Release Notes for Service Pack for ProLiant, vGen9.0

BIOS - System ROM

Driver - Lights-Out Management

Driver - Network Driver - Storage

<u>Driver - Storage Controller</u>

Driver - Storage Fibre Channel and Fibre Channel Over Ethernet

<u>Driver - System</u>

Driver - System Management

<u>Driver - Video</u>

Firmware - Blade Infrastructure

Firmware - Network

Firmware - PCIe NVMe Storage Disk Firmware - Power Management Firmware - SAS Storage Disk

Firmware - SATA Storage Disk

Firmware - Storage Controller

Firmware - Storage Fibre Channel

Firmware - System

Firmware (Entitlement Required) - Storage Controller

Software - Lights-Out Management

Software - Management Software - Network

Software - Storage Controller

Software - Storage Fibre Channel

Software - Storage Fibre Channel HBA Software - System Management

BIOS - System ROM Top

Online ROM Flash Component for Linux - HPE ProLiant DL380 Gen9/DL360 Gen9 (P89) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p89-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL360/DL380 Gen9 System ROM - P89

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL380 Gen9/DL360 Gen9 (P89) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050187.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL360/DL380 Gen9 System ROM - P89

Release Version:

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 (U19) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u19-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 System ROM - U19

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant BL460c Gen9/WS460c Gen9 (I36) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-i36-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL460c Gen9/WS460c Gen9 System ROM - I36

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for the below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant BL660c Gen9 (I38) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-i38-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL660c Gen9 System ROM - I38

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL120 Gen9 (P86) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p86-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL120 Gen9 System ROM - P86

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-

0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL160 Gen9/DL180 Gen9 (U20) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u20-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL160 Gen9/DL180 Gen9 System ROM - U20

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL20 Gen9 (U22) Servers

Version: 3.02_11-19-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u22-3.02_2021_11_19-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL20 Gen9 System ROM - U22

Release Version:

3.02_11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

Previous Revision:

3.00_04-01-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL560 Gen9 (P85) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p85-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL560 Gen9 System ROM - P85

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

	2.92_11-23-2021
	Previous Revision:
	2.90_04-29-2021
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.
	These issues are not unique to HPE servers.
	Known Issues:
	None
Prerequ	<u>uisites</u>
	The "HPE ProLiant iLO $3/4$ Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.
<u>Fixes</u>	
	Important Notes:
	This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.
	Firmware Dependencies:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.
	These issues are not unique to HPE servers.
	Known Issues:
	None

Online ROM Flash Component for Linux - HPE ProLiant DL580 Gen9 (U17) Servers Version: 2.92_11-23-2021 **(Recommended)** Filename: RPMS/i386/firmware-system-u17-2.92_2021_11_23-1.1.i386.rpm

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL580 Gen9 System ROM - U17

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL60 Gen9/DL80 Gen9 (U15) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u15-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL60 Gen9/ProLiant DL80 Gen9 System ROM - U15

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant EC200a (U26) Server/HPE ProLiant Thin Micro TM200

(U26) Server

Version: 2.66_07-19-2019 (Recommended)

Filename: RPMS/i386/firmware-system-u26-2.66_2019_07_19-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant Thin Micro TM200 System ROM - U26

Release Version:

2.66_07-19-2019

Last Recommended or Critical Revision:

2.66_07-19-2019

Previous Revision:

2.62_02-20-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.

Known Issues:

None

Enhancements

None

Online ROM Flash Component for Linux - HPE ProLiant ML110 Gen9 (P99) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p99-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

	Deliverable Name:
	HPE ProLiant ML110 Gen9 System ROM - P99
	Release Version:
	2.92_11-23-2021
	Last Recommended or Critical Revision:
	2.92_11-23-2021
	Previous Revision:
	2.90_04-29-2021
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.
	These issues are not unique to HPE servers.
	Known Issues:
	None
Prereq	<u>uisites</u>
	The "HPE ProLiant iLO $3/4$ Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.
<u>Fixes</u>	
	Important Notes:
	This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.
	Firmware Dependencies:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant ML150 Gen9 (P95) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p95-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML150 Gen9 System ROM - P95

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant ML30 Gen9 (U23) Servers

Version: 3.02_11-19-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u23-3.02_2021_11_19-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML30 Gen9 System ROM - U23

Release Version:

3.02_11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

Previous Revision:

3.00_04-01-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant ML350 Gen9 (P92) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-p92-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML350 Gen9 System ROM - P92

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant XL170r/XL190r Gen9 (U14) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u14-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL170r/XL190r Gen9 System ROM - U14

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-

0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant XL230a/XL250a Gen9 (U13) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u13-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL230a/250a Gen9 System ROM - U13

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant XL260a Gen9/XL2x260w (U24) Server

Version: 1.60_01-22-2018 (B) (Critical)

Filename: RPMS/i386/firmware-system-u24-1.60_2018_01_22-2.1.i386.rpm

Important Note!

