

SnapManager® 5.0R1 for Microsoft® SQL Server® **Release Notes**

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Topics covered

Topics covered

These release notes provide information about SnapManager® 5.0R1 for Microsoft® SQL Server® and include the following topics:

- ◆ [“Features, enhancements, and limitations”](#) on page 2
- ◆ [“Upgrade information”](#) on page 4
- ◆ [“SnapManager system requirements”](#) on page 6
- ◆ [“Fixed issues”](#) on page 14
- ◆ [“Known issues”](#) on page 15

Features, enhancements, and limitations

Features and enhancements

SnapManager 5.0R1 for Microsoft SQL Server supports the following new features:

- ◆ Policy-driven data protection (provides SnapVault® integration)
- ◆ Database cloning wizard
- ◆ Integrity verification on SnapMirror® destination volume and SnapVault secondary storage
- ◆ Control-file-based configuration
- ◆ Support for Windows® 2008 (Standard or Enterprise Edition)
- ◆ Support for SQL Server 2008
- ◆ Transaction log backup compression (SQL Server 2008 feature)
- ◆ Support for the Filestream data type (SQL Server 2008 feature)
- ◆ SnapManager PowerShell cmdlet command-line functionality
- ◆ Support for Microsoft® Management Console (MMC) 3.0
- ◆ Support for SnapDrive® 6.0.1

Additional support:

- ◆ Support for Windows® 2008 IA-64 (Enterprise Edition)

Note

The functionality for data set and SnapVault integration with SnapManager is available only if you are using Data ONTAP 7.3 RC2 or later along with Protection Manager 3.7 D8.

Limitations

SnapManager for Microsoft SQL Server does not support the following:

- ◆ Microsoft SQL Server 6.5 or 7.0.
- ◆ SnapDrive versions earlier than SnapDrive 6.0.1
- ◆ Creation or restoration of backups of Microsoft SQL Server databases that are stored on storage devices that are provided by companies other than NetApp
- ◆ Filegroup backups or filegroup restorations of Microsoft SQL Server databases
- ◆ Differential backup

- ◆ Backup or restoration of SQL Server databases that are accessed through CIFS
- ◆ Backup of tempdb (temporary database) files

Upgrade information

You can upgrade directly to SnapManager 5.0R1 for Microsoft SQL Server from SnapManager 1.5 or 2.0 or 2.1 for Microsoft SQL Server. Do this after you have upgraded your Windows host system software to meet the SnapManager system requirements. If you upgrade the SnapDrive version on your Windows host systems, be sure that your storage system is running a compatible version of the Data ONTAP® software.

Note

You do not need to stop SQL Server instances before or during the SnapManager software upgrade process.

Note

An upgrade from SnapManager for SQL Server 2.0 or 32-bit SnapManager for SQL 2.1 to SnapManager for SQL 2.1 x64 version is not supported.

Before you upgrade SnapManager

Before you upgrade from SnapManager 1.5 or 2.0 or 2.1 to SnapManager 5.0R1 for Microsoft SQL Server, do the following:

- ◆ Ensure that each of your *Windows host systems* is running a compatible version of the Windows operating system and a compatible version of Microsoft SQL Server 2000, SQL Server 2005, or SQL Server 2008. Additional requirements depend on your configuration.
For more information, see “[Windows host system requirements](#)” on page 7.
- ◆ Ensure that your *storage system* is running a version of the Data ONTAP software that is compatible with the version of SnapDrive on each of your Windows host systems. Additional requirements depend on your configuration.
For more information, see “[Storage system requirements](#)” on page 12.

Note

For the most current list of system requirements, see the SnapManager 5.0R1 for Microsoft SQL Server Description Page on the NOW™ NetApp on the Web™ site at <http://now.netapp.com/NOW/cgi-bin/software/>.

The following information summarizes the SnapManager system requirements that are particularly relevant to upgrading from SnapManager 1.5, 2.0, or 2.1 to SnapManager 5.0R1 for Microsoft SQL Server.

