

Open Systems SnapVault® 2.5

Release Notes

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Topics covered

About this release

Open Systems SnapVault® 2.5 introduces common Snapshot™ copy and enhanced checkpoint functionality. For details about bug fixes, see Bugs Online in NOW™ NetApp on the Web™ at <http://now.netapp.com/NOW/cgi-bin/bol>.

These release notes include enhancements and fixes for Open Systems SnapVault 2.5 or earlier. For hardware and software requirements, and configuration settings, see the Open Systems SnapVault 2.5 NOW pages and the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

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Enhancements

The enhancements in the Open Systems SnapVault 2.5 release are as follows:

- ◆ “Support for block-level checkpoints”
- ◆ “Support for common Snapshot management”
- ◆ “Support for Windows EventLog”
- ◆ “Support for Windows® 64-bit platform”
- ◆ “Support for compression and encryption in the Logical Replication (LREP) tool”

Support for block-level checkpoints

Prior to Open Systems SnapVault 2.5 release, checkpoints were allowed only at the end of files. The checkpoint mechanism was not useful if large files were transferred, as checkpoint can be taken only after the end of the file transfer. This resulted in sending all the file data again, if there was a transfer failure.

For such transfers, Open Systems SnapVault 2.5 supports the following improvements in the checkpoint mechanism:

- ◆ Enabling checkpoints at block levels inside files—This improvement is useful, especially when the data set contains large files (greater than 100 MB). Checkpoints are allowed inside files, therefore you can restart the transfer even from the middle of a file.
- ◆ Configuring checkpoint intervals—You can configure a checkpoint interval. The default value is set to 300 seconds (5 minutes).

Support for common Snapshot management

In releases prior to Open Systems SnapVault 2.5, whenever the transfer of files failed, the Snapshot copies were deleted and a new Snapshot copy was created during the transfer restart. However, Open Systems SnapVault 2.5 has the ability to retain old Snapshot copies and to use these copies subsequently during transfer restarts. This process is termed as common Snapshot management.

A Snapshot copy is a point-in-time copy of a file system that facilitates data recovery. You can access Snapshot copies to recover from accidental deletions. Whenever there is a transfer of a data set or files from a primary storage system to a secondary storage system, Snapshot copies the files and keeps a backup. Thus, if the connection between the primary storage system and the secondary storage system aborts or the transfer of files restart, the data is retained from the

Snapshot copy. For more information, see the chapter about configuring Open Systems SnapVault in the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

Support for Windows EventLog

With Open Systems SnapVault support for Windows EventLog, you can maintain the records of all the events that occur in the system. The EventLog files record information about all that is happening in a system at any given point in time. It is necessary to record the events to help you carry out tasks, for example, troubleshooting problems or capacity planning. For more information, see the chapter about configuring Open Systems SnapVault in the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

Support for Windows® 64-bit platform

Open Systems SnapVault 2.5 provides separate binaries for Windows 64-bit platform (Windows Server 2003). For more information about the requirements, see the chapter about installing the Open Systems SnapVault software in the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

Support for compression and encryption in the Logical Replication (LREP) tool

The LREP tool is packaged with the Open Systems SnapVault software. The LREP tool is also available as a separate downloadable binary. For more information, see the *Logical Replication (LREP) Tool 2.0 User Guide*.

Bug fixes

The following table lists the bugs that were fixed in Open Systems SnapVault 2.5. 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 ID(s) field, and then click Go!

Bug ID	Description
183022	Sparse file in Windows does not show up as sparse after restore.
201180	Enabling svestimator can result in transfer timeouts.
227529	Open Systems SnapVault 2.3 fails to install on certain client configurations.
236236	Open Systems SnapVault database restore support is limited to 4 GB. Database restore fails if the uncompressed database size is more than 4 GB.
242071	Open Systems SnapVault update fails on AIX® for very large data sets.
252983	Open Systems SnapVault backups fail when Data ONTAP is upgraded from prior 7.2 (for example, 7.1.2, and so on) to 7.2 or 7.2.x.

Limitations

In addition to the information in this section, familiarize yourself with the limitations of Open Systems SnapVault 2.5 listed in the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

Reverting to earlier versions is not supported

Open Systems SnapVault 2.5 does not support reverting to earlier versions.

Checkpointed baseline transfers fail during the upgrade to Open Systems SnapVault 2.5

Checkpointed baseline transfers fail when any release prior to Open Systems SnapVault 2.3.1 is upgraded to Open Systems SnapVault 2.5.

Checkpointed baseline transfers fail under the following conditions:

- ◆ A baseline transfer using an earlier version of Open Systems SnapVault aborts or fails midway.
- ◆ An upgrade to Open Systems SnapVault 2.5.
- ◆ The `snapvault status` command is run for this transfer on the storage system, and it displays “idle with restart checkpoint” or “pending with restart checkpoint”.
- ◆ Any attempt to restart this aborted transfer from the checkpoint fails.

