Cisco MDS 9000 Family Release Notes for Cisco MDS Fabric Manager Release 3.4(1a)

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This document describes the new features, limitations, and caveats for Cisco MDS 9000 Family Fabric Manager Release 3.4(1a). Use this document in conjunction with documents listed in the "Related Documentation" section on page 17.

Note Cisco Fabric Manager 3.4(1a) works in conjunction with Cisco MDS SAN-OS Releases 3.1.x and higher including Release 3.3(1c). Release notes are sometimes updated with new information on restrictions and caveats. Refer to the following website for the most recent version of the *Cisco MDS 9000 Family Release Notes*: http://www.cisco.com/en/US/products/hw/ps4159/ps4358/prod_release_notes_list.html

Table 1 shows the on-line change history for this document.

Table 1 Online History Change

Revision	Date	Description
A0	08/05/2008	Created release notes.
B0	09/17/2008	Added DDTS CSCsl12611.
C0	11/12/2008	Added DDTS CSCso36760.
D0	08/31/2009	Added a Note to the "Installing Fabric Manager on Windows" section on page -6 about the effect of a Group Policy Object (GPO) in Windows on Fabric Manager Server when used with the PostgreSQL database.

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Contents

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Introduction

Introduction

The Cisco Fabric Manager provides an alternative to the command-line interface (CLI) for most switch configuration commands. Fabric Manager provides powerful Fibre Channel troubleshooting tools such as advanced monitoring features and sophisticated debug analysis tools. These in-depth health and configuration analysis capabilities leverage unique MDS 9000 switch capabilities including the Fibre Channel Ping and Traceroute utilities.

The Cisco Fabric Manager includes these management applications:

- Fabric Manager (client and server)
- Device Manager
- Performance Manager
- Fabric Manager Web Services

For detailed information on using Cisco Fabric Manager to configure a Cisco MDS 9000 Family switch, refer to the *Cisco MDS 9000 Family Fabric Manager Configuration Guide*. For information on using the CLI to configure a Cisco MDS 9000 Family switch, refer to the *Cisco MDS 9000 Family CLI Configuration Guide* or the *Cisco MDS 9020 Switch Configuration Guide and Command Reference*.

Upgrading Your Version of Cisco Fabric Manager

As of Cisco SAN-OS Release 3.2(1), Cisco Fabric Manager is no longer packaged with a Cisco MDS 9000 Family switch. It is included on the CD-ROM that ships with the switch. You can install Fabric Manager from the CD-ROM or from files that you download.

Installing Cisco Fabric Manager is a multi-step process that involves installing a database, as well as Fabric Manager. The complete installation instructions are provided in the “Installation of Cisco MDS SAN-OS and Fabric Manager” section in the *Cisco MDS 9000 Family Fabric Manager Configuration Guide,* and are available on-screen once you launch the Fabric Manager installer from the CD-ROM.

Note When upgrading Fabric Manager, refer to the supported upgrade path shown in Table 2. For example, when upgrading from SAN-OS Release 3.1(x) to Release 3.4(1a), you will need to upgrade from Release 3.1(x) to Release 3.2(x) and then upgrade to Release 3.4(1a).

Table 2 Supported Fabric Manager Upgrade Paths

Current	Upgrade Path
3.0.x	3.1.x
3.1.x (HSQL)	3.2.x (Oracle)
3.1.x (HSQL)	3.2.x PostgreSQL
3.1.x (Oracle)	3.2.x (Oracle)
3.2.x (Oracle)	3.3.x (Oracle)
3.2.x (PostgreSQL)	3.3.x (PostgreSQL)

Upgrading from Release 3.1(2c) with the PostgreSQL Patch

To upgrade Fabric Manager to Release 3.4(1a) from the UBS special version of 3.1.2c with the PostgreSQL patch, do the following:

Step 1 Upgrade Fabric Manager to Release 3.2(1b), pointing to the same PostgreSQL database which was used by Release 3.1.2c.

Step 2 When the installation is complete, stop the Fabric Manager server.

Step 3 Run **PM.sh s** located in **$InstallDir/bin** to re-index the **rrd** files in the PostgreSQL database.

Step 4 Upgrade Fabric Manager to Release 3.4(1a) by running the Release 3.4(1a) installer.

Step 5 Discover the fabric again.

Step 6 Add the fabric back into the PM collection. This starts the PM collection.

