



Release Notes for TopspinOS Release 2.8.0 Update 2

Release Date: Nov 26, 2007
Part Number: OL-9388-06

Contents

This document includes the following sections:

- [Introduction, page 1](#)
- [System Requirements, page 2](#)
- [New and Changed Information, page 2](#)
- [Caveats, page 5](#)
- [Related Documentation, page 7](#)
- [Service and Support, page 8](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 9](#)

Introduction

These release notes describe the features and known issues for the Topspin and Cisco SFS Series Product Family operating system 2.8.0 Update 2 (build 164) and Element Manager 2.8.0.10 software releases.



Note

These release notes apply to the Cisco SFS 3001, Cisco SFS 3012, Cisco SFS 3012R, Topspin 90, and Topspin 360 Multifabric Server Switches that run TopspinOS 2.8.0 software.



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA
© 2007 Cisco Systems, Inc. All rights reserved.

System Requirements

This section describes the system requirements for this software release.

Determining the Software Version

To determine the version of the operating system that you are running on the switch, log in to the CLI and enter the **show version** EXEC command.

```
SFS-3012R> show version
=====
                        System Version Information
=====
system-version : SFS-3012R TopspinOS 2.8.0 releng #164 ...
contact : tac@cisco.com
name : SFS-3012R
```

Upgrading to a New Software Release

To verify that you are running the latest available release, compare your version against the latest version on the Cisco support website at <http://www.cisco.com/cgi-bin/tablebuild.pl/sfs-3000>. After registering your product, you should have received a username and password that grant you access to this site.

Switch software and Linux host drivers are now released and packaged separately. Switch software is also now packaged and released separately for the following products:

- Cisco SFS 7000, 7000P, 7000D, 7008, and 7008P chassis — 2.9.0 Update 2
- Topspin 120 and 270 chassis — 2.9.0 Update 2
- 4X InfiniBand Switch Module for IBM BladeCenter H — 2.9.0 Update 2
- 1X InfiniBand Switch Module for IBM BladeCenter — 2.9.0 Update 2
- Cisco SFS 3001 and 3012 Multifabric chassis — 2.8.0 Update 2
- Topspin 90 and 360 Multifabric chassis — 2.8.0 Update 2

Old and new TopspinOS releases can be used in the same InfiniBand fabric, although InfiniBand subnet manager synchronization will not occur between TopspinOS 2.9.0 and older releases.

Switches should be upgraded before the InfiniBand hosts. The CLI **install** command will prevent an incompatible software image from being installed. To upgrade Element Manager (EM) GUI, first uninstall the older version and then install software release 2.8.0.

For general information about upgrading to a new software release, see the Installing Software Images section in the *Cisco SFS Product Family Element Manager User Guide*.

New and Changed Information

TopspinOS 2.8.0 is a major release that introduces significant new features and documentation. It includes the following changes:

- Support for SFS 3012R Multifabric switch
- Ability to disable IPoIB on an InfiniBand partition for improved security
- Ability to configure timezone

- Many bug fixes

Changes From Release 2.8.0 Update 1 (build 99) to 2.8.0 Update 2 (build 164)

This section describes the new features and resolved caveats since the 2.8.0 Update 1 (build 99) release.



Note

The ID number from the Cisco Defect Tracking System, if applicable, is included with this format: CSCxxyyyy. The current status of all issues is available online at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. Contact Cisco Technical Support for more information.

InfiniBand

- CSCsh89714
A problem has been fixed where the path MTU returned in PathRecord query could be set incorrectly, resulting in low throughput, especially for paths traversing DDR IB links.
- CSCsi31350
A problem has been fixed where user configured IPoIB multicast groups were not saved and restored correctly if the multicast group was first automatically created by IPoIB.
- CSCsi27775
A problem has been fixed where the IB Performance Management feature would not work with the High-Performance Subnet Manager (HSM) running on OFED.
- CSCse94345
A problem has been fixed where the IB Subnet Manager would fail and the chassis would reboot, due to a deadlock caused by a temporary InfiniBand packet credit loop while rerouting a network. The solution was to change the default packet lifetime from infinite (never discard) to approximately one second.
- CSCsg15550
A problem has been fixed where the CLI **show ib sm neighbor** command could show incorrect information.
- CSCsh48444
A problem has been fixed where the IB Subnet Manager did not always set the Attribute Offset in GetTable Response IB protocol messages.

