

# Intel<sup>®</sup> Omni-Path Fabric Switches

Version 10.3 Release Notes

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*December 2016*



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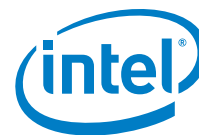
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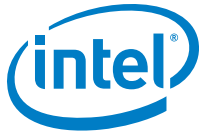
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## 1.0 Overview of the Release

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### 1.1 Introduction

These Release Notes provide a brief overview of the changes introduced into the Intel® Omni-Path Fabric Switches. References to more detailed information are provided where necessary. The information contained in this document is intended for supplemental use only; it should be used in conjunction with the documentation provided for each component.

These Release Notes list the new features, system issues closed since the previous release, as well as any known issues.

### 1.2 Audience

The information provided in this document is intended for installers, software support engineers, hardware engineers, and service personnel.

### 1.3 If You Need Help

If you need assistance while working with the Intel® Omni-Path Fabric Switches, contact your Intel representative.

### 1.4 Supported in this Release

The following items are supported for this release:

- 24-port Intel® Omni-Path Edge Switch 100
- Externally-managed 24-port Intel® Omni-Path Edge Switch 100
- 48-port Intel® Omni-Path Edge Switch 100
- Externally-managed 48-port Intel® Omni-Path Edge Switch 100
- 6-slot Intel® Omni-Path Director Class Switch 100 Series
- 24-slot Intel® Omni-Path Director Class Switch 100 Series

### 1.5 Product Constraints

- The embedded version of the Intel® Fabric Manager supports up to a maximum of 100 nodes within a fabric. This is due to the limited memory and processing resources available in the embedded environment.
- For Director-class switches that use the embedded Fabric Manager, the maximum supported configuration is 2 leaf and 2 spine modules.



## 1.6 Installation Requirements

- The Intel® Omni-Path Fabric Suite FastFabric toolset needs to be installed to manage the externally-managed edge switch.

### 1.6.1 Changes to Firmware Components

The following firmware is supported in this release:

- Internally-managed switches:  
STL1.q7.10.3.0.0.66.spkg

and has been tested with the following externally-managed switch firmware:

- Externally-managed edge: Intel\_PRREdge\_V1\_firmware.10.3.0.0.60.emfw

## 1.7 Miscellaneous

- Additional internal tracing has been added to the firmware to improve link error-related diagnostic capabilities.
- Intel recommends that all fabrics contain at least one managed switch.
- Chassis GUI port statistics error counters now have red background color.

## 1.8 Configurator

The Cluster Configurator for Intel® Omni-Path Fabrics is available at: <http://www.intel.com/content/www/us/en/high-performance-computing-fabrics/omni-path-configurator.html>.

This tool generates sample cluster configurations based on key cluster attributes, including a side-by-side comparison of up to four cluster configurations. The tool also generates parts lists and cluster diagrams.

## 1.9 Documentation

Table 1-1 lists the end user documentation for the current release.

Documents are available at the following URLs:

- Intel® Omni-Path Switches Installation, User, and Reference Guides  
[www.intel.com/omnipath/SwitchPublications](http://www.intel.com/omnipath/SwitchPublications)
- Intel® Omni-Path Fabric Software Installation, User, and Reference Guides  
[www.intel.com/omnipath/FabricSoftwarePublications](http://www.intel.com/omnipath/FabricSoftwarePublications)
- Drivers and Software (including Release Notes)  
[www.intel.com/omnipath/downloads](http://www.intel.com/omnipath/downloads)

**Table 1-1. Related Documentation for this Release (Sheet 1 of 2)**

Document Title
<b>Hardware Documents</b>
<i>Intel® Omni-Path Fabric Switches Hardware Installation Guide</i>
<i>Intel® Omni-Path Fabric Switches GUI User Guide</i>
<i>Intel® Omni-Path Fabric Switches Command Line Interface Reference Guide</i>

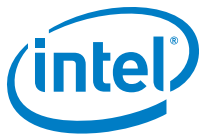


Table 1-1. Related Documentation for this Release (Sheet 2 of 2)

