

# Intel<sup>®</sup> Omni-Path Fabric Manager GUI Software

**Release Notes for 10.6** 

October 2017

Order No.: J82663-1.0



You may not use or facilitate the use of this document in connection with any infringement or other legal analysis concerning Intel products described herein. You agree to grant Intel a non-exclusive, royalty-free license to any patent claim thereafter drafted which includes subject matter disclosed herein.

No license (express or implied, by estoppel or otherwise) to any intellectual property rights is granted by this document.

All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps.

The products described may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting: http://www.intel.com/design/literature.htm

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Learn more at http://www.intel.com/ or from the OEM or retailer.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and/or other countries.

\*Other names and brands may be claimed as the property of others.

Copyright © 2017, Intel Corporation. All rights reserved.



# Contents

1.0	Overv	iew of the Release	.4
	1.1	Introduction	4
	1.2	Audience	
	1.3	Software License Agreement	
	1.4	If You Need Help	
	1.5	Supported in this Release	
	1.6	Operating Environments Supported	
	1.7	Installation Requirements	
	1.8	Product Constraints	
	1.9	Product Limitations	
	1.10	Documentation Versions	
2.0	Issue	s	7
	2.1	Introduction	
	2.2	Resolved Issues in this Release	
	2.3	Open Issues	.7
3.0	Relate	ed Information	
	3.1	Documentation	8

### **Tables**

1-1	Operating Environments Supported	. 5
	Supported Documentation Versions	
	Resolved Issues	
2-2	Open Issues	. 7
3-1	Intel <sup>®</sup> Omni-Path Documentation Library	. 8

#### §



# **1.0 Overview of the Release**

#### **1.1** Introduction

These Release Notes provide a brief overview of the changes introduced into the Intel<sup>®</sup> Omni-Path Fabric Manager GUI by this release. 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 of the release, open issues, and issues that were resolved during release development.

#### **1.2** Audience

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

#### **1.3 Software License Agreement**

This software is provided under license agreements and may contain third-party software under separate third-party licensing. Please refer to the license files provided with the software for specific details.

#### 1.4 If You Need Help

Technical support for Intel<sup>®</sup> Omni-Path products is available 24 hours a day, 365 days a year. Please contact Intel Customer Support or visit www.intel.com for additional detail.

#### **1.5** Supported in this Release

This release contains no new features, it is a maintenance release that contains bug fixes and performance improvements.

This section lists the items supported for this release.

- Data is collected from the Fabric Manager's Fabric Executive and local data storage and is shown in the GUI as Failures, Hot spots, or trends.
- Information for the Fabric Manager's Device Groups, Virtual Fabric configuration, and Command Line Interface descriptions can be shown.
- Fabric Manager GUI Online help opens in a separate window. Context-sensitive help is also available.
- The Home page provides the big picture of a fabric, including the Subnet Summary, Subnet Performance, Subnet Statistics, Statistical Summary of Nodes, Statistical Summary of Ports, Subnet Status, Subnet Health Trend, and Worst Nodes.



- The Topology page provides topology information for selected resources, with a selection of Device Set Topology, Device Node topology, Link Topology, and Route Topology.
- The Administration Page allows the user to manage a subnet with Applications Management, Device Groups Management, Virtual Fabrics Management, an Interactive Console, and a Log Viewer.
- Other useful items include an Event Table, a Pin Board, and a Navigation bar.
- New Health Score calculation
- Email notification on events
- Application, Device Group, and Virtual Fabric management on ESM

#### **1.6 Operating Environments Supported**

This release of the Intel<sup>®</sup> Omni-Path Fabric Manager GUI supports all operating systems using JRE 1.7 or higher. The supported operating systems listed in Table 1-1 have been fully tested.

#### Table 1-1. Operating Environments Supported

Operating System	Update/ SP	Kernel Version
Red Hat* Enterprise Linux* (RHEL*) 7.3 X86_64	N/A	3.10.0-514.el7.x86_64
XLS: Red Hat* Enterprise Linux* (RHEL*) 7.2 X86_64	Update 2	3.10.0-327.el7.x86_64
SUSE* Linux* Enterprise Server (SLES) 12.2 X86_64	Service Pack 2	4.4.21-69-default
SUSE* Linux* Enterprise Server (SLES) 12.1 X86_64	Service Pack 1	3.12.49-11.1-default
Microsoft Windows* 8.1 (64-bit)		
Microsoft Windows* 10.0 (64-bit)		

#### **1.7 Installation Requirements**

The following are special or release-specific installation requirements for this release:

• Oracle\* Java\* Runtime Environment (JRE) 1.7 or higher.

