

SnapManager® 5.2.1 for Microsoft® SQL Server® Release Notes

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SnapManager 5.2.1 for Microsoft SQL Server release summary

SnapManager 5.2.1 for Microsoft SQL Server contains bug fixes in addition to all of the features and bug fixes in SnapManager for Microsoft SQL Server 5.2.

The features found in both SnapManager 5.2 and 5.2.1 for Microsoft SQL Server include the following:

Enterprise monitoring and reporting	Enterprise monitoring and reporting enables you to report the status of backup, verification, and clone operations by sending application event log or email notifications at fixed intervals.
Up-to-the-minute backup retention management	Configuring the number of transaction log backups your system retains enables you to balance up-to-the-minute restore needs with storage efficiency.
Clone database lifecycles	A cloned database lifecycle comprises automatic, scheduled cloned database resynchronization and deletion.
Federated full backup	You can use Snapshot copy-based full database backup to back up databases from different instances or different servers at the same time. You can add databases from multiple servers and multiple instances to the same federated group. Backing up a federated group backs up all databases in that group at the same time.
Federated transaction log backup	Federated transaction log backup enables you to set marks on transaction logs of all databases in a federated backup group at the same time, before backing up transaction logs from instances distributed between multiple servers.
Restore to mark	Restore to marked transaction operations enable you to restore a database to a marked transaction. Using the marks created on a federated transaction log backup, you can restore databases to the same marked transaction across multiple databases, for asynchronous restoration.
Cluster-Mode support	SnapManager 5.2 and 5.2.1 for SQL Server with SnapDrive 6.4 for Windows supports clustered configurations.

Fixed issues

SnapManager 5.2.1 for SQL Server adds bug fixes to those in SnapManager 5.2.

Note: Not all bugs fixed in SnapManager 5.2 are listed here.

Issues fixed in SnapManager 5.2.1

Bug ID 579185

Title: Remote clone to SnapMirror destination volume fails while mounting Snapshot copy

Description: Cloning a database from a backup set to an available SnapMirror destination volume fails with error "Clone on snap mirror destination volume to a remote server (in case of VMDK's) is failing: Remote clone operation failed: Error code: 0xc0041057, Error Code: 0xc0041057 Further details may be found in the SnapManager report or event logs."

Bug ID 585632

Title: Restore and clone might fail with error "Logical file db_data is not part of database db, Use RESTORE FILELISTONLY to list the logical file names"

Description: When performing a database restore or clone operation, the operation might fail with the following error messages the SnapManager report: Failed to prepare VDI mount snapshot. Error encountered when executing SQL command: Msg 3234, SevLevel 16, State 2, SQLState 42000 [Microsoft][ODBC SQL Server Driver][SQL Server]Logical file 'db_Data' is not part of database 'db'. Use RESTORE FILELISTONLY to list the logical file names. Msg 3013, SevLevel 16, State 1, SQLState 42000 [Microsoft][ODBC SQL Server Driver][SQL Server]RESTORE DATABASE is terminating abnormally. Error Code: 0xc00408a0 Unable to get VDI command to perform snapshot creation or LUN restore. The SQL command executed. Failed to restore SQL Server database [db] of [inst]. The problem will occur under the following conditions: 1. Multiple databases are sharing the same LUN or two LUNs; 2. Among databases sharing LUN(s), there are more than one databases whose name's first 4 characters are the same, and those databases belong to the same SQL Server instance, or instances when the first 4 characters of the instances' names are the same.

Issues fixed in SnapManager 5.2

Bug ID 425134

Title: Restore to remote server is not supported.

Description: When you select a remote server for a restore operation, the Restore Wizard displays the following message at the end of the process:

Unable to locate SQL Server instance selected for restore operation

When you use the Restore wizard or Restore window in the Action pane, you are performing an in-place restore. To perform a restore to an alternate location, use the Clone wizard or Clone window in the Action pane.

Bug ID 502330

Title: Remote Backup cloning to local SQL cluster instance fails with SnapManager 5.1P1 for SQL Server.

Description: When you clone a database from its archived backup to the local SQL cluster instance, the clone operation fails with the following error:

Mounting snapshot using Dataset [SnapMgr_SQLServer_SQL2008CLUS3] with Backup Version [1304262339] and Backup ID [39669]...

SDDatasetBackupConnect failed.

[SDAPI Error]: Operating System does not support mounting non-shared disk on a shared volume. Please change disk type or select different mount point.

Unable to mount snapshot from dataset.

Bug ID 483101

Title: Log truncation behavior in new-backup.

Description: In previous versions of SnapManager for SQL Server, backup logs truncation was not the expected behavior.

In SnapManager 5.2 for SQL Server, logs are truncated by default. To support this new default behavior, SnapManager introduces the new -TruncateLogs parameter for new-backup. The -TruncateLogs value is automatically set to true.

