

**Oracle® Communications**  
**HP Solutions Firmware Upgrade Pack**  
**Software Centric Release Notes**  
Release 2.2.7  
**E56670 Revision 01**

September 2014

**ORACLE®**

Oracle Communications, HP Solutions Firmware Upgrade Pack, Release 2.2.7

Copyright ©2010, 2014 Oracle and/or its affiliates. All rights reserved.

*This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.*

*The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.*

*If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:*

*U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.*

*This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.*

*Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.*

*Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.*

*This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.*

# Table of Contents

---

<b>Table of Contents .....</b>	<b>3</b>
<b>1 Introduction .....</b>	<b>4</b>
1.1 Purpose and Scope .....	4
1.2 Acronyms .....	4
1.3 Terminology .....	4
<b>2 Content .....</b>	<b>6</b>
2.1 Firmware Baselines and Exceptions .....	6
2.2 HP Solutions Firmware Components Upgraded.....	7
2.2.1 HP ProLiant Server Firmware Components .....	7
2.2.2 HP Misc Firmware Components.....	9
<b>3 Upgrade Order .....</b>	<b>11</b>
3.1 Recommended Order of Firmware Upgrades - Platform 6.5 and Below.....	11
3.2 Recommended Order of Firmware Upgrades - Platform 6.7 or 7.0 .....	11
3.3 Important Rules on Simultaneous Firmware Upgrades .....	12
<b>4 Compatibility .....</b>	<b>13</b>
4.1 With Previous HP FUP Releases .....	13
4.2 With Oracle Application Software .....	13
4.3 Firmware Version Restrictions .....	13
<b>Appendix A My Oracle Support (MOS).....</b>	<b>15</b>

# 1 Introduction

## 1.1 Purpose and Scope

When a customer buys their HP ProLiant hardware through Oracle we act as the OEM provider of firmware updates through the HP Solutions Firmware Upgrade Pack releases. For Software Centric Customers this is not legally possible.

This document lists the firmware versions approved for this HP Solutions Firmware Upgrade Pack release to assist customers with upgrading their HP hardware. Also, additional instructions and guidance on the firmware upgrades has been provided where possible.

Oracle cannot provide any more detail on HP firmware for Software Centric Customers beyond what this document provides.

## 1.2 Acronyms

**Table 1. Acronyms**

BIOS	Basic Input Output System
FC	Fiber Channel
GPS	Global Product Solutions
HP	Hewlett-Packard Development Company, L.P.
iLO	Integrated Lights-Out
IOS	Internetwork Operating System
IP	Internet Protocol
IPM	Initial Product Manufacture
ISO	ISO 9660 file system (when used in the context of this document)
MOP	Method of Procedure
MSA	Modular Smart Array
OA	Onboard Administrator
POST	Power On Self-Test
PR	Problem Report
RMS	Rack Mount Server
ROM	Read Only Memory
SAN	Storage Area Network
SAS	Serial attached SCSI
SPP	Service Pack for ProLiant
TPD	Tekelec Platform Distribution
UI	User Interface

## 1.3 Terminology

**Table 2. Terminology**

<b>Firmware</b>	Coded instructions and data programmed directly into the circuitry of read-only memory for controlling the operation of the server or one of its devices.
<b>BladeSystem</b>	The HP c-Class BladeSystem which refers to the c7000 enclosure and all of its contained server and storage blades, including its management software and firmware.

<b>Upgrade</b>	The process of converting an HP hardware component from its current firmware release to a newer release.
<b>Software Centric</b>	Refers to customers who do not buy their HP hardware through Oracle (Software Only Customers).

## 2 Content

---

### 2.1 Firmware Baselines and Exceptions

Firmware packages in this document have a specified “Minimum Supported Version”, “Current Approved Version”, and “Maximum Supported Version”. The Current Approved Version is the version currently provided by this HP FUP Release. Systems should be upgraded to at least the Minimum Supported Version where the presently-installed firmware is of an earlier version. In some cases versions newer than the Current Approved Version may be available. **Installing these newer versions is typically acceptable. However, check the "Maximum Supported Version" column for restrictions on newer firmware versions.**

## 2.2 HP Solutions Firmware Components Upgraded

**IMPORTANT:** For the versions indicated below here are guidelines for reading the table:

- **Minimum Supported FW Version** - If a component has a firmware version older than this it needs to be upgraded.
- **Current Approved FW Version** - This is the version of firmware used in this HP FUP release.
- **Maximum Supported FW Version** - If a component has a firmware version newer than this it needs to be downgraded.

