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Enterprise

Moonshot Component Pack 2018.02.0 and 2018.02.1

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Release Notes

Overview

Moonshot Component Pack is a comprehensive firmware solution tested on the Moonshot System and delivered as a compressed file. The compressed file includes the firmware files to update a Moonshot Chassis and its cartridges. Deploy firmware updates from a command line with the iLO Chassis Manager CLI (iLO Chassis Manager) or Moonshot-45G/180G Switch Module CLI (switch firmware only). Users can also use the included Smart Update Manager (SUM). Download the latest **Moonshot Component Pack** from the Hewlett Packard Enterprise Support Center website.

These Release Notes apply to Moonshot Component Pack versions 2018.02.0 and 2018.02.1.

Moonshot Component Pack 2018.02.1 was released shortly after Moonshot Component Pack 2018.02.0 due to the availability of ROM versions that included the latest versions of the Intel microcode. In combination with operating system updates, this microcode provides mitigation for Variant 2 of the Side Channel Analysis vulnerability, also known as Spectre.

Notes about Tables 1 and 2:

- Table 1 includes file information included only in Moonshot Component Pack 2018.02.1.
- Table 2 includes file information included in Moonshot Component Pack 2018.02.0 and 2018.02.1. Replacements are noted in Table 1.

Table 1: Table 1: Moonshot Component Pack 2018.02.1 included files and descriptions

Filename	Description
cp035143.zip	Moonshot Firmware Pack 2018.02.1
README.txt	Moonshot Component Pack Readme v2018.2.1
ProLiant_m510_Server_ROM_H05_1.64_01_22_2018.signed.flash	System ROM for HPE ProLiant m510 Server Cartridge (H05)
ProLiant_m710_Server_ROM_H03_2018_01_22.HPb	System ROM for HPE ProLiant m710 Server Cartridge (H03)
ProLiant_m710p_Server_ROM_H06_2018_01_22.HPb	System ROM for HPE ProLiant m710p Server Cartridge (H06)
ProLiant_m710x_Server_ROM_H07_1.64_01_22_2018.signed.flash	System ROM for HPE ProLiant m710x Server Cartridge (H07)

Table 2: Table 2: Moonshot Component Pack 2018.02.0 included files and descriptions

Filename	Description
cp034460.zip	Moonshot Firmware Pack
README.txt	Moonshot Component Pack Readme v2018.2.0
Chassis Firmware	

Table Continued

Filename	Description
iLO_Chassis_Manager_Firmware_156.bin ¹	Integrated Lights-Out Chassis Manager Firmware 1.56
iLO_Chassis_Mgmt_Module_CPLD_0707.HPb ¹	Integrated Lights-Out Management Module CPLD 07
HP_Moonshot_1500_Chassis_Firmware_4.9.2S.hex ¹	Moonshot 1500 Chassis Firmware
HP_Moonshot_1500_Chassis_Programmable_Logic_Device_0B0B.HPb ¹	Moonshot 1500 Chassis Programmable Logic Device 0B0B
Switch Firmware	
MOONSHOT_SWITCH_FW-CMW710-R2432P02.signed.bin ²	Moonshot Switch Firmware
MOONSHOT_SWITCH_FW-CMW710-R2432P02.ipe ²	Moonshot Switch Firmware
180G_Switch_Data_2013-12-06S.bin ¹	Moonshot-180G Switch Module Cartridge Data File 12-06-2013
180XGc_Switch_Data_2015-11-30S.bin ¹	Moonshot-180XGc Switch Module Cartridge Data File 11-30-2015
45Gc_Switch_Data_2015-02-04S.bin ¹	HPE Moonshot-45Gc Switch Module Cartridge Data File 02-04-2015
45G_Switch_Data_2013-12-06S.bin ¹	Moonshot-45G Switch Module Cartridge Data File 1206.13
45XGc_Switch_Data_2016-11-30S.bin ¹	Moonshot-45XGc Switch Module Cartridge Data File 11-30-2016
Switch_FW_45G_180G_2.0.3.5.bin ²	Moonshot 45-Port/180-Port Switch Firmware Image 2.0.3.5
Remote Control Administrator	
mRCA_Cartridge_Data_6_16_2017.bin.HPb ¹	Remote Console Administrator Cartridge Data 6-16-2017
mRCA_Programmable_Logic_Device_0808.bin.HPb ¹	iLO Moonshot Remote Console Administrator 2.32
iLO4_232_mRCA.bin ¹	iLO Moonshot Remote Console Administrator 2.32
m510 Server Cartridge Firmware	
ProLiant_m510_Server_ROM_H05_1.60_11_30_2017.signed.flash	System ROM for ProLiant m510 (H05) 1.60_11-30-2017
iLO4_254_moonshot.bin ¹	iLO for Moonshot Firmware 2.54
ProLiant_m510_Cartridge_Data_8Core_27April2017.HPb ¹	ProLiant m510 Server Cartridge Data 8 Core 04-27-2017
ProLiant_m510_Cartridge_Data_16Core_27April2017.HPb ¹	ProLiant m510 Server Cartridge Data 16 Core 04-27-2017
ProLiant_m510_Server_Programmable_Logic_Device_v17_15Jan2018.HPb	ProLiant m510 Server Programmable Logic Device v17

