

Product Bulletin



Support of Shared FC SAN Hosts Using NetApp FAS with Native Host Multipath and EMC CLARiiON with PowerPath

Revision History	Summary of Changes
January 2008	Initial Version

This product bulletin informs NetApp sales and NetApp partners about new or changed NetApp products or services.

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1. Summary

This product bulletin announces support of heterogeneous storage system configurations composed of NetApp FAS or V-Series systems and EMC CLARiiON systems that are sharing a common host server by using Fibre Channel protocol. In these shared-host configurations, host multipathing to NetApp FAS is managed with native operating system multipath drivers, and host multipathing to EMC CLARiiON is managed with PowerPath. Native host multipath applications provide host applications with high performance and high availability to NetApp storage.

NetApp support of shared-host configurations with PowerPath is provided through a product variance request (PVR). Support includes configurations that use NetApp host- or array-based software such as FC Host Utilities, SnapDrive®, SnapMirror®, and MetroCluster. This product bulletin is a NetApp support statement; partners and end users should also consult EMC regarding its third-party-storage support.

2. What's New

PVR-Based Support of Shared-Host Configurations: NetApp FAS (Native Multipath) and EMC CLARiiON (PowerPath)

As defined in section 3, NetApp supports the integration of NetApp FAS and EMC CLARiiON storage systems to shared host servers in Windows® 2003, Solaris™ 10, and AIX 5.3 configurations. Partners and end users can request this support through the standard NetApp PVR process. For PVRs that match the existing host operating system, NetApp Data ONTAP®, and CLARiiON operating system levels, the PVR facilitates an end-user support document. Additional host operating system configurations, such as Red Hat Linux®, SUSE Linux, and HP-UX, are planned for future PVR-based qualification.

3. System Requirements

A. Supported Configurations

The following table defines the currently supported shared-host configurations.

Parameter	Shared FC SAN Host Support: NetApp FAS and EMC CLARiiON Storage Systems		
Host Operating Systems	Windows 2003 SP2	Solaris 10 Update 3	AIX 5.3 TL5 CSP
Host I/O Stack	NTFS, LDM	UFS, SVM	JFS, JFS/2, LVM
NetApp FC Host Utilities	FCP Windows HU 3.0 (NetApp PN SW-FAK-WIN)	FCP Solaris HU 4.2 (NetApp PN SW-FAK-SOL)	FCP AIX HU 4.0 (NetApp PN SW-FAK-AIX)
Host Multipathing with NetApp FAS	Windows Multipath IO 1.17 with Data ONTAP DSM 3.1 (NetApp PN SW-DSM-MPIO- WIN)	Sun® Traffic Manager (MPxIO) Distributed by Sun	AIX Multipath IO Distributed by IBM
Host Multipathing with EMC CLARiiON	PowerPath 4.5, 5.0	PowerPath 5.0, 5.0.1	PowerPath 5.0
Host Clustering	Not currently supported		
Host Timeout Values	As defined by NetApp Host Utilities or Interoperability Matrix		
Host Bus Adapter (HBA)	HBA models, drivers, and firmware that are generally supported are listed in the NetApp Interoperability Matrix NetApp recommends separate HBAs for NetApp and EMC systems; shared-HBA configurations are supportable		
FC Fabric and Director Switch	Switch models that are generally supported are listed in the NetApp Interoperability Matrix		
NetApp FAS System Models	All FC storage systems generally support required Data ONTAP release		
Data ONTAP Release	7.2.2, 7.2.3		
NetApp Controller Failover Mode	Single Image (SSI)		
NetApp System Disk Drives	FC or SATA		
EMC CLARiiON System Models	CX3-20, CX3-40, CX3-80		
EMC CLARiiON FLARE Release	03.22.040.5.508		
SnapDrive, SnapManager (with NetApp storage systems)	SnapDrive and SnapManager are supportable via PVR	PVR-based support capability of the Solaris native host I/O stack required for MPxIO is targeted for a future SnapDrive release	SnapDrive is supportable via PVR PVR-based support capability of SnapManager® for Oracle® with AIX native host I/O stack is targeted for future support

B. VMware ESX Server

VMware® ESX Server does not currently have an EMC PowerPath offering, and ESX Server configurations are supported in shared-host configurations that use ESX native multipathing. Shared-host configurations must use NetApp-established FC Host Utilities (SW-FCP-ESX-HU), host-configuration settings, HBA timeout values, and ESX multipathing settings.

C. Future Support

Additional host operating systems—Red Hat Linux, SUSE Linux, and HP HP-UX—are planned for future support.

4. Ordering

NetApp does not offer software products specifically associated with supporting shared-host configurations with EMC PowerPath. Partners and customers should procure NetApp FC Host Utilities for Windows, Solaris, and AIX environments and the Data ONTAP DSM for Windows Multipath I/O for Windows for use with NetApp FAS system configurations, per standard NetApp integration practice. For consulting services associated with shared-host environments, contact NetApp Professional Services.

Native Host Multipathing Driver Overview and Comparison to EMC PowerPath

Host multipath applications provide host applications with high availability and high performance to storage systems.

Parameter	EMC	Native Host Multipathing Driver		
Multipath application	PowerPath Distributed by EMC and its authorized resellers	Microsoft Multipath IO Supported by NetApp via the Data ONTAP DSM (SW-DSM-MPIO-WIN)	Sun Traffic Manager (MPxIO) Distributed by Sun and its authorized resellers	AIX Multipath IO Distributed by IBM and its authorized resellers
End-to-end channel failover	✓	✓	✓	✓
Automatic path recovery	✓	✓	✓	✓
Active-active load-balance policies	✓	✓	✓	✓
Load balance across alternate paths after failover	✓	✓	✓	✓
Ability to disable load balancing	✓	✓	✓	✓
Storage-independent support and management		✓	✓	✓
Server operating environments supported	Broad, but not inbox	Native OS (since April 2003)	Native OS (since August 2005)	Native OS (since October 2002)
Host cluster support	✓	✓	✓	✓

5. Regulatory Compliance

Products need to be validated against the NetApp Safety/EMI Regulatory Compliance List prior to order submission. This is required to ensure that products are being sold only in the countries in which NetApp has received regulatory compliance certification.

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

