

StarWind SAN V8

What's New in StarWind SAN V8 Beta 3

LSFS device:

- Correct processing of device size parameters and usage of available storage of underlying disk.
- Fixed the issue which led to disk write errors (when certain amount of data was written on the device and device files multiplied).

Synchronous replication for LSFS device:

- Fixed snapshot management functionality: creation and deletion of snapshots now works correctly.
- Fixed the issue, where the state of HA node changed to "unsynchronized" without any reason.

VSS providers:

- Hardware VSS provider is now available for LSFS devices and LSFS devices with synchronous replication.
- Software VSS Provider is now available for LSFS devices.

Asynchronous replication:

- Replication on very slow channels is now possible.
- Mounting of snapshot fixed.
- Replication algorithm fixed.

Minor fixes to the VAAI commands processing implemented.

Installation notes

Installation:

- Previous versions can be updated by installing this version over the existing installation.
- **Warning: Mirror, IBV and Deduplication devices of version 6.x and earlier versions have limited support in v8.0!** Data from existing Mirror, IBV and Deduplication devices must be migrated to new ImageFile or LSFS devices after installation.
- Use the replication manager to add the synchronous replication functionality for your device.
- Use the LSFS virtual device type when thin provisioning and snapshots features are needed.

Please take the following steps to update the existing HA devices:

1. To prevent data loss, disconnect clients from the HA device (if possible).
2. Update the StarWind service on the first HA node. Wait until the service starts. At this step the HA node is unable to synchronize its HA devices and will not accept the client connections. Client requests are processed by the second HA node. The next step will disconnect the existing client connections.
3. Update the StarWind service on the second HA node. Wait until the service starts.
4. Start synchronization on the first HA node. The second node will change its state to "ready" and start processing client connections. Now you can safely connect to the HA device.
5. Wait for synchronization to finish. Now the first HA node will also process the client connections.

StarWind SAN V8 Beta 2 Changes and Improvements:

- The Log-structured File System container: Multiple fixes and performance improvements.
- Flash caching : Fix for the issue when a non-default path was used for an L2 cache storage device.
- Core: The VAAI support for single-node devices and devices with synchronous replication is added. WRITE SAME, EXTENDED COPY, ATS commands are supported now.
- A scale-out cluster: Add any number of servers to the SAN cluster and create multi-node devices across the cluster easily.
- Asynchronous replication: The asynchronous mode is added to the replication engine. Asynchronous replication can be used to replicate data to a remote site. Note that snapshots stored on the primary storage are replicated too. Replication channel bandwidth doesn't affect the performance of the primary storage which is replicated. The state of the primary storage can be easily restored from the replica.

The beta 2 release version also contains a large number of smaller bug fixes and updates.

New Log-structured File System container:

- The LSFS container implements thin provisioning, snapshots and optional online deduplication features. Synchronous replication for high availability can be configured for an LSFS device. Snapshots are replicated too.
- An LSFS device is flash-friendly. It eliminates multiple rewrites of the same data blocks.
- LSFS provides high performance for random write access patterns and therefore eliminates the I/O blender effect in virtualized environments.

Flash cache:

- L2 cache can be used with LSFS or flat storage devices for performance acceleration.

Management console:

- The GUI has been reworked to simplify user experience.
- The default storage pool path can be set up for the server. This path will be used for all new devices.
- A new simple device creation wizard allows creating a virtual device with a target in three steps.
- A high availability device can be created from any existing device by adding a replication partner through the replication manager.
- Network settings for replication can be changed on the fly without rebuilding replication partners.