#### **1.8 Product Constraints**

The following is a list of product constraints for this release:

• None

#### **1.9 Product Limitations**

The following is a list of product limitations for this release.

- The Applications, DeviceGroups and VirtualFabrics management on the Admin Page only apply on the common section on file <code>opafm.xml</code>. To change FM per instance configurations, you must manually edit the file.
- This release does not support proxy setup. To use FM GUI with proxy, you must run FM GUI locally with fabric, and then use remote desktop or a similar technique such as VNC, NX, or XMing to access FM GUI remotely via proxy.



### **1.10** Documentation Versions

Table 1-2 lists the end user document versions supported by this release.

#### Table 1-2. Supported Documentation Versions

Title	Doc. Number	Revision
Key: Shading indicates the URL to use for accessing the particular document.		
• Intel <sup>®</sup> Omni-Path Switches Installation, User, and Reference Guides: http://www.in	ntel.com/omnipath/Swi	tchPublications
<ul> <li>Intel<sup>®</sup> Omni-Path Software Installation, User, and Reference Guides (includes HFI http://www.intel.com/omnipath/FabricSoftwarePublications</li> </ul>	documents):	
Drivers and Software (including Release Notes): http://www.intel.com/omnipath/D	ownloads	
Intel <sup>®</sup> Omni-Path Fabric Quick Start Guide	357479	3.0
Intel <sup>®</sup> Omni-Path Fabric Setup Guide (Old title: Intel <sup>®</sup> Omni-Path Fabric Staging Guide)	J27600	7.0
Intel <sup>®</sup> Omni-Path Fabric Switches Hardware Installation Guide	H76456	6.0
Intel <sup>®</sup> Omni-Path Host Fabric Interface Installation Guide	H76466	5.0
Intel <sup>®</sup> Omni-Path Fabric Software Installation Guide	H76467	8.0
Intel <sup>®</sup> Omni-Path Fabric Switches GUI User Guide	H76457	8.0
Intel <sup>®</sup> Omni-Path Fabric Switches Command Line Interface Reference Guide	H76458	8.0
Intel <sup>®</sup> Omni-Path Fabric Suite FastFabric User Guide (Merged with: Intel <sup>®</sup> Omni-Path Fabric Suite FastFabric Command Line Interface Reference Guide)	H76469	8.0
Intel <sup>®</sup> Omni-Path Fabric Suite Fabric Manager User Guide	H76468	8.0
Intel <sup>®</sup> Omni-Path Fabric Suite Fabric Manager GUI User Guide	H76471	8.0
Intel <sup>®</sup> Omni-Path Fabric Host Software User Guide	H76470	8.0
Intel <sup>®</sup> Performance Scaled Messaging 2 (PSM2) Programmer's Guide	H76473	8.0
Intel <sup>®</sup> Omni-Path Fabric Performance Tuning User Guide	H93143	10.0
Intel <sup>®</sup> Omni-Path IP and Storage Router Design Guide	H99668	5.0
Building Lustre $^{*}$ Servers with Intel $^{\circledast}$ Omni-Path Architecture Application Note	J10040	1.0
Building Containers for Intel $^{(\!8\!)}$ Omni-Path Fabrics using Docker* and Singularity* Application Note	357474	4.0
Intel <sup>®</sup> Omni-Path Architecture Management API Programmer's Guide	J68876	2.0
Intel <sup>®</sup> Omni-Path Fabric Software Release Notes	J82662	1.0
Intel <sup>®</sup> Omni-Path Fabric Manager GUI Release Notes	J82663	1.0
Intel $^{\rm (B)}$ Omni-Path Fabric Switches Release Notes (includes managed and externally-managed switches)	J82661	1.0

For details on which document to use for a particular task, see Table 3-1 on page 8.

§§



## 2.0 Issues

#### 2.1 Introduction

This section provides a list of the resolved and open issues in the  ${\rm Intel}^{\$}$  Omni-Path Fabric Manager GUI.

#### 2.2 **Resolved Issues in this Release**

Table 2-1 lists the issues that are resolved in this release.

