

**Date:** February 6, 2006

**Name of Product:** Cisco MDS 9000 Family - version 2.1.2

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## Declaration of Conformance

The Cisco Storage product line below (and all plug-in cards) conforms to the technical requirements listed in Sections 508 and 1194, and if a U.S. federal agency installs these products, the agency will be in compliance with Sections 508.

The following products are "back office" products, not touched by end users. So the only accessibility requirement is that a disabled network administrator must be able to remotely configure the product through the Storage Services CLI Interface 2.1.2.

M91S1K9-2.1.2B MDS 9100 Supervisor/Fabric-I, SAN-OS Software Release 2.1.2b (CLI OS Functionality)

M92S1K9-2.1.2B MDS 9216 Supervisor/Fabric-I, SAN-OS Software Release 2.1.2b (CLI OS Functionality)

M95S1K9-2.1.2B MDS 9500 Supervisor/Fabric-I, SAN-OS Software Release 2.1.2b (CLI OS Functionality)

The following statement applies to the SSI-M9K9-212 Storage Services Interface - version 2.1.2 (Fabric Manager and Device Manager)

Individuals with other disabilities, such as deaf, hard of hearing, mobility impaired, low-vision etc., should also be able to use a CLI (Command Line Interface). So a network administrator with disabilities -- including low vision or blind -- can remotely configure/administer this product.

<b>Summary Table Voluntary Product Accessibility Template</b>		
<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>

Section 1194.21 Software Applications and Operating Systems	Not Applicable	
Section 1194.22 Web-based internet information and applications	Not Applicable	
Section 1194.23 Telecommunications Products	Not Applicable	This product does not have any Telecommunication features
Section 1194.24 Video and Multi-media Products	Included	This product family leverages a command line interface (CLI). The CLI is inherently 508 conformant because its text based and relies on keyboard for navigation. All function of the router can be configure and monitor through the CLI.
Section 1194.25 Self-Contained, Closed Products	Not Applicable	This not a self-contained product.
Section 1194.26 Desktop and Portable Computers	Not Applicable	This not a desktop or portable computer.
Section 1194.31 Functional Performance Criteria	Included	
Section 1194.41 Information, Documentation and Support - Detail	Included	

**Section 1194.25: Self-Contained, Closed Products - Detail  
Voluntary Product Accessibility Template**

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<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) Self contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.	Support when combined with Compatible AT	The command line interface (CLI) that permits complete control over configuration which is fully compatible with screen reader technology.
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Support	
(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	Not Applicable	
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not Applicable	
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.	Not Applicable	

**Section 1194.31: Functional Performance Criteria - Detail  
Voluntary Product Accessibility Template**

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<b>Criteria</b>	<b>Supporting Features</b>	<b>Remarks and Explanations</b>
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	Supports	See <b>1194.25(a)</b>
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports	
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	Supports	
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supports	
(e) At least one mode of operation and information	Supports	

retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.		
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supports	

## Cisco MDS 9000 CLI and Fabric Manager Functional Differences

This Cisco MDS 9000 Family Fabric Manager Configuration Guide Table A-1 contains a list of features and functions not supported by Cisco Fabric Manager or Device Manager. This list is organized according to the chapter in which the feature would be described if it were supported. For documentation about these features, refer to the *Cisco MDS 9000 Family CLI Configuration Guide* – use the following URL to view the guide:

[http://www.cisco.com/en/US/products/ps5989/products\\_configuration\\_guide\\_chapter09186a008040f8f6.html](http://www.cisco.com/en/US/products/ps5989/products_configuration_guide_chapter09186a008040f8f6.html)

**Table A-1 Features/Functions Not Supported by Cisco Fabric Manager or Device Manager (SAN-OS 2.1.2b)**

Part	Chapter/Category	Procedure
2 Installation and Management	Obtaining and Installing Licenses	Backing Up License Files Updating Licenses Moving licenses between switches
	Initial Configuration	Starting a Switch (Initial Setup) Configuring Console Settings Configuring COM1 and Modem Settings