Table Continued

Filename	Description
RunIFXTPMUpdate4Moonshot.efi	ProLiant m510 Server Cartridges Trusted Platform Module (TPM 2.0) firmware update for UEFI
HP_ProLiant_m510_Cartridge_ME@2017.03.27(b)___pca_en	HPE ProLiant m510 Cartridge ME
ProLiant_m510_Mellanox_NIC_FW_2_42_5004.HPb ³	ProLiant m510 NIC 2.42.5004
Firmware-nic-mellanox-nic-1.1-1.x86_64.rpm ⁴	Online firmware Upgrade Utility for HPE M510 And M710x Ethernet 10Gb 2 Port 544+i Adapter
m700 Server Cartridge Firmware	
ProLiant_m700_Server_ROM_A34_2017_05_23.HPb ¹	System ROM for ProLiant m700 Server Cartridge (A34) 05-23-2017
m700_Server_M2_Mezz_Data_2016_01_08.HPb ¹	ProLiant m700 Server Cartridge M2 Mezz Data 01-08-2016
HP_ProLiant_m700_Server_Cartridge_Data_3_5_2015.HPb	HPE ProLiant m700 Server Cartridge Abstraction data, FAN data, SDR data, ASSET data
ProLiant_m700_Server_Cartridge_PLD_0B0B.bin.HPb ³	ProLiant m700 Server Cartridge PLD 0B0B
HP_ProLiant_m700_Server_iSSD_Mezz_Data_5_19_2015.bin.HPb ¹	ProLiant m700 Server Cartridge iSSD Mezz Data 5-19-2015
Cartridge_Satellite_Firmware_0706.17S.bin ¹	Cartridge Satellite Firmware
m700p Server Cartridge Firmware	
ProLiant_m700p_Server_ROM_A35_2017_08_11.HPb ¹	System ROM for HPE ProLiant m700p Server Cartridge (A35) 08-11-2017
ProLiant_m700p_Server_Programmable_Logic_Device_v0B(b)_29May2017.HPb ³	ProLiant m700p Server Cartridge Programmable Logic Device v0b (b)
ProLiant_m700p_Server_Cartridge_Data_29May2017.HPb ¹	ProLiant m700p Server Cartridge Data 05-29-2017
Cartridge_Satellite_Gen2_Firmware_0711.175.BIN ¹	Cartridge Satellite Gen2 Firmware
m710 Server Cartridge Firmware	
ProLiant_m710_Server_ROM_H03_2016_01_06.HPb ¹	System ROM for ProLiant m710 Server Cartridge 01-06-2016
m710_Programmable_Logic_Device_1111.bin.HPb ¹	ProLiant m710 Server Cartridge Programmable Logic Device 1111
m710_Cartridge_Data_06_21_2016.bin.HPb ¹	ProLiant m710 Server Cartridge Data 06-21-2015
Cartridge_Satellite_Firmware_0706.17S.bin ¹	Cartridge Satellite Firmware
ProLiant_m710_Mellanox_2_42_5004.bin.HPb ³	ProLiant m710 Server Cartridge Mellanox 2.42 5004

