

New and Changed Information

This document provides release-specific information for each new and changed feature in Cisco Fabric Manager and Cisco MDS SAN-OS Release 3.x software. The *Cisco MDS 9000 Family Fabric Manager Configuration Guide* is updated to address each new and changed feature in the Cisco MDS SAN-OS Release 3.x software. The latest version of this document is available at the Cisco MDS 9000 SAN-OS Software Configuration Guides website.

<u>}</u> Tip

The configuration guides created for earlier releases are also listed at the aforementioned website. Each guide addresses the features introduced 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 this release, refer to the *Cisco MDS 9000 Family Release Notes* available at the Cisco MDS 9000 SAN-OS Software Release Notes website.

Table 1 summarizes the new and changed features for the *Cisco MDS 9000 Family Fabric Manager 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.

Caution

FCIP tape acceleration is not supported in Cisco MDS SAN-OS Release 3.0(1) and Release 3.0(2). This feature must be disabled before upgrading from Cisco SAN-OS Release 2.x to Cisco MDS SAN-OS Release 3.0(1) or Release 3.0(2).

Table 1 New and Changed Features for Release 3.x

Feature	GUI Change	Description	Changed in Release	Where Documented
Configuring Delayed Traps	Delayed Traps	Added features to support EMC Delayed Traps	3.3(3)	Chapter 64, "Configuring Call Home"
Configuring NPV Traffic Management	NPV Traffic Map tab, Load Balance tab, and NPV Setup Wizard	New tabs and setup wizard steps are added to map external interfaces to the server interface and to enable disruptive load balancing.	3.4(1)	Chapter 21, "Configuring N Port Virtualization"
Configuring SANTap DVT MSM	SANTap DVT MSM tab	New tabs are added to configure SANTap DVT MSM 18+4 and 9222i.	3.4(1)	Chapter 49, "Configuring SANTap"

New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
Configuring RMON 32 and 64 bit Alarm	RMON 32 and 64 bit Alarm tab	New tabs are added to configure RMON 32 and 64 bit alarm.	3.4(1)	Chapter 61, "Configuring RMON"
Inventory Summary Detail ReportS	Report tab. An additional option to see detailed reports in the summary section.	Inventory switch detail report has been enhanced to include a number of summary statistics useful for creating a more comprehensive SAN health reports	3.4(1)	Chapter 7, "Fabric Manager Web Server"
Configuring Port Security Using Wizard	Port Security Wizard	The Port Security Configuration wizard provides step-by-step procedures for setting up the Port Security Policy for a selected VSAN	3.3(1a)	Chapter 37, "Configuring Port Security"
Dense Wavelength Division Multiplexing	The FSPF (Fabric Shortest Path First) database only displays an ISL link, which is connected with DWDM SPFs at both ends.	Dense Wavelength-Division Multiplexing (DWDM) multiplexes multiple optical carrier signals on a single optical fiber. DWDM uses different wavelengths to carry various signals.	3.3(1a)	Chapter 33, "Dense Wavelength Division Multiplexing"
NPV Setup Wizard	Wizard and Error Screens added	Enables users to configure using a GUI wizard, interactively.	3.3(1a)	Chapter 21, "Configuring N Port Virtualization"
Configuring FlexAttach Virtual pWWN	FlexAttach enabling dialog boxes in DM, and FlexAttach enabling options displayed in the Information pane	FlexAttach virtual pWWN feature facilitates server and configuration management. In a SAN environment, the server installation or replacement, requires interaction and coordination among the SAN and server administrators.	3.3(1a)	Chapter 14, "Configuring FlexAttach Virtual pWWN"
Database Backup and Restore-Postgres		The Fabric Manager uses Postgres Database as the default database. The Fabric Manager backup utility uses Postgres pg_dump utility, to dump all database content to an ASCII dump file. Restore utility uses psql to re-create data using the dump file	3.3(1a)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"
Importing PM Statitics Data to Fabric Manager		Manually import existing PM statistics data to Fabric Manager	3.3(1a)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"

