

Product Bulletin



Support of QLogic iSCSI HBAs

Revision History

4 March 2008

Summary of Changes

Initial release

This product bulletin is an overview of NetApp support of, and deployment and network configuration considerations for, QLogic SANblade 4000 Series iSCSI HBAs, including the QLA4010, QLA4010C, QLA4050C, QLA4052C, QLE4060C, QLE4062C, and QMC blade server models, with NetApp iSCSI storage systems across supported host operating system environments.

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1. Summary

This product bulletin is an overview of NetApp support of QLogic SANblade 4000 Series iSCSI HBAs and OEM equivalents. It also outlines known general considerations when assessing the QLogic iSCSI HBAs, and the issues outlined are not specific to NetApp iSCSI storage systems. The product bulletin addresses the SANblade 4000 Series iSCSI HBAs, including the QLA4010, QLA4010C, QLA4050C, QLA4052C, QLE4060C, QLE4062C, and QMC blade server models.

NetApp supports the use of the QLogic iSCSI HBAs in configurations defined in the NetApp Interoperability Matrix at <http://now.netapp.com/NOW/products/interoperability>. Before deploying the QLogic iSCSI HBAs, users should consult NetApp Knowledge Bulletin (KB) [37788](#), QLogic iSCSI HBA – Network Latency and MSCS Issues, and QLogic Technical Bulletin (TBU) [07008](#), iSCSI Performance Considerations. These bulletins discuss non-NetApp-specific considerations about performance and network latency in low-congestion networks. The NetApp KB also addresses considerations about failover and failback with multipath I/O using the Microsoft® DSM (Device Specific Module) with the QLogic iSCSI HBA in Microsoft Cluster Server (MSCS) configurations, and recommends the use of active-active multipath configurations.

Note: NetApp does not sell the QLogic iSCSI HBAs, which are available from QLogic authorized resellers.

2. What's New

General considerations for deploying QLogic iSCSI HBAs with NetApp iSCSI storage systems.

3. System Requirements

Configuration Support Overview

- NetApp generally supports the QLogic iSCSI HBAs, without a PVR, as defined in the NetApp Interoperability Matrix. For the most recent NetApp iSCSI storage system configurations supported by NetApp, including QLogic iSCSI HBAs, refer to the NetApp Interoperability Matrix at <http://now.netapp.com/NOW/products/interoperability>.
Note: The QLogic QLE406x iSCSI HBAs and the addition of SnapDrive® 5.0 for Windows® with the QLogic QLA405x and QLE406x will be included in the NetApp Interoperability Matrix by March 30.
- **Network latency consideration.** In networks with measurable congestion, characterized by as low as 1% to 3% packet drops, the QLogic iSCSI HBAs can exhibit slow recovery times, leading to suboptimal performance for applications such as Microsoft Exchange, or in other supported host operating system environments. This network latency issue is general in nature and is not specific to configurations involving NetApp iSCSI storage systems. Before deploying the QLogic iSCSI HBAs, users should consult NetApp Knowledge Bulletin (KB) [37788](#), "QLogic iSCSI HBA – Network Latency and MSCS Issues," and QLogic Technical Bulletin (TBU) [07008](#), "iSCSI Performance Considerations." The QLogic TBU discusses considerations for enhancing performance with the QLogic iSCSI HBAs. With QLogic iSCSI HBAs, NetApp requires that network configurations be designed to minimize packet loss and network disruptions. If users are unable to ensure network robustness, NetApp recommends the use of alternative iSCSI host connectivity solutions such as the Microsoft software initiator with network interface cards.
- **Failover and fallback considerations with the Microsoft DSM for multipath IO in MSCS configurations.** With QLogic iSCSI HBAs using driver and firmware versions **prior to** driver 2.1.4.18 and firmware 3.99.0.99 (SANsurfer 5.01.14) in configurations involving the Microsoft DSM for Windows MPIO and Microsoft Cluster Server, NetApp supports active-active path configurations only. In these configurations, failover from active to passive paths does not operate correctly and can cause a node to time out and fail over, requiring a reboot. NetApp expects to support both active-active and active-passive path configurations with the release of QLogic driver 2.1.4.18 and firmware 3.99.0.99 (SANsurfer version 5.01.14, which is targeted by the end of March).
- SnapDrive 5.0 for Windows is supported with QLogic QLA405x, QLE406x, and QMC blade server iSCSI HBAs. Refer to the NetApp Interoperability Matrix for supported configurations.
Note: The QLogic QLE406x iSCSI HBAs and the addition of SnapDrive 5.0 for Windows with the QLogic QLA405x and QLE406x will be included in the NetApp Interoperability Matrix by March 30.
- SnapDrive 4.2.1 for Windows is supported with QLogic QLA405x and QMC blade server iSCSI HBAs, as noted in the current NetApp Interoperability Matrix.

4. Product Information

Availability

NetApp does not sell the QLogic iSCSI HBAs, which are available from QLogic authorized resellers. For information about the QLogic iSCSI HBA models, see http://www.qlogic.com/Products/SAN_products_iSCSI.aspx.

5. Regulatory Compliance

Products need to be validated against the NetApp Regulatory Compliance Country List prior to distribution. This is required to ensure that products are being distributed only in the countries in which NetApp has received regulatory compliance certification.

6. Warranty and Service

NetApp does not sell the QLogic iSCSI HBAs, or hardware support or software support plans, which are available from QLogic authorized resellers.

7. Additional Information

For NetApp iSCSI storage system configurations that are qualified and supported by NetApp, refer to the NetApp Interoperability Matrix at <http://now.netapp.com/NOW/products/interoperability>.

Contact Information: Please contact your Network Appliance sales or channel partner representative with questions regarding this bulletin.

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