BACKINT interface provided by SnapManager for SAP. To integrate SAP BR* Tools, you must create a link from the BR* Tools directory to `<SnapManager for SAP installation directory>\NetApp\SnapManager for SAP\bin`, where the BACKINT file is installed.

What you'll need

- You must ensure that you have installed SAP BR* Tools.

Steps

1. Create a link from the BR*Tools directory to the `C:\Program Files\NetApp\SnapManager for SAP\bin\backint` file for each SAP instance.



You must use the link instead of copying the file so that when you install a new version of SnapManager, the link will point to the new BACKINT interface version.

2. Set credentials for the user that runs the BR*Tools commands.

The operating system user needs the credentials of SnapManager for SAP repository, profile, and server to support the backup and restore of the SAP instance.

3. Specify a different profile name.

By default, SnapManager uses the profile with the same name as the SAP system identifier when processing commands from BR*Tools. If this system identifier is not unique in your environment, modify the `initSID.utl` SAP initialization file, and create a parameter to specify the correct profile. The `initSID.utl` file is located at `%ORACLE_HOME%\database`.

Example

A sample `initSID.utl` file is as follows:

```

# Backup Retention policy.
# Specifies the retention / lifecycle of backups on the filer.
#
-----
-----
# Default Value: daily
# Valid Values: unlimited/hourly/daily/weekly/monthly
# retain = daily
# Enabling Fast Restore.
#
-----
-----
# Default Value: fallback
# Valid Values: fallback/off
#
# fast = fallback
# profile_name = SID_BRTOOLS

```



The parameter name is always in lowercase and the comments must have a number sign (#).

4. Edit the `initSID.sap` BR*Tools configuration file by performing the following steps:
 - a. Open the `initSID.sap` file.
 - b. Locate the section containing the backup utility parameter file information.

Example

```

# backup utility parameter file
# default: no parameter file
# util_par_file =

```

- c. Edit the last line to include the `initSID.utl` file.

Example

```

# backup utility parameter file
# default: no parameter file
# util_par_file = initSID.utl

```

5. Perform the following steps to complete the linking:

The steps might vary depending on the operating system (OS) version.

- a. Log in to the host system as an administrator.

b. Click **Start > Control Panel > System > Advanced > Environment**.

c. Edit the **PATH** variable to add the following path: `Installation
directory\NetApp\SnapManager for SAP\bin`

After you finish

Register the BACKINT interface in your System Landscape Directory (SLD) by running the `backint register-sld` command.

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