The Fabric Manager Installation Process Overview

The following section presents the flow of the installation process at a high level. Review these guidelines before you begin the installation process.

1. Verify supported software. Cisco Fabric Manager has been tested with the following software:
   - Windows 2000 SP4, 2003 SP2, XP SP2
   - Red Hat Enterprise Linux AS Release 4
   - Solaris (SPARC) 8, 9, and 10

Note On Solaris 9, the supported web browser is Mozilla 1.7. You can download Mozilla from the following website: http://www.sun.com/software/solaris/browser/getmozilla17.xml. On Solaris 10, the supported web browser is FireFox 2.0. You can download FireFox from the following website: http://www.mozilla.com/en-US/firefox/.

- VMWare Server 1.0:
  - Base Operating System: Windows 2000 SP4 / Virtual Operating System: Windows XP SP2
  - Base Operating System: Windows 2000 SP4 / Virtual Operating System: Windows 2000 SP4
- VMWare ESX Server 3.5
- Java Sun JRE and JDK 1.5(x) and JRE 1.6 are supported
- Java Web Start 1.2, 1.0.1, 1.5, 1.6
- Firefox 1.5 and 2.0
- Internet Explorer 6.x, and 7.0

Note Internet Explorer 7.0 is not supported on Windows 2000 SP4.

- Mozilla 1.7 (packaged with Solaris 9)
- Oracle Database 10g Express; Oracle Enterprise Edition 10g
- PostgreSQL 8.2 (Windows and Linux)
- PostgreSQL 8.1 (Solaris)
- Cisco ACS 3.1 and 4.0
- PIX Firewall
- IP Tables
- SSH v2
- Global Enforce SNMP Privacy Encryption
- HTTPS

2. Ensure data migration when upgrading Cisco Fabric Manager from Cisco SAN-OS Releases 3.1(2b) and later.

   If you are upgrading Cisco Fabric Manager in Cisco SAN-OS Releases 3.1(2b) and later, be aware that data is migrated from the Hypersonic HSQL database to either the PostgreSQL database or Oracle Database 10g Express during the installation. Data is also migrated from Oracle Database 10g Express to Oracle Database 10g Express. If you migrate the database from Oracle to Oracle, the schema is updated. Refer to Table 2 for information on the supported upgrade path.

3. Ensure data migration when upgrading Cisco Fabric Manager from releases prior to Cisco SAN-OS Releases 3.1(2b).

   If you are upgrading Fabric Manager in a Cisco SAN-OS Release prior to 3.1(2b), be aware that data is migrated from the Hypersonic HSQL database to either the PostgreSQL database or the Oracle Database 10g Express during the installation. The Fabric Manager Installer installs the PostgreSQL database on Windows. If you want to install the PostgreSQL database on Solaris or Linux, or if you

want to install the Oracle Database 10g Express database, follow the instructions in the "Installation of Cisco MDS SAN-OS and Fabric Manager" section in the *Configuration Guide*. Refer to Table 5 for information on the supported upgrade path.

4. If you are upgrading a previous installation of Fabric Manager, make sure the previous installation is installed and running. Do not uninstall the previous version. If the previous version is uninstalled, the database will not be migrated and your server settings will not be preserved.
5. Select the database.

   If you want to use the Oracle Database 10g Express, you must install the database and create a user name and password before continuing with the Fabric Manager installation. We recommend the Oracle Database 10g Express option for all users who are running Performance Manager on large fabrics (1000 or more end devices).

   If you want to install the PostgreSQL database, you must disable any security software you are running as PostgreSQL may not install certain folders or users. You must also log in as a Superuser before you start the installation.
6. Install Fabric Manager from the CD-ROM or from files that you download from Cisco.com at the following website:

   http://cisco.com/cgi-bin/tablebuild.pl/mds-fm

Installing Fabric Manager on Solaris

This section includes guidelines on installing Fabric Manager Server on Solaris from the Fabric Manager Installation CD.

- Turn off security software before installing PostGreSQL.
- If you are installing the Fabric Manager Server on a Solaris 9 host, to avoid memory allocation issues during the PostGreSQL installation process, make these changes to the system parameters file **/etc/system**. You may need to increase these values depending on what applications are installed on your host.

```
set shmsys:shminfo_shmmax=252993536
set shmsys:shminfo_shmmin=1
set shmsys:shminfo_shmmni=256
set shmsys:shminfo_shmseg=256

set semsys:seminfo_semmap=256
set semsys:seminfo_semmni=512
set semsys:seminfo_semmns=512
set semsys:seminfo_semmsl=32
```

  Make sure a supported Java version is installed and that JavaScript is enabled in your browser.

