How To Enable MPIO in WS2008

F300H / F300C / F300Q Series
F400H / F400Q Series
P300H / P300C / P300Q Series
P500H / P500C / P500Q Series
S300H / S300C / S300Q Series

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Introduction

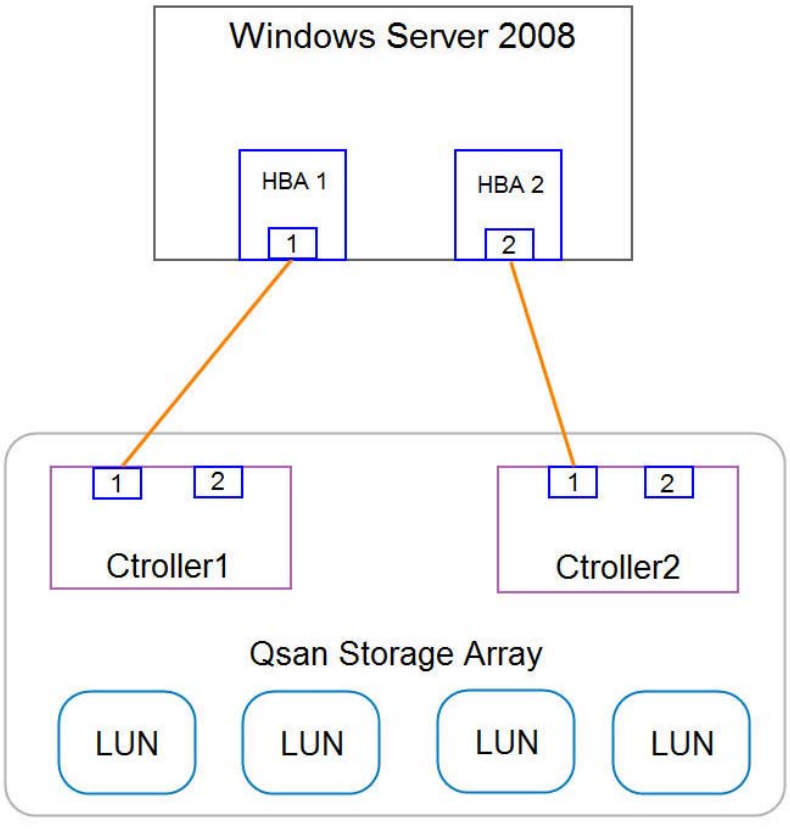
The Multipath I/O is natively supported in Windows Server 2008. In this document, it describes how to configure MPIO for Qsan storage in Windows Server 2008. Although the MIPO driver is also available in the Qsan Storage Service installer, we strongly recommend that the customers use the Multipath I/O in the Windows Server 2008 instead of the Qsan MPIO driver.

Environment

Host OS	Windows Server 2008
Qsan Controllers	Qsan F300H / F400H / F300C / P300H / P300C / P500H / P500C / S300H / S300C
Qsan Systems	Qsan F300Q / F400Q / P300Q / P500Q / S300Q Series

Diagram

The figure below is the basic redundant connection of direct attach.