Table Continued

Filename	Description
m710p Server Cartridge Firmware	
ProLiant_m710p_Server_ROM_H06_2016_07_13.HPb ¹	System ROM for ProLiant m710p Server Cartridge 07-13-2016
ProLiant_m710p_Server_Cartridge_Data_15May2017.HPb ¹	ProLiant_m710p_Server_Cartridge_Data
m710p_Programmable_Logic_Device_1111.bin.HPb ¹	ProLiant m710p Server Cartridge Programmable Logic Drive 1111
Cartridge_Satellite_Firmware_0706.17S.bin ¹	Cartridge Satellite Firmware
ProLiant_m710p_Mellanox_2_42_5004.bin.HPb ³	ProLiant m710p Server Cartridge Mellanox 2.42 5004
m710x Server Cartridge Firmware	
ProLiant_m710x_Server_ROM_H07_1.62_12_14_2017.signed.flash	System ROM for HPE ProLiant m710x Server Cartridge (H07) 1.62_12-14-2017
iLO4_254_moonshot.bin ¹	iLO for Moonshot Firmware 2.54
ProLiant_m710x_Server_Cartridge_Data_13Nov2017.hp b	ProLiant m710x Server Cartridge Data 11-13-2017
ProLiant_m710x_Server_Programmable_Logic_Device_v14_06Dec2017.HPb	ProLiant m710x Server Programmable Logic Device v14
RunIFXTPMUpdate4Moonshot.efi	ProLiant m710x Server Cartridges Trusted Platform Module (TPM 2.0) firmware update for UEFI
ProLiant_m710x_Server_ME_17Oct2017.bin.HPb	HPE ProLiant m710x Cartridge ME
ProLiant_m710x_Mellanox_NIC_FW_2_42_5004.HPb ¹	ProLiant m710x Mellanox NIC firmware 2.42 5004
firmware-nic-mellanox-nic-1.1-1.1.x86_64.rpm ⁴	Online Firmware Upgrade Utility for HPE M510 And M710x Ethernet 10Gb 2 Port 544+i Adapter
License	
eula-en.html	Hewlett Packard Enterprise End-User License Agreement v2017.01
eula-ja.htm	Hewlett Packard Enterprise End-User License Agreement (Japanese) v2017.01
eula-zh.htm	Hewlett Packard Enterprise End-User License Agreement (Simplified Chinese) v2017.01

¹ Included in cp034460.zip/cp035143.zip. All firmware files included in cp034460.zip/cp035143.zip can be updated using SUM.

² This firmware file is included outside of the firmware zip file cp034460.zip/cp035143.zip if needed, update the switch from the switch or iLO CM firmware command line, or by using the Moonshot iLO Chassis Manager web interface. SUM does not support switch module firmware updates or certain NIC firmware updates, as noted, at this time.

³ This firmware file is included outside of the firmware zip file cp034460.zip/cp035143.zip and must be updated manually as SUM only updates the firmware included in the cp034460.zip/cp035143.zip file.

⁴ Includes ProLiant_m510_NIC_2_42_5004.HPb and ProLiant_m710x_Mellanox_NIC_FW_2_42_5004.HPb

Supersede information

Supersedes: Moonshot Component Pack 2017.12.0

Product models

This release applies to the following models.

- Moonshot 1500 Chassis
- ProLiant m510 Server Cartridge
- ProLiant m700 Server Cartridge
- ProLiant m700p Server Cartridge
- ProLiant m710 Server Cartridge
- ProLiant m710p Server Cartridge
- ProLiant m710x Server Cartridge
- Moonshot Remote Console Administrator Data

Devices supported

Installation of this release applies to the following devices:

- Moonshot-45G Switch Module
- Moonshot-45Gc Switch Module
- Moonshot-180G Switch Module
- Moonshot-180XGc Switch Module
- Moonshot-45XGc Switch Module

Languages

The Moonshot Component Pack firmware update files support the following languages:

- English
- Japanese

Important notes

Read this section before you start updating your system.

