

SnapManager® 2.1 for Microsoft® SQL Server™

Release Notes

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Topics covered

About this document

These release notes cover the following topics:

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Features of this release

New and enhanced features

The major new and enhanced features of SnapManager® 2.1 for Microsoft® SQL Server™ include the following items:

- ◆ Fractional space reservation policy settings
- ◆ NTFS volume mount point support
- ◆ Availability both in x64 and x86 builds
- ◆ Backup of read-only databases
- ◆ Management and configuration of resource databases

Limitations

Features not supported with this release

SnapManager 2.1 for Microsoft SQL Server does not support the following uses:

- ◆ SnapManager 2.1 does not support Microsoft SQL Server 6.5 or 7.0.
- ◆ SnapManager 2.1 does not support SnapDrive versions prior to 4.1.
- ◆ SnapManager 2.1 does not create or restore backups of Microsoft SQL Server databases that are stored on storage devices that are provided by companies other than NetApp.
- ◆ SnapManager 2.1 does not support filegroup backups or filegroup restores of Microsoft SQL Server databases.
- ◆ SnapManager 2.1 is not capable of backing up or restoring SQL Server databases that are accessed through CIFS.

Upgrade information

You can upgrade directly to SnapManager 2.1 for Microsoft SQL Server from SnapManager 1.5 or 2.0 for Microsoft SQL Server, 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 NetApp 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 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 to SnapManager 2.1 for Microsoft SQL Server, do the following:

1. 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 or 2005. Additional requirements depend on your configuration.

For more information, see “[Windows host system requirements](#)” on page 6.

2. Ensure that your *NetApp 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 “[NetApp storage system requirements](#)” on page 8.

Note

For the most current list of system requirements, see the SnapManager 2.1 for Microsoft SQL Server Description Page on the NetApp on the Web (NOW) site at <http://now.netapp.com/NOW/cgi-bin/software/>.

The following paragraphs summarize the SnapManager system requirements that are particularly relevant to upgrading from SnapManager 1.5 or 2.0 to SnapManager 2.1 for Microsoft SQL Server.

Microsoft SQL Server: SnapManager supports Microsoft SQL Server 2000 or 2005, 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: SnapManager 2.1 for Microsoft SQL Server is supported with SnapDrive **4.1**. SnapManager for Microsoft SQL Server does not support SnapDrive versions prior to 4.1.

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

SnapManager system requirements

For the most current list of system requirements, see the SnapManager 2.1 for Microsoft SQL Server Description Page on the NetApp on the Web (NOW) site at <http://now.netapp.com/NOW/cgi-bin/software/>.

Windows host system requirements

The following table lists the system requirements for SnapManager 2.1 for Microsoft SQL Server.

Windows host component	Requirement if the host system is running Windows 2000 Server	Requirement if the host system is running Windows Server 2003
Operating system	One of the following: ◆ Windows 2000 Server with SP4 ◆ Windows 2000 Advanced Server with SP4 If the host system is running SQL Server 2005, the following version of Microsoft Data Access Components (MDAC) 2.8 <i>SP1</i> must be installed.	One of the following: ◆ Windows Server 2003 R2 Standard or Enterprise Edition with SP1(x86) ◆ Windows Server 2003 Standard or Enterprise Edition with SP1(x86) Note _____ Windows Server 2003 SP1 includes MDAC 2.8 SP2, which is required for SQL Server 2005 on Windows Server 2003. ◆ Windows Server 2003 R2 Standard or Enterprise Edition with SP1(x64) ◆ Windows Server 2003 Standard or Enterprise Edition with SP1(x64)
Microsoft Windows hotfixes	See the SnapDrive software system requirements.	