Microsoft SQL Server: SnapManager supports Microsoft SQL Server 2000, SQL Server 2005, or SQL Server 2008, both Standard Edition and Enterprise Edition. For either edition of SQL Server 2000, be sure that Microsoft SQL Server 2000 Service Pack 3a or 4 is installed.

SnapDrive: SnapDrive 6.0.1 supports SnapManager 5.0R1 for Microsoft SQL Server. SnapManager for Microsoft SQL Server does not support SnapDrive versions earlier than 6.0.1.

Data ONTAP: If you need to upgrade SnapDrive on your Windows host systems, ensure that your storage system is running a compatible version of Data ONTAP.

SnapManager system requirements

For the most current list of system requirements, see the SnapManager 5.0R1 for Microsoft SQL Server Description Page on the NOW™ site at <http://now.netapp.com/NOW/cgi-bin/software/>.

This section describes the following topics:

- ◆ “[Windows host system requirements](#)” on page 7
- ◆ “[Storage system requirements](#)” on page 12

Windows host system requirements

The following table lists the Windows host system requirements:

Windows host components	Requirements
Operating system	<p>One of the following for the SnapManager 5.0R1 for SQL Server (x86) configurations:</p> <ul style="list-style-type: none"> ◆ Windows Server 2003 Standard Edition with SP2 (x86) ◆ Windows Server 2003 Enterprise Edition with SP2 (x86) ◆ Windows Server 2003 R2 Standard Edition with SP2 (x86) ◆ Windows Server 2003 R2 Enterprise Edition with SP2 (x86) ◆ Windows Server 2008 Standard Edition (x86) ◆ Windows Server 2008 Enterprise Edition (x86) <p>One of the following for the SnapManager 5.0R1 for SQL Server (x64) configurations:</p> <ul style="list-style-type: none"> ◆ Windows Server 2003 Standard Edition with SP2 (x64) ◆ Windows Server 2003 Enterprise Edition with SP2 (x64) ◆ Windows Server 2003 R2 Standard Edition with SP2 (x64) ◆ Windows Server 2003 R2 Enterprise Edition with SP2 (x64) ◆ Windows Server 2008 Standard Edition (x64) ◆ Windows Server 2008 Enterprise Edition (x64) <p>For SnapManager 5.0R1 for the SQL Server (IA-64) configurations:</p> <ul style="list-style-type: none"> ◆ Windows Server 2008 Enterprise Edition (IA-64)

Windows host components	Requirements
Microsoft Windows hotfixes	See the SnapDrive software system requirements in the <i>Installation and Administration Guide</i> for your version of SnapDrive.

Windows host components	Requirements
Microsoft SQL Server	<p>One of the following for SnapManager 5.0R1 for SQL Server (x86) configuration:</p> <ul style="list-style-type: none"> ◆ SQL Server 2005 Standard Edition with SP2 (x86) ◆ SQL Server 2005 Enterprise Edition with SP2 (x86) ◆ SQL Server 2008 Standard Edition (x86) ◆ SQL Server 2008 Enterprise Edition (x86) ◆ SQL Server 2000 Standard Edition with SP4 (x86) ◆ SQL Server 2000 Enterprise Edition with SP4 (x86) ◆ SQL Server 2008 Standard Edition (x86) ◆ SQL Server 2008 Enterprise Edition (x86) <p>One of the following for SnapManager 5.0R1 for SQL Server (x64) configuration:</p> <ul style="list-style-type: none"> ◆ SQL Server 2005 Standard Edition with SP2 (x64) ◆ SQL Server 2005 Enterprise Edition with SP2 (x64) ◆ SQL Server 2008 Standard Edition (x64) ◆ SQL Server 2008 Enterprise Edition (x64) <p>One of the following for SnapManager 5.0R1 for SQL Server (IA-64) configuration:</p> <ul style="list-style-type: none"> ◆ SQL Server 2005 Enterprise Edition with SP2 (IA-64) ◆ SQL Server 2008 Enterprise Edition (IA-64) <p>Note_____</p> <p>The preceding requirement does not apply to a remote administration server.</p> <p>_____</p>