- The ROMs for the following Server Cartridges included in the Moonshot Component Pack v2018.02.1 contain the fix for the industry-wide microprocessor vulnerability:
 - HPE ProLiant m510 Server Cartridge v1.64_01-22-2018
 - HPE ProLiant m710 Server Cartridge v2018.01.22

- HPE ProLiant m710p Server Cartridge v2018.01.22
- HPE ProLiant m710x Server Cartridge v1.64_01-22-2018
- For the latest update on the industry-wide microprocessor vulnerability - see the *Hewlett Packard Enterprise Product Security Vulnerability Alerts* at <https://www.hpe.com/us/en/services/security-vulnerability.html> and the *Side Channel Analysis Method Alert* at http://h22208.www2.hpe.com/eginfolib/securityalerts/SCAM/Side_Channel_Analysis_Method.html.
- Review ALL of the following Customer Advisories as the fixes for these issues are included in the components in the Moonshot Component Pack.
- Components for the following cartridges have been removed from this Moonshot Component Pack. Moonshot Component Pack 2017.06.0 was the last Moonshot Component Pack to contain components for the following cartridges:
 - HPE ProLiant Moonshot Server
 - HPE ProLiant m800 Server Cartridge
 - HPE ProLiant m400 Server Cartridge
 - HPE ProLiant m350 Server Cartridge
 - HPE ProLiant m300 Server Cartridge

Customer advisories

The fixes to the issues documented in the following Customer Advisories are included in the Moonshot Component Pack:

- **Customer Bulletin a00039267 - (Revision) HPE ProLiant, Moonshot, and Synergy Servers - Side Channel Analysis Method Allows Improper Information Disclosure in Microprocessors (CVE-2017-5715, CVE-2017-5753, CVE-2017-5754)**
 Review at: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00039267en_us
 Affects: m510 Server Cartridge, m710 Server Cartridge, m710p Server Cartridge, and m710x Server Cartridge
- **Customer Bulletin a00036596 - HPE Servers - Some Systems Using Certain Intel Processors Are Vulnerable to Local Denial of Service and Execution of Arbitrary Code**
 Review at: http://h20564.www2.hpe.com/portal/site/hpsc/public/kb/docDisplay/?docId=emr_na-a00036596en_us
 Affects: m710x Server Cartridge
- **Customer Bulletin a00029873, HPE ProLiant m510, or HPE ProLiant m710x Server Cartridge - Potential Vulnerability in the HPE Trusted Platform Module 2.0 Firmware Version 5.51**
 Review at: http://h20564.www2.hpe.com/portal/site/hpsc/public/kb/docDisplay/?docId=emr_na-a00029873en_us
 Affects: m510 Server Cartridge and m710x Server Cartridge

Component fixes and enhancements

Chassis-related firmware

Integrated Lights-Out Chassis Manager Firmware version 1.56

(Filename iLO_Chassis_Manager_Firmware_156.bin)

Fixes

- Fixed a rollover problem in flashing MAC addresses into Mellanox firmware. If the first NIC MAC address ended in FF, the second MAC address would be programmed to the wrong value. iLO Chassis Manager would always show the desired MAC addresses, but the NIC firmware was using a second MAC address with the fifth octet 1 value too low.
- Fixed a problem with potentially losing some cartridge network connectivity for a brief period when iLO-C performed a watchdog reset. This scenario was not a problem when iLO Chassis Manager was reset through the GUI or RESET CM from the CLI.
- Fixed a problem with REST calls to /Systems/cxny or /Chassis/1/Cartridges/cx sometimes returning a 404 error when a cartridge is present. The previous workaround was to call /Systems or /Chassis/1/Cartridges beforehand to avoid a potential 404 error.
- Will now report an error if we run out of space while adding a file to the Firmware Repository.
- AlertMail will now also set X-Priority in email headers for severities CAUTION and WARNING to 3 and UNKNOWN to 5.

Cartridge-related firmware (applies to m510 and m710x Server Cartridges)

iLO on Moonshot version 2.54 *(Filename ilo4_254_moonshot.bin)*

Fixes

- Fixed problem with cartridge ROM IML events not showing in iLO Chassis Manager. (Applicable to 1500 chassis only)
- Fixed problem with closing or dropping of SSH sessions while data is still being transmitted to the client. This scenario possibly results in SSH sessions not closing completely and additional connections being refused.

Enhancements

Allow enabling of ROM Secure Boot through REST calls to iLO on cartridge in a Moonshot 1500 chassis. Exposed /Systems/1/Secure Boot.