Important Notes:

Ver. 1.60(B) contains updates to the component packaging and is functionally equivalent to ver. 1.60. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the firmware to version 1.60.

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. Additional information is available from Intel's Security Exploit Newsroom, https://newsroom.intel.com/press-kits/security-exploits-intel-products/.

Deliverable Name:

HPE ProLiant XL260a Gen9/XL2x260w System ROM - U24

Release Version:

1.60 01-22-2018

Last Recommended or Critical Revision:

1.60_01-22-2018

	Previous Revision:
	1.50_09-25-2017
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	Updated the Intel processor microcode to the latest version.
	Known Issues:
	None
<u>Prerequ</u>	<u>uisites</u>
	The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.
<u>Fixes</u>	
	Important Notes:
	Ver. $1.60(B)$ contains updates to the component packaging and is functionally equivalent to ver. 1.60 . It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the firmware to version 1.60 .
	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. Additional information is available from Intel's Security Exploit Newsroom, https://newsroom.intel.com/press-kits/security-exploits-intel-products/ .
	Firmware Dependencies:
	None
	Problems Fixed:
	Updated the Intel processor microcode to the latest version.
	Known Issues:
	None

Online ROM Flash Component for Linux - HPE ProLiant XL270d (U25) Accelerator Tray

Version: 2.92_11-23-2021 **(Recommended)**Filename: RPMS/i386/firmware-system-u25-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL270d Accelerator Tray System ROM - U25

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-

0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant XL450 Gen9 (U21) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u21-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL450 Gen9 System ROM - U21

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant XL730f/XL740f/XL750f Gen9 (U18) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: RPMS/i386/firmware-system-u18-2.92_2021_11_23-1.1.i386.rpm

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL730f/XL740f/XL750f Gen9 System ROM - U18

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 (U19) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050234.compsig; CP050234.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 System ROM - U19

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8. The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on

vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant BL460c Gen9/WS460c Gen9 (I36) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050727.compsig; CP050727.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL460c Gen9/WS460c Gen9 System ROM - I36

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for the below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant BL660c Gen9 (I38) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050744.compsig; CP050744.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL660c Gen9 System ROM - I38

Release Version:

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL120 Gen9 (P86) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050729.compsig; CP050729.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL120 Gen9 System ROM - P86

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.1, 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.1 is 5.0.3.9.

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL160 Gen9/DL180 Gen9 (U20) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050219.compsig; CP050219.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL160 Gen9/DL180 Gen9 System ROM - U20

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL20 Gen9 (U22) Servers

Version: 3.02_11-19-2021 (Recommended) Filename: CP050206.compsig; CP050206.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL20 Gen9 System ROM - U22

Release Version:

3.02_11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

Previous Revision:

3.00_04-01-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, and 5.5 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL380 Gen9/DL360 Gen9 (P89) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050227.compsig; CP050227.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL360/DL380 Gen9 System ROM - P89

Release Version:

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.1, 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.1 is 5.0.3.9.

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL560 Gen9 (P85) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050223.compsig; CP050223.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL560 Gen9 System ROM - P85

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compag ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL580 Gen9 (U17) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050231.compsig; CP050231.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL580 Gen9 System ROM - U17

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compag ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant DL60 Gen9/DL80 Gen9 (U15) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050229.compsig; CP050229.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL60 Gen9/ProLiant DL80 Gen9 System ROM - U15

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.1, 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.1 is 5.0.3.9.

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant EC200a (U26) Server/HPE ProLiant Thin Micro TM200 (U26) Server
Version: 2.66_07-19-2019 (Recommended)
Filename: CP040773.compsig; CP040773.zip

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant Thin Micro TM200 System ROM - U26

Release Version:

2.66_07-19-2019

Last Recommended or Critical Revision:

2.66 07-19-2019

Previous Revision:

2.62_02-20-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5 on vibsdepot.hpe.com.