Windows host components	Requirements
SQL Server Browser service	If the host system is running SQL Server 2005, configure the SQL Server Browser service to start automatically.
SnapDrive	<p>SnapDrive 6.0.1 and later.</p> <p>If you need to install or upgrade SnapDrive, see the <i>Installation and Administration Guide</i> for your version of SnapDrive for detailed instructions.</p> <hr/> <p>Note</p> <p>For a remote <i>administration</i> server, SnapDrive is optional unless you intend to use the remote administration server to remotely administer SnapDrive. You need SnapDrive for a remote <i>verification</i> server.</p> <hr/>
SnapDrive preferred IP address	<p>If your storage system has multiple IP addresses, configure the SnapDrive preferred IP address. See the <i>Installation and Administration Guide</i> for your version of SnapDrive.</p> <p>If you do not configure a SnapDrive preferred IP address for a storage system that has multiple IP addresses, SnapDrive times out when attempting to create Snapshot copies simultaneously for more than one LUN on a storage system.</p>
SnapManager licenses	<p>If SnapManager is per-server licensed, a SnapManager license is required on the Windows host system.</p> <hr/> <p>Note</p> <p>For SnapManager per-server licensing, you can install SnapManager without specifying a server-side license. After SnapManager has been installed, you can apply the license from the License Settings dialog box.</p> <hr/>

Windows host components	Requirements
Microsoft .NET Framework 3.5	If Microsoft .NET Framework 3.5 is not present in the host system, the SnapManager installation package installs it.
Microsoft Management Console (MMC)	You require MMC 3.0 x64 Edition or MMC 3.0 x86 Edition to launch the SnapManager snap-in console, which is a prerequisite before for starting the SnapManager installation.
Windows PowerShell	PowerShell 1.0 RTM x86 Edition or PowerShell 1.0 RTM x64 Edition is a prerequisite for running the SnapManager installation.
Other hardware and software	<p>See your SnapDrive documentation for complete details about the following system requirements:</p> <ul style="list-style-type: none"> ◆ Host hardware operating system ◆ LUN access protocol (FC or iSCSI protocol) software <p>The preceding requirements do not apply to a remote administration server.</p>

Before installation, keep in mind the following points:

- ◆ If your system has SQL Server 2008 installed, then during the installation of SnapManager 5.0R1, SnapManager automatically installs the required SQL Server 2005 backward compatibility components if they are not already installed. If you install SQL Server 2008 after upgrading or installing SnapManager, install the SQL Server 2005 backward compatibility components manually.
- ◆ If the host system is running SQL Server 2005, Microsoft Data Access Components (MDAC) 2.8 SP1 must be installed. Windows Server 2003 SP1 and SP2 include MDAC 2.8 SP2, which is required for SQL Server 2005 on Windows Server 2003.
- ◆ Be sure that TCP port 808 is open for SnapManager to function.

Storage system requirements

To be used with SnapManager, your storage system must meet the following requirements.

Storage system component	Requirements
Data ONTAP	See the SnapDrive software requirements described in the <i>Installation and Administration Guide</i> for your version of SnapDrive.
SnapManager license	A SnapManager license is required on the storage system only if you have licensed SnapManager on a per-storage-system basis.
iSCSI or FC protocol	The appropriate LUN access protocol software must be installed on the storage system that stores the databases. For more information, see the <i>Installation and Administration Guide</i> for your version of SnapDrive.
FlexClone® license	A FlexClone license is required. Note If you do not have FlexClone licensed, SnapManager does not support the verification on destination SnapMirror volumes. Also, the cloned databases will be unable to use FlexClone.
SnapMirror license	If you plan to use the SnapMirror software along with SnapManager, a SnapMirror license is required on both the source and target storage systems. For more information, see the <i>Installation and Administration Guide</i> for your version of SnapDrive.

Storage system component	Requirements
Additional requirements	All the SnapDrive requirements that apply: <ul style="list-style-type: none"> ◆ SnapRestore feature ◆ iSCSI or FC protocols ◆ SnapMirror license (if in use) ◆ SnapVault licenses on the primary and the secondary storage systems ◆ Protection Manager license ◆ Preferred IP address (if using multiple IP addresses)

Note

SnapManager offers support only to Windows guest operating systems of VMware® ESX 3.0.2 (Update 1), VMware ESX 3.5 (with updates), and Windows child operating systems of Microsoft Hyper-V™.

