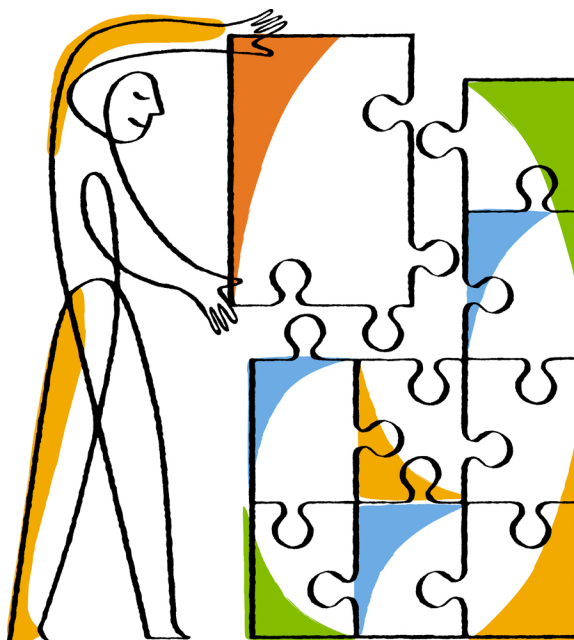




SnapManager[®] 7.0.1 for Microsoft[®] SQL Server[®]

Release Notes



NetApp, Inc.
495 East Java Drive
Sunnyvale, CA 94089
U.S.

Telephone: +1 (408) 822-6000
Fax: +1 (408) 822-4501
Support telephone: +1 (888) 463-8277
Web: www.netapp.com
Feedback: doccomments@netapp.com

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Product overview

SnapManager for Microsoft SQL Server reduces costs and simplifies data management by automating complex and time-consuming processes. Integrated with Microsoft technologies, SnapManager streamlines database storage management by simplifying storage layout planning and automating backup, restore, and cloning operations for SQL Server databases.

SnapManager for Microsoft SQL Server offers you the following:

Backup and restore of databases

You can minimize exposure to data loss by performing frequent backups with nondisruptive Snapshot technology. SnapManager takes only minutes to do a full backup and requires only minimal disk space.

Increased data protection

You can increase your data protection by using built-in mirroring and archiving technologies (SnapMirror and SnapVault) or by archiving backups to third-party tape devices.

Federated database backups

You can add multiple SQL Server instances and databases to the same federated group and create a Snapshot copy to back up all databases in that group at the same time. SnapManager enables you to restore to a marker so you can tie recovery to a business event.

Clone lifecycle management

You can create space-efficient copies of SQL Server data with end-to-end clone lifecycle management, including policy-based clone deletion and refresh.

Simplified management

A rich set of Windows PowerShell cmdlets enable you to script repetitive tasks as well as include SnapManager functions in custom data management workflows.

New in this release

SnapManager 7.0.1 for Microsoft SQL Server provides fixes to several known issues. You can upgrade to this release from version 5.2 and later.

Note: If you are upgrading from version 5.2 or 6.0, see the [SnapManager 7.0 for Microsoft SQL Server Release Notes](#) to identify changes made in the 7.0 release that can impact your upgrade.

Verifying support for your configuration in the IMT

You can use the NetApp Interoperability Matrix (IMT) to verify product support for your configuration: Data ONTAP software, host operating system, and so on. Verify support for your configuration before you install or upgrade to the new release.

Steps

1. Access the IMT.
[NetApp Interoperability Matrix Tool](#)
2. If **SnapManager for Microsoft SQL Server (SMSQL)** is not the selected Storage Solution, click **Change** and select it under the **Database Suite** category.



3. In the **Component Explorer** pane, select each component you want to verify and click **Add** when prompted.

When you add an item, incompatible items are grayed out.

Tip: Select the parent of a set of components to select all of its children.

4. When you are satisfied with your choices, click **Show Results**.

The IMT lists each supported configuration.

5. You can:
 - Scroll across a configuration to view the supported components and any notes or alerts for the configuration.
 - Click the configuration name to display complete information for supported components, including support history and NetApp policies and guidelines for the selected Storage Solution category.
6. If no results are returned for your configuration, use the feedback wizard to report the problem to NetApp:

- a. Click **Feedback** in the upper right corner of the IMT.
- b. Select **I cannot find my configuration**, then click **Next**.
- c. Choose **SnapManager for Microsoft SQL Server (SMSQL)** in the **Solution** drop-down, then type your comments and click **Submit**.