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.

Known Issues:

None

Enhancements

None

Online ROM Flash Component for VMware - HPE ProLiant ML110 Gen9 (P99) Servers

Version: 2.92_11-23-2021 (**Recommended**) Filename: CP050741.compsig; CP050741.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML110 Gen9 System ROM - P99

Release Version:

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant ML150 Gen9 (P95) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050225.compsig; CP050225.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML150 Gen9 System ROM - P95

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 quidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant ML30 Gen9 (U23) Servers

Version: 3.02_11-19-2021 (Recommended) Filename: CP050169.compsig; CP050169.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML30 Gen9 System ROM - U23

Release Version:

3.02_11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

3.00_04-01-2021 **Firmware Dependencies:** None **Enhancements/New Features:** None **Problems Fixed:** This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers. **Known Issues:** None **Prerequisites** This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0. 2. The "Compaq ROM Utility Driver" (CRU) must be installed and running The minimum CRU version for 5.5 is 5.5.4.1. The minimum CRU version for 6.0 is 6.0.8. The minimum CRU version for 6.5 is 6.5.8. The minimum CRU version for 6.7 is 6.7.10. Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, and 5.5 on vibsdepot.hpe.com. **Fixes Important Notes:** This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance. **Firmware Dependencies:** None **Problems Fixed:**

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-

None

Known Issues:

0127. These issues are not unique to HPE servers.

Previous Revision:

Online ROM Flash Component for VMware - HPE ProLiant ML350 Gen9 (P92) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050691.compsig; CP050691.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML350 Gen9 System ROM - P92

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8. The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE

advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant XL170r/XL190r Gen9 (U14) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050565.compsig; CP050565.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL170r/XL190r Gen9 System ROM - U14

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.1, 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.1 is 5.0.3.9.

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-

0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware - HPE ProLiant XL450 Gen9 (U21) Servers

Version: 2.92_11-23-2021 (Recommended) Filename: CP050710.compsig; CP050710.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL450 Gen9 System ROM - U21

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi- HPE ProLiant XL230a/XL250a Gen9 (U13) Servers

Version: 2.92_11-23-2021 (**Recommended**) Filename: CP050566.compsig; CP050566.zip

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL230a/250a Gen9 System ROM - U13

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision: 2.90_04-29-2021 Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run. 1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running. The minimum iLO version for ESXi 5.1, ESXi 5.5, ESXi 6.0 and ESXi 6.5 is 1.4. The minimum iLO version for ESXi 6.7 is 10.1.0.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for 5.1 is 5.0.3.9.

The minimum CRU version for 5.5 is 5.5.4.1.

The minimum CRU version for 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Cu

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.7, 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 (U19)

Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050235.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE Apollo 4200 Gen9/HPE ProLiant XL420 Gen9 System ROM - U19

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant BL460c Gen9/WS460c Gen9 (I36) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050731.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL460c Gen9/WS460c Gen9 System ROM - I36

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for the below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant BL660c Gen9 (I38) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050743.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant BL660c Gen9 System ROM - I38

Release Version:

2.92_11-23-2021

2.92_11-23-2021 **Previous Revision:** 2.90_04-29-2021 **Firmware Dependencies:** None **Enhancements/New Features:** None **Problems Fixed:** This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124. These issues are not unique to HPE servers. **Known Issues:** None **Prerequisites** The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP). **Fixes Important Notes:** This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance. **Firmware Dependencies:** None **Problems Fixed:** This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124. These issues are not unique to HPE servers. **Known Issues:** None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL120 Gen9 (P86) Servers

Version: 2.92_11-23-2021 (Recommended)

Last Recommended or Critical Revision:

Filename: cp050728.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL120 Gen9 System ROM - P86

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL160 Gen9/DL180 Gen9 (U20) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050182.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL160 Gen9/DL180 Gen9 System ROM - U20

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

<u>Fixes</u>

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL20 Gen9 (U22) Servers

Version: 3.02_11-19-2021 (Recommended)

Filename: cp050176.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL20 Gen9 System ROM - U22

Release Version:

3.02 11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

Previous Revision:

3.00_04-01-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL560 Gen9 (P85) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050180.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL560 Gen9 System ROM - P85

Release Version:

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

Online ROM Flash Component for Windows x64 - HPE ProLiant DL580 Gen9 (U17) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050195.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant DL580 Gen9 System ROM - U17

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0103, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL60 Gen9/DL80 Gen9 (U15) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050228.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 quidance.