Workaround: Release the existing baseline relationship and create a new relationship.

Restoring to a directory that is part of a SnapVault relationship is not allowed

If you attempt to restore to a directory involved in a SnapVault relationship by using the `snapvault restore` command, the attempt fails with the following message:

```
Invalid Qtree/Snapshot requested
Directory in wrong phase
Error performing restore. Check snapvault log.
```

The following information will be logged in the SnapVault log files:

```
Invalid Qtree/Snapshot requested
Directory in wrong phase
```

You can restore to such a directory by first releasing the SnapVault relationship using the `snapvault release` command as follows:

`snapvault release pathname secondary:secondary_qtree`

After releasing the SnapVault relationship and restoring the files, you must resynchronize the SnapVault relationship before subsequent updates can succeed.

This behavior was allowed in the releases prior to Open Systems SnapVault 2.1.

Support for extended attributes

Open Systems SnapVault does not support extended attributes on any of the supported UNIX file systems.

Crossing NFS mountpoints is not supported

Open Systems SnapVault does not cross Network File System (NFS) mountpoints when backing up or restoring data.

Cannot resynchronize restored subdirectories and single files

Open Systems SnapVault does not support resynchronizing restored subdirectories and single files.

Resynchronizing an Open Systems SnapVault relationship

Currently, resynchronization is supported on Data ONTAP 7.2, and later releases in the 7.2.x release family. For more details on the availability of this feature, see the Knowledgebase article kb12138 at <http://now.netapp.com/Knowledgebase/>.

NTFS compressed files and directories lose compressed attributes when restored

Open Systems SnapVault does not restore the compressed attribute on a Windows file if both the following conditions are true:

- ◆ The file has a compressed attribute set.
- ◆ The file has a sparse or compressed alternate data stream attached.

In case of compressed directories, the compressed attributes are lost when restored, regardless of the alternate data streams.

Checkpoint restart results in failure of the restore operation

A restore operation on a relation fails when the baseline transfer involves checkpoint restarts. This problem occurs when the data set contains access control lists (ACLs) and you are using Data ONTAP 6.5.x and 7.0.x.

Backup might hang when a stale mount is encountered

Open Systems SnapVault backup might hang when a stale mount is encountered.

ACL modifications are not updated correctly

On Linux® (only ReiserFS) and Solaris™ platforms, Open Systems SnapVault does not mark the files as changed if the ACLs associated with the files are deleted. This results in Open Systems SnapVault not updating the files during update transfers. The problem occurs only on Linux ReiserFS and Solaris platforms, wherein “mtime” and “ctime” of the files remain unchanged after ACL deletion.

Known issues

The following table lists the issues known to exist in Open Systems SnapVault 2.5. 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 ID(s) field, and then click Go!

Bug ID	Description and workaround
130071	Open Systems SnapVault backup could potentially hang when a stale mount is encountered. Workaround: Reboot the server to clear any residual stale mounts.
176080	Open Systems SnapVault updates fail with the error VSS_E_VOLUME_NOT_SUPPORTED. Workaround: Perform any one of the following steps: ◆ Restart the VSS service and retry the transfer. ◆ Restart the Windows system and retry the transfer.
203063	Upgrading from the previous version of Open Systems SnapVault to the next version results in configuration variables with multiple values. Workaround: None
216910	The ossv-system-get-info API output does not reflect the correct time zone and UTC offset parameters on Linux platforms. This occurs if the system time zone is changed. Workaround: Restart the NetApp Host Agent service.
220856	Open Systems SnapVault binaries for HP-UX® are compiled using PA-RISC 2.0, which causes errors on the systems that use PA-RISC 1.1 code. Workaround: None

System requirements, and installation and upgrade information

The system requirements, and installation and upgrade information for Open Systems SnapVault 2.5 is available in the *Open Systems SnapVault 2.5 Installation and Administration Guide*.

For the most recent information about the platforms supported, see <http://mktgweb.netapp.com/products/software/ossv/index.html>.

Operating systems

Support for operating system versions

In Open Systems SnapVault 2.5, the following list of operating system versions are additionally supported.

Operating system	Version supported
Windows	◆ Windows Server 2003 Standard x64 Edition ◆ Windows Server 2003 Enterprise x64 Edition
Linux	◆ Red Hat® Enterprise Linux 5.0 AS/ES/WS ◆ SuSE® Linux Enterprise Server 10
HP-UX	11.31

Operating system versions no longer supported

In Open Systems SnapVault 2.5, the following list of operating system versions are not supported.

Operating system	Version no longer supported
HP-UX	11.11
Linux	◆ Red Hat Enterprise Linux 3.0 ◆ Red Hat Linux 9 ◆ SUSE Linux Enterprise Server 8