Fixed issues

It is a good practice to review the known issues fixed in a new release before upgrading to it.

Bug ID	Description
754449	The Backup report includes the message No volume found for mirror update, even though a SnapMirror update was successful.
756944	Database verification on a SnapVault or SnapMirror destination volume fails if a database is spread across multiple LUNs.
776216	SnapManager cannot restore database files when the database files and logs are on separate LUNs or VMDKs.
791147	SnapManager does not send an email notification when a remote restore operation or remote clone operation fails.

Known limitations

Known limitations identify platforms, devices, or functions that are not supported by this release of the product, or that do not interoperate correctly with it. Review these limitations carefully.

Database and SnapInfo directory must be on separate volumes for SnapVault backups

If you archive a database to a SnapVault backup (clustered Data ONTAP only), the database and SnapInfo directory must be on separate volumes.

Fractional space reservation policy not supported with SQL Server 2012

SnapManager's fractional space reservation policy is not supported with SQL Server 2012. SnapManager does not take action to prevent the overwrite reserve from becoming fully depleted in an SQL Server 2012 configuration.

SnapManager does not support specifying fully qualified domain names for SQL Servers

When you add an SQL Server to SnapManager, SnapManager does not support specifying a fully qualified domain name for an SQL Server instance. You must enter the SQL Server name.

Multiple backup operations required for databases on LUNs and SMB shares contained in the same volume

If your databases reside on LUNs and SMB shares that are contained in the same volume, you cannot back up those databases from a single backup operation. Instead, you should set up two backup operations: one for the databases that reside on the LUNs and one for the databases that reside on the SMB shares.

Backup with remote verification and remote cloning on available destination volumes not supported on VMDK with VMFS datastore

Attempting to mount a VMFS datastore backup copy or trying to clone such a backup copy can fail with the error `Volume is read-only`. SnapManager for Microsoft SQL Server does not support remote verification of available destination volumes for VMDK backup copies created on VMFS datastores. It also does not support remote cloning of VMDK backup copies created on VMFS datastores. Attempting either of these operations results in the error message.

Known issues

Known issues identify problems that might prevent you from using this release of the product successfully. NetApp Bugs Online provides complete information for most known issues, including any workarounds.

[NetApp Bugs Online](#)

If a Bugs Online report is available, the bug ID contains a hyperlink to the report.

No new issues have been added to the 7.0.1 version of the release notes.

Known issues identified in 7.0

Some issues were added to the 7.0 version of the release notes.

Bug ID	Description
639137	The SnapInfo directory is not immediately archived to secondary storage when performing verification on a remote backup (Data ONTAP operating in 7-Mode only).
724404	SnapManager backup verification fails on a Windows Failover Cluster running on VMware when using FC RDM LUNs.
730760	Restoring a large database to an alternate location fails with a timeout error after three hours.

Known issues identified in previous releases

Several issues reported in previous editions of the release notes continue to affect this release.

Last backup, restore, configuration, and next job information not being populated on the dashboard

In clustered instances, the dashboard values for last backup, restore configuration, and next job information is not filled in.

Taking backups for only some of the databases on a vdisk might unexpectedly delete some log backups

When you have multiple databases on a vdisk, but take a full backup of only some of the databases, the transaction logs for those backed up databases might be deleted, even though they should be

retained. For example, if you take a full backup of databases db001_D, db002_D, and db003_D, then later take a full backup of db003_D, and then later take a full backup of db001_D, the transaction logs for db001_D are deleted.

Snapshot verification from cmdlets does not use the server-specific verification server when the verification server is not explicitly mentioned

Even though there is a server-specific verification server set, if you use the restore-backup cmdlet and do not specify the verification server when performing a restore of a backup performed without verification, the default server is used for verification.

Workaround: When using the restore-backup cmdlet, specify the verification server to use.

Federated backups can fail with the addition of a remote database

(Bug ID 549665) Federated backups can fail when databases from remote SQL Server instances are added to nonfederated database groups.

Workaround: To back up databases from multiple remote hosts without federation, create or schedule backups on those databases separately by connecting to individual SQL Server hosts.