Table 1

New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
Creating FM/DM Shortcut Manually		The FM/DM shortcut on the desktop is available only when launching the application for the first time. Also, the shortcut is not offered when you lauche Fabric Manager from the FM download page. Manually creating the FM/DM shortcut	3.3(1a)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"
Creating Startup Files in Solaris		The Postgre SQL and Fabric Manager does not automatically start-up in Solaris after the installation. These files can be created using commands	3.3(1a)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"
Enabling HTTPS after FMS Installation-Windows and Unix		Enabling https after FMS installation, using a user-signed or CA-signed certificate	3.3(1a)	Chapter 7, "Fabric Manager Web Server"
Device Manager-Graphs and Charts	Graphical representation of traffic statistics	Graphical representation of Real time Performance Monitoring of interface Traffic	3.3(1a)	Chapter 60, "Performance Monitoring"
FCIP Compression		Added table for Algorithm Classification and Performance Settings	3.3(1a)	Chapter 48, "Configuring FCIP"
Cisco Fabric Manager and Device Manager Installer	Cisco Fabric Manager and Device Manager Installer	Enables users must install Fabric Manager from the CD-ROM or from Cisco.com. Fabric Manager is no longer packaged with a Cisco MDS 9000 Family Switch.	3.2(1)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"
Launching Fabric Manager Client	Control Panel dialog box to open and discover fabrics	Enables network operators to launch Fabric Manager Client from the desktop once it is installed.	3.2(1)	Chapter 5, "Fabric Manager Client"
Selecting a Fabric to Manage Continuously	Drop-down list in Control Panel dialog box with options to Manage Continuously, Manage and Unmanage	Enables users to continuously manage a Fabric Manager Server fabric, whether or not a client has that fabric open.	3.2(1)	Chapter 3, "Fabric Manager Server"
Health tab and Analysis subtab, Switch Bandwidth subtab under Performance tab, Scheduled Jobs subtab under Custom tab	New screens for each new subtab	Users can run or schedule analysis reports, view total bandwidth for a switch, and view scheduled jobs by custom report templates.	3.2(1)	Chapter 7, "Fabric Manager Web Server"

Table 1 New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
On-Demand Port Activation Licensing		Added support for the Cisco MDS 9134 Fabric Switch.	3.2(1)	Chapter 11, "On-Demand Port Activation Licensing"
N Port Virtualization	Dialog boxes for enabling NPV	Enables users to configure NPV devices.	3.2(1)	Chapter 21, "Configuring N Port Virtualization"
CFS Regions	Region tabs added to CFS and dialog boxes for creating a region and assigning a feature to a region	Enables users to configure a CFS region that contains a subset of switches in a switch fabric.	3.2(1)	Chapter 13, "Using the CFS Infrastructure"
Viewing Digital Diagnostic Values	FC Interfaces dialog box	Enables users to view digital diagnostic values for single or multiple ports.	3.2(1)	Chapter 22, "Configuring Generation 2 Switches and Modules"
CompactFlash CRC Checksum test		When upgrading to SAN-OS Release 3.1(3), the CompactFlash CRC Checksum test runs automatically.	3.1(3)	Chapter 15, "Software Images"
Option to use Oracle Express database	Database Options dialog box	Added an option to choose Oracle Express as your database.	3.1(2b)	Chapter 2, "Installation of Cisco MDS SAN-OS and Fabric Manager"
On-Demand Port Activation Licensing	License dialog boxes	Added support for the Cisco Fabric Switch for HP c-Class BladeSystem and the Cisco Fabric Switch for IBM BladeCenter.	3.1(2)	Chapter 11, "On-Demand Port Activation Licensing"
Running the CompactFlash Report	Compact Flash Report dialog box	Enables users to run the CompactFlash Check utility to generate a report that shows the status of CompactFlash on certain line cards.	3.1(2)	Chapter 18, "Managing System Hardware"
SAN Device Virtualization	Dialog boxes for enabling SAN Device Virtualization and creating virtual targets and devices	Enables users to configure virtual devices to represent physical end devices for switches running Cisco SAN-OS Release 3.1(2) and later.	3.1(2)	Chapter 27, "SAN Device Virtualization"
Run CLI Commands	Run CLI Commands dialog box	Enables users to run a CLI command on multiple switches.	3.1(2)	Chapter 68, "Troubleshooting Your Fabric"
Setting the Seed Switch	Login, Add Fabric, Open Fabric, and FM User dialog boxes	Enables the user to login and select the switch for Fabric Manager to use.	3.1(1)	Appendix A, "Launching Fabric Manager in Cisco SAN-OS Releases Prior to 3.2(1)"