Management

- CSCsk38029, CSCsj61966, CSCsh86818
A problem has been fixed where SFS 3012R/3012 and Topspin 360 controller card could hang during normal operation.
- CSCtp02842
Support has been added for configuring the timezone in TopspinOS. The local time will be printed in the chassis syslog and other logging information.

- CSCsj28639
A problem has been fixed where closed telnet CLI sessions might not be cleaned up by the CLI. Note that the CLI terminal time-out must be set to non-zero for cleanup to always occur.
- CSCsg79959
A problem has been fixed where user account settings would not be saved correctly when the configuration was saved from a GUI.
- CSCsg79624
A problem has been fixed where configuring the mgmt-ib management InfiniBand interface with a non-default IB partition would also configure the interface on the default partition.
- CSCsg79571
A problem has been fixed where configuring the mgmt-ib management InfiniBand interface with a non-default IB partition would not function correctly in a multi-chassis configuration.

Fibre Channel Gateway

- CSCsg20293
Support has been added for displaying an SRP LUN size.
- CSCsj59978, CSCsj42535
A problem has been fixed where the Fibre Channel gateway could crash during failover.
- CSCsk18355
A problem has been fixed where the Fibre Channel gateway could cause SRP hosts to lose a path to storage.
- CSCsh57222
A problem has been fixed where Solaris SRP hosts did not get their SRP connections evenly distributed across multiple gateways.

Ethernet Gateway

- CSCsk18811
A problem has been fixed where all Ethernet gateway bridge groups would incorrectly become primary redundancy group when using non-default InfiniBand partition.
- CSCsh20067
Support has been added for enabling directed IP broadcast on Ethernet gateway bridge groups and redundancy groups.
- CSCsg45327
A problem has been fixed where IP multicast through Ethernet gateway would fail when an IB host left and then quickly rejoined an IP multicast group.
- CSCsi42055
A problem has been fixed where IGMP leave messages were not being sent by Ethernet gateway.
- CSCsg63684
A problem has been fixed where IGMP join and leave messages were sent in wrong order by Ethernet gateway.

- CSCsh52323
A problem has been fixed where the first bridge group added to an Ethernet gateway redundancy group would not become the primary bridge group.
- CSCsi62584
A problem has been fixed where Ethernet gateway redundancy group configuration changes did not get applied correctly.
- CSCsf11090
A problem has been fixed where Ethernet gateway redundancy group deletion did not get applied correctly.
- CSCse45126
The maximum number of multicast groups in the Ethernet gateway has been increased from 128 to 512.

Caveats

This section describes temporary limitations of this release. These restrictions will be resolved in a future release of this product.

InfiniBand

- CSCtp00882
InfiniBand switch cards cannot be hot swapped on SFS 3012R/3012 and Topspin 360, and there must always be an InfiniBand switch card present in slot 16 (bottom slot).
- When running an IB PM Connection test on SFS 3012R/3012 and Topspin 360, one host must be connected to one of the two left-most InfiniBand ports on the switch card.

Management

- CSCtp02866
If power is lost while the system image is being upgraded on SFS 3012R/3012 and Topspin 360, the chassis may not reboot correctly. The workaround is to put the chassis on a UPS while it is being upgraded.
- CSCtp01382
The CLI command **show card** does not show all status for SFS 3012R/3012 and Topspin 360 InfiniBand switch cards.
- CSCtp02661
The CLI command **reload no-failover** produces cryptic output on SFS 3012R/3012 and Topspin 360 on the second controller card, if there is one.
- CSCsg27834
On Windows Internet Explorer, the Chassis Manager web interface may pop up in front of all other windows. This condition is due to a bug in the Sun JVM and is fixed in the latest Sun release, which can be downloaded at http://www.java.com/en/download/windows_ie.jsp.

- CSCtp00587
The Ethernet management port (interface mgmt-ethernet) 100Base-T supports only full-duplex connectivity.
- CSCtp01801
If a firmware upgrade fails, the CLI does not report why the failure occurred.
Workaround: Use the **show logging end** command to review the failure.
- CSCtp02078
The error messages in the **show logging** command for environmental monitoring failures, such as failed power supplies, are cryptic.
- CSCtp00813
The CLI does not provide any diagnostics if the NTP server(s) is not responding.
- CSCtp02196
The EM GUI will not install if there is not sufficient temporary space in /tmp.
- CSCtp01285
The Serial/Mgmt-Ethernet and Maintenance->System Info windows in the GUI may not display if the GUI has been running for a while.
- CSCtp01977
The ALT-TAB icon for the Element Manager GUI is blank on Linux.