### 2.2.1 HP ProLiant Server Firmware Components

The table below lists the main firmware components relating to Oracle supported HP ProLiant Rack Mount and Blade servers.

**Note:** System ROM Versions are often interchangeably written with either a "yyyy.mm.dd" format or a "mm/dd/yyyy" format. For example, "05/02/2011" is equivalent to "2011.05.02".

Component	Minimum Supported FW Version	Current Approved FW Version	Maximum Approved FW Version
System ROM for DL360 G6	2013.07.02	2013.07.02	no maximum
System ROM for DL360 G7	2013.07.02	2013.07.02	no maximum
System ROM for DL360p Gen8 <b>w/ TPD builds 82.29 and lower</b>	2013.09.08	2013.09.08	2013.09.18
System ROM for DL360p Gen8 <b>w/ TPD builds 82.30 and above</b>	2013.09.08	2014.02.10	no maximum
System ROM for DL380 G6	2013.07.02	2013.07.02	no maximum
System ROM for DL380p Gen8 <b>w/ TPD builds 82.29 and lower</b>	2013.09.08	2013.09.08	2013.09.18
System ROM for DL380p Gen8 <b>w/ TPD builds 82.30 and above</b>	2013.09.08	2014.02.10	no maximum
System ROM for BL460c G6	2013.07.02	2013.10.01	no maximum
System ROM for BL460c Gen8 <b>w/ TPD builds 82.29 and lower</b>	2013.09.08	2013.09.08	2013.09.18
System ROM for BL460c Gen8 <b>w/ TPD builds 82.30 and above</b>	2013.09.08	2014.02.10	no maximum
System ROM for BL620c G7	2013.07.01	2013.07.01	no maximum
Power Management Controller for BL460c G6 Servers	3.4	not included <sup>1</sup>	no maximum
Power Management Controller for DL360 G6 and DL380 G6 Servers	2.9	not included <sup>1</sup>	no maximum
Power Management Controller for DL360 G7 and BL460c G7 Servers	1.6	not included <sup>1</sup>	no maximum
Power Management Controller for BL620c G7 Servers	1.7	not included <sup>1</sup>	no maximum
Power Management Controller for all Gen8 Servers	3.0	3.3	no maximum
HP NC532m Broadcom Dual Port 10GbE	6.2.25	6.2.28	no maximum

<sup>1</sup> Power Management Controller firmware is not included in HP's latest SPP for ProLiant G1-G7 servers, but can be found on HP's support website.

Component	Minimum Supported FW Version	Current Approved FW Version	Maximum Approved FW Version
HP NC532i Broadcom Dual Port 10GbE	6.2.25	6.2.28	no maximum
HP NC382i Broadcom Dual Port 1GbE	5.2.3	5.2.3	no maximum
HP NC365T Intel Quad Port 1GbE	no minimum	not included <sup>2</sup>	no maximum
HP NC364T Intel Quad Port 1GbE	no minimum	not included <sup>2</sup>	no maximum
HP NC364m Intel Quad Port 1GbE	no minimum	not included <sup>2</sup>	no maximum
HP 366M Intel Quad Port 1GbE	1.349.0	1.464.0	no maximum
HP 331FLR Broadcom 4-port 1Gb	1.37	1.38	no maximum
HP 331T Broadcom 4-port 1Gb	1.37	1.38	no maximum
HP 530FLB Broadcom 2-port 10Gb	7.4.22	7.10.10	no maximum
HP 530M Broadcom 2-port 10Gb	7.4.22	7.10.10	no maximum
HP NC553i Emulex 2-port 10Gb	4.6.247.5	4.9.416.0	no maximum
Smart Array P410i/P411 Controller for DL/BL G6 Servers	6.40	6.40	no maximum
Smart Array P220i/P420i/P420/P421	5.42	5.42	no maximum
Direct Attached D2700	0070(B)	0147	no maximum
D2200sb Storage Blade (internal P410i)	6.40	6.40	no maximum
D2220sb Storage Blade (internal P420i)	5.42	5.42	no maximum
QLogic FC Host Adapter for BL460c	2010.05.19	2014.04.01	no maximum
iLO2 for all G5/G6 DL/ML/BL Servers <b>w/ TPD 4.x and greater</b>	2.25	2.25	no maximum
iLO3 for all G7 DL/ML/BL Servers	1.70	1.70	no maximum
iLO4 for all Gen8 DL/BL Servers	1.51	1.51	no maximum
SAS Storage Disks (Multiple Part Numbers included)	Various	Various	no maximum

<sup>2</sup> The NC364m, NC364T, and NC365T NICs do not have firmware on the SPP. HP has never released updated firmware for these NICs. They do not need to be upgraded. The firmware they ship with is approved.