#### Table 2-1.Resolved Issues

ID	Description	Resolved in Release
138970	<b>RESOLVED:</b> Incorrect unit in Packet Rate trend chart	Intel <sup>®</sup> Omni-Path Release 10.6.
140148	<b>RESOLVED:</b> TopN charts show the same value for a port and its neighbor	Intel <sup>®</sup> Omni-Path Release 10.6.

### 2.3 Open Issues

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

#### Table 2-2. Open Issues

ID/ Status	Product/ Component	Description	Workaround
138583	Fabric Manager GUI Client	There is no way to display switch capability properties on the performance page.	Use the CLI command opasaquery to get switch capability properties.

§§



# 3.0 Related Information

### 3.1 Documentation

Intel<sup>®</sup> Omni-Path deliverables are available at the following URLs:

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

Use the tasks listed in this table to find the corresponding Intel<sup>®</sup> Omni-Path document.

#### Table 3-1. Intel<sup>®</sup> Omni-Path Documentation Library (Sheet 1 of 3)

Task	Document Title	Description			
Key: Shading indicates the l	Key: Shading indicates the URL to use for accessing the particular document.				
Intel <sup>®</sup> Omni-Path	Switches Installation, User, and Reference	Guides: http://www.intel.com/omnipath/SwitchPublications			
	Software Installation, User, and Reference om/omnipath/FabricSoftwarePublications	Guides (includes HFI documents):			
Drivers and Software	are (including Release Notes): http://www	.intel.com/omnipath/Downloads			
Using the Intel <sup>®</sup> OPA documentation set	Intel <sup>®</sup> Omni-Path Fabric Quick Start Guide	A roadmap to Intel's comprehensive library of publications describing all aspects of the product family. It outlines the most basic steps for getting your Intel <sup>®</sup> Omni-Path Architecture (Intel <sup>®</sup> OPA) cluster installed and operational.			
Setting up an Intel <sup>®</sup> OPA cluster	<b>New title:</b> Intel <sup>®</sup> Omni-Path Fabric Setup Guide (Old title: Intel <sup>®</sup> Omni-Path Fabric Staging Guide)	Provides a high level overview of the steps required to stage a customer-based installation of the Intel <sup>®</sup> Omni-Path Fabric. Procedures and key reference documents, such as Intel <sup>®</sup> Omni-Path user guides and installation guides are provided to clarify the process. Additional commands and BKMs are defined to facilitate the installation process and troubleshooting.			
Installing hardware	Intel <sup>®</sup> Omni-Path Fabric Switches Hardware Installation Guide	Describes the hardware installation and initial configuration tasks for the Intel <sup>®</sup> Omni-Path Switches 100 Series. This includes: Intel <sup>®</sup> Omni-Path Edge Switches 100 Series, 24 and 48-port configurable Edge switches, and Intel <sup>®</sup> Omni-Path Director Class Switches 100 Series.			
	<i>Intel<sup>®</sup> Omni-Path Host Fabric Interface Installation Guide</i>	Contains instructions for installing the HFI in an Intel <sup>®</sup> OPA cluster. A cluster is defined as a collection of nodes, each attached to a fabric through the Intel interconnect. The Intel <sup>®</sup> HFI utilizes Intel <sup>®</sup> Omni-Path switches and cabling.			