Fibre Channel Gateway

- CSCtp01770
Each Fibre Channel gateway is limited to discovering 64 SRP hosts and 64 targets.
- CSCtp04382
Fibre Channel gateway port status may not be displayed correctly if directly connected to storage and ports are manually enabled or disabled. The port status is correct, just not displayed correctly.
- CSCtp02775
Configuring an SRP policy after Fibre Channel gateways are first booted may fail with the error message "Operation temporarily failed - try again." The workaround is to try again after approximately one minute.
- CSCtp02717
The second HCA in a host doesn't connect to storage when SRP policies are restricted.
- CSCtp04721
The Storage Manager GUI has a limit on the number of LUNs whose access policies can be modified at once. The workaround is to configure 60 or fewer LUNs at a time.
- CSCtp02741
ITL (Initiator/Target/LUN) statistics are zero even if traffic is running to that ITL.

- CSCtp00957

The Fibre Channel gateway does not correctly autonegotiate speed to 1Gbps if only one of the two ports are connected to a 1Gbps device. You must manually set the port speed to 1Gbps using the CLI/GUI.

- CSCtp01991

The Storage Manager GUI online help is incomplete.

Ethernet Gateway

- CSCtp02722, CSCtp03296

L3 routing mode is not supported. Only L2.5 bridging is supported.

- CSCsh28087

Disabling or enabling IPoIB on an InfiniBand partition requires all Ethernet gateways and hosts to be rebooted for the change to take full effect.

- CSCtp06567

The mgmt-ib interface must be configured and enabled for Ethernet redundancy to function.

- CSCtp02727

The Ethernet gateway does not implement ARP aging.

- CSCtp03224

The CLI command **show card-inventory** does not support displaying the SFS 3012R/3012 and Topspin 360 Ethernet gateway FPGA version.

- CSCtp02668

Some Element Manager GUI IP statistics are not available in L2.5 bridging mode.

Related Documentation

The following list describes the documentation available with TopspinOS 2.8.0, which is available in electronic form and printed form upon request.



Note

Documentation is included on the TopspinOS 2.8.0 Server Switch CD Image.

You can download the latest documentation updates on the Cisco support site at http://www.cisco.com/en/US/partner/products/ps6418/tsd_products_support_category_home.html.

- *InfiniBand Hardware Installation and Cabling Guide*
- *Cisco SFS 3012R Multifabric Server Switch Installation and Configuration Note*
- *Cisco SFS 3012R Multifabric Hardware Installation Guide*
- *Release Notes for TopspinOS Release 2.8.0*
- *Cisco SFS InfiniBand Fibre Channel Gateway User Guide*
- *Cisco SFS InfiniBand Ethernet Gateway User Guide*
- *Cisco SFS Product Family Chassis Manager User Guide*

- *Cisco SFS Product Family Element Manager User Guide*
- *Cisco SFS Product Family Command Reference Guide*
- *Cisco SFS InfiniBand Redundancy Configuration Guide*

Service and Support

For additional support, you must first register your product at <http://www.cisco.com>. After registering, you may contact your supplier for support, or Cisco directly.

Refer to the “[Obtaining Documentation, Obtaining Support, and Security Guidelines](#)” section on page 9 in this document.

When you call Cisco Technical Support or use the Cisco Technical Support website at <http://www.cisco.com>, be prepared to provide the following information to support personnel:

General Information

- Technical Support registration number, if applicable
- Error messages received
- Detailed description of the problem and specific questions
- Description of any troubleshooting steps already performed and results

Server Configuration

- Type of server, chip set, CPU, amount of RAM, and number of nodes
- Attached storage devices (output from `cat /proc/scsi/scsi`)
- InfiniBand configuration (output from `/usr/local/topspin/sbin/hca_self_test`)

Chassis Configuration

- Chassis model
- Output from the **show running-status all** command

Chassis Serial Number

The chassis serial number and corresponding bar code are provided on the serial number label, as shown in this example:

Model: TS360



SN UST323XXXXXXXXX

This chassis serial number can be found on the bottom of the chassis or the outside of the chassis box packaging. It can also be found in the output of the **show backplane** command.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

CCVP, the Cisco logo, and Welcome to the Human Network are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0711R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2007 Cisco Systems, Inc. All rights reserved.