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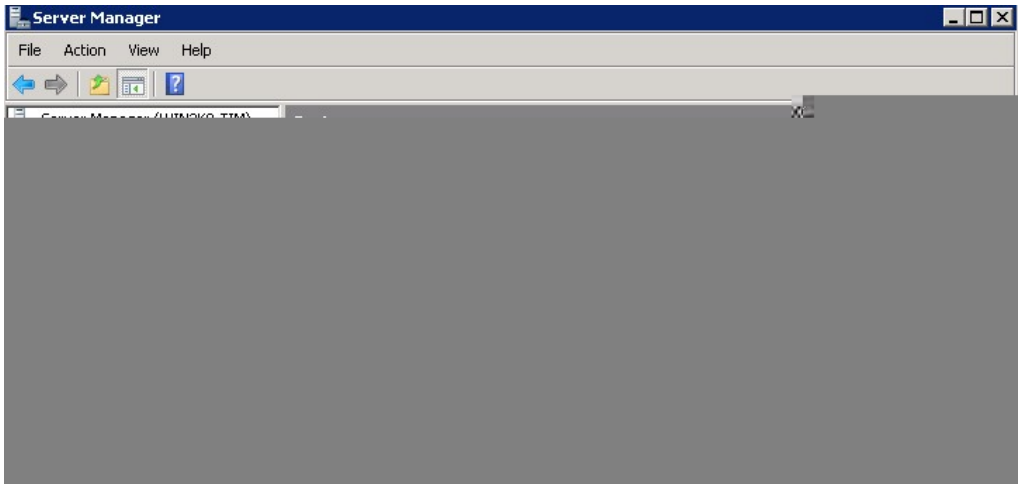
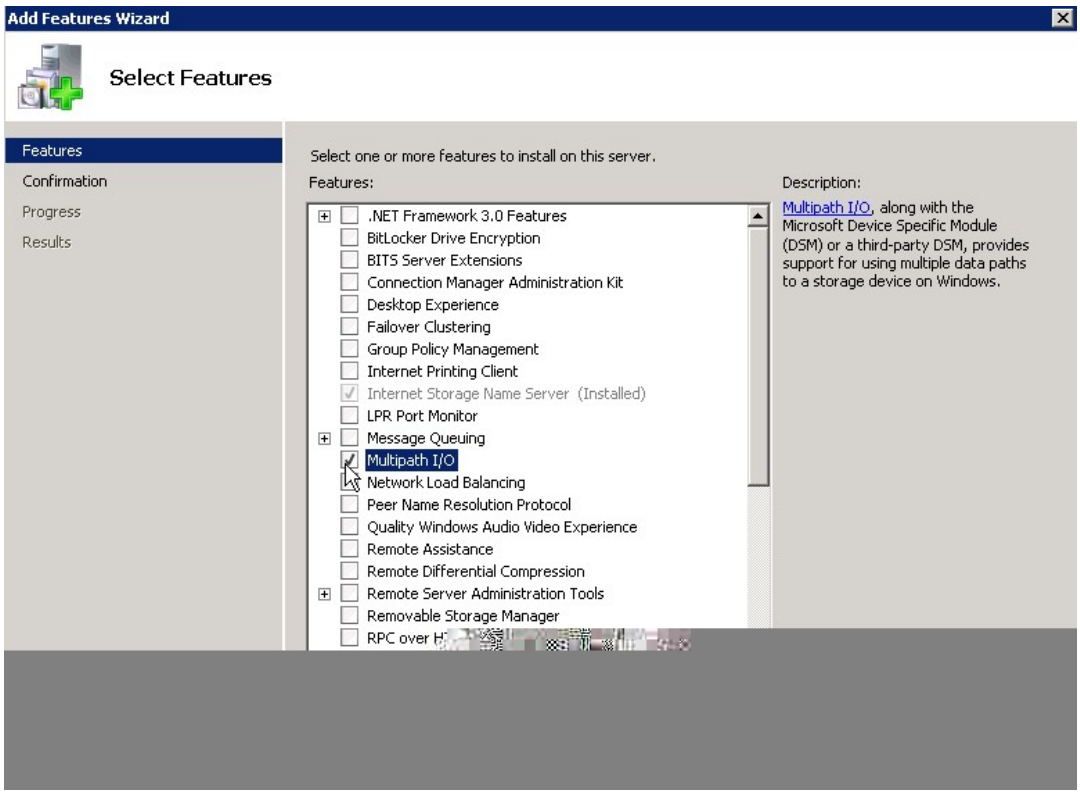
Configuration

