

Active Fabric Manager

Release Notes 1.5

June 2013



Notes, Cautions, and Warnings



NOTE: A NOTE indicates important information that helps you make better use of your computer.



CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Documentation Resources

This document contains operational information specific to the Active Fabric Manager (AFM).

The AFM Release Notes and software downloads are available on the **Software Center** tab of iSupport at the following URL:

<https://www.force10networks.com/CSPortal20/Software/AFMDownloads.aspx>. Click on the **Active Fabric Manager** link in the left pane.

 **NOTE:** You must setup an iSupport account to access this site. If you have an account and cannot access this page, send a request to Dell-Force10_Technical_Support@Dell.com.

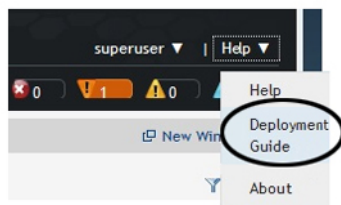
For more information on hardware and software features, commands, and capabilities, refer to the documents on the Dell Networking website at <http://www.dell.com/us/enterprise/p/force10-networking>.

For information about using the AFM, refer to the following documents at <https://www.force10networks.com/CSPortal20/KnowledgeBase/Documentation.aspx>

- *Active Fabric Manager Installation Guide*
- *Active Fabric Manager Deployment Guide*

Click on the **Documents Tab** and then **Active Fabric Manager Manual**.

You can also view the AFM Deployment Guide in the AFM by selecting the **Deployment Guide** option from the **Help** pull-down menu in the upper right of the screen.



Supported Hardware and Software

Hardware Requirements

Table 1. Hardware Requirements

Hardware	Requirement
Processor	Intel® Xeon® E5620 2.4Ghz, 12M Cache,Turbo, HT, 1066MHz Max Mem
System Type	64-bit operating system
Memory	32GB Memory (8x4GB), 1333MHz Dual Ranked LV RDIMMs for 2 Processors, Advanced ECC
Disk Space	1TB 7.2K RPM SATA 3.5 Hot Plug Hard Drive

Table 2. Windows 7 Hardware Requirements

Hardware	Requirement
Processor	Intel® Core (TM) i5–2520M CPU @2.50Ghz
Memory	8 GB
System Type	64–bit operating system
Disk Space	1TB 7.2K RPM SATA 3.5 Hot Plug Hard Drive

Table 3. Software Requirements for Windows 7

Software	Requirements
Windows® 7 Professional Service Pack 1 64-bit architecture	Windows requires administrator permission on the target server. Make sure that you have permission on the network service account to modify the system temp directory. For Windows®, the temp directory is %systemroot%\temp
Internet Explorer® 9	
Firefox® 12 and higher	



Table 4. Software Requirements for Dell Networking Switches

Platform	Software Version
S4810	9.1.0.0P5 or higher
S4820T	8.3.19.0a or higher
S55	E8.3.5.3 or higher

S60	E8.3.3.9 or higher
Z9000	9.1.0.0P5 or higher
MXL	8.3.16.4a or higher

Virtual Appliance Requirements

AFM runs as a virtual appliance. It requires the following software to host the solution:

- VMware® Workstation™ version 8.0.5 and higher
 -  **NOTE:** VMware® Workstation™ does not support HA and FT
- VMware® vSphere® Hypervisor (ESXi) 5.0 and higher (must meet virtual appliance, port access, and listening port requirements)
 -  **NOTE:** VMware® vCenter™ is required for HA and FT.

Port Requirements

Open the ports on the firewalls listed in the following table on the AFM:

Table 5. Ports

Port	Description
20 & 21	FTP
22	SSH and SCP (communication to the switches and CLI access to the AFM)
23	Telnet (communication to the switches)
67 & 68	DHCP
69	TFTP
80	AFM server ports used to take requests from the client (browser)
123	NTP
161	SNMP get and set protocol between AFM server and switch.
162	SNMP trap listener between AFM and switch.
443	HTTPS communication protocol where the AFM takes requests from the client browser.
5432	Database server
8080	TCP/UDP
61616	ActiveMQ

New AFM Version 1.5 Features

The following features have been added to the AFM version 1.5. Please refer to the *Active Fabric Manager Deployment Guide*, *Active Manager Installation Guide*, and Online help for details regarding configurations, restrictions, and limitations.