SnapManager clone on remote server fails

(Bug ID 431196) A SnapManager clone on a remote server might fail with the following error: "Operating system error 2 (The system cannot find the file specified.)" This occurs when you apply transaction logs beyond the selected full backups and the latest SnapInfo Snapshot copy is not available, even though the user interface allows you to select newer log backups.

Workaround: There is no workaround for this issue.

Messages are not sent from a VMDK configuration

(Bug ID 532734) If you are running on VMDK over NFS, SnapManager cannot send EMS and AutoSupport messages. Despite the AutoSupport message failure, SnapManager indicates that the messages have been sent.

Workaround: There is no workaround for this issue.

Documentation errors

Review these errors and omissions in the published documentation carefully.

Change to “A database not in valid configuration was not backed up”

The topic in the *SnapManager for Microsoft SQL Server Installation and Administration Guide* titled “What to do if a SnapManager backup operation fails” describes common backup failures. There is an update to the section within that topic titled “A database not in valid configuration was not backed up.”

The updated topic is as follows.

Database is not in valid configuration

A SnapManager backup operation might fail with the following message in the backup report:

```
WARNING: Database DatabaseName of ServerName is not in valid
configuration, and will not be included in this backup.
```

This message can appear if any of the following is true:

- The database is not in the online state.
For example, if autoshrink is enabled on the database, the database will not be online during the shrink operation. For information about autoshrink, see [Microsoft article 315512](#).
- The database configuration is not supported with SnapManager.
To verify that your configuration is supported, see “SQL Server configuration rules with SnapManager” and “SQL Server configurations supported with SnapManager.”

Examples of the -SnapVaultSecondary parameter

The descriptions of the clone-backup, delete-backup, reseed-backup, and restore-backup cmdlets in the *SnapManager for Microsoft SQL Server Installation and Administration Guide* do not include an example that shows how to use the -SnapVaultSecondary parameter (short form -vaultsec).

The missing examples are as follows.

Note: These examples are present in the PowerShell help.

cmdlet	Example
clone-backup	<pre>clone-backup -svr win-225-165 -Database DB2 -Inst win-225-165 -Backup sqlsnap__win-225-165_09-06-2008_13.44.51 - RestoreArchivedBackup -vaultsec 2,vserver1:volume1,vserver2:volume2</pre> This command creates a clone of database DB2 from the specified SnapVault secondary volume.
delete-backup	<pre>delete-backup -d "Db1" -bk "Db1bkup" -ArchiveBackup - vaultsec 2,sn_vserver_dev:test_volume_sec,sn_vserver_dev:test_volum e_sec2</pre> This command deletes the backup set Db1bkup from the specified SnapVault secondary volume.
reseed-backup	<pre>reseed-backup -svr 'venudhar-2k8vm2' -inst 'venudhar-2k8vm2' -ag 'testag1' -backup 'sqlsnap__VENUDHAR-2K8VM2_08-26-2012_20.46.42' - RestoreArchivedBackup</pre> This example reseeds databases that belong to the specified Availability Group from a SnapVault secondary volume chosen by SnapManager. The command does not specify a SnapVault secondary volume because the Availability Group databases are not spread across the same volumes.
restore-backup	<pre>restore-backup -svr 'VM-VS-1' -inst vm-vs-1 -d 'ds_test7' -backup sqlsnap__VM-VS-1_07-18-2008_03.19.14__Daily - RestoreArchivedBackup -vaultsec 2,vserver1:volume1,vserver2:volume2</pre> This example restores the database ds_test7 from the specified SnapVault secondary volume on the specified server instance.

Where to get help and find more information

The NetApp Support Site provides access to troubleshooting tools, product documentation, and technical assistance. You can use NetApp Community forums to connect with peers, and the NetApp Library to access technical reports and white papers.

Resource	Description
NetApp Support	Access troubleshooting tools, product documentation, and technical support assistance.
NetApp Communities	Connect with peers, ask questions, exchange ideas, find resources, and share best practices.
NetApp library of technical reports and white papers	Access technical reports, white papers, and other documents.

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You can also contact us in the following ways:

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- Telephone: +1 (408) 822-6000
- Fax: +1 (408) 822-4501
- Support telephone: +1 (888) 463-8277