HPE ProLiant m510/m710x Server Cartridges Trusted Platform Module (TPM 2.0) firmware for UEFI version 5.62 *(Filename RunIFXTPMUpdate4Moonshot.efi)*

Firmware dependencies

- HPE Trusted Platform Module 2.0 Option firmware version 5.51 installed to upgrade to version 5.62.
- System ROM version 1.50 or later installed before updating the TPM 2.0 firmware.
- The server must run in UEFI mode with the TPM enabled or hidden. Legacy BIOS mode is not supported. It can be installed with Secure Boot enabled.
- Refer to the Customer Bulletin at http://h20564.www2.hp.com/hpsc/doc/public/display?docId=a00029873en_us for more information.

Fixes

- Improved TPM RSA key generation algorithm to prevent generation of weak keys.
- Improved compatibility with Microsoft Hardware Logo Kit tests.

Enhancements

Improved compatibility with Microsoft Hardware Logo Kit tests.

m510 Server Cartridge

System ROM for ProLiant m510 Server Cartridge (H05) version 1.64_01-22-2018 (Filename *ProLiant_m510_Server_ROM_H05_1.64_01_22_2018_signed.flash*) **Only in Moonshot Component Pack 2018.02.1**

Important notes

This revision of the System ROM includes the latest revision of the Intel microcode. In combination with operating system updates, this microcode provides mitigation for Variant 2 of the Side Channel Analysis vulnerability, also known as Spectre. The revision of the microcode included in this System ROM does NOT have issues with more frequent reboots and unpredictable system behavior. This behavior impacted the previous Intel microcode that was part of the Spectre Variant 2 mitigation.

Fixes

Updated the Intel processor microcode to the latest version.

System ROM for ProLiant m510 Server Cartridge (H05) version 1.60_11-30-2017 (Filename *ProLiant_m510_Server_ROM_H05_1.60_11_30_2017_signed.flash*) **Only in Moonshot Component Pack 2018. 02.1**

Enhancements

Added support for configuring Enforce Throttling in a multinode chassis. This feature allows a user to exclude the node from being throttled down on power input loss events.

HPE ProLiant m510 Cartridges CPLD version 17 (Filename *ProLiant_m510_Server_Programmable_Logic_Device_v17_15Jan2018.HPb*)

Enhancements

Added customer configuration setting to allow iLO Chassis Manager to disable throttling per cartridge.

ProLiant m510 Server Mellanox Firmware version 2.42.5004 (Filename *ProLiant_m510_Mellanox_NIC_FW_2_42_5004.HPb*)

Fixes

- The broken Blink LEDs feature in Flexboot configuration menu.
- Corruption of ConnectFirstTgt and FirstTgtTcpPort attributes when reading them from the flash memory.
- SR-IOV Settings were not propagated properly when changing them from legacy mode.

Enhancements

- Added support for the following features:
 - New TLV: CX3_GLOBAL_CONF to enable/disable time stamp on incoming packets through mlxconfig configuration.
 - User MAC configuration.
 - Automatically collecting mstdump before driver reset.
 - Mechanism to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.
 - A new field to "set port" command which notifies the firmware what is the user mtu size.
- Enhanced the debug ability for command timeout cases.

m710 Server Cartridge

System ROM for HPE ProLiant m710 Server Cartridge (H03) version 2018.01.22 (Filename *ProLiant_m710_Server_ROM_H03_2018_01_22.HPb*)

Important notes

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for Variant 2 of the Side Channel Analysis vulnerability, also known as Spectre. The revision of the microcode included in this System ROM does NOT have issues with more frequent reboots and unpredictable system behavior which impacted the previous Intel microcode which was part of the Spectre Variant 2 mitigation.

Fixes

Updated the Intel processor microcode to the latest version.

Hpb image for HP m710 Ethernet 10Gb 2 Port 544 +I Adapter version 2.42.5004 (Filename *ProLiant_m710_Mellanox_NIC_FW_2_42_5004.HPb*)

Fixes

- The broken Blink LEDs feature in Flexboot configuration menu.
- Corruption of ConnectFirstTgt and FirstTgtTcpPort attributes when reading them from the flash memory.
- SR-IOV Settings were not propagated properly when changing them from legacy mode.

Enhancements

- Added support for the following features:
 - New TLV: CX3_GLOBAL_CONF to enable/disable time stamp on incoming packets through mlxconfig configuration.
 - User MAC configuration.
 - Automatically collecting mstdump before driver reset.