Fixed issues

This section lists the issues that are fixed in this release. For a complete list of known issues fixed in SnapManager 5.0R1 for Microsoft SQL Server, see the Bugs Online & Release Tools page on the NOW site. To access this page, launch your Web browser, navigate to <http://now.netapp.com/NOW/cgi-bin/bol>, type the bug ID into the Enter Bug IDs field, and then click Go!

Get-backup cmdlet might not list backups of databases configured with simple recovery model

When two or multiple databases with the simple recovery model are shared across single or more LUNs and a backup is created either using the GUI or cmdlet, then the get-backup cmdlet might not list any previously created backup sets. However, GUI still lists all backup sets.

Known issues

The following table lists and describes issues known to exist in SnapManager 5.0R1 for Microsoft SQL Server.

Bug ID	Title, description, and workaround
258503	<p>Title: Error occurs when SnapManager for SQL Server is upgraded from a SnapManager for SQL Server 2.1P or 2.1R to a 2.1.1 release.</p> <p>Description: If you install the 32-bit IBM version of the SnapManager for SQL Server 2.1 patch release (that is 2.1P1 or 2.1R1, 2.1R1P1, 2.1R1P2, or 2.1R1P3) and try to upgrade to 2.1.1 or a later release, you get the following errors:</p> <ul style="list-style-type: none">◆ SnapManager indicates that the upgrade failed to change the SnapManagerService Log On credential during the installation.◆ SnapManager indicates that the reinstall or remove parameter is missing at the command line. The installation aborts during the SnapManager launch.◆ The Windows installer starts and gives errors. <p>Workaround: Uninstall any SnapManager for SQL Server 2.1 patch release that is installed on the system before installing the new release.</p>

Bug ID	Title, description, and workaround
226516	<p>Title: At least two of the most recent SnapManager Snapshot copies that were used for SnapVault updates need to be kept online on the primary storage system.</p> <p>Description: When using SnapVault to archive backup sets, at least two of the most recent Snapshot copies that were used for the SnapVault updates should be kept online in SnapManager.</p> <p>Workaround: You can use SnapManager to delete backup sets outside the backup process. When SnapVault is used, keep at least two of the most recent Snapshot copies used for the SnapVault updates until SnapVault updates for a given backup are complete. To check which Snapshot copies are required for the SnapVault relationships, use the Snapvault destinations -s command on the SnapVault primary storage system.</p> <p>When you use SnapManager to automatically delete older backup sets as part of a backup process, be sure to configure the "Delete backups In excess of" option to a number that is equal to or greater than 2. If backups are automatically deleted based on time rather than quantity using the "Delete backups Older than" option, be sure to specify a number of days that will allow at least two of the Snapshot copies used for the SnapVault updates to remain online. This information also applies to deleting backups using the Delete Backup option from the SnapManager Action pane.</p> <p>Note _____ This workaround applies only to Snapshot copies that are used for SnapVault updates. _____</p>
295445	<p>Title: Windows Server 2008 firewall settings can cause Remote Verification Server Access errors.</p> <p>Description: The following conditions can be caused by Windows 2008 Firewall:</p> <ul style="list-style-type: none"> ◆ Configuring Windows Server 2008 as the remote verification server results in an error when the firewall is on. ◆ Execution of remote verification job on a Windows Server 2008 results in an error when the firewall is on. <p>Workaround: Ensure that the firewall rules are relaxed appropriately. The Distributed Component Object Model (DCOM) traffic should be able to flow through the firewall.</p>