Document Title
<i>Intel® Omni-Path Edge Switch Platform Configuration Reference Guide</i>
<i>Intel® Omni-Path Fabric Managed Switches Release Notes</i>
<i>Intel® Omni-Path Fabric Externally-Managed Switches Release Notes</i>
<i>Intel® Omni-Path Host Fabric Interface Installation Guide</i>
<b>Fabric Software Documents</b>
<i>Intel® Omni-Path Fabric Software Installation Guide</i>
<i>Intel® Omni-Path Fabric Suite Fabric Manager User Guide</i>
<i>Intel® Omni-Path Fabric Suite FastFabric User Guide</i>
<i>Intel® Omni-Path Fabric Host Software User Guide</i>
<i>Intel® Omni-Path Fabric Suite Fabric Manager GUI Online Help</i>
<i>Intel® Omni-Path Fabric Suite Fabric Manager GUI User Guide</i>
<i>Intel® Omni-Path Fabric Suite FastFabric Command Line Interface Reference Guide</i>
<i>Intel® Performance Scaled Messaging 2 (PSM2) Programmer's Guide</i>
<i>Intel® Omni-Path Fabric Performance Tuning User Guide</i>
<i>Intel® Omni-Path Host Fabric Interface Platform Configuration Reference Guide</i>
<i>Intel® Omni-Path Fabric Software Release Notes</i>
<i>Intel® Omni-Path Fabric Manager GUI Release Notes</i>
<i>Intel® Omni-Path Storage Router Design Guide</i>
<i>Intel® Omni-Path Fabric Staging Guide</i>
<i>Building Lustre* Servers with Intel® Omni-Path Architecture Application Note</i>



## 2.0 System Issues

This section lists the resolved and known issues for the Intel® Omni-Path Fabric Switches.

### 2.1 Resolved Issues

Table 2-1 lists the resolved issues for this release.

Table 2-1. Resolved Issues

ID	Description	Resolved in Release
135197	usb2i2c subsystem may hang on i2c failures	10.2
135109	sm_set_buffer_control_table: buffer control table query failed	10.3
133761	Chassis Viewer; missing syslog configuration	10.2
135869	i2cProxy send error mm1 xfered=0 expected=20	10.3

### 2.2 Open Issues

Table 2-2 lists the known open issues for this release by component, including the description and workaround.

Table 2-2. Open Issues (Sheet 1 of 2)

ID/ Status	Product/ Component/ Ext Managed (E) Managed (M) All (A)	Description	Workaround
132341	Switch Hardware/ Director Chassis (M)	Spurious switch fan module I2C path error messages may be reported in the Command Line Interface (CLI) and diagnostic logs. These errors are caused by intermittent noise on the I2C signals going to fan modules.	Install firmware version 10.0.1 or later. Ignore spurious fan module I2C path error messages.
132786	Switch Software/ Chassis Management (M)	Downgrading from the production validated (PV) release to release 10.0.0.0.625 (or earlier) fails.	Do not downgrade the firmware from the PV release.
134000	Switch Software (E)	When AOCs are connected to externally-managed switches, links may come up at widths less than 4x.	Use the CLI command <b>opaswitchadmin configure</b> and set the <b>LinkWidth.Enabled</b> to 4x only.
134970	Switch Software/ Chassis Management (M)	Sub-windows sometimes do not open properly in the Chassis Viewer when using Internet Explorer.	Use Mozilla Firefox* or Google Chrome* to run Chassis Viewer.

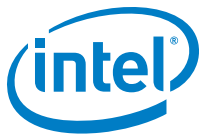


Table 2-2. Open Issues (Sheet 2 of 2)

ID/ Status	Product/ Component/ Ext Managed (E) Managed (M) All (A)	Description	Workaround
136382	Switch Software/ Chassis Management (M)	IPoIB does not work with IPv6 in Release 10.3.	None.
135838	Switch Software/ Chassis Management (M)	Slow response to ssh or scp requests to a switch from a SLES 12.2 system.	Adding the following command to the ssh_config file on the SLES 12.2 host may improve response time: # MACs hmac-md5 ,hmac-shal ,umac-64@openssh.com ,hmac-ripemd160 MACs hmac-md5
135757	Switch Software/ Chassis Management (M)	Chassis Viewer fails to display Daylight Saving Time (DST).	Use the CLI to set DST.

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