- Mechanism to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.
- A new field to "set port" command which notifies the firmware what is the user mtu size.
- Enhanced the debug ability for command timeout cases.

m710p Server Cartridge

System ROM for HPE ProLiant m710p Server Cartridge (H06) version 2018.01.22 (Filename *ProLiant_m710p_Server_ROM_H06_2018_01_22.HPb*)

Important notes

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for Variant 2 of the Side Channel Analysis vulnerability, also known as Spectre. The revision of the microcode included in this System ROM does NOT have issues with more frequent reboots and unpredictable system behavior which impacted the previous Intel microcode which was part of the Spectre Variant 2 mitigation.

Fixes

Updated the Intel processor microcode to the latest version.

Hpb image for HPE m710p Ethernet 10Gb 2 Port 544 +I Adapter version 2.42.5004 (Filename *ProLiant_m710p_Mellanox_NIC_FW_2_42_5004.HPb*)

Fixes

- The broken Blink LEDs feature in Flexboot configuration menu.
- Corruption of ConnectFirstTgt and FirstTgtTcpPort attributes when reading them from the flash memory.
- SR-IOV Settings were not propagated properly when changing them from legacy mode.

Enhancements

- Added support for the following features:
 - New TLV: CX3_GLOBAL_CONF to enable/disable time stamp on incoming packets through mlxconfig configuration.
 - User MAC configuration.
 - Automatically collecting mstdump before driver reset.
 - Mechanism to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.
 - A new field to "set port" command which notifies the firmware what is the user mtu size.
- Enhanced the debug ability for command timeout cases.

m710x Server Cartridge

System ROM for HPE ProLiant m710x Server Cartridge (H07) version 1.64_01-22-2018 (Filename *ProLiant_m710x_Server_ROM_H07_1.64_01_22_2018.signed.flash*)

Important notes

This revision of the System ROM includes the latest revision of the Intel microcode. In combination with operating system updates, this microcode provides mitigation for Variant 2 of the Side Channel Analysis vulnerability, also known as Spectre. The revision of the microcode included in this System ROM does NOT have issues with more frequent reboots and unpredictable system behavior. This behavior impacted the previous Intel microcode that was part of the Spectre Variant 2 mitigation.

Fixes

Updated the Intel processor microcode to the latest version.

System ROM for HPE ProLiant m710x Server Cartridge (H07) version 1.62_12-14-2018 (Filename *ProLiant_m710x_Server_ROM_H07_1.62_12_14_2017.signed.flash*) **Only in Moonshot Component Pack 2018.02.0**

Fixes

- Addressed an issue preventing Intel® SGX Software Controlled interface from being enabled.
- Addressed an issue restricting valid Intel® SGX EPOCH value ranges through RESTful API.
- Addressed an issue where video output from the Mini DisplayPort was not displayed during POST.

Enhancements

Added support for configuring Enforce Throttling in a multi-node chassis. This feature allows a user to exclude the node from being throttled down on power input loss events.

ProLiant m710x Server Programmable Logic Device version 14 (Filename *ProLiant_m710x_Server_Programmable_Logic_Device_v14_06Dec2017.HPb*)

Fixes

Added GPO2 2.4 to disable external throttling.

ProLiant m710x Server Mellanox Firmware version 2.42.5004 (Filename *ProLiant_m710x_Mellanox_NIC_FW_2_42_5004.hpb*)

Fixes

- The broken Blink LEDs feature in Flexboot configuration menu.
- Corruption of ConnectFirstTgt and FirstTgtTcpPort attributes when reading them from the flash memory.
- SR-IOV Settings were not propagated properly when changing them from legacy mode.

Enhancements

- Added support for the following features:
 - New TLV: CX3_GLOBAL_CONF to enable/disable time stamp on incoming packets through mlxconfig configuration.
 - User MAC configuration.
 - Automatically collecting mstdump before driver reset.

- Mechanism to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.
- A new field to "set port" command which notifies the firmware what is the user mtu size.
- Enhanced the debug ability for command timeout cases.

ProLiant m710x Server Cartridge Data 11/13/2017 version 10 (Filename *ProLiant_m710x_Server_Cartridge_Data_13Nov2017.hpb*)

Fixes

- Updated fan table to address cooling for Intel P3100 M.2 drives
- Modified fan ramp timing

HPE ProLiant m710x Cartridge ME version 10/17/2017 (Filename *ProLiant_m710x_Server_ME_17Oct2017.bin.HPb*)

Fixes

Recompiled with the 04.01.04.054.0 SPS to fix a known issue found by Intel that requires a change of the image offset map.