Deliverable Name:

HPE ProLiant DL60 Gen9/ProLiant DL80 Gen9 System ROM - U15

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant EC200a (U26) Server/HPE ProLiant Thin Micro

TM200 (U26) Server

Version: 2.66_07-19-2019 (Recommended)

Filename: cp040771.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant Thin Micro TM200 System ROM - U26

Release Version:

2.66_07-19-2019

Last Recommended or Critical Revision:

2.66_07-19-2019

Previous Revision:

	2.62_02-20-2019
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.
	Known Issues:
	None
<u>Prerequisites</u>	
	The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).
<u>Fixes</u>	
	Important Notes:
	None
	Firmware Dependencies:
	None
	Problems Fixed:
	This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where the system may experience a machine check after updating to the latest System ROM which contained a fix for an Intel TSX (Transactional Synchronizations Extensions) sightings. The previous microcode was first introduced in the v2.62 System ROM. This issue only impacts systems configured with Intel Xeon® D-1500 processors. This issue is not unique to HPE servers.
	Known Issues:
	None
<u>Enhancements</u>	
	None

Online ROM Flash Component for Windows x64 - HPE ProLiant ML110 Gen9 (P99) Servers Version: 2.92_11-23-2021 (**Recommended**) Filename: cp050740.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML110 Gen9 System ROM - P99

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant ML150 Gen9 (P95) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050175.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML150 Gen9 System ROM - P95

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant ML30 Gen9 (U23) Servers

Version: 3.02_11-19-2021 (Recommended)

Filename: cp050170.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML30 Gen9 System ROM - U23

Release Version:

3.02 11-19-2021

Last Recommended or Critical Revision:

3.02_11-19-2021

Previous Revision:

3.00_04-01-2021

Firmware Dependencies:

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes microcode mitigations for security vulnerability CVE-2021-0127. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant ML350 Gen9 (P92) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050690.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant ML350 Gen9 System ROM - P92

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

	2.92_11-23-2021
	Previous Revision:
	2.90_04-29-2021
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.
	These issues are not unique to HPE servers.
	Known Issues:
	None
Prereq	<u>uisites</u>
	The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).
<u>Fixes</u>	
	Important Notes:
	This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.
	Firmware Dependencies:
	None
	Problems Fixed:
	This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.
	These issues are not unique to HPE servers.
	Known Issues:
	None

Online ROM Flash Component for Windows x64 - HPE ProLiant XL170r/XL190r Gen9 (U14) Servers Version: 2.92_11-23-2021 **(Recommended)** Filename: cp050567.exe

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL170r/XL190r Gen9 System ROM - U14

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90 04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant XL230a/XL250a Gen9 (U13) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050568.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL230a/250a Gen9 System ROM - U13

Release Version:

2.92 11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant XL270d (U25) Accelerator Tray

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050804.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL270d Accelerator Tray System ROM - U25

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92_11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant XL450 Gen9 (U21) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050709.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL450 Gen9 System ROM - U21 **Release Version:** 2.92_11-23-2021 **Last Recommended or Critical Revision:** 2.92 11-23-2021 **Previous Revision:** 2.90 04-29-2021 Firmware Dependencies: None **Enhancements/New Features:** None **Problems Fixed:** This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124. These issues are not unique to HPE servers. **Known Issues:** None **Prerequisites** The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP). <u>Fixes</u> **Important Notes:** This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance. **Firmware Dependencies:** None **Problems Fixed:** This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant XL730f/XL740f/XL750f Gen9 (U18) Servers

Version: 2.92_11-23-2021 (Recommended)

Filename: cp050551.exe

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Deliverable Name:

HPE ProLiant XL730f/XL740f/XL750f Gen9 System ROM - U18

Release Version:

2.92_11-23-2021

Last Recommended or Critical Revision:

2.92 11-23-2021

Previous Revision:

2.90_04-29-2021

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM contains updates aligned with the Intel Product Update (IPU) version IPU.2021.2 guidance.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes Intel Platform Update 2021.2. It provides mitigations for security vulnerabilities documented as INTEL-SA-00561 for below CVEs: CVE-2021-0092, CVE-2021-0144, CVE-2021-0099, CVE-2021-0107, CVE-2021-0111, CVE-2021-0114, CVE-2021-0115, CVE-2021-0116, CVE-2021-0117, CVE-2021-0118, CVE-2021-0125, CVE-2021-0124.