  On Solaris 9, the supported web browser is Mozilla 1.7. You can download Mozilla from the following website: http://www.sun.com/software/solaris/browser/getmozilla17.xml.

  On Solaris 10, the supported web browser is FireFox 2.0. You can download FireFox from the following website: http://www.mozilla.com/en-US/firefox/.

  On Solaris 9, you may need to manually set the Java Web Start MIME type for **.jnlp** files. Follow these steps to make the required changes:

  Open the Mozilla web browser.

  Select **Edit > Preferences > Navigator > Helper Applications**.

  Click **New Type** and then enter the following information to set the MIME type in the respective fields:

MIME Type : **application/x-java-jnlp-file**

Description: **Java Web Start**

Extension : **jnlp**

Choose **Open these files using the default application** under **When a file of this type is encountered:**, and then click **OK**.

After reviewing the guidelines listed in this section, follow these steps to install Fabric Manager on Solaris:

Set Java 1.5 or 1.6 to the path that is to be used for installing Fabric Manager.

Install the database that is to be used with Fabric Manager.

Copy the Fabric Manager jar file **m9000-fm-3.4.1.jar** from the CD-ROM to a folder on the Solaris workstation.

Launch the installer using the following command:

```
java -Xms512m -Xmx512m -jar m9000-fm-3.4.1.jar
```

Installing Fabric Manager on Windows

Step 1

Step 2 **Management Software > Cisco Fabric Manage**

Step 3 **Installing Fabric Manager**

Step 4

Step 5 **FM Installer**

Step 6

Note

Step 1

Step 2 **Cisco Device Manager**

Step 3 **Next**

Step 4

Note

javaws element-manager.jnlp

New Features in Cisco MDS Fabric Manager Release 3.4(1a)

Release 3.x *Cisco MDS 9000 Family Fabric Manager Configuration Guide* *Cisco MDS 9000 Family Storage Media Encryption Configuration Guide*
Cisco MDS 9000 Family Command Reference

Note

N-port Virtualizer Traffic Management

FlexAttatch

Inventory Summary Detail Report

-
-
-
-

Inventory Switch Detail Report Enhancements

-
-
-
-

Mapping New Release 3.4(1a) Features to Software Licenses

Table 3 Release 3.4(1a) New Features Mapping to Software Licenses

	SAN Ext	Enterprise	Mainframe	SSE	FMS	SME	DMM
Cisco Fabric Manager							

Limitations and Restrictions

Upgrading to Recover Loss of Performance Manager Data

Warning **You must upgrade to Fabric Manager Release 3.1(x) and then upgrade to a later release of Fabric Manager to avoid losing Performance Manager data. If data has been lost, follow the steps below to recover the data.**

Step 1

Step 2

Step 3 **$INSTALL_DIR**

Step 4 **$INSTALL_DIR/pm/db**

Step 5 **$INSTALL_DIR/bin/pm.bat m**

Step 6

Maximum Number of Zones Supported in Interop Mode 4

Java Web Start

Cisco Storage Media Encryption

-
-
-

Cisco SME Configuration Limits

Cisco SME Limits

Configuration	Limit

Configuration	Limit
Cisco Key Management Center (# of keys)	32K
Targets per switch that can be FC-redirected	32

Deleting Cisco SME Interfaces

Emulex Driver Version

SANTap

Caveats

Table 5 Open Caveats and Resolved Caveats Reference

DDTS Number	Software Release (Open or Resolved)	Software Release (Open or Resolved)
	3.3(1a)	3.4(1a)

Severity 3		
Severity 4		
Severity 6		

Symptom: In Fabric Manager Release 3.3(x), zone set cloning returns an autoZoneEditing error. The option to clone a zone is missing.

Workaround

Symptom

Workaround

Symptom

Workaround

Symptom

Workaround

Symptom

Workaround

Symptom
The log records "Fabric not found fabricID=xxx".

: Scheduled jobs whose scope is a deleted fabric, should be removed.

CSCsq57352

: After upgrading from Fabric Manager Release 3.0(2a) to Fabric Manager Relealse 3.2(3a), the Fabric Manager client fails to reuse the map layout files produced by Release 3.0(2a). Renaming the map layout files will make them compatible with Fabric Manager Release 3.2(3a).

