



## New and Changed Information

This chapter provides release-specific information for each new and changed feature in the Cisco MDS SAN-OS Release 1.3 software. The *Cisco MDS 9000 Family Configuration Guide* is updated to address each new and changed feature in the Cisco MDS SAN-OS Release 1.3 software. The latest version of this document is available at the following Cisco Systems website:

[http://www.cisco.com/en/US/products/hw/ps4159/ps4358/prod\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/hw/ps4159/ps4358/prod_configuration_guides_list.html)



**Tip**

The configuration guides created for previous releases are also listed in the website mentioned above. Each guide addresses the features introduced in or available in those releases. Select and view the configuration guide pertinent to the software installed in your switch.

To check for additional information about Cisco MDS SAN-OS Release 1.3, refer to the *Cisco MDS 9000 Family Release Notes* available at the following Cisco Systems website:

[http://www.cisco.com/en/US/products/hw/ps4159/ps4358/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/hw/ps4159/ps4358/prod_release_notes_list.html)

**Table 1** summarizes the new and changed features for the *Cisco MDS 9000 Family Configuration Guide*, and tells you where they are documented. The table includes a brief description of each new feature and the release in which the change occurred.

**Table 1 Documented Features for the Cisco MDS 9000 Family Configuration Guide**

Feature	Description	Changed in Release	Where Documented
TL port ALPA cache	Configuring manual entries in the ALPA Cache for TL ports.	1.3(5)	<a href="#">Chapter 10, “Configuring Interfaces”</a>
Banner message	Configure the message of the day (MOTD) for each switch.	1.3(4a)	<a href="#">Chapter 2, “Before You Begin”</a>
Full zone set distribution	Distribute inactive, unmodified zonesets throughout the fabric.	1.3(4a)	<a href="#">Chapter 13, “Configuring and Managing Zones”</a>
Inter-VSAN Routing (IVR)	Configure IVR interoperation with third-party switches. Adding and withdrawing IVR domains to VSANs.	1.3(4a)	<a href="#">Chapter 14, “Configuring Inter-VSAN Routing”</a>
In-Order Delivery (IOD)	Enable IOD for specific VSANs.	1.3(4a)	<a href="#">Chapter 19, “Configuring Fibre Channel Routing Services and Protocols”</a>

**Table 1 Documented Features for the Cisco MDS 9000 Family Configuration Guide (continued)**

<b>Feature</b>	<b>Description</b>	<b>Changed in Release</b>	<b>Where Documented</b>
FICON features	Configure FICON port numbering, first-available port numbers, and move the FICON VSAN offline.	1.3(4a)	Chapter 21, “Configuring FICON”
IP Storage updates	Address the IPS-4 module inclusion, FCIP and iSCSI default changes, burst size change for iSCSI interfaces, and delay jitter estimation.	1.3(4a)	Chapter 22, “Configuring IP Storage”
Switch summary	Provide a brief summary of the switch configuration using the <b>brief</b> option in the <b>show tech-support</b> command.	1.3(4a)	Chapter 29, “Advanced Features and Concepts”
Online Health Management System	Perform fault detection and recovery using the Online Health Management System (system health) feature.	1.3(4a)	Chapter 31, “Monitoring System Processes and Logs”
iSCSI SACK Default	Enable the TCP SACK parameter (default) for iSCSI configurations.	1.3(3)	Chapter 22, “Configuring IP Storage”
Essential Upgrade Prerequisites	Contact customer service for recommendations before attempting an upgrade.	1.3(3)	Chapter 6, “Software Images”
iSCSI name restriction	Restrict the iSCSI qualified name to a maximum name length of 223 alphanumeric characters and a minimum length of 16 characters.	1.3(3)	Chapter 22, “Configuring IP Storage”
The <b>zoneset import</b> command	Import the zoneset from the adjacent switch connected through the specified interface.	1.3(2a)	Chapter 13, “Configuring and Managing Zones”
The <b>zoneset export</b> command	Export the zoneset to the adjacent switch connected through the specified VSAN.	1.3(2a)	
The <b>clear system reset-reason</b> command	Clear the reset-reason information stored in NVRAM and volatile persistent storage.	1.3(2a)	Chapter 31, “Monitoring System Processes and Logs”
The <b>update license url</b> command	Update an existing, expiring license file.	1.3(2a)	Chapter 3, “Obtaining and Installing Licenses”
The <b>show scsi-target pwwn</b> command	Display the port WWN that is assigned to each OS (Windows, AIX, Solaris, Linux, or HPUX).	1.3(2a)	Chapter 27, “Discovering SCSI Targets”
The <b>discover scsi-target local</b> command	Provide the <b>os</b> keyword along with one of the OS options ( <b>aix</b> , <b>all</b> , <b>hpux</b> , <b>linux</b> , <b>solaris</b> , or <b>windows</b> ).	1.3(2a)	
Rolling upgrades	Use a rolling upgrade install mechanism for the Cashing Services Module (CSM) and the IP Storage (IPS) services module.	1.3(2a)	Chapter 6, “Software Images”