These issues are not unique to HPE servers.

Known Issues:

None

Driver - Lights-Out Management

Top

HPE iLO Native Driver for ESXi 7.0 Version: 10.7.5 (Recommended)

Filename: ilo-driver_700.10.7.5.2-10EM.700.1.0.15843807_17856914.zip

<u>Fixes</u>

 Fixed driver unload function to allow controller to function properly on reload and when Quickboot is enabled.

Driver - Network Top

HPE Blade Emulex 10/20GbE Driver for VMware vSphere 6.5

Version: 2020.03.09 (Optional)

Filename: cp042919.compsig; cp042919.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5*, version 2019.12.01 or later, for use with this driver.

Fixes

This product corrects a vmnic flapping issue which impacts network connectivity.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Driver for VMware vSphere 6.7

Version: 2020.03.09 (Optional)

Filename: cp042920.compsig; cp042920.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7*, version 2019.12.01 or later, for use with this driver.

Fixes

This product corrects a vmnic flapping issue which impacts network connectivity.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Driver for Windows Server 2016

Version: 12.0.1344.0 (Optional)

Filename: cp045173.compsig; cp045173.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Microsoft Windows Server 2016/2019(x64),* version 2021.09.01 or later, for use with this driver.

Fixes

This driver addresses a Windows Stop Error (BSOD) seen after Windows Event ID 67.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- O HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Driver for Windows Server 2019

Version: 12.0.1344.0 (Optional)

Filename: cp045174.compsig; cp045174.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Microsoft Windows Server 2016/2019(x64)*, version 2021.09.01 or later, for use with this driver.

Fixes

This driver addresses a Windows Stop Error (BSOD) seen after Windows Event ID 67. This driver corrects an issue which results in a BSOD for Software Defined Data Center (SDDC).

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- O HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 7

Version: 12.0.1342.0-1 (Optional)

 $\label{lem:kmod-be2net_bl-12.0.1342.0-1.} Filename: kmod-be2net_bl-12.0.1342.0-1. rhel7u8.x86_64. compsig; kmod-be2net_bl-12.0.1342.0-1. rhel7u8.x86_64. compsig; kmod-be2net_bl-12.0.1342.0-1. rhel7u9.x86_64. compsig; kmod-be2net_$

12.0.1342.0-1.rhel7u9.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7, Updates 8 and 9.

Supported Devices and Features

This driver supports the following network adapters:

- O HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 8

Version: 12.0.1342.0-1 (B) **(Optional)**

Filename: $kmod-be2net_bl-12.0.1342.0-1.rhel8u2.x86_64.compsig; kmod-be2net_bl-12.0.1342.0-1.rhel8u2.x86_64.rpm; kmod-be2net_bl-12.0.1342.0-1.rhel8u3.x86_64.compsig; kmod-be2net_bl-12.0.1342.0-1.rhel8u3.x86_64.rpm$

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux* (x64), version 2021.09.01 or later, for use with these drivers.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 12 $\,$

Version: 12.0.1342.0-1 (Optional)

Filename: be2net_bl-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.compsig; be2net_bl-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.rpm; be2net_bl-kmp-default-12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2net_bl-kmp-default-

12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Fixes

This product now supports SUSE Linux Enterprise Server 12 SP5.

Supported Devices and Features

This driver supports the following network adapters:

- O HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 15

Version: 12.0.1342.0-1 (B) (Optional)

Filename: be2net_bl-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; be2net_bl-kmp-

default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.rpm; be2net_bl-kmp-default-

12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.compsig; be2net_bl-kmp-default-12.0.1342.0_k5.3.18_22-

1.sles15sp2.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 SP2.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.5

Version: 2019.12.20 (Optional)

Filename: cp039936.compsig; cp039936.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5*, version 2019.03.01 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

o HPE FlexFabric 20Gb 2-port 650FLB Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp039935.compsig; cp039935.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7*, version 2019.03.01 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for Windows Server 2016

Version: 12.0.1171.0 (Optional)

Filename: cp039931.compsig; cp039931.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- O HPE FlexFabric 20Gb 2-port 650FLB Adapter
- O HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for Windows Server 2019

Version: 12.0.1171.0 (B) **(Optional)** Filename: cp049074.compsig; cp049074.exe

Important Note!

