



3PAR InServ™ Host/Platform Test Overview For Fujitsu PRIMEPOWER Servers

Tested Date: April, 2003

Venue: 3PAR Engineering Lab
4209 Technology Drive
Fremont, CA 94538

OBJECTIVE

3PAR InServ Storage Servers provide a storage resource to host servers through the connections between them. 3PAR will support specific host attachment configurations once they have passed assurance testing. A host attachment configuration is defined as the combination of:

- Host platform family
- Operating System
- Host bus adapter and driver
- Host based multi-path software
- SAN Infrastructure

This test plan/overview describes testing planned for all 3PAR Host/Platform testing to assure the Server/Host/Platform functions correctly when connected to the 3PAR InServ.

TESTED AND SUPPORTED CONFIGURATION

- **Host Systems:** PRIMEPOWER 200, 400, 650, 800, 850, 900, 1000, 1500, 2000, 2500
- **Operating System:** Solaris 2.8 MU4 +
- **3PAR InServ Models:** S200, S400 and S800
- **InForm OS Version:** 2.0.1 and later releases
- **HBA:** Emulex LP8000, LP9002L
- **HBA Firmware:** version 3.90A7 +
- **HBA Driver:** version 5.00i +
- **Multi-Path SW:** VERITAS Volume Manager version 3.2 +
- **Fabric:** Brocade 2x00 2.6.0a +
Brocade 3x00 3.0.2 +
McData 3xxx 02.00.00.33 +
McData 6064/6164 02.00.00.33 +
Cisco 9216/9500 1.0(4) +

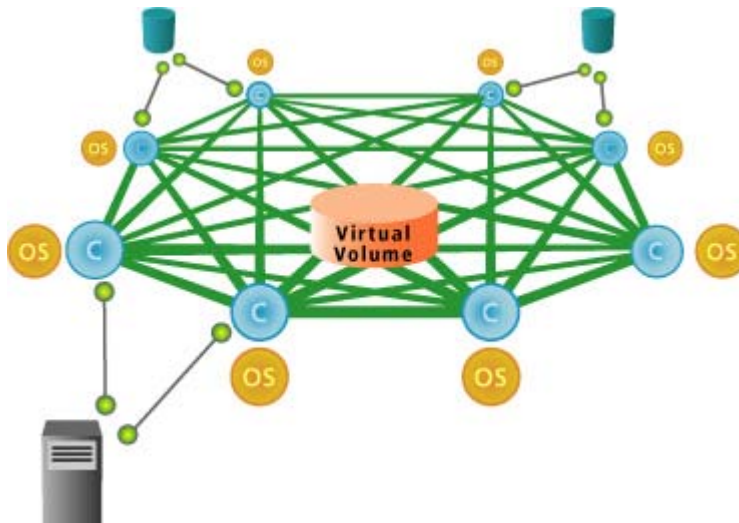
UNIQUE CONFIGURATION AND TERMS

3PAR InServ to host Connection: The 3PAR InServ is connected to the tested host(s) using the specified Fibre Channel interconnect. The host interfaces should be discovered by the InServ and be recognized as valid hosts by the InServ.

Virtual Volume: A base volume containing data, created by the 3PAR InForm® Operating System's virtualization and volume management functionality. A set of virtual volumes (VV's) is created on the InServ by a single command or GUI input panel using the simple, robust and secure user interface (CLI and GUI). The VV set will contain each type of striped RAID set currently supported on the InServ, i.e. RAID10 and RAID50.

CLI command example, "createaldv [option] <vv_name> <size>[g|G]"

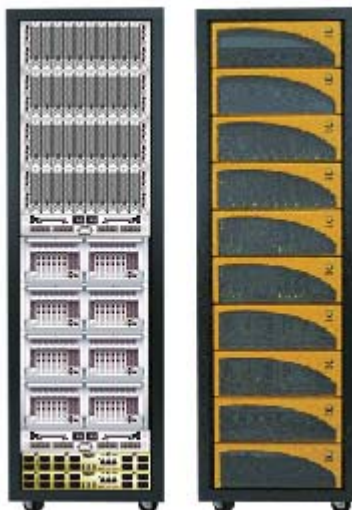
Virtual LUN: A LUN that is discovered and registered by host(s) using each platform's normal procedure. The VV set is exported to the host(s) by creating virtual LUN (VLUN) export mechanisms from the 3PAR InForm via the simple, robust and secure user interface (CLI and GUI).



TESTED ITEMS AND RESULTS

Test Description	Results of Testing Pass/Fail
Platform testing	Completed
Configuration and setup	Passed
Virtual LUN Presentation and Discovery	Passed
Virtual LUN Basic Functionality	Passed
Path Fault Injection (non multi-pathed)	Passed
Multi-Pathing Support	Passed
Stress and Performance Characterization	Passed
Boundary Characterization (max.VV and VLUN)	Passed
InServ Functional testing	Completed
Availability testing	Passed
Fabric Connect- Switch/Director Setup	Completed
Fabric Zoning	Passed
Connect to Host	Passed
Test Fabric Mode	Passed

The interoperability test objectives focused on assuring the interoperability of the Fujitsu PRIMEPOWER host platforms with the 3PAR InServ Storage Server. The features and base functions of the InServ Storage Server have been independently validated by 3PAR.



www.3par.com

The 3PAR InServ™ Storage Array Family is the hardware foundation of 3PAR Utility Storage Systems. 3PAR InServ Storage Arrays utilize a cluster-based approach. The modularity of the system delivers a single storage platform that scales continuously from the very small to the very large and offers complete fault tolerance of both hardware and software.

3PAR InForm® Operating System is the intelligence foundation behind 3PAR Utility Storage products. It uses sophisticated virtualization management capabilities to provide unique advantages in simplification, usability, security, flexibility, and storage efficiency. The 3PAR Software Family enables customers to control their storage environment—no matter the size—with dramatically fewer human and capital resources.

Contact for More Information

3PARdata, Inc.

Japan Office

email: infojp@3pardata.com



3PARdata, Inc.
4209 Technology Drive
Fremont, CA 94538
510.413.5999
www.3par.com