 **NOTE:** Dell Fabric Manager (DFM) is now called Active Fabric Manager (AFM).

Table 6. New AFM Features

Feature	Description
AFM virtual appliance	The AFM is now available as a virtual appliance. You can deploy the AFM as virtual appliance on a VMware® ESX® virtual machine or Workstation.
Audit Log	Logs a chronological sequence of audit records, each of which contains information on who has accessed the switch and what operations the user has performed during a given period of time.
High Availability	Provides a mechanism to support high availability (HA) on the AFM.
Importing an Existing Fabric Design	Supports the importing of an existing fabric design.
FTP/TFTP/DHCP	AFM can now act as a FTP, TFTP or DHCP server. Use the FTP/TFTP server to obtain the switch configuration.  NOTE: AFM can be provisioned as a local DHCP server only when the AFM server belongs to the same subnet as the network switches management interface subnet.
Performance Management	Monitors performance at the network, fabric, switch, and port level using enhanced color coding.
Replace a Switch	Supports the decommissioning of a switch and replacing it in the fabric.
Stacking	Supports stacking for the following Layer 2 VLT deployments: <ul style="list-style-type: none"> • Type 1: 1 Gb Top of Rack • Type 2: 10 Gb Blade Switch (MXL)
Templates	Associates one or more existing configuration templates to the entire fabric, all spines, all leaves, or a set of switches. When a template is associated to an entire fabric or all spines or all leaves, the template is automatically applied to the newly added switches (instead of having to create new associations manually).
Troubleshooting	Supports the troubleshooting of a switch in the fabric, using ping, traceroute, SSH, and Telnet commands.
TCA Threshold Settings	Monitors the link bundle and Threshold Crossing Alert (TCA) between the spine switches and the leaf switches for a fabric.
VLT	Supports VLT. AFM automates the design and deployment based on VLT Layer 2 fabrics.

Caveats

Caveat Definitions

Category	Description
PR#	Problem Report number that identifies the caveat.
Synopsis	Synopsis is the title or short description of the caveat.
Release Note	Release Notes description contains more detailed information about the caveat.
Work around	Work around describes a mechanism for circumventing, avoiding, or recovering from the caveat. It might not be a permanent solution. Caveats listed in the “Closed Caveats” section should not be present, and the work around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.
Severity	<p>S1— Crash: A software crash occurs in the kernel or a running process that requires a restart of the AFM, router, switch, or process.</p> <p>S2— Critical: A caveat that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work around acceptable to the customer.</p> <p>S3— Major: A caveat that effects the functionality of a major feature or negatively effects the network for which there exists a work around that is acceptable to the customer.</p> <p>S4— Minor: A cosmetic caveat or a caveat in a minor feature with little or no network impact for which there might be a work around.</p>

Open Caveats

PR#115689

Severity: S3

Synopsis: The trap message that contains the time zone for the alarm date and time is different than the AFM Server.

Release Notes: The trap message that contains the time zone for the alarm date and time is different than the AFM Server.

Work around: Reload the switch.

PR#118352

Severity: S3

Synopsis: For distributed-core fabrics, in some specific cases, the number of downlinks provided exceed the number that the user actually requested.

Release Notes: For distributed-core fabrics, in some specific cases, the number of downlinks provided exceed the number that the user actually requested.

Work around: None.

PR#118369

Severity: S3

Synopsis: Wrong current downlink port count is calculated by AFM for Type 3 core with OS ratio 4:1 for the below design parameters

Release Notes: For Distributed core fabrics, in the following cases (1) Type = Medium and OverSubscription Ratio = 4:1 (2) Type = Small and Oversubscriptions Ratio = 5:1, and port count exceeds 832, the user requested Oversubscriptions cannot be achieved.

Work around: For both these cases, solution can be arrived with the OS Ratio of 7:1

PR#118516

Severity: S3

Synopsis: User unable to achieve the requested OSRatio, when user deploys only current AFM calculated devices

Release Notes: User requested Oversubscription ratio is achieved for the fabric including current and future downlinks. It is not achieved only for the currently deployed downlinks.

Work around: None

PR#119645

Severity: S3

Synopsis: For the large distributed core fabrics, the visio representation in one page is not viewed clearly and the connection details appear unclear.

Release Notes: For the large distributed core fabrics, the visio representation in one page is not viewed clearly and the connection details appear unclear.

Work around: Use the pdf representation for viewing the connection details for the large distributed core fabrics

PR#120015

Severity: S3

Synopsis: If the pre-deployment wizard is canceled after the MAC address and IP IPAddress values are entered, the values are retained for the next predeploy operation

Release Notes: If the pre-deployment wizard is canceled after the MAC address and IP IPAddress values are entered, the values are retained for the next predeploy operation

Work around: When predeploy operation is initiated again, enter correct MAC address and IP address to overwrite the existing value.

PR#120743

Severity: S3

Synopsis: For Distributed Core fabrics, Calculated downlink value is not shown in the Edit screen. Instead only the user requested downlink value is shown

Release Notes: For Distributed Core fabrics, Calculated downlink value is not shown in the Edit screen. Instead only the user requested downlink value is shown in the Edit screen.