**Table 1 Documented Features for the Cisco MDS 9000 Family Configuration Guide (continued)**

<b>Feature</b>	<b>Description</b>	<b>Changed in Release</b>	<b>Where Documented</b>
Running configuration information	Display configurations based on a specified feature, interface, module, or VSAN.	1.3(1)	<a href="#">Chapter 2, “Before You Begin”</a>
Licensing	Access specified premium features on the switch.	1.3(1)	<a href="#">Chapter 3, “Obtaining and Installing Licenses”</a>
Initial setup additions	Configure the full zoneset distribution and FC ID persistence features for the entire fabric during initial setup.	1.3(1)	<a href="#">Chapter 4, “Initial Configuration”</a>
Automatic image synchronization	Automatic synchronization of the running image in the standby supervisor module by the active supervisor module.	1.3(1)	<a href="#">Chapter 5, “Configuring High Availability”</a>
Standby state	Display standby or HA standby when the redundancy state or the supervisor state indicate a switchover is possible.	1.3(1)	<a href="#">Chapter 5, “Configuring High Availability”</a>
Terminal connection options	Connect to a console terminal, a Telnet terminal, or an SSH terminal from the active supervisor module.	1.3(1)	<a href="#">Chapter 6, “Software Images”</a>
Standby supervisor module boot variables	Force the standby supervisor module to run the same version as the active supervisor module.	1.3(1)	<a href="#">Chapter 6, “Software Images”</a>
Replacing modules	Ensure that the new module is running the same software version as the rest of the switch.	1.3(1)	<a href="#">Chapter 6, “Software Images”</a>
Transceiver and calibration information	Display real-time diagnostics information using the <b>show interface interface-type slot/port transceiver</b> command.	1.3(1)	<a href="#">Chapter 10, “Configuring Interfaces”</a>
Buffer-to-buffer credit (BB_credit) display	Display the receive and transmit BB_credit along with other pertinent interface information using the <b>show interface bbcredit</b> command.	1.3(1)	<a href="#">Chapter 10, “Configuring Interfaces”</a>
Common Information Model (CIM) configuration	Configure the CIM server using the HTTP and HTTPS protocol.		
PortChannel quiesce	Use the <b>quiesce</b> command on an ISL to gracefully shut down an interface without dropping any frames.	1.3(1)	<a href="#">Chapter 12, “Configuring PortChannels”</a>
Zone membership	Assign zone membership criteria is also based on the interface and domain ID, domain ID and port number, and IP address.	1.3(1)	<a href="#">Chapter 13, “Configuring and Managing Zones”</a>