Enable Multipath I/O feature

1. Open the **Server Manager** window, and click **Add Features**.



2. Check the item of **Multipath I/O**, and click **Next** button below to install this new feature.



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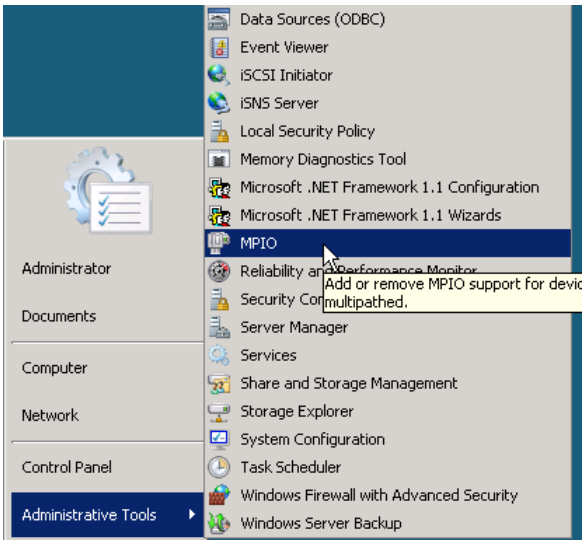
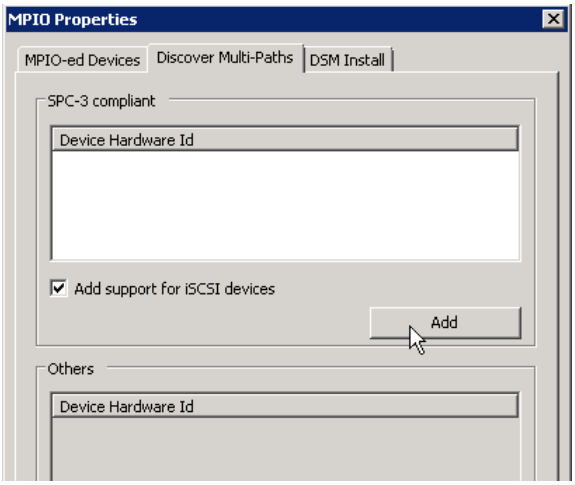
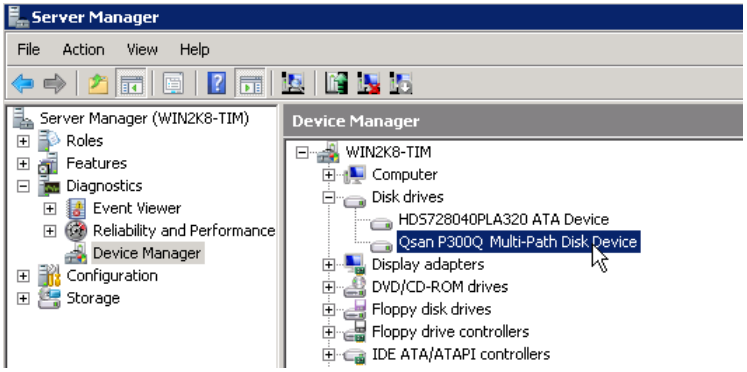


4. In **MPIO Properties** window, switch to the label of **Discover Multi-Paths**. Check the option of **Add support for iSCSI devices** and press **Add** button. A reboot for the host is required for this setting to take effect.



5. After reboot, logon to the iSCSI target again. The iSCSI disk drive in **Device Manager** becomes a multi path disk device now.