Table 1

New and Changed Features for Release 3.x (continued)

Feature	GUI Change	Description	Changed in Release	Where Documented
Adding or Deleting Fabric Manager Server users	FM Users tab on Server Admin dialog box	Enables users to add or delete a Fabric Manager Server user or to change the password for an existing user using Fabric Manager.	3.1(1)	Appendix A, "Launching Fabric Manager in Cisco SAN-OS Releases Prior to 3.2(1)"
Launching Fabric Manager Client	Open Fabric and Add New Fabric dialog boxes	Enables the user to select the fabric they want to open.	3.1(1)	Chapter 5, "Fabric Manager Client"
On-Demand Port Activation Licensing	License dialog boxes	Enables users to activate licenses for a single port or multiple ports.	3.1(1)	Chapter 11, "On-Demand Port Activation Licensing"
Performance tab	Ethernet and Others tabs	Users can see a list of GigE ports or a list of other statistics.	3.1(1)	Chapter 7, "Fabric Manager Web Server"
Configuring Rate Mode Oversubscription Limits	Module dialog boxes	Enables users to configure rate mode oversubscription limits for a single module or multiple modules.	3.1(1)	Chapter 22, "Configuring Generation 2 Switches and Modules"
Quick Config Wizard	Quick Config Wizard on the FC Menu of Device Manager	Enables the user to add or remove zone members per VSAN using Device Manager.	3.1(1)	Chapter 30, "Configuring and Managing Zones"
		Note The Quick Config Wizard is supported on the Cisco MDS 9124 Switch only.		
Activating or Deactivating a Zone Set	Zone Log dialog box	Users can use this dialog box to find out whether the zone set activation or deactivation was successful.	3.1(1)	Chapter 30, "Configuring and Managing Zones"
Assigning Device Alias Modes	Global tab added to Device Alias configuration	After setting their configuration to enhanced mode, zoning and other applications such as inter-VSAN routing (IVR), Dynamic Port VSAN Membership (DPVM), and port security automatically keep track of device alias changes.	3.1(1)	Chapter 24, "Distributing Device Alias Services"
FICON Tape Acceleration	TapeAccelerator option added to FCIP Tunnel dialog box	Users can check this check box to enable FICON tape acceleration over the selected FCIP tunnel.	3.1(1)	Chapter 28, "Configuring FICON"
Federal Information Processing Standards (FIPS) Publication 140-2	FIPS activation check box	Users can enable FIPS mode per switch.	3.1(1)	Chapter 30, "Configuring FIPS"
FCIP Wizard	FCIP Wizard Select Switch Pair dialog box	Dialog box for selecting switches is non-editable. Users must select a switch from the drop-down menu.	3.1(1)	Chapter 48, "Configuring FCIP"