Bug ID 517370

Title: SnapManager 5.1 for SQL Server is unable to get valid backup time from the SnapInfo Snapshot name.

Description: When using the generic naming convention for backup operations, delete operations might give the following backup report warning: "Unable to get valid backup time from snapinfo snapshot name. No backup data set will be deleted."

Bug ID 465174

Title: Migrating databases to SnapManager 5.1 for SQL Server sometimes generates errors.

Description: When the database name starts with a number, or contains '-', '_', or a space in between, migration or backup operations generate an error similar to the following: "AUTO_SHRINK is not a recognized SET option."

Bug ID 457389

Title: Full backups with unique naming cause TRB file irregularities in the SnapInfo directory.

Description: Changing the naming convention of full backups to "unique" causes transaction log backups to stop rotating TRB files in the SnapInfo directory. Instead of keeping the specified number of backups, the SnapInfo directory keeps all the log backups created since the oldest full backup. If the last full backup naming convention is "generic," TRB files are rotated in the expected manner. If the naming convention is "unique," TRB files are saved regardless of configuration file specifications.

Bug ID 467974

Title: SnapManager 5.1 for SQL Server Configuration wizard takes the SQL Cluster resource online and offline without prompting.

Description: When there are databases on mount point root LUNs, the Configuration wizard can take the SQL Cluster resource offline and online without configuration changes to prompt this activity.

Bug ID 492714

Title: The clone to remote server tries to connect to RemoteSQLServer\LocalSQLServer.

Description: If you are using the SnapManager GUI to perform a clone operation on one or more databases sharing a LUN with other remote server databases, the clone operation generates the following error:

```
WARNING: Unable to find the SQL Server instance name [RemoteSQLServer
\LocalSQLServer] from SQL Server instance list on host [RemoteSQLServer].
```

```
Connecting to server [RemoteSQLServer\LocalSQLServer]...
```

```
Error Code 80040000
```

```
Description: SQL Server does not exist or access denied.
```

```
ConnectionOpen (Connect()).
```

```
[SQL-DMO API Error]: Source: Microsoft SQL-DMO (ODBC SQLState: 08001)
```

```
Error Message: Invalid OLEVERB structure
```

Bug ID 457833

Title: Remote backup cloning to a remote server fails.

Description: When you use SnapManager 5.1 for SQL Server to perform remote backup cloning to a remote server, the attempted operation fails with an error similar to the following: Getting remote backup ID for dataset [(null)] with Backup Version [0]...

Bug ID 467369

Title: SnapManager for SQL Server email notifications are not sent when multiple email addresses are specified.

Description: Email notification failure occurs when you add certain values to the SMTP SERVER, TO, or FROM email address fields in the Notification Settings dialog.

The *SnapManager 5.2 for Microsoft SQL Server Installation and Administration Guide* has been updated with the above correct email format.

Bug ID 366513

Title: SnapManager for SQL Server deletes current SnapInfo directory backup sets if a SnapDrive error occurs.

Description: During backup delete operations after a normal backup, SnapManager might delete SnapInfo directories if it cannot retrieve a Snapshot list of the database LUNs from SnapDrive. This can result in the deletion of valid backups.

Bug ID 483213

Title: Database backups with names greater than 86 characters result in incomplete Snapshot copies.

Description: When a database name is longer than 86 characters, SnapManager backups might fail during full database or transaction log backup. The failure generates an error similar to the following: "Error Code: 0xc0040810 Invalid path." The SnapManager GUI indicates a successful backup, despite this error.

Bug ID 494762

Title: SnapManager configuration settings in a Microsoft Cluster environment are not on a per SQL Server instance basis.

Description: In previous versions of SnapManager for SQL Server, the Backup Verification Settings were configured only on a global basis. The MountPointDir and UseDrvLetterIfAvail registry values were used for verification of all SQL instances, and during a Clone Restore and Restore job.

SnapManager 5.2 for SQL Server introduces the -TargetServerMountPointDir parameter for the clone-database and clone-backup cmdlets. You can use this parameter to specify the mount point path or the directory target server on a per instance basis.

Bug ID 484985

Title: Scheduled job creation is incorrect with the named SQL Server instance.

Description: Powershell cmdlet backup jobs for a named server fail to connect if the default unnamed (single part) instance does not exist on the same machine or cluster. An example of this is if you had a SQL Server instance named SQLHOST\NAMEDINST and specified a cmdlet path as follows:

```
new-backup -svr SQLHOST -d SQLHOST\NAMEDINST,1,dbXYZ
```

When you back up the database dbXYZ on the server SQLHOST\NAMEDINST, it fails to connect if there is no unnamed default SQLHOST instance on the same machine. You also encounter this when you schedule a backup of the entire host instead of just individual databases and only named servers exist.