: This issue is resolved.

CSCsq60582

: Multiple Cisco products contain either of two authentication vulnerabilities in the Simple Network Management Protocol Version 3 (SNMPv3) feature. These vulnerabilities can be exploited when processing a malformed SNMPv3 message. These vulnerabilities could allow the disclosure of network information or may enable an attacker to perform configuration changes to vulnerable devices. The SNMP server is an optional service that is disabled by default. Only SNMPv3 is impacted by these vulnerabilities.

SNMP versions 1, 2 and 2c are not impacted by these vulnerabilities.

The United States Computer Emergency Response Team (US-CERT) has assigned Vulnerability Note VU#878044 to these vulnerabilities. Common Vulnerabilities and Exposures (CVE) identifier CVE-2008-0960 has been assigned to these vulnerabilities.

This advisory is posted at
http://www.cisco.com/en/US/products/products_security_advisory09186a00809ac83b.shtml

Workaround

Symptom

Workaround

Symptom: Typing the N5K switch's ip address in the browser's address bar shows a download page which says Cisco Device Manager for MDS 9000 Series

: This issue is resolved.

CSCso32705

: Disabling Fabric Manager emails for CallHome on a port flap event through the server properties is not allowed.

: This issue is resolved.

CSCsl71227

: Using Fabric Manager Release 3.2(2), if you have an enclosure with multiple ports and you then use the Data Migration Wizard to create a job with that enclosure as the existing storage but don't select all the storage ports in the enclosure, an error is displayed in the creation wizard.

: Put the ports you plan to use as the existing storage in the migration into a separate enclosure, and use that enclosure in the wizard selection.

CSCsm54544

: In some instances, when requests to the control virtual target (CVT) are made, Fabric Manager times out. Regardless of the timeout, the CVT is created in the specified VSAN.

: To verify this, do either of the following:

Refresh the SANTap CVT field. The CVT will appear.

Verify the CVT creation on the Supervisor by issuing the **show santap module <#> cvt**

Symptom

Workaround

Symptom

Workaround

Symptom

Workaround:

Symptom

Workaround

Symptom

Workaround
CSCso55622
Symptom

Workaround

Start Run cmd Return
Change user /install

change user /execute
Return exit

Symptom

Workaround

Symptom **show interface fcx/y**

Workaround

Symptom

Workaround

Symptom

Workaround

Symptom

Workaround

Symptom

Workaround

http://www.cisco.com/en/US/products/ps5989/products_documentation_roadmap09186a00804500c1.html.
For information on IBM TotalStorage SAN Volume Controller Storage Software for the Cisco MDS 9000 Family, refer to the IBM TotalStorage Support website: http://www.ibm.com

Cisco MDS 9000 Family Release Notes for Cisco MDS SAN-OS Releases

Cisco MDS 9000 Family Release Notes for Storage Services Interface Images

Cisco MDS 9000 Family Release Notes for Cisco MDS 9000 EPLD Images

Cisco MDS 9000 SAN-OS Hardware and Software Compatibility Information

Cisco MDS 9000 Family Interoperability Support Matrix

Cisco MDS SAN-OS Release Compatibility Matrix for IBM SAN Volume Controller Software for Cisco MDS 9000

Cisco MDS SAN-OS Release Compatibility Matrix for Storage Service Interface Images

Regulatory Compliance and Safety Information for the Cisco MDS 9000 Family

Hardware Installation

- Cisco MDS 9500 Series Hardware Installation Guide
- Cisco MDS 9200 Series Hardware Installation Guide
- Cisco MDS 9216 Switch Hardware Installation Guide
- Cisco MDS 9100 Series Hardware Installation Guide
- Cisco MDS 9124 Multilayer Fabric Switch Quick Start Guide
- Cisco MDS 9020 Fabric Switch Hardware Installation Guide

Cisco Fabric Manager

- Cisco MDS 9000 Family Fabric Manager Quick Configuration Guide
- Cisco MDS 9000 Family Fabric Manager Configuration Guide
- Cisco MDS 9000 Fabric Manager Online Help
- Cisco MDS 9000 Fabric Manager Web Services Online Help

Command-Line Interface

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Intelligent Storage Networking Services

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-
-

Troubleshooting and Reference

-
-
-
-
-
-

Installation and Configuration Note

-
-

Obtaining Documentation and Submitting a Service Request

What's New in Cisco Product Documentation

What's New in Cisco Product Documentation

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.