Bug ID	Title, description, and workaround
310053	<p>Title: After upgrading from SnapManager 2.1 to SnapManager 5.0R1, SnapManager requires the user to add servers to be managed, even though the server was connected in SnapManager 2.1.</p> <p>Workaround: After upgrading to SMSQL 5.0R1 from earlier versions of SnapManager, add each of the required servers individually.</p>
312171	<p>Title: SnapManager server instance aliases fail to get added to the system.</p> <p>Description: An alias can be used for a verification server name, but SnapManager displays an error stating that the alias used is not a valid server instance. The alias is visible as a valid selection in the “Add Servers to be managed” dialog box but fails at a later time.</p> <p>Workaround: Specify alias names only to SQL servers and not to SQL server instances.</p>
288831	<p>Title: SnapManager displays an error if SnapDrive is not installed.</p> <p>Description: SnapManager can be installed without SnapDrive for remote administration. But when you launch SnapManager, you will get the error stating that SnapDrive is not installed on the server.</p> <p>Workaround: You can safely ignore the error and continue to connect to the host that has SQL Server and SnapDrive installed.</p>
315141	<p>Title: Clone from archives: Limitations with transaction log restore</p> <p>Description: When an archive of a backup is used as a source for creating a clone, and if the transaction logs are selected to be applied, the clone operation fails. The reason for the failure is that the transaction log backups are not available for the mounted archived Snapshot copies.</p> <p>This happens because during the archival process, only the transaction log backups that were created along with their full backups are made available through the archived Snapshot copies.</p> <p>Workaround: Do not select transaction log backups during a clone from archive operation. If the transaction log backups are available by other means, the databases can also be left in read-only standby mode or a non-operational mode and the transaction log backups can be applied later.</p>

Bug ID	Title, description, and workaround
318289	<p>Title: The “Details” button is not available in the Configuration wizard.</p> <p>Description: Because the “Details” button is not available, you can move the database to a LUN but you cannot change the file path on the selected LUN.</p> <p>Workaround: Use the SQL Server Management Studio to change the file path on the selected LUN. You can also export the configuration to a control file and then import the modified control file with the correct file path.</p>
259806	<p>Title: Security limitations in SnapManager.</p> <p>Description: You might come across the following security limitations in SnapManager:</p> <ul style="list-style-type: none"> ◆ If SQL Server or SQL Server Agent is started in a low privileged or nonlocal administrator group, you can come across the following error: DBCC options get changed to NO_INFOMSGS and PHYSICAL_ONLY when they are set to be different, and the job runs using SQL Server Agent. ◆ If you try to schedule a job using SnapManager, it fails to create or open the registry key on a Windows Server 2008 system. <p>Workaround: Provide full control permission to the following SnapManager registry keys in the nonlocal account or the less privileged group account in which SQL Server Agent started:</p> <ul style="list-style-type: none"> ◆ HKLM\SOFTWARE\Network Appliance\SnapManager for SQL Server ◆ All of the child keys
253962	<p>Title: Managing database that has an empty filegroup.</p> <p>Description: When a server has a database that has an empty filegroup, and that empty filegroup is the first filegroup of the database, performing the backup operation can crash the file SnapMgrSql.exe.</p> <p>Workaround: Delete all empty filegroups or add a data file to the empty filegroups.</p>

Bug ID	Title, description, and workaround
322339	<p>Title: Documentation modifications: Backup of tempdb files.</p> <p>a) Description: In the "What SnapManager does not do" section of the <i>Installation and Administration Guide</i>, the following text appears:</p> <p style="padding-left: 40px;">SnapManager does not back up the tempdb or other system database files.</p> <p>Workaround: Substitute the following text:</p> <p>tempdb files contain temporary data and are created every time SQL Server restarts. SnapManager does not back up tempdb files but backs up all other system database files. However, if LUNs that contain system databases are included in a data set and replicated to the SnapVault secondary storage, SnapManager does not restore the system database files from the SnapVault secondary storage. You can restore the system database files manually by connecting the LUNs that contain the system databases to the restore operation.</p> <p>b) Description: In the section "Restoring system databases from SnapManager backup sets > About this section" in <i>SnapManager 5.0 for Microsoft SQL Server Installation and Administration Guide</i>, the following text appears:</p> <p>After the failure of your SQL Server system databases (distribution, master, tempdb, model, and msdb databases), you can restore them from SnapManager backup sets for default and named SQL Server instances.</p> <p>Workaround: Substitute the following text:</p> <p>After the failure of your SQL Server system databases (distribution, master, model, and msdb databases), you can restore them from SnapManager backup sets for default and named SQL Server instances.</p>