<b>Part</b>	<b>Chapter/Category</b>	<b>Procedure</b>
		Configuring the Initialization String Basic Switch Configuration Terminal Settings File System Commands (Subset Supported) Displaying File Contents
	Using the CFS Infrastructure	Configuring CFS over IP
	Working with Configuration Files	Formatting External CompactFlash Compressing and Uncompressing Files Displaying the Last Lines in a File Executing Commands Specified in a Script Setting the Delay Time Displaying Configuration Files Unlocking the Startup Configuration File Accessing Remote File Systems
	Software Images	Manual Upgrade on a Dual Supervisor Switch Corrupted Bootflash Recovery
	Configuring High Availability	Copying Images to the Standby Supervisor
	Managing System Hardware	Clock Modules
	Managing Modules	Connecting to a Module Preserving Module Configuration Purging Module Configuration Reloading the Switch

<b>Part</b>	<b>Chapter/Category</b>	<b>Procedure</b>
		EPLD Configuration ASM-FSN Boot Image Configuring SSI Boot Image Managing ASM and SSM Modules
3 Switch Configuration	Configuring Interfaces	Displaying the ALPA Cache Contents Clearing the ALPA Cache N-port identifier virtualization (NPIV)
	Scheduling Tasks	Schedule Configuration
4 Fabric Configuration	Inter-VSAN Routing Configuration	Inter-VSAN routing (IVR) FICON support IVR Service Groups
	Distributing Device Alias Services	Configuring DDAS
6 IP Services	Configuring FCIP	Displaying and Clearing ARP Caches
	Configuring the SAN Extension Tuner	Tuning Configuration
	Configuring IP Storage	IPS Module Core Dumps
8 Network and Switch Monitoring	Monitoring Network Traffic Using SPAN	Remote SPAN

Part	Chapter/Category	Procedure
10 Troubleshooting	Troubleshooting Your Fabric	Loop Monitoring Configuring CIM CFS for fcTimers Local Text Based Capture Capturing FCAnalyzer Frames Locally Sending Captured FCAnalyzer Frames to a Remote IP Address Clearing Configured FCAnalyzer Information Display a List of Hosts Configured for Remote Capture Use Fabric Analyzer Display Filters
	Monitoring System Processes and Logs	Saving the Last Core to Flash Kernel Core Dumps System Health Initiation Loopback Test Configuration Frequency Hardware Failure Action Tests for a Specified Module Clearing Previous Error Reports Online Health Management System <ul style="list-style-type: none"> <li>• Enabling and Disabling the OHMS</li> <li>• Enabling and Disabling Hardware Failure Action</li> <li>• Configuring Onboard Failure Logging</li> <li>• Clearing Previous Error Reports</li> <li>• Performing Tests for a Specified Module</li> </ul>

Part	Chapter/Category	Procedure
		<ul style="list-style-type: none"> <li>• Configuring Automatic Loopback Tests</li> <li>• Performing SERDES Loopback Tests</li> </ul>

There are some functions that can be performed using the Cisco Fabric Manager (FM), Cisco Device Manager (DM), and Cisco Fabric Manager Server (FMS) that are not available using only CLI. Table 2 lists the functions that are unique to Cisco FM, DM, and FMS. The following guidelines are used to determine what constitutes functional differences:

- The CLI and GUI procedures used to view or configure parameters do not constitute a functional difference, because the functions can still be performed.
- The format and organization of the parameters presented is not relevant, because a user still have access to the same information.
- If a parameter or statistic cannot be viewed or configured using CLI or GUI that constitutes a functional difference.
- If parameters are transformed (analytical functions) into new values which are not accessible by CLI or GUI that constitutes a functional difference.
- Major presentation capabilities only provided by GUI interfaces constitutes a functional difference, such as graphing and mapping.

**Table 2 Cisco FM, DM, and FMS Functions Not Provided by CLI (SAN-OS 2.1.2b)**

Tool	Feature Description
Cisco FM	Fibre Channel network discovery
	Fibre Channel topology mapping
	Configuration comparison (Fabric Configuration Analysis tool)

Tool	Feature Description
	Fabric-level connectivity analysis (End-to-End Connectivity Analysis tool)
	Zone Merge Analysis tool
	Zone Migration tool
	FICON Flow Load Balance Calculator
	Syslog server
	TFTP server
<b>Cisco DM</b>	Real-time performance charting (bar, pie, line, area)
<b>Cisco FMS</b>	Performance prediction reporting
	SNMP proxy
	Historical performance monitoring
	Auto-baseline performance thresholds (calculated)

**Section 1194.41: Information, Documentation and Support - Detail Voluntary Product Accessibility Template**

Storage Services Interface, Fabric Manager - version 2.1.2

Criteria	Supporting Features	Remarks and Explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	Supports	Available upon request.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	Available upon request.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	