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Table 1	
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New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
ESCON Style Port Configuration Display	ESCON Style Port check box added to the Port Configuration Table	Enables the user to see which ports are available or prohibited in Device Manager.	3.0(2)	Chapter 28, "Configuring FICON"
FICON Configuration Locking	A confirmation dialog box displayed if the FICON VSAN information is changed.	Enables the user to save any changes to the FICON configuration since the last refresh.	3.0(2)	Chapter 28, "Configuring FICON"
SNMP over TCP/IP	None - updated Server Properties file	Enables SNMP messages to be transported over TCP rather than UDP for management traffic on the out-of-band Ethernet management port (mgmt0).	3.0(1)	Chapter 3, "Fabric Manager Server"
EMC Call Home	None - updated Server Properties file	Enables the forwarding of traps as XML data using email, according to EMC specifications.	3.0(1)	Chapter 3, "Fabric Manager Server"
Syslog messages	Syslog link	Click on a syslog link to directly access the syslog files.	3.0(1)	Chapter 3, "Fabric Manager Server"
Traffic statistics	Hot links for traffic data grouped by Host	If the data is grouped by Hosts, you can click on the host link to get traffic statistics.	3.0(1)	Chapter 3, "Fabric Manager Server"
Reporting of enclosure aliases	Report Aliases Preference Added	Checking this check box in Preferences > General shows the aliases for the enclosures when you mouse over them in the Fabric pane.	3.0(1)	Chapter 5, "Fabric Manager Client"
Fabric Manager Install Wizard	Install Wizard updated to support Motorola-based clients	Supports installation on Motorola-based systems such as the Apple Power PC.	3.0(1)	Chapter 5, "Fabric Manager Client"
Filtering by User Defined Groups	Group menu item added to switch and host context menus	Enables the definition of custom groups containing switches, or hosts and storage devices, to enable the filtering of information that is not relevant to that group. Filtering applies to the Cisco Fabric Manger topology map, information tables (switch parameters), and Cisco Fabric Manager Server (FMS) reports.	3.0(1)	Chapter 5, "Fabric Manager Client"

Table 1

New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
Filtering by user defined groups	Groups folder added	Enables the definition of custom groups containing switches, or hosts and storage devices, to enable the filtering of information that is not relevant to that group. Filtering applies to the Cisco Fabric Manger topology map, information tables (switch parameters), and Cisco Fabric Manager Server (FMS) reports.	3.0(1)	Chapter 5, "Fabric Manager Client"
Fabric pane layout saving	Save Layout menu item added to general context menu	This feature, which was removed in Release 2.x, has been added to Release 3.0.	3.0(1)	Chapter 5, "Fabric Manager Client"
Export Device Manager image	Export Image menu item on Device menu	Saves a snapshot of the Device Manager display to the local PC.	3.0(1)	Chapter 6, "Device Manager"
Print Device Manager image	Print menu item on Device menu	Prints a snapshot of the Device Manager display to the local PC.	3.0(1)	Chapter 6, "Device Manager"
Browser preference for Device Manager display	Browser Preferences setting in Preferences dialog box	Enables you to set the type of browser you use to display the Device Manager (Netscape or Mozilla-based).	3.0(1)	Chapter 6, "Device Manager"
Change in Device Manager Inventory display	Module ID column on Inventory display	Displays the module ID.	3.0(1)	Chapter 6, "Device Manager"
Performance Collections	Performance Manager Collection Wizard Moved to Web Services	Collections are now configured using the Fabric Manager Web Services client, under the Admin > Configuration > Collections screen.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Searchable statistical information in the Fabric Manager Web Services client	Searchability icon displayed in certain table columns	Click on the search icon in some tables to search for items listed in that column.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Event Forwarding	New Event screen	Events logged by Cisco FMS can be forwarded to users via e-mail, or as SNMP Traps to network management systems.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Data collection auto update	Data Collection tab	Provides an automatic way to keep data collection definitions current.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
SCSI flow statistics reports	SCSI flow tab	Provides a real-time view of SCSI flow statistics, which include logical unit number (LUN) level throughput, I/Os per second, response times, and SCSI error information.	3.0(1)	Chapter 7, "Fabric Manager Web Server"