## 2.2.2 HP Misc Firmware Components

The table below lists various HP and non-HP firmware components.

**Important:** Mated switches of the same model must have matching firmware versions.

Component	Minimum Supported FW Version	Current Approved FW Version	Maximum Supported FW Version
OA (Use with PM&C versions 5.7 and 6.0)	4.22	4.22	4.22
OA (Use with PM&C versions 4.x to 5.5)	3.71	3.71	3.71
OA (Use with PM&C versions 2.x to 3.x)	3.31	3.31	3.31
1Gb Ethernet Pass-Thru Module	3.0.3	3.0.3	no maximum
MSA2012fc Disk Controller	J200P50-02	J201R09	no maximum
P2000 G3 MSA Disk Controller	TS201P004	TS201P007	no maximum
P2000 MSA USB Driver (Windows 32bit)	1.0.0.5	1.0.2.8	no maximum
P2000 MSA USB Driver (Windows 64bit)	1.0.2.8	1.0.2.8	no maximum
Cascaded D2700	0070(B)	0147	no maximum
Brocade SAN Switch	6.2.2b	6.2.2b	no maximum
Cisco 4948E-F Switch IOS	12.2(54)WO	12.2(54)WO	12.2(54)WO
Cisco 4948E-F Switch PROM	12.2(44r)SG9	12.2(44r)SG9	no maximum
Cisco 4948E Switch IOS	12.2(54)XO	12.2(54)XO	12.2(54)XO
Cisco 4948E Switch PROM	12.2(44r)SG8	12.2(44r)SG8	no maximum
Cisco 4948 Switch IOS	12.2(53)SG2	12.2(53)SG2	12.2(53)SG2
Cisco 4948 Switch PROM	12.2(31r)SGA1	12.2(31r)SGA1	no maximum
Cisco 3020 Switch IOS	12.2(58)SE1 <sup>3</sup>	12.2(58)SE1 <sup>3</sup>	12.2(58)SE1 <sup>3</sup>
HP 6120XG Switch	Z.14.37	Z.14.37	Z.14.37
HP 6125G Switch	5.20.99, Release 2105	5.20.99, Release 2105	5.20.99, Release 2105

<sup>3</sup> This firmware version requires that OA firmware version 3.70 or greater is already installed before a 3020 upgrade.

<b>Component</b>	<b>Minimum Supported FW Version</b>	<b>Current Approved FW Version</b>	<b>Maximum Supported FW Version</b>
HP 6125XLG Switch	7.1.045, Release 2403	7.1.045, Release 2403	7.1.045, Release 2403

## 3 Upgrade Order

---

The follow recommended order of firmware upgrades and important rules on simultaneous firmware upgrades helps prevent possible firmware upgrade issues and can make trouble shooting easier.

### 3.1 Recommended Order of Firmware Upgrades - Platform 6.5 and Below

The following is the recommended order of firmware upgrades to reduce possible issues during the process of upgrading a system's firmware.

1. 4948, 4948E, and 4948E-F switches.
2. Onboard Administrator (OA).
3. 1Gb Ethernet Pass-Thru Modules.
4. Cisco 3020, HP 6125G, HP 6120XG, and Brocade SAN enclosure switches.
5. BL460 and BL620 blade servers.
6. P2000 and MSA2012fc external storage controllers.
7. D2700 enclosure cascaded from a P2000.
8. DL380 and DL360 rack mount servers.

**NOTE:** While it is recommended that rack mount servers be upgraded last, it is fine to upgrade them at any point while adhering to the rules in the *Important Rules on Simultaneous Firmware Upgrades* section as they are not as reliant on other components as the rest of the hardware on the list.

**NOTE:** Mated switches must run the same firmware version. Make sure both switches are running the same firmware version before proceeding with the recommended order of firmware upgrades.

### 3.2 Recommended Order of Firmware Upgrades - Platform 6.7 or 7.0

The following is the recommended order of firmware upgrades when on or upgrading to Platform 6.7 or 7.0. It is meant to reduce possible issues during the process of upgrading a system's firmware.

1. PM&C host server and PM&C application. (**PM&C 5.7 or 6.0 must be installed before upgrading OA firmware to version 4.22**)
2. 4948, 4948E, and 4948E-F switches.
3. Onboard Administrator (OA).
4. 1Gb Ethernet Pass-Thru Modules.
5. Cisco 3020, HP 6125G, HP 6120XG, 6125XLG and Brocade SAN enclosure switches.
6. BL460 and BL620 blade servers.
7. P2000 and MSA2012fc external storage controllers.
8. D2700 enclosure cascaded from a P2000.
9. DL380 and DL360 rack mount servers.

