How to change Synchronization Journal settings for StarWind HA devices

2025

StarWind Documents

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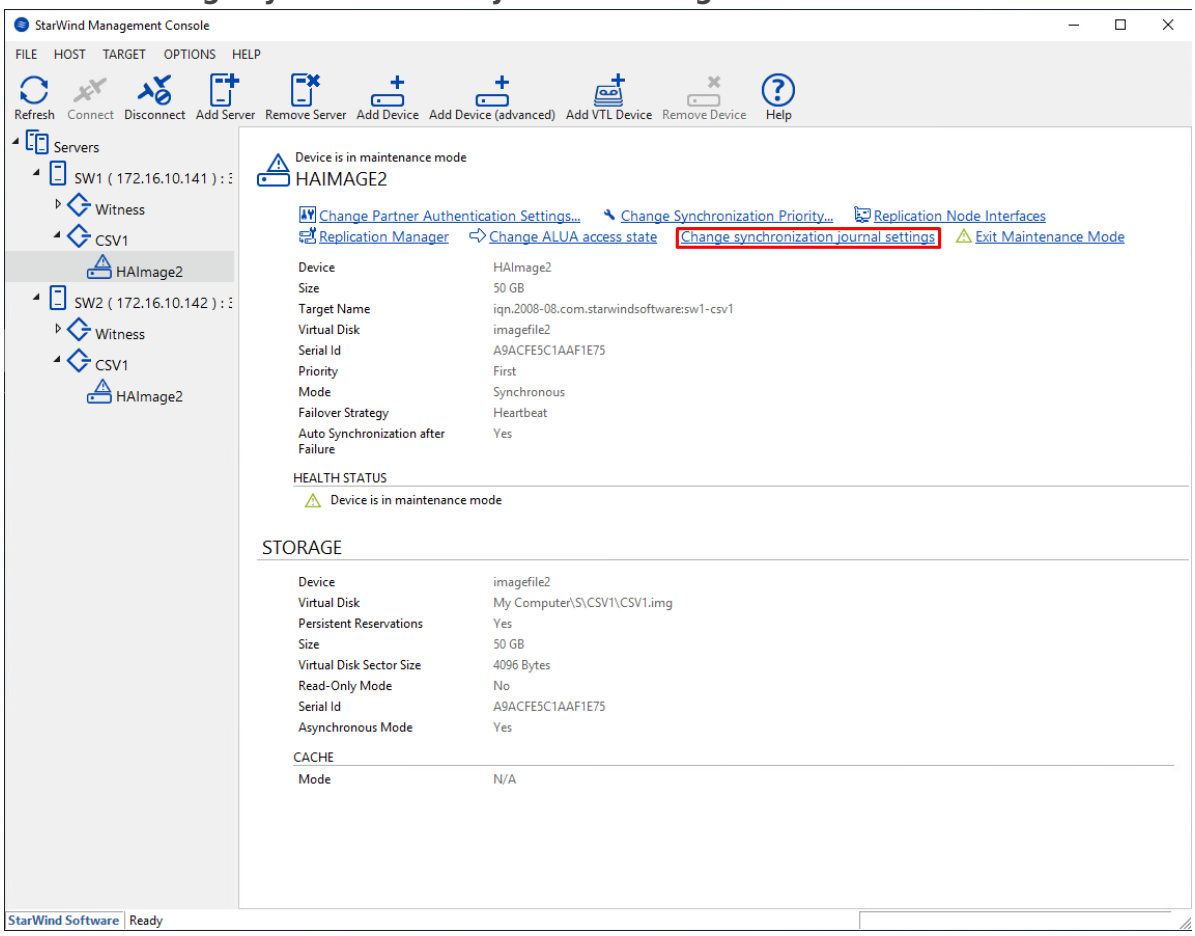
Description

Starting from the 14869 build, an option to place the synchronization journal into the disk was added to minimize cases when full synchronization occurs. Below are the steps that describe the Synchronization journal settings conversion procedure for StarWind HA devices:

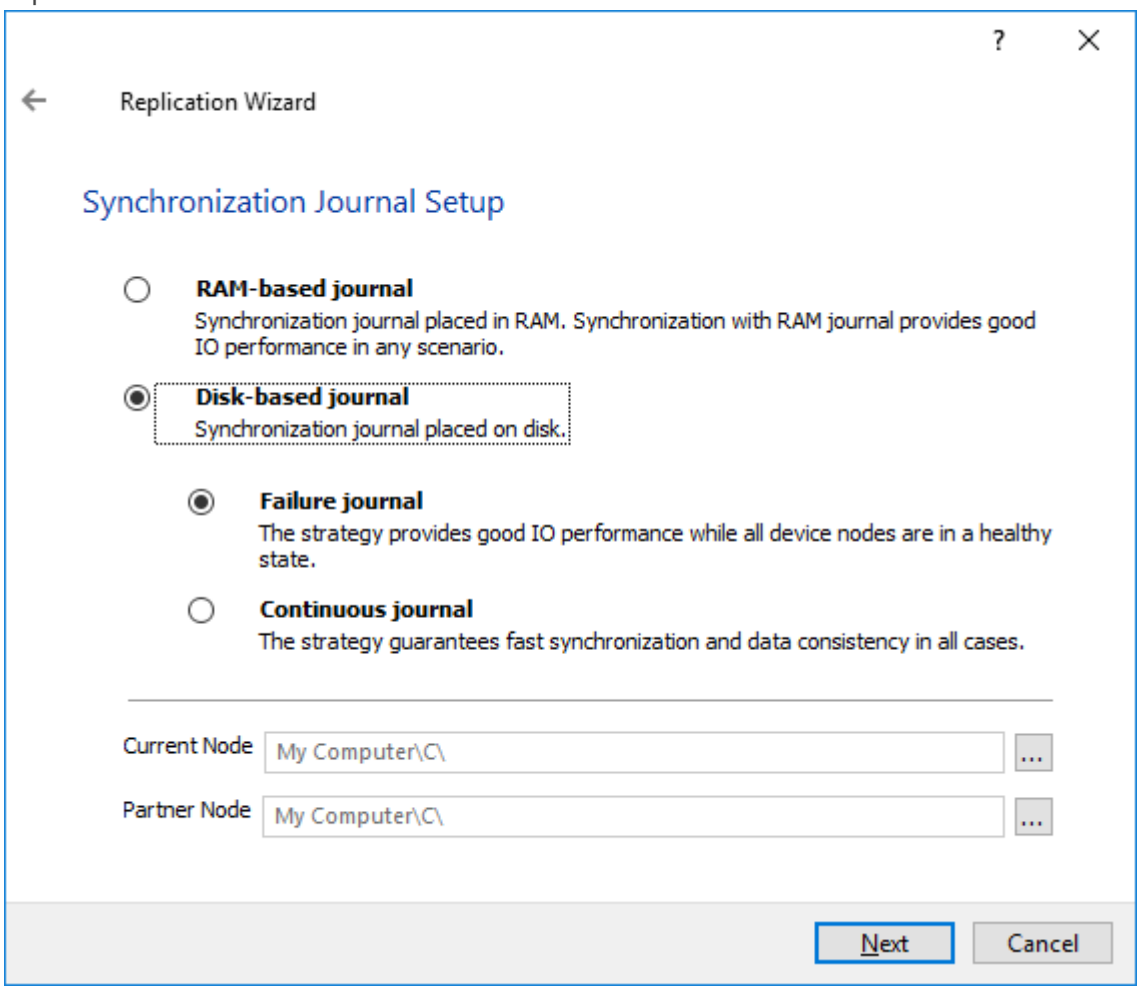
• Shutdown the VMs, services, and roles running that use StarWind HA device that will be converted; • In the **StarWind Management Console**, connect to the server and check that the required StarWind HA device has the “Synchronized” status on all servers where it's replicated; • Enter Maintenance Mode for the required StarWind HA device. The step-by-step guide for enabling StarWind Maintenance mode can be found here. • Click the **Change synchronization journal settings** button.



• Select the required **Synchronization Journal Setup**, specify a location for the disk-based synchronization journal for all servers, and click **Apply. RAM-based journal** Since the synchronization journal is placed in RAM it provides the best performance, however, the probability of full synchronization is higher. **Failure journal** That setting provides good I/O performance, as the disk-based journal activates only in case of one of