Bug ID 483192

Title: SnapManager fails to restore a single database from a LUN with multiple databases in a clustered instance.

Description: If you are performing copy restore operations in a clustered environment, the restore operation fails with an error similar to the following: "Operating System does not support mounting non-shared disk on a shared volume."

Bug ID 525052

Title: SnapManager for SQL Server does not indicate why a location is detected as invalid/local.

Description: In previous versions of SnapManager for SQL Server, Migration wizard "invalid/local" errors provided insufficient information regarding why SnapManager for SQL has detected this as invalid.

SnapManager 5.2 for SQL Server has updated ToolTips messages with more thorough information.

Known issues

You should be familiar with the known issues in SnapManager 5.2.1 for SQL Server.

Concurrent verification job fails to mount Snapshot copies

(Bug ID 543831) When you run concurrent verification jobs, the verification job might fail to mount a Snapshot copy with error "The parameter is incorrect."

Workaround: There is no workaround for this issue.

Operation information not populating clustered SQL Server instance dashboards

(Bug ID 550310) Information about the most recent backup, restore, configuration, and next job operations is not populating the dashboard of cluster SQL Server instances.

Workaround: There is no workaround for this issue.

SnapManager for SQL Server 64-bit cannot detect some 32-bit instances

(Bug ID 534761) When SQL Server 2008 64-bit and SQL Server 2005 SP3 are installed on the same Windows Server 2008 R2, SnapManager does not display the 64-bit and 32-bit servers at the same time.

Workaround: Manually add two registry key entries to simultaneously manage both 64-bit and 32-bit SQL Server instances:

1. Manually add a DWORD value named `UseRegListLocalInstance` under `HKEY_LOCAL_MACHINE\SOFTWARE\Network Appliance\SnapManager for SQL Server\Server\` and set its value to 1.
2. Under the same registry key, add a String value name "ListInstalledInstances", and enter the local installed 64-bit and 32-bit SQL Server instances with the following format:
"server\instance1,server\instance2"
3. Restart SnapManager services.

Restore operations for Windows Server 2008 fail with certain mount point configurations

(Bug ID 365915) If you are running Windows Server 2008 in a clustered environment, locating databases or logs in the mount point root directory can cause restore operations to fail.

Workaround: Move the database so it is not located in the root directory.

Unclear error message about disabled services

(Bug ID 530789) If the Windows services in your SQL Server host are disabled or uninstalled when connecting to a SQL Server instance, you receive error 0xC0040804: "Failed to validate SQL Server for verification."

Workaround: Before connecting to a SQL Server instance, verify that your SQL Server Services are enabled and running.

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.

Snapshot copy deletion errors

(Bug ID 541117) If a Snapshot copy is deleted for a database, it is also deleted for other databases sharing the same Snapshot copy. This can result in an error message similar to the following:
Error: The backup specified for delete could not be found. Please verify the input and retry the operation.

Workaround: There is no workaround for this issue.

Backup set restore operation failure

(Bug ID 538684) If one of the databases has failed verification in a configuration where multiple databases are sharing one or more LUNs, you cannot use the SnapManager GUI to restore a database from a backup set.

Workaround: To restore a database in these circumstances, use the SnapManager PowerShell cmdlet `restore-backup`.

Email notification failure

(Bug ID 529678) SnapManager email notifications can fail with an error similar to the following: Failure sending mail invalid lengths for a base 64char array.

Workaround: To resolve email failures with this error, add the following registry key to `HKEY_LOCAL_MACHINE\SOFTWARE\Network Appliance\SnapManager for SQL Server\Server`:

REG_DWORD, Key value Name = SendEmailViaDotNetClr, set the value = 0

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Clone wizard incorrectly appends certain cloned database names

(Bug ID 525418) If you clone one database on a LUN containing multiple databases, `__clone` is appended to the database name, regardless of Clone wizard instructions.

Workaround: There is no workaround for this issue.

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.

Verify application launches with Least Privilege user token

(Bug ID 529841) Some executables need administrative privileges in the host to update the SnapManager-specific registry keys in the system, to add and remove cluster resources, to bring online and take offline SQL databases, to detach and attach SQL databases, and so on. The data in the registry is used for storing the default values of certain fields that SnapManager requires for its operation. If you do not set `requestedExecutionLevel` to `highestAvailable`, the application fails to run.

The following executables have the `requestedExecutionLevel` set at `highestAvailable`:

- `SMSQLJobLauncher.exe`
- `SMSQLJobParser.exe`
- `SMSQLUpgradeJobs.exe`
- `SMVI_Metadata_update.exe`
- `SnapMgrService.exe`

Workaround: You can avoid this issue by modifying the `requestedExecutionLevel` as `highestAvailable`.

For each InstallShield custom action, InstallShield extracts `ISBEW64.exe` to a different folder in the temp location. These files are not always automatically deleted. Delete any leftover items manually.

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