Table 1

New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
Server performance summary reports	Server performance tab	Provides a view of summary throughput, errors, and discards statistics for all connections on paths from a server to its storage devices.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Custom report performance charts	Custom report tab	Enables throughput performance charts to be optionally embedded for each table entry.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Configurable RRD	Database menu option on Admin tab	Enables configuration of the number of samples saved for each resolution.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Fabric Manager Web Services administration	Reorganized Admin area	Reorganization of certain areas of the Admin tab, such as Performance and Fabrics.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Communities configuration	New Communities screen	Enables you to configure communities.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Local Roles configuration	New Web Local Roles screen	Enables you to configure local roles.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Performance Prediction	New Performance Prediction tab	Provides a way to more reliably predict when storage network connections will become overutilized.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Performance statistics	New Last Updated column on performance statistics	Displays the date and time the statistics were last updated.	3.0(1)	Chapter 7, "Fabric Manager Web Server"
Crossbar graceful shutdown	Out of Service menu item on Supervisor context menu	Provides procedures for gracefully shutting down the crossbars on the Cisco MDS 9500 Series Directors.	3.0(1)	Chapter 18, "Managing System Hardware"
Crossbar removal procedures		Provides the recommended procedures to prepare to remove crossbars from Cisco MDS 9500 Series Directors.	3.0(1)	Chapter 18, "Managing System Hardware"
Supervisor-2 module support		Includes support for the following Supervisor-2 module features:	3.0(1)	Chapter 12, "Initial Configuration"
		• Configuring modem parameters on the console port and COM1 port.		
		Allowing 1000 Mbps speed on the management port.		
Generation 2 switching module support		Describes how to configure interfaces on the Generation 2 Fibre Channel switching modules.	3.0(1)	Chapter 22, "Configuring Generation 2 Switches and Modules"

Table 1

New and Changed Features for Release 3.x (continued)

			Changed in	
Feature	GUI Change	Description	Release	Where Documented
CFS support for allowed domain ID lists	Allowed DomainIds tab under VSAN, Domain Manager	Enables the allowed domain ID lists to be distributed in the fabric using the CFS infrastructure.	3.0(1)	Chapter 25, "Configuring Domain Parameters"
CFS over IP		Enables CFS distributions over IP connections.	3.0(1)	Chapter 13, "Using the CFS Infrastructure"
Supervisor module management procedures		 Includes the following recommended supervisor module management procedures: Preparing to remove supervisor modules from Cisco MDS 9500 Series Directors containing both Generation 1 and Generation 2 switching modules. 	3.0(1)	Chapter 15, "Software Images"
		Migrating from Supervisor 1 modules to Supervisor 2 modules in the Cisco MDS 9500 Series Directors.		
IVR zone rename	Rename menu item on Edit menu in Edit Local Full Zone Database dialog box	Enables the renaming of IVR zones.	3.0(1)	Chapter 29, "Configuring Inter-VSAN Routing"
IVR zone set rename	Rename menu item on Edit menu in Edit Local Full Zone Database dialog box	Enables the renaming of IVR zonesets.	3.0(1)	Chapter 29, "Configuring Inter-VSAN Routing"
Active IVR zone set (IVZS) copy	Copy menu item on Edit menu in Edit Local Full Zone Database dialog box	Enables copying the active IVZS to the full IVZS to be edited and reactivated.	3.0(1)	Chapter 29, "Configuring Inter-VSAN Routing"
Active IVR topology copy	Discrepancies tab and Domains tab - visible after clicking IVR, CFS tab	Enables copying the active IVR topology to the manually configured IVR topology.	3.0(1)	Chapter 29, "Configuring Inter-VSAN Routing"
Increased zone limit per VSAN	None	Increases the maximum number of zones per VSAN from 2000 to 8000.	3.0(1)	Chapter 29, "Configuring Inter-VSAN Routing"
In-order-delivery enhancement		Ensures that frames are delivered in order within the switch latency drop period.	3.0(1)	Chapter 36, "Configuring FC-SP and DHCHAP"