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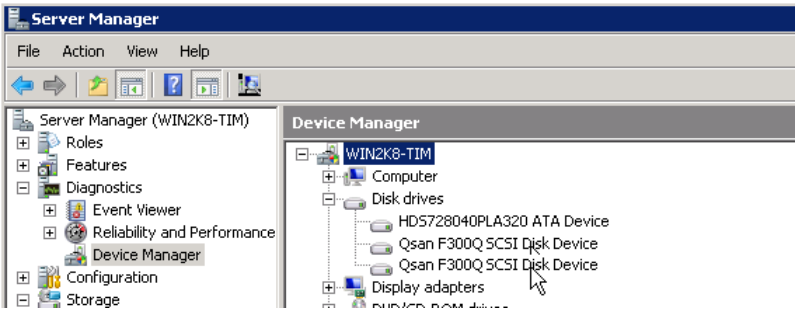
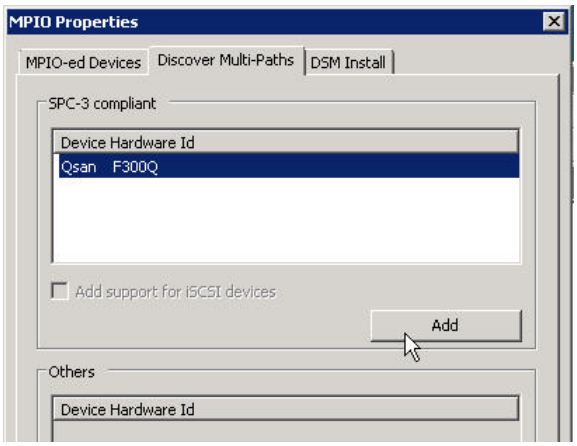
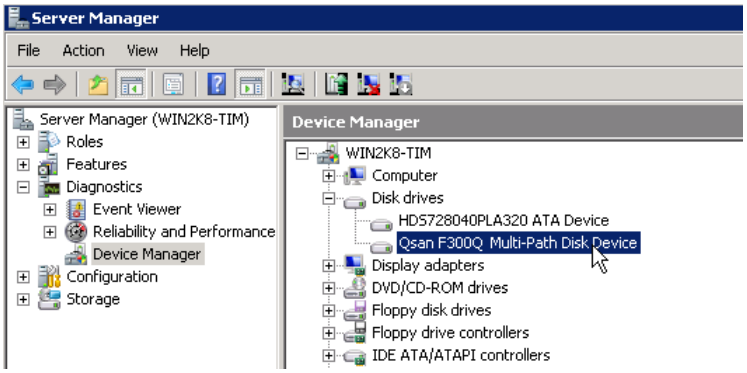
6. For the FC storage like F300Q and SAS storage like S300Q, it is similar steps to enable the MPIO support on the iSCSI storage. Here we take F300Q as example, connecting the host with HBA to the storage with VD attached to LUN on it first.



7. In **MPIO Properties** window, switch to the label of **Discover Multi-Paths**. The F300Q will be listed in the SPC ß compliant column. Select the **Qsan F300Q** and click **Add** button. It will take about half minute to accomplish the setting, and then a reboot on the server is necessary to let it takes effect.