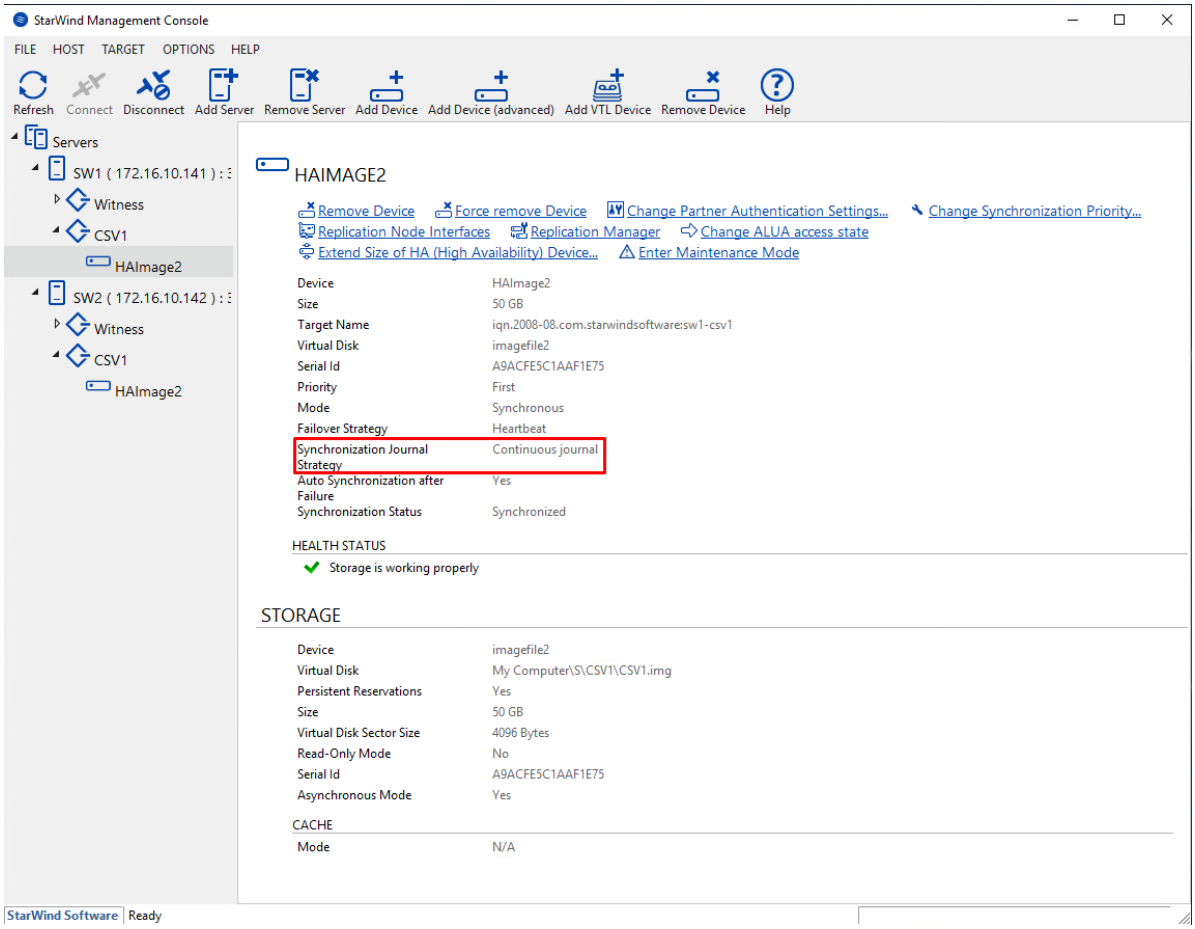
the nodes' interruption or the device become not synchronized. If a device went into a not synchronized state on one node, a performance drop could occur as a disk-based journal activates. **Continuous journal** That setting uses a disk-based journal continuously which ensures fast synchronization and data consistency in all cases. This approach has the worst I/O performance, because of frequent write operations to the disk-based journal.

NOTE: Disk-based synchronization journal should be placed on a separate, preferably faster disk from StarWind devices. For example, it can be placed on the boot volume. SSDs and NVMe disks are recommended as the device performance is defined by the disk speed, where the journal is located. It is required to allocate 2 MB of disk space for the synchronization journal per 1 TB of HA device size with a disk-based journal configured and 2-way replication and 4MB per 1 TB of HA device size for 3-way replication.



- Exit maintenance mode for StarWind HA device. The current **Synchronization Journal settings** can be found in device settings under the **Synchronization Journal Strategy**

section:



Useful Links

The recent StarWind Virtual SAN build can be downloaded here: https://www.starwindsoftware.com/starwind-virtual-san#download The complete Release Notes can be viewed by following this link: https://www.starwindsoftware.com/release-notes-build

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Contacts

US Headquarters	EMEA and APAC
+1 617 829 44 95	+44 2037 691 857 (United Kingdom)
+1 617 507 58 45	+49 800 100 68 26 (Germany)
+1 866 790 26 46	+34 629 03 07 17 (Spain and Portugal)
	+33 788 60 30 06 (France)

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StarWind Software, Inc. 100 Cummings Center Suite 224-C Beverly MA 01915, USA
www.starwind.com