Table 1 New and Changed Features for Release 3.x (continue	able 1	New and Changed Features for Release 3.x (continued)
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			Changed in	
Feature	GUI Change	Description	Release	Where Documented
CFS support for RCSN	CFS tab under VSAN, Domain Manager, Advanced	Enables the RSCN timer value to be distributed in the fabric using the CFS infrastructure.	3.0(1)	Chapter 26, "Managing FLOGI, Name Server, FDMI, and RSCN Databases"
RSCN timer value configuration	RSCN Event tab under VSAN, Domain Manager, Advanced	Enables the RSCN timer value to be configured.	3.0(1)	Chapter 26, "Managing FLOGI, Name Server, FDMI, and RSCN Databases"
FICON port numbering	None	Provides information on the changed default port numbering scheme for Generation 2 hardware and how to assign port numbers when a switch has more than 255 ports.	3.0(1)	Chapter 28, "Configuring FICON"
McDATA native interoperability	McDATA tab	Describes how to configure McDATA native mode interoperability.	3.0(1)	Chapter 29, "Advanced Features and Concepts"
Certificate authorities and digital certificates	PKI item under Security	Describes interoperating with Certificate Authorities and using digital certificates for secure communication with peers.	3.0(1)	Chapter 34, "Configuring Certificate Authorities and Digital Certificates"
IKE identity	IKE item under Security	Enables an IKE identity host name or IP address to be specified in the IPsec domain.	3.0(1)	Chapter 35, "Configuring IPsec Network Security"
IKE key host name	Pre-Shared AuthKey tab under Security, IKE	Enables IKE identity host name to be specified instead of an IP address for preshared keys.	3.0(1)	Chapter 35, "Configuring IPsec Network Security"
AAA server enhancements	AAA folder under Security	Includes the following AAA server enhancements:	3.0(1)	Chapter 32, "Configuring RADIUS and TACACS+"
		• Validating the availability of remote AAA servers		
		• Allowing users to specify a remote AAA server name at login		
		Displaying AAA server statistics.		
MS CHAP	AuthTypeMSCHAP check box under Security, AAA, General tab	Provides support for the Microsoft Challenge Handshake Authentication Protocol (MSCHAP).	3.0(1)	Chapter 32, "Configuring RADIUS and TACACS+"
Fabric binding for Fibre Channel	Fabric Binding under VSAN, Domain Manager	Supports fabric binding for Fibre Channel VSANs as well as FICON VSANs.	3.0(1)	Chapter 38, "Configuring Fabric Binding"

Table 1

New and Changed Features for Release 3.x (continued)

			Changed	
Feature	GUI Change	Description	in Release	Where Documented
FCIP tape read acceleration		Supports tape read acceleration over FCIP interfaces as well as tape write acceleration.	3.0(1)	Chapter 48, "Configuring FCIP"
iSCSI server load balancing (iSLB)		Provides information about how to easily configure large iSCSI deployments.	3.0(1)	Chapter 42, "Configuring iSCSI"
iSNS cloud discovery		Provides information to iSNS on the various interfaces reachable from an initiator by partitioning the interfaces on a switch into disjoint IP clouds.	3.0(1)	Chapter 42, "Configuring iSCSI"
IPv6 access control lists (IPv6-ACLs)	IP ACL Wizard on the Tools menu	Describes the support for IPv6-ACLs.	3.0(1)	Chapter 46, "Configuring IPv6 for Gigabit Ethernet Interfaces"
Dynamic initiator modes		Enables configuration of dynamic initiator modes iSCSI, iSLB, and deny log in to the MDS switch.	3.0(1)	Chapter 42, "Configuring iSCSI"
IPv6	None	Provides support for IP version 6 (IPv6).	3.0(1)	Chapter 43, "Configuring IP Services"
				Chapter 46, "Configuring IPv6 for Gigabit Ethernet Interfaces"
Call Home enhancement		Enables customization of alert group messages.	3.0(1)	Chapter 64, "Configuring Call Home"
SAN extension tuner enhancement		Describes how to assign tape read and write commands to N ports.	3.0(1)	Chapter 41, "Configuring the SAN Extension Tuner"
QoS behavior		Provides information about the behavior of QoS with different combinations of Generation 1 and Generation 2 switching modules.	3.0(1)	Chapter 57, "Configuring Fabric Congestion Control and QoS"
CFS Regions	Added All Regions and Feature by Region tabs	Allows to view and manage CFS Regions. You can create regions, assign features to region and move features from one region to other using the All Regions and Feature by Region tabs.	3.2.(1)	Chapter 13, "Using the CFS Infrastructure."