8. After reboot, the VD on F300Q in **Device Manager** becomes a multi path disk device



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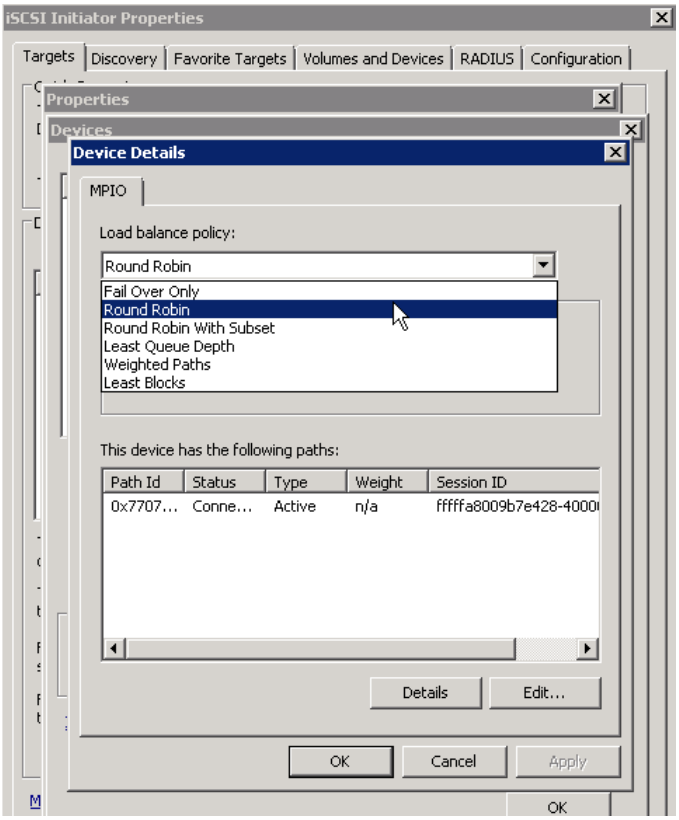
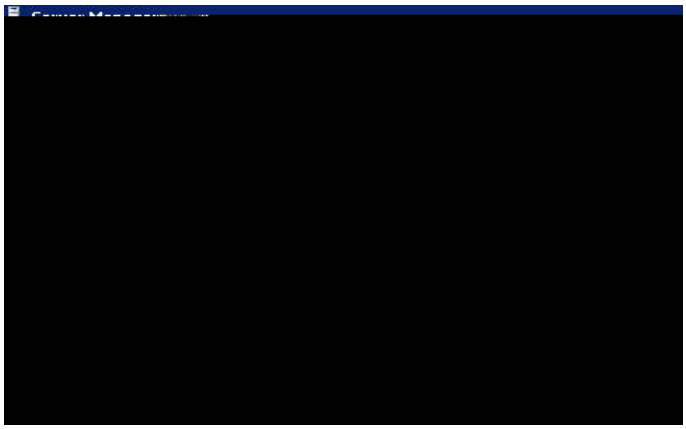
Configure the Multipath policy

1. For the iSCSI disk, the multipath policy can be specified inside the Microsoft iSCSI initiator.



2. For the FC/SAS disk, the multipath policy can be specified by right clicking on the multi path disk device in the **Device manager**, and then select **Properties**.



3. In MPIO label, the load balance policy can be modified.

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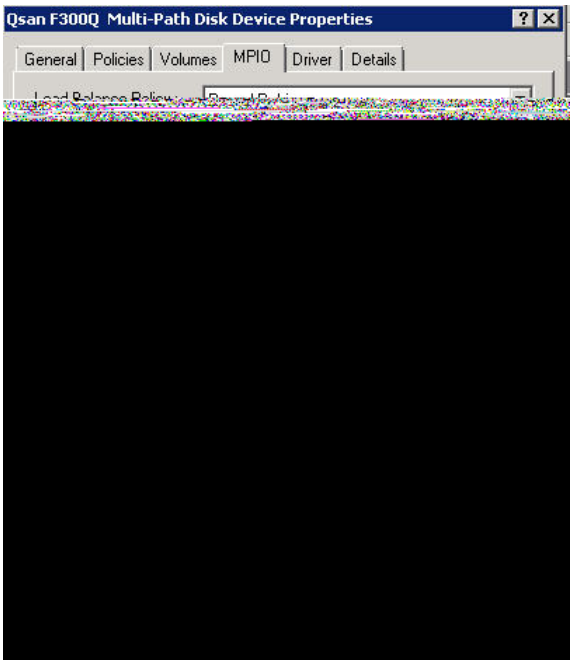

Summary

The MPIO function is a build in feature of Windows Server 2008 and needs to be enabled and configured before using it. This is a new feature compared with the previous version of Microsoft Server operating systems. It helps the user connect to SAN storage more robust and faster.

Applies To

- MSD Controllers: F300H / F300C / F400H / P300H / P300C / P500H / P500C / S300H / S300C: FW 2.2.1
- MSD Systems: F300Q / F400Q / P300Q / P500Q / S300Q Series: FW 2.2.1

Obsolete

- Qsan White Paper

  QWP200903 P150C How_to_enable_MPIO_of_iSCSI_in_WS2008.pdf

  QWP200916 F300H How_to_configure_MPIO_of_F300H_in_WS2008.pdf

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