NOTE:

Node must be turned off for the flash to happen. After the flash, the node must be aux powered.

Known limitations

m510 and m710x Server Cartridges

Setting the UefiPxeBoot to IPv4 using the REST interface to remove IPv6 entries from the BIOS boot order list as documented in the iLO RESTful API Data Model Reference (for iLO 4).

This scenario occurs when the server cartridges are in the Moonshot chassis and iLO Chassis Manager boot setting is set. iLO Chassis Manager boot setting will override the RBSU settings and can cause this issue. To make sure iLO Chassis Manager boot setting is not set, use the 'show node boot cXnY' command in iLO Chassis Manager CLI.

For more information, refer to the *iLO RESTful API Data Model Reference* white paper at http://h22208.www2.hp.com/eginfolib/servers/docs/HPRestfultool/iLo4/data_model_reference.html.

m700p Server Cartridges

When a remote Windows host is connected with RDP, the AMD Radeon Setting Tool will fail to deploy.

The AMD Radeon Setting Tool requires the AMD GPU driver to be installed. This tool fails to start when the AMD GPU driver is installed and the remote host is connected using RDP. It will start successfully when the AMD GPU driver is installed and VNC is used to connect the remote Windows host. When the AMD GPU driver is not installed, a user can connect to the remote host using RDP and use Windows native display settings to make changes. Since the AMD GPU driver is not installed, the Windows Inbox Display driver will be used and AMD Radeon Setting Tool will not be available.

Supported operating systems

For more information on the Hewlett Packard Enterprise Certified and Supported ProLiant Servers for OS and Virtualization, go to the OS Support Site at <http://www.hpe.com/info/ossupport>. This site has specific OS support per cartridge. Not all server cartridges support all operating systems.

For information about supported operating systems, view the *Supported Operating Systems for Edgeline, Moonshot, and IoT Gateway Systems* document at https://support.hpe.com/hpsc/doc/public/display?docId=a00037370en_us.

Prerequisites

SUM prerequisites: The most current prerequisites for SUM can be found on the SUM documentation page at <https://www.hpe.com/servers/hpsum/documentation>.

HPE Trusted Platform Module 2.0: For HPE ProLiant m510 and m710x Server Cartridges, ROM version 1.50 or later must be installed before updating the TPM 2.0 firmware. The TPM must be enabled before updating the TPM 2.0 firmware. TPM for m510 and m710x server cartridges is set to hidden by default.

NOTE:

Steps to update the TPM firmware and System ROM on multiple server cartridges will be available soon. The Customer Bulletin at https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00029873en_us will be updated when the updated steps are available.

If secure boot is enabled, iLO firmware version 2.54 (or later) must be installed prior to updating the TPM firmware.

Refer to Customer Bulletin a00029873 at https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00029873en_us for instructions on how to enable the TPM to be visible and to update the TPM firmware.

Deployment instructions

For installation instructions, see the *Moonshot Component Pack Update Guide* available at <http://www.hpe.com/info/moonshot/docs>. Here are some additional installation instructions specific to this release.

Installation instructions - m510 Server Cartridge

The m510 server cartridge ME firmware included in the Moonshot Component Pack can be installed by flashing it through iLO on the Server Cartridge following these steps:

1. Power off the CPU.
2. Flash the ME through iLO.

If the power is on, you will receive a failed error.

3. Power on the CPU.

To ensure that Moonshot cartridges do not power cycle during firmware updates, Hewlett Packard Enterprise recommends that you power off all cartridges before beginning any firmware update.

To locate Windows-related drivers, see *HPE Moonshot Windows Deployment Pack for HPE ProLiant m510 Servers version 2017.02.08*. This document can be found on hpe.com.

Installation instructions - m710x Server Cartridge

The m710x ROM and Cartridge Data components must be updated as a set. If they are not both updated, then the iLO Chassis Manager will report the System ROM as "Unavailable" instead of reporting the ROM version.

