

# *hp StorageWorks*

## **SR2122-2 Product Support Tables for the SAN Design Reference Guide**

This document contains the latest support information for the hp StorageWorks SR2122-2 Storage Router.

Table 1 lists the supported B-Series Fibre Channel switch models and firmware.

Table 2 lists the supported C-Series Fibre Channel switch models and firmware.

Table 3 lists the supported M-Series Fibre Channel switch models and firmware.

Table 4 lists the supported storage models and firmware for iSCSI.

Table 5 lists the supported storage models and firmware for FCIP.

Table 6 lists iSCSI-supported operating systems, network interface controllers and iSCSI drivers.

## Switch Support for the SR2122-2

The following tables list the Fibre Channel switches that are supported for use with the SR2122-2 IP Storage Router.

NOTE: Not all switch product lines are supported on all operating systems or for both iSCSI and FCIP. Refer to the notes following each table for specific support information.

**Table 1: HP StorageWorks B-Series Product Line Switches**

HP StorageWorks Switch Name		Firmware Version	Number of Ports
HP StorageWorks MSA SAN switch 2/8		3.1.1, 3.1.1c	8
HP StorageWorks SAN Switch 2/8 EL, 2/8 Power Pak			8
HP StorageWorks SAN Switch 2/16, 2/16 EL, 2/16 Power Pak			16
HP StorageWorks SAN Switch 2/32, 2/32 Power Pak		4.1.1, 4.1.2b	32
HP StorageWorks Core Switch 2/64, 2/64 Power Pak			64 (2 switches per chassis, for a total of 128 ports per chassis)
HP Switch Name	Compaq StorageWorks Switch Name		Number of Ports
HP Brocade 2400 (HP reseller)	Compaq StorageWorks SAN Switch 8	2.6.1, 2.6.1c	8
N/A	Compaq StorageWorks SAN Switch 8-EL		8
HP Brocade 2800 (HP reseller)	Compaq StorageWorks SAN Switch 16		16
N/A	Compaq StorageWorks SAN Switch 16-EL		16
HP Surestore FC Switch 6164 (64 ISL Ports)	Compaq StorageWorks SAN Switch Integrated/32 (64 ISL Ports)		32 (counts as 6 switches and 2 hops when applying configuration rules)
HP Surestore FC Switch 6164 (32 ISL Ports)	Compaq StorageWorks SAN Switch Integrated/64 (32 ISL Ports)		64 (counts as 6 switches and 2 hops when applying configuration rules)
HP Surestore FC 1Gb/2Gb Entry Switch 8B	N/A	3.1.1, 3.1.1c	8
N/A	Compaq StorageWorks SAN Switch 2/8-EL		8
N/A	Compaq StorageWorks SAN Switch 2/16-EL		16
HP Surestore FC 1Gb/2Gb Switch 8B	N/A		8
HP Surestore FC 1Gb/2Gb Switch 16B	Compaq StorageWorks SAN Switch 2/16		16

### Notes for B-Series Product Line Switches

- All switch models listed in Table 1 are supported for iSCSI and FCIP on all operating systems listed in Table 6.

**Table 2: HP C-Series Product Line Switches**

Switch Name	Firmware Version	Number of Ports
MDS 9506	1.2.1b	128
MDS 9509	1.2.1b	224
MDS 9216		48
MDS 9120	1.2.1b	20
MDS 9140		40

**Notes for C-Series Product Line Switches**

- All switch models listed in Table 2 are supported for iSCSI on all operating systems listed in Table 6
- FCIP is not supported with C-Series switch models

**Table 3: HP StorageWorks M-Series Product Line Switches**

HP StorageWorks Switch Name		Firmware Version	Number of Ports
HP StorageWorks edge switch 2/12		05.05.00-12	4 to 12
HP StorageWorks edge switch 2/16		05.02.00-13	16
HP StorageWorks edge switch 2/24			8 to 24
HP StorageWorks edge switch 2/32			16 to 32
HP StorageWorks director 2/64			32 to 64
HP StorageWorks director 2/140			64 to 140
HP Switch Name	Compaq Switch Name		Number of Ports
N/A	McDATA ES-3016 (Compaq reseller)	05.02.00-13	16
N/A	McDATA ES-3032 (Compaq reseller)		32
HP Director FC-64	Compaq StorageWorks SAN Director 64	05.02.00-13	64

**Notes for M-Series Product Line Switches**

- All switch models listed in Table 3 are supported for iSCSI on Microsoft Windows and Red Hat Linux. HP-UX is not supported for iSCSI with M-Series switch models.
- FCIP is supported with M-Series switch models listed in Table 3 for all operating systems listed in Table 5.

**Table 4: Supported Storage Arrays for iSCSI**

Storage Arrays	Minimum Firmware	HP-UX iSCSI Initiators	Windows 2000, 2003 iSCSI Initiators	Red Hat Linux iSCSI Initiator
MSA1000	v4.24	Not Supported	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02	V3.2.03
RA/MA8000, ESA/EMA12000, EMA16000 (HSG80)	ACS v8.6x, ACS v8.7x	Not Supported	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02	V3.2.03
Enterprise Virtual Array (EVA5000) (Not supported with CA)	VCS v2.005	Not Supported	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02	V3.2.03
Enterprise Virtual Array (EVA5000)	VCS v3.01	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02	V3.2.03
VA7100	HP 18	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	HP 3.1.1, 3.1.3, 3.1.4 Microsoft iSCSI 1.01, 1.03	V3.4.1
VA7400, VA7410	A100	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	HP 3.1.1, 3.1.3, 3.1.4 Microsoft iSCSI 1.01, 1.03	V3.4.1
XP128	v21-06-22-00/00	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	HP 3.1.1, 3.1.3, 3.1.4 Microsoft iSCSI 1.01, 1.03	V3.4.1
XP256	v21-06-22-00/00	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	Not Supported	Not Supported
XP1024	v21-06-22-00/00	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03	HP 3.1.1, 3.1.3, 3.1.4 Microsoft iSCSI 1.01, 1.03	V3.4.1