**Table 1 Documented Features for the Cisco MDS 9000 Family Configuration Guide (continued)**

<b>Feature</b>	<b>Description</b>	<b>Changed in Release</b>	<b>Where Documented</b>
IVR	Access resources across VSANs without compromising other VSAN benefits.	1.3(1)	<a href="#">Chapter 14, “Configuring Inter-VSAN Routing”</a>
Fabric-Device Management Interface (FDMI)	Enables management of devices using the FDMI feature.	1.3(1)	<a href="#">Chapter 15, “Managing FLOGI, Name Server, FDMI, and RSCN Databases”</a>
AAA server groups	Configure remote AAA servers using server groups.	1.3(1)	<a href="#">Chapter 16, “Configuring Switch Security”</a>
TACACS+ authentication	Use the Terminal Access Controller Access Control System plus (TACACS+) protocol to communicate with remote AAA servers.	1.3(1)	<a href="#">Chapter 16, “Configuring Switch Security”</a>
RADIUS enhancements	Configure multiple RADIUS server groups.	1.3(1)	<a href="#">Chapter 16, “Configuring Switch Security”</a>
FC-SP DHCHAP	Configure Fibre Channel Security Protocol (FC-SP) authentication to overcome security challenges for enterprise-wide fabrics. Diffie-Hellman Challenge Handshake Authentication Protocol (DHCHAP) provides authentication between Cisco MDS switches and other devices.	1.3(1)	<a href="#">Chapter 17, “Configuring Fabric Security”</a>
FI-bre CON-nection (FICON)	Intermix FICON and Fibre Channel Protocol (FCP) traffic on the same switch without compromising scalability, availability, manageability and network security.	1.3(1)	<a href="#">Chapter 21, “Configuring FICON”</a>
Fabric binding	Prevent unauthorized switches from joining the fabric or disrupting current fabric operations.	1.3(1)	<a href="#">Chapter 21, “Configuring FICON”</a>
Registered link incident report (RLIR)	Use the RLIR function to send a LIR to a registered Nx-port.	1.3(1)	<a href="#">Chapter 21, “Configuring FICON”</a>
Trespass support	Use the trespass feature to enable the export of logical units (LUs) from the active to the passive port of a statically imported iSCSI target.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>
Internet Storage Name Service (iSNS)	Use the iSNS services to automate the discovery and management of iSCSI devices.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>
Proxy initiator	Connect all iSCSI initiators through one IPS port to make it appear as one Fibre Channel port per VSAN.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>

**Table 1 Documented Features for the Cisco MDS 9000 Family Configuration Guide (continued)**

Feature	Description	Changed in Release	Where Documented
FCIP write accelerator	Improve application performance using the FCIP write acceleration feature.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>
FCIP compression	Allow IP packets to be compressed on the FCIP link if this feature is enabled on that link.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>
VSAN membership for iSCSI interfaces	Configure an iSCSI host to be a member of one or more VSANs.	1.3(1)	<a href="#">Chapter 22, “Configuring IP Storage”</a>
Call Home enhancements	Define a Call Home destination profile, select predefined types of Call Home alerts, or filter messages based on their level of urgency.	1.3(1)	<a href="#">Chapter 23, “Configuring Call Home”</a>
FC domain ID changes	Define the default behavior to enable persistent FC IDs globally or for each VSAN.	1.3(1)	<a href="#">Chapter 24, “Configuring Domain Parameters”</a>
Port rate limiting	Use the port rate limiting feature to control ingress traffic into a Fibre Channel port.	1.3(1)	<a href="#">Chapter 25, “Configuring Traffic Management”</a>
Quality of Service (QoS)	Configure four priority levels for service differentiation.	1.3(1)	<a href="#">Chapter 25, “Configuring Traffic Management”</a>
Auto-discovery of SCSI targets	Automatically discover SCSI targets using the <b>show scsi-target auto-poll</b> command.	1.3(1)	<a href="#">Chapter 27, “Discovering SCSI Targets”</a>
IPS SPAN source	Assign a Switched Port Analyzer (SPAN) source on the IP Storage (IPS) services module.	1.3(1)	<a href="#">Chapter 28, “Monitoring Network Traffic Using SPAN”</a>
Per VSAN Time Out Values (TOV)	Configure different TOVs for a specified VSAN with special links like FC or IP tunnels using the <b>ftimer</b> command.	1.3(1)	<a href="#">Chapter 29, “Advanced Features and Concepts”</a>
Management interface	Manage the switch with a single IP address. The active supervisor module's management (mgmt0) interface uses this IP address.	All	<a href="#">Chapter 4, “Initial Configuration”</a>
Deleting directories	Delete the entire directory and all its contents.	All	<a href="#">Chapter 2, “Before You Begin”</a>

[Table 2](#) contains the history of the changes to the *Cisco MDS 9000 Family Configuration Guide* in Release 1.3. When the document is updated for the next release, these changes are incorporated into the new revision and will no longer appear in this table.

**Table 2**    *Documentation Changes for Cisco MDS 9000 Family Configuration Guide, Release 1.3*

<b>Date</b>	<b>Description of Change</b>	<b>Where Changed</b>
08/03/2004	New 1.3(5) features documented.	See <a href="#">Table 1</a> .
04/19/2004	New 1.3(4a) features documented.	See <a href="#">Table 1</a> .
01/13/2004	New 1.3(3) features documented.	See <a href="#">Table 1</a> .
12/19/2003	New 1.3(2a) features documented.	See <a href="#">Table 1</a> .
11/21/2003	Document created for Release 1.3(1).	See <a href="#">Table 1</a> .