The m710x server cartridge ME firmware included in the Moonshot Component Pack can be installed by flashing it through iLO on the Server Cartridge following these steps:

1. Power off the CPU.
2. Flash the ME through iLO.

If the power is on, you will receive a failed error.

3. Power on the CPU.

This server cartridge supports UEFI and Legacy boot modes. By default, the boot mode is set to UEFI Mode; however, you can configure the boot options manually as well. The server cartridge must boot in UEFI Mode to use certain options, including:

- Secure Boot
- UEFI Optimized Boot
- Generic USB Boot
- IPv6 PXE Boot
- iSCSI Boot
- Boot from URL

NOTE:

The boot mode you use must match the operating system installation. If not, changing the boot mode can impact the ability of the server to boot to the installed operating system.

Prerequisite: When booting to UEFI Mode, leave UEFI Optimized Boot enabled.

The ROM has added SGX support. SGX will only work with kernels older than 3.17 due to missing ACPI entry. SGX must be enabled and configured in the BIOS under RBSU -> Processor Options. It cannot be configured through REST.

To enable the SGX feature, install the m710x ROM version 1.64, enable the SGX feature, download the SGX driver from Intel® at <https://downloadcenter.intel.com/download/27028/Intel-Software-Guard-Extensions-Intel-SGX-Driver-for-Windows>, then install the driver.

To find the Windows-related drivers that may be needed, see *HPE Moonshot Windows Deployment Pack for HPE ProLiant m710x Servers version 2017.05.08*, which can be found on hpe.com.

Updating Moonshot switch firmware

After updating certain Moonshot switch firmware, the switch must be rebooted as all data previously held in the switch must be reloaded.

Affected switches:

- Moonshot-45Gc Switch Module
- Moonshot-180XGc Switch Module
- Moonshot-45XGc Switch Module

There is a typo in the HPE Moonshot iLO Chassis Manager CLI User Guide concerning the updating the switch firmware from the iLO Chassis Manager CLI. Previous versions of the document listed an incomplete update command. The correct format is:

```
update firmware { <file> | <URL> } [ force ] [ C<cartridge number> | SA | SB | ALL ]
```

Update with the specified file from the iLO Chassis Manager repository or URL. If updating the chassis, cartridge or switch is omitted.

Related information

The latest documentation for Moonshot is available at <http://www.hpe.com/info/moonshot/docs>. Available documents include:

- *HPE Moonshot System Setup Overview*
- *Moonshot Component Pack Update Guide*
- *HPE Moonshot iLO Chassis Manager CLI User Guide*
- *Moonshot Web Interface User Guide*
- *OS Deployment Guide*
- *Supported Operating systems for Edgeline Moonshot and IoT Gateway systems*

Websites

General websites

Hewlett Packard Enterprise Information Library

www.hpe.com/info/EIL

Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix

www.hpe.com/storage/spock

Storage white papers and analyst reports

www.hpe.com/storage/whitepapers

For additional websites, see [Support and other resources](#).

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
<http://www.hpe.com/assistance>
- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
<http://www.hpe.com/support/hpesc>

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates:
Hewlett Packard Enterprise Support Center
www.hpe.com/support/hpesc
Hewlett Packard Enterprise Support Center: Software downloads
www.hpe.com/support/downloads
Software Depot
www.hpe.com/support/softwaredepot
- To subscribe to eNewsletters and alerts:
www.hpe.com/support/e-updates
- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:
www.hpe.com/support/AccessToSupportMaterials

! **IMPORTANT:**

Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

<http://www.hpe.com/support/selfrepair>

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

Remote support and Proactive Care information

HPE Get Connected

www.hpe.com/services/getconnected

HPE Proactive Care services

www.hpe.com/services/proactivecare

HPE Proactive Care service: Supported products list

www.hpe.com/services/proactivecaresupportedproducts

HPE Proactive Care advanced service: Supported products list

www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information

Proactive Care central

www.hpe.com/services/proactivecarecentral

Proactive Care service activation

www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

To view the warranty for your product or to view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products* reference document, go to the Enterprise Safety and Compliance website:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional warranty information

HPE ProLiant and x86 Servers and Options

www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise Servers

www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products

www.hpe.com/support/Storage-Warranties

HPE Networking Products

www.hpe.com/support/Networking-Warranties

Regulatory information

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

www.hpe.com/info/environment

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hpe.com). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.