**NOTE:** While it is recommended that rack mount servers be upgraded last, it is fine to upgrade them at any point while adhering to the rules in the *Important Rules on Simultaneous Firmware Upgrades* section as they are not as reliant on other components as the rest of the hardware on the list.

**NOTE:** Mated switches must run the same firmware version. Make sure both switches are running the same firmware version before proceeding with the recommended order of firmware upgrades.

### 3.3 Important Rules on Simultaneous Firmware Upgrades

Below are important rules to follow when attempting to upgrade more than one type of hardware at a time.

- Do not upgrade an Onboard Administrator to version 4.22 until the associated PM&C is at version 5.7 or greater.
- When upgrading any firmware component do not simultaneously upgrade any network hardware between you and the component being upgraded.
- Do not upgrade anything else when upgrading 4948, 4948E, and 4948E-F switches.
- Do not upgrade anything else within the c7000 enclosure when upgrading Cisco 3020, HP 6125G, HP 6120XG, HP 6125XLG, and Brocade SAN enclosure switches.
- When upgrading an Onboard Administrator (OA) do not upgrade anything else within the c7000 enclosure.

## 4 Compatibility

### 4.1 With Previous HP FUP Releases

HP FUP releases are generally compatible with previous HP FUP releases, but previous HP FUP releases may not be compatible with the TPD version being used.

Each downgrade situation is different and My Oracle Support (MOS) should be consulted. See [Appendix A. My Oracle Support \(MOS\)](#) for more details.

### 4.2 With Oracle Application Software

Before upgrading the Onboard Administrator to firmware version 4.22 the PM&C must be at version 5.7 or greater.

If using PM&C 5.7 or greater use Onboard Administrator firmware version 4.22.

If using PM&C 4.x to 5.5 use Onboard Administrator firmware version 3.71.

If using PM&C 2.x to 3.x use Onboard Administrator firmware version 3.31.

All HP Gen8 servers require either TPD 5.1.0 or TPD 6.0.0 build 80.20 or higher (eg. TPD 6.0.0-80.20.0) when installing TPD and this firmware release.

Installing TPD and TVOE builds older than 82.30 fails on Gen8 servers when System ROMs newer than 2013.09.18 are used. This problem only occurs during install.

After an older, affected version of TPD (build 82.29 and lower) has been installed System ROM versions newer than 2013.09.18 can be installed and ran without issue.

This problem would only occur if there were some reason to re-install that older version of TPD such as a disaster recovery scenario. This means that before you upgrade to TPD build 82.30 or newer you can and should upgrade the firmware on the server to the latest approved System ROM version.

### 4.3 Firmware Version Restrictions

This table includes all conditional restrictions on firmware versions. If a system meets the condition then the listed component must comply with the version restrictions.

Condition	Component	Version	Description
PM&C version ≤ 3.2.x	OA	3.31 only	HP OA Firmware version 3.5 or higher is incompatible with older PM&C versions resulting in an inability to IPM enclosure blades.
TPD/TVOE build less than 82.30	Gen8 Blade and RMS System ROMs	2013.09.18 maximum	TPD/TVOE builds before 82.30 will not install with Gen8 System ROMs newer than version 2013.09.18
OA firmware version ≥ 4.01	PM&C	5.7 minimum	Before an OA can be upgraded to firmware version 4.01 or later the PM&C must be at version 5.7 or greater.
PM&C version 4.x to 5.4	OA	3.71 only	If a PM&C, version 4.x to 5.5, is being used the OA firmware must be version 3.71.
Mated switches of the same model	All Switches	N/A	Mated switches of the same model must have the same firmware version(s) as each other.
OA must be upgraded to version 4.22	OA and PM&C	N/A	The PM&C must be at version 5.7 or 6.0 before upgrading to OA firmware version 4.22.
Cisco 3020 must be upgraded	OA and Cisco 3020	N/A	When upgrading a Cisco 3020 switch, the OA must first be upgraded to firmware version 3.70 or newer.



## Appendix A My Oracle Support (MOS)

---

MOS (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at **1-800-223-1711** (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking, and Solaris Operating System Support
3. Select 2 for Non-Technical Issue

You will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS. MOS is available 24 hours a day, 7 days a week, 365 days a year.

### Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at **1-800-223-1711** (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.