Work around: None

PR#120933

Severity: S3

Synopsis: PM: Input Throughput for the port is incorrectly displayed.

Release Notes: For the S4810 ports, Input unicast, multicast, and broadcast counters is displayed incorrectly and does not match the CLI.

Work around: None.

PR#121350

Severity: S3

Synopsis: Option should be available to user to view and export only the current device wiring plan

Release Notes: For the case of Distributed Core fabrics, view wiring plan and export wiring plan options always show current and future devices, even if the user choose to view only current devices.

Work around: None.

PR#121408

Severity: S3

Synopsis: Alarms reported in FTOS version E8.3.5.3 for S55 are erroneously handled causing the system to ignore configuration failures.

Release Notes: Alarms reported in FTOS version E8.3.5.3 for S55 are erroneously handled causing the system to ignore configuration failures.

Work around: Download FTOS version E8.3.5.5 to resolve this issue.

PR#124119

Severity: S3

Synopsis: OVF:446 Swap time out error in S4810 device in 1G VLT S60 stacking topology.

Release Notes: Extra wiring other than the AFM proposed wiring could cause undesired looping in devices leading to service affecting scenarios.

Work around: Ensure that the physical wiring on the devices in the designed fabric are as per the proposed AFM wiring before deploying the devices in the fabric.

PR#124545

Severity: S3

Synopsis: Custom config error is displayed in AFM , after standby software activation in devices under below scenario

Release Notes: AFM reports a config mismatch error in the case where a device image is upgraded through AFM, even though there is no actual config mismatch. The config mismatch is reported in the boot system command used to upgrade the image.

Work around: Please ignore this config mismatch error. This error will be cleared when any of the subsequent APPLY / OVERWRITE operations are triggered from AFM

PR#124652

Severity: S3

Synopsis: AFM user can be able to login into AFM Server console terminal by using telnet or SSH session.

Release Notes: AFM user can be able to login into AFM Server console terminal by using telnet or SSH session. Most of AFM Server Console terminal requires up and down arrow key as part of selection. The telnet/SSH client needs to support term setting type either XTERM, teraterm, or teraterm23.

Work around: PuTTY Release 0.61 support XTERM or Tera Term Prov Web Version 3.1.3

Resolved Caveats

PR#115408

Severity: S3

Synopsis: In the custom configuration screen, whenever you double click any switch from the tree panel without changing any configuration and then click the **OK** button, the switch changes the state to "needs redeploy".

Release Notes: In the custom configuration screen, whenever you double click any switch from the tree panel without changing any configuration and then click the **OK** button, the switch changes the state to "needs redeploy".

Work around: Click on the **Cancel** button to exit the configuration.

Technical Support

iSupport provides a range of documents and tools to assist you with effectively using Dell Networking equipment and mitigating the impact of network outages. Through iSupport you can obtain technical information regarding Dell Networking products, access to software upgrades and patches, and open and manage your technical assistance center (TAC) cases. Dell Networking iSupport provides integrated, secure access to these services.

Accessing iSupport Services

The URL for iSupport is www.force10networks.com/support/. To access iSupport services you must have a user identification (userid) and password. If you do not have one, you can request one at the website:

1. On the Dell Networking iSupport page, click the **Account Request** link.
2. Fill out the **User Account Request** form, and then click **Send**. You will receive your user identification and password by E-Mail.
3. To access iSupport services, click the **Log in** link, and enter your user identification and password.

Contacting the Technical Assistance Center

How to Contact Dell Networking TAC

Log in to iSupport at <http://www.force10networks.com/CSPortal20/Main/Login.aspx> and select the **Service Request**.

Your name, company name, phone number, and E-mail address

- Preferred method of contact
- Model number
- Serial Number
- Software version number
- Symptom description
- Screen shots illustrating the symptom, including any error messages. These can include:
 - Output from the show tech command or the show tech linecard command.
 - Output from the show trace command or the show trace linecard command.
 - Console captures showing the error messages.
 - Console captures showing the troubleshooting steps taken.
 - Saved messages to a syslog server, if one is used.

Managing Your Case

Log in to iSupport and select the Service Request tab to view all open cases and RMAs.

Downloading Software

Log in to iSupport and select the Software Center tab.

Technical Documentation

Log in to iSupport, and select the Documents tab. This page can be accessed without logging in via the Documentation link on the iSupport page.

Contact Information

E-mail: Dell-Force10_Technical_Support@Dell.com

Web: www.force10networks.com/support/

Telephone: US and Canada: 1.866.965.5800 /International: 1.408.965.5800