Table 5: Supported Storage Arrays for FCIP

Storage Arrays	Firmware	Operating System	Multi-Path Software
Continuous Access Enterprise Virtual Array (EVA5000)	VCS v3.010	HP OpenVMS V7.3.1, V7.2.2	Native
		HP Tru64 Unix V5.1, V5.1A, V5.1B	Native
		IBM AIX V4.3.3, V5.1, V5.2	Secure Path 2.0D or 2.0D SP1
		Linux Red Hat AS2.1 e-27 (32-bit)	Secure Path 3.0B
		Linux SuSE SLES7, SLES8, United Linux 1.0	Secure Path 3.0B
		Windows 2000 Sever, Advanced Server, 2003 <sup>1</sup> (32 and 64 bit), NT v4.0 SP6a	Secure Path 4.0B
		HP-UX v11.0, v11.11, v11.23	Secure Path 3.0C
		Novell NetWare V5.1 SP6, V6 SP 3, V6.5	Secure Path 3.0C
Sun Solaris V2.6, V7, V8, V9	Secure Path <b>V2.6:</b> 3.0A SP1, 3.0B, 3.0B SP1, 3.0C <b>V7, V8:</b> 3.0A SP1, 3.0B, 3.0B SP1, 3.0C <b>V9:</b> 3.0B, 3.0B SP1, 3.0C		
Continuous Access XP128/1024	v21-05-23-00/00	HP OpenVMS V7.3.1, V7.2.2	Native
		HP Tru64 Unix V5.1A	Native
		Sun Solaris 8	Secure Path 3.0C SP1
		IBM AIX V5.2	Secure Path 2.0D
		Linux Red Hat AS2.1 e-27 (32-bit)	Secure Path 3.0B
		Linux SuSE SLES8	Secure Path 3.0B
		Windows 2000, 2003 <sup>1</sup>	Secure Path 4.0B

**Table 5: Supported Storage Arrays for FCIP (Continued)**

Storage Arrays	Firmware	Operating System	Multi-Path Software
Data Replication Manager (DRM) RA/ MA8000, ESA/EMA12000, EMA16000 (HSG80)	ACS 8.7P	HP OpenVMS 7.2-2, 7.3, and 7.3-1	Native
		HP Tru64 UNIX V5.1, 5.1a and 5.1b	Native
		HP-UX v11.0, v11.11	Secure Path 3.0C
		IBM AIX 4.3.3 & 5.1	Secure Path 2.0D, 2.0D SP1
		Windows 2000, NT	Secure Path 4.0C
		Novell Netware 5.1 and 6.0	Secure Path 3.0C
		Red Hat Linux AS 2.1	Secure Path 3.0B
		SolarisV2.6, 7, 8, and 9	Secure Path 3.0C
		SuSE LINUX SLES 8 and United Linux 1.0	Secure Path 3.0B

1. Secure Path for Windows is only supported with SR2122-2's in Standalone Mode.  
SR2122-2's in High Availability Mode (clustered) are not supported.

**Table 6: iSCSI-Supported Operating Systems, Networks Interface Cards, iSCSI Driver**

Operating Systems <sup>1</sup>	Network Interface Controllers (NIC)	Minimum NIC driver	Network Teaming	iSCSI Driver
HP-UX 11i v1, 11i v2	All NICs supported by HP-UX	Consult the <i>HP-UX iSCSI Release Notes</i> for updates or patches <a href="http://www.docs.hp.com">www.docs.hp.com</a>	Not supported	HP-UX 11i v1: B.11.11.03 HP-UX 11i v2: B.11.23.03
Microsoft Windows 2000 SP2 with either Microsoft hotfix Q302895 or Q248720 and Microsoft hotfix Q318271, SP3 MSCS Cluster with HP iSCSI initiator only	NC6136 Gigabit Server Adapter	v2.87.287.0 <sup>2</sup>	v7.20.720.86	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7131 Gigabit Server Adapter	v2.87.287.0 <sup>2</sup>	v7.20.720.86	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7770 PCI-X Gigabit Server Adapter	v7.10 Rev A	v7.20.720.86	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7781 GbE Blade Adapter	v2.90.0.0	v7.20.720.86	HP 3.1.1, 3.1.3, 3.1.4 Microsoft v1.0, v1.02
Red Hat Advanced Server 2.1	NC7131 Gigabit Server Adapter	O/S Default	No	v3.4.1 <sup>3</sup>
Windows 2003 MSCS Cluster with HP iSCSI initiator only	NC6136 Gigabit Server Adapter	v6.2.34.0	v7.30.730	HP 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7131 Gigabit Server Adapter	v6.2.34.0	v7.30.730	HP 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7770 PCI-X Gigabit Server Adapter	v6.2.34.0	v7.30.730	HP 3.1.3, 3.1.4 Microsoft v1.0, v1.02, 1.03
	NC7781 GbE Blade Adapter	v6.2.34.0	v7.30.730	HP 3.1.3, 3.1.4 Microsoft v1.0, v1.02

1. Linux Clustering is not supported.

2. v3.63.363.0 is the Minimum NIC driver if Compaq Network Teaming is enabled.

3. Please refer to the following web site for the latest sources for the linux driver for the HP SR2122-2 Storage Router:

<http://sourceforge.net/projects/linux-iscsi>