Windows host component	Requirement if the host system is running Windows 2000 Server	Requirement if the host system is running Windows Server 2003
Microsoft SQL Server	One of the following editions of Microsoft SQL Server: ◆ Microsoft SQL Server 2000 Standard Edition with SP3a or SP4 (x86) ◆ Microsoft SQL Server 2005 Standard or Enterprise Edition (x86) ◆ Microsoft SQL Server 2005 Standard or Enterprise Edition with SP1(x86) ◆ Microsoft SQL Server 2005 Enterprise Edition (x64) ◆ Microsoft SQL Server 2005 Enterprise Edition with SP1 (x64) Note_____ The preceding requirement does not apply to a remote administration server.	
SQL Browser service	If the host system is running SQL Server 2005, configure the SQL Browser service to start automatically.	
SnapDrive	SnapDrive 4.1(x86) SnapDrive 4.1(x64) If the NetApp storage system has multiple IP addressees, configure the preferred IP address. Note_____ For a remote <i>administration</i> server, SnapDrive is optional unless you intend to use the remote administration server to remotely administer SnapDrive. For a remote <i>verification</i> server, SnapDrive is required. _____ When used with SnapDrive 4.1 in a clustered environment, SnapManager 2.1 is capable of restoring databases in a cluster without taking the SQL Server cluster group offline.	
Windows registry keys	To enable this feature, you must configure all of the nodes in the cluster by setting a registry variable. This configuration step is described in the SnapManager 2.1 for <i>Microsoft SQL Server Installation and Administration Guide</i> .	
Licenses enabled	Depends on the type of SnapManager licensing purchased: ◆ If SnapManager is licensed per SQL Server, a SnapManager license is required on the Windows host system. ◆ If SnapManager is licensed per NetApp storage system, a SnapManager license is required on the storage system.	

Windows host component	Requirement if the host system is running Windows 2000 Server	Requirement if the host system is running Windows Server 2003
Other hardware and software	See your SnapDrive documentation for complete details about the following system requirements: ◆ Host hardware platform ◆ LUN access protocol software Note_____ The preceding requirements do not apply to a remote administration server. _____	

NetApp storage system requirements

For it to be used with SnapManager, your NetApp storage system must meet the following requirements.

Storage system component	Requirements
Data ONTAP	See the SnapDrive software system requirements. This information is provided in the <i>SnapDrive 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.
Additional requirements	All of the SnapDrive requirements that apply: ◆ SnapRestore® feature ◆ iSCSI protocol, FCP protocols, or both ◆ SnapMirror license (if SnapMirror is used)

Bug fixes

The following table lists and describes bugs fixed in SnapManager 2.1 for Microsoft SQL Server. For more information about any of these bugs, 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.

Bug ID	Description
99132	SnapManager for SQL point-in-time restore fails on Japanese and German systems.
161211	After each SnapManager for SQL backup, an “Update SnapMirror” is done, even though the customer specified not to update SnapMirror.

Known issues

The following table lists and describes issues known to exist in SnapManager 2.1 for Microsoft SQL Server. For the latest information about workarounds, 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.

Bug ID	Description and workaround
90637	Unable to perform SQL Server database migration, transaction log backup, or restore of databases whose names contain the “[” or “]” character. SnapManager for Microsoft SQL Server is unable to migrate a database to virtual disk if the name contains either the “[” character or the “]” character. Failures also occur when performing transaction log backups and restore of a database whose name contains either the “[” character or the “]” character. Workaround: Rename the database using a name that does not contain either the “[” character or the “]” character.
92736	The SnapManager operation fails with Error Code: 0x80040154 “Class not registered”. If any of the COM components used by SnapManager is not registered correctly, SnapManager displays an error message with error code 0x80040154 “Class not registered” when you attempt to perform a SnapManager operation. The operation fails, and the error message appears in either the operational status report or a Windows pop-up message box. Workaround: 1. Check the context of the operation to identify which COM component that SnapManager attempted to use is not registered. It can be a Microsoft SQL Server component (such as the VDI component or the SQL-DMO component), the SnapDrive service, or the SnapManager server component itself. To determine which SnapManager operation failed and which COM component caused the failure, see the Windows pop-up message box, the SnapManager operational status report, and the application event log error. 2. Reinstall the identified COM component or contact the vendor of the COM component for assistance.

