StarWind Targets and Linux Open iSCSI Initiator

2025

StarWind Documents

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Technical Support and Services

If you have questions about installing or using this software, check this and other documents first - you will find answers to most of your questions on the Technical Papers webpage or in StarWind Forum. If you need further assistance, please contact us .

About StarWind

StarWind is a pioneer in virtualization and a company that participated in the development of this technology from its earliest days. Now the company is among the leading vendors of software and hardware hyper-converged solutions. The company's core product is the years-proven StarWind Virtual SAN, which allows SMB and ROBO to benefit from cost-efficient hyperconverged IT infrastructure. Having earned a reputation of reliability, StarWind created a hardware product line and is actively tapping into hyperconverged and storage appliances market. In 2016, Gartner named StarWind "Cool Vendor for Compute Platforms" following the success and popularity of StarWind HyperConverged Appliance. StarWind partners with world-known companies: Microsoft, VMware, Veeam, Intel, Dell, Mellanox, Citrix, Western Digital, etc.

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Symptoms

1. After a short time when a StarWind device is connected in a Linux based OS, the device encounters random disconnect and needs to be reconnected.
2. After mounting StarWind device as ext3 or ext4 datastore inside Linux, StarWind service immediately crashes.

Resolution

1. The issue is related to the Open iSCSI when it is trying to send iSCSI NoPout request while the target is busy. For correct work of Open-iSCSI with StarWind targets and to avoid timeouts and intervals for iSCSI pings, edit “iscsid.conf” configuration files (/etc/iscsi/iscsid.conf). Use any built-in text editor (nano, vi, etc.) to set the below values: *node.conn[0].timeo.noop_out_interval = 0* *node.conn[0].timeo.noop_out_timeout = 0* Also, make sure that “Replacement timeout” parameter is not bigger than 120: *node.session.timeo.replacement_timeout = 120* After accepting these changes, StarWind device will not encounter random disconnects anymore.
2. The issue is related to the wrong processing of hardware acceleration SCSI command from Open-iSCSI. To disable hardware acceleration support in StarWind, perform the following steps: **Please note:** In StarWind VSAN, till **8.9996** build version, VAAI/ODX support is disabled by default. **For StarWind VSAN builds 8.10547 – 8.11456:** -Stop StarWind Service -Open StarWind configuration file in StarWind root folder (default path is *C:\Program Files\StarWind Software\StarWind\StarWind.cfg*) - Find the string *<HardwareAccelerationEnabled value="yes"/>* and change it to *<HardwareAccelerationEnabled value="no"/>* - Save the changes and start StarWind service **For StarWind VSAN build 8.11456 and later** - Stop StarWind Service - Open StarWind configuration file in StarWind root folder (default path is *C:\Program Files\StarWind Software\StarWind\StarWind.cfg*) - Find the strings <**VaaiExCopyEnabled value="yes"/>, <VaaiCawEnabled value="yes"/>, <VaaiWriteSameEnabled value="yes"/>**and change them to <**VaaiExCopyEnabled value="no"/>, <VaaiCawEnabled value="no"/>, <VaaiWriteSameEnabled value="no"/>**-Save the changes and start StarWind service**.**

After disabling Hardware Acceleration in StarWind VSAN, StarWind device should be mounted as ext3 or ext4 in Linux-based machine without any issues.

Request A Product Feature

To request a new product feature or to provide a feedback on a StarWind product, please email to our support at support@starwind.com and put “Request a Product Feature” as the subject.

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