### Table 3-1. Intel<sup>®</sup> Omni-Path Documentation Library (Sheet 2 of 3)

Task	Document Title	Description
Installing host software Installing HFI firmware Installing switch firmware (externally- managed switches)	Intel <sup>®</sup> Omni-Path Fabric Software Installation Guide	Describes using a Text User Interface (TUI) to guide you through the installation process. You have the option of using command line interface (CLI) commands to perform the installation or install using the Linux* distribution software.
Managing a switch using Chassis Viewer GUI Installing switch firmware (managed switches)	Intel <sup>®</sup> Omni-Path Fabric Switches GUI User Guide	Describes the Intel <sup>®</sup> Omni-Path Fabric Chassis Viewer graphical user interface (GUI). It provides task-oriented procedures for configuring and managing the Intel <sup>®</sup> Omni-Path Switch family. Help: GUI Online Help.
Managing a switch using the CLI Installing switch firmware (managed switches)	Intel <sup>®</sup> Omni-Path Fabric Switches Command Line Interface Reference Guide	Describes the command line interface (CLI) task information for the $Intel^{(0)}$ Omni-Path Switch family. Help: -help for each CLI.
Managing a fabric using FastFabric	Intel <sup>®</sup> Omni-Path Fabric Suite FastFabric User Guide (Merged with: Intel <sup>®</sup> Omni-Path Fabric Suite FastFabric Command Line Interface Reference Guide)	Provides instructions for using the set of fabric management tools designed to simplify and optimize common fabric management tasks. The management tools consist of TUI menus and command line interface (CLI) commands. Help: -help and man pages for each CLI. Also, all host CLI commands can be accessed as console help in the Fabric Manager GUI.
Managing a fabric	Intel <sup>®</sup> Omni-Path Fabric Suite Fabric Manager User Guide	The Fabric Manager uses a well defined management protocol to communicate with management agents in every Intel <sup>®</sup> Omni-Path Host Fabric Interface (HFI) and switch. Through these interfaces the Fabric Manager is able to discover, configure, and monitor the fabric.
using Fabric Manager	Intel <sup>®</sup> Omni-Path Fabric Suite Fabric Manager GUI User Guide	Provides an intuitive, scalable dashboard and set of analysis tools for graphically monitoring fabric status and configuration. It is a user-friendly alternative to traditional command-line tools for day-to-day monitoring of fabric health. Help: Fabric Manager GUI Online Help.
Configuring and administering Intel <sup>®</sup> HFI and IPoIB driver Running MPI applications on Intel <sup>®</sup> OPA	Intel <sup>®</sup> Omni-Path Fabric Host Software User Guide	Describes how to set up and administer the Host Fabric Interface (HFI) after the software has been installed. The audience for this document includes both cluster administrators and Message-Passing Interface (MPI) application programmers, who have different but overlapping interests in the details of the technology.
Writing and running middleware that uses Intel <sup>®</sup> OPA	<i>Intel<sup>®</sup> Performance Scaled Messaging 2 (PSM2) Programmer's Guide</i>	Provides a reference for programmers working with the Intel <sup>®</sup> PSM2 Application Programming Interface (API). The Performance Scaled Messaging 2 API (PSM2 API) is a low-level user-level communications interface.
Optimizing system performance	Intel <sup>®</sup> Omni-Path Fabric Performance Tuning User Guide	Describes BIOS settings and parameters that have been shown to ensure best performance, or make performance more consistent, on Intel <sup>®</sup> Omni-Path Architecture. If you are interested in benchmarking the performance of your system, these tips may help you obtain better performance.
Designing an IP or storage router on Intel <sup>®</sup> OPA	Intel <sup>®</sup> Omni-Path IP and Storage Router Design Guide	Describes how to install, configure, and administer an IPoIB router solution (Linux* IP or LNet) for inter-operating between $Intel^{\textcircled{R}}$ Omni-Path and a legacy InfiniBand* fabric.
Building a Lustre* Server using Intel <sup>®</sup> OPA	Building Lustre* Servers with Intel <sup>®</sup> Omni-Path Architecture Application Note	Describes the steps to build and test a Lustre* system (MGS, MDT, MDS, OSS, OST, client) from the HPDD master branch on a x86_64, RHEL*/CentOS* 7.1 machine.
Building Containers for Intel <sup>®</sup> OPA Fabrics	Building Containers for Intel <sup>®</sup> Omni-Path Fabrics using Docker* and Singularity* Application Note	Provides basic information for building and running Docker* and Singularity* containers on Linux*-based computer platforms that incorporate Intel <sup>®</sup> Omni-Path networking technology.





#### Table 3-1. Intel<sup>®</sup> Omni-Path Documentation Library (Sheet 3 of 3)

Task	Document Title	Description	
Writing management applications that interface with Intel <sup>®</sup> OPA	Intel <sup>®</sup> Omni-Path Architecture Management API Programmer's Guide	Contains a reference for programmers working with the Intel <sup>®</sup> Omni-Path Architecture Management (Intel OPAMGT) Application Programming Interface (API). The Intel OPAMGT API is a C-API permitting in-band and out-of-band queries of the FM's Subnet Administrator and Performance Administrator.	
Learning about new	Intel <sup>®</sup> Omni-Path Fabric Software Release Notes		
release features, open issues, and	Intel <sup>®</sup> Omni-Path Fabric Manager GUI Release Notes		
resolved issues for a particular release			