Bug ID	Description and workaround
144161	The backups for a database are available for restore from more than one place after the database configuration was changed. In the SnapManager Restore tab or in the SnapManager Restore wizard, the backups for a database might be listed in more than one place if the configuration of this database was changed. The backups for a database might be listed in the following locations in the tree view: ◆ Under its SQL Server name/database name The backup listed under the SQL Server instance name and database name is the backup that was created when the database was located on a LUN that was not used by any other databases. ◆ Under its drive letter (VDISK__<i>DriveLetter</i>) The backup listed under its drive letter is the backup that was created when other databases were located on the same LUN as this database. This behavior is expected if a database configuration was changed and the previous backup was not deleted. Workaround: The backups listed in both locations in the tree can be restored as long as they meet the prerequisites of SnapManager Restore. The administrator should identify and select the correct backup when restoring a database whose configuration was changed. When restoring the backup under the SQL Server name/database name tree view, if the database is sharing the LUN with other databases, then SnapManager uses the copy-based method to perform the restore operation.
144499	The backup operation might stall when a clustered SQL Server instance moves from one node to another while a backup is in progress. SnapManager backup might stall when a clustered SQL Server instance moves from one node to another in the middle of a SnapManager backup operation. The SnapManager application is more likely to stall while performing a stream-based full database backup operation or a transaction log backup operation. Both of these SnapManager operations use the Microsoft SQL-DMO API. The stall occurs because the SnapManager application does not receive an indication that the backup job aborted due to the SQL Server instance moving from one node to another. Workaround: If the SnapManager operation stalls under these circumstances, use Windows Task Manager to stop both SnapManager .exe and SmSqlSrvr .exe, and then rerun the SnapManager backup operation.

Bug ID	Description and workaround
144988	An information type of event is logged for a SnapManager installation failure. If the SmSqlSrvr.exe process, the SnapManagerDebug.exe process, or both are running during the SnapManager installation process, the installation package aborts the installation, and MsiInstaller logs an informational event for a SnapManager installation failure. Workaround: None.
145575	A SystemTimeToFileTime error might be reported when you double-click on a SnapManager backup. When you double-click on a SnapManager backup either in the SnapManager Restore tab or the SnapManager Restore wizard, a “SystemTimeToFileTime” error might be reported. SnapManager received this error from the SQL Server while reading the backup header information. If you examine the application event log, you might find that an event with ID 3266 has been reported by SQL Server. For more information on this event, see the following Microsoft KB article; http://support.microsoft.com/default.aspx?scid=kb;en-us;290787 Workaround: This backup set might still be restorable. If you need to restore from this backup set, be sure to verify the database using DBCC after the restore operation finishes.
190932	Uninstall of SMSQL leaves stale registry entries in mscs.. In a cluster environment, when uninstalling SnapManager for Microsoft SQL Server from any node, uninstaller leaves the registry key in the following places: HKEY_LOCAL_MACHINE\Cluster\SOFTWARE\Network Appliance\SnapManager for SQL\Server HKEY_LOCAL_MACHINE\Cluster\SOFTWARE\Network Appliance\SnapMgrService Uninstall does this because it assumes other nodes are still sharing the registry key. Workaround: If you have uninstalled SnapManager for Microsoft SQL from all nodes, you can safely delete the registry key from both of the above mentioned places by using Register Editor.

Bug ID	Description and workaround
213839	SnapManager binary files installed in the Windows system directory. ◆ When you install SnapManager, the following binary files are installed in the windows system directory: <i>mfc71.dll</i> <i>mfc71u.dll</i> <i>msvc71.dll</i> <i>msvcr71.dll</i> When you uninstall SnapManager, these binary files are removed automatically provided no other application is using it. ◆ The following SnapManager installation binary package files are redistributed in the Windows Assembly directory WinSxS: <i>ATL80.dll</i> <i>msvcm80.dll</i> <i>msvc80.dll</i> <i>msvcr80.dll</i> <i>mfc80.dll</i> <i>mfc80u.dll</i> <i>mfc80.dll</i> <i>mfc80u.dll</i> <i>vcomp.dll</i> When you uninstall SnapManager, these files are not removed automatically because they may be in use by some other applications installed on the Windows system. ◆ The following SnapManager installation binary package files are installed in the Common Files\InstallShield\Driver\Intel 32\ directory: <i>IDriver.exe</i> <i>IDriver2.exe</i> <i>ISRT.dll</i> <i>IScrCnv.dll</i> <i>IUserCnv.dll</i> <i>_ISRES1033.dll</i> <i>iGdiCnv.dll</i> <i>objpsCnv.dll</i>

Bug ID	Description and workaround
	When you uninstall SnapManager, these files are not removed automatically because they may be in use by some other applications installed on the Windows system. ◆ The following binary file is cached by SnapManager in the Windows Installer directory: <i>SnapManager® for Microsoft SQL.msi</i> When you uninstall SnapManager, this binary file is not removed automatically. This file can be accessed from the Add/Remove Programs panel, and is used for maintenance and repair activities.