HPE recommends the firmware provided in HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64), version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This driver supports the following network adapters:

- O HP FlexFabric 20Gb 2-port 650FLB Adapter
- o HP FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 7

Version: 12.0.1342.0-1 (Optional)

Filename: kmod-be2iscsi_bl-12.0.1342.0-1.rhel7u8.x86_64.compsig; kmod-be2iscsi_bl-12.0.1342.0-1.rhel7u8.x86_64.rpm; kmod-be2iscsi_bl-12.0.1342.0-1.rhel7u9.x86_64.compsig; kmod-be2iscsi_bl-12.0.1342.0-1.rhel7u9.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7, Updates 8 and 9.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 8

Version: 12.0.1342.0-1 (B) (Optional)

Filename: kmod-be2iscsi_bl-12.0.1342.0-1.rhel8u2.x86_64.compsig; kmod-be2iscsi_bl-12.0.1342.0-1.rhel8u2.x86_64.rpm; kmod-be2iscsi_bl-12.0.1342.0-1.rhel8u3.x86_64.compsig; kmod-be2iscsi_bl-12.0.1342.0-1.rhel8u3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.09.01 or later, for use with these drivers.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 12 $\,$

Version: 12.0.1342.0-1 (Optional)

Filename: be2iscsi_bl-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.rpm; be2iscsi_bl-kmp-default-12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 SP5.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 15

Version: 12.0.1342.0-1 (B) (Optional)

Filename: be2iscsi_bl-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; be2iscsi_bl-kmp-

default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.rpm; be2iscsi_bl-kmp-default-

12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1342.0_k5.3.18_22-

1.sles15sp2.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)*, version 2021.02.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 SP2.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- o HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Intel ixgbe Drivers for Red Hat Enterprise Linux 7

Version: 5.9.4-1 (Optional)

Filename: kmod-hp-ixgbe_bl-5.9.4-1.rhel7u8.x86_64.compsig; kmod-hp-ixgbe_bl-5.9.4-

1.rhel7u8.x86_64.rpm; kmod-hp-ixgbe_bl-5.9.4-1.rhel7u9.x86_64.compsig; kmod-hp-ixgbe_bl-5.9.4-

1.rhel7u9.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7, Updates 8 and 9.

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 10Gb 2-port 560FLB Adapter
- o HP Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbe Drivers for Red Hat Enterprise Linux 8

Version: 5.9.4-1 (B) (Optional)

Filename: kmod-hp-ixgbe_bl-5.9.4-1.rhel8u2.x86_64.compsig; kmod-hp-ixgbe_bl-5.9.4-

1.rhel8u2.x86_64.rpm; kmod-hp-ixgbe_bl-5.9.4-2.rhel8u3.x86_64.compsig; kmod-hp-ixgbe_bl-5.9.4-

2.rhel8u3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbe Drivers for SUSE Linux Enterprise Server 12

Version: 5.9.4-1 (Optional)

Filename: hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_120-1.sles12sp5.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_120-1.sles12sp5.x86_64.rpm; hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 SP5.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbe Drivers for SUSE Linux Enterprise Server 15

Version: 5.9.4-1 (B) (Optional)

 $\label{lem:hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.9.4_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-ixgbe_bl-kmp-default-5.9.4_k5.3.18_22-1.sles15sp2.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.9.4_k5.3.18_22-1.sles15sp2.x86_64.rpm$

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 SP2.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgben Driver for VMware vSphere 6.5

Version: 2021.04.19 (Optional)

Filename: cp045171.compsig; cp045171.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for VMware*, version 1.2.3 or later, for use with this driver.

Fixes

This product addresses VF issues when calculating, reset PF interface, link state propagation and VLAN trunk scenarios.

Enhancements

This product now supports VMware vSphere 6.5 U3.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgben Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp039953.compsig; cp039953.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for VMware*, version 1.0.7 or later, for use with this driver.

Fixes

This product corrects a recursion termination condition so that recursion correctly ends in the case of PCIe link down.

This product addresses an issue where the ixgben driver has high CPU overhead when an SFP+ module is absent.

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgben Driver for VMware vSphere 7.0

Version: 2020.06.01 (Optional)

Filename: cp041435.compsig; cp041435.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for VMware*, version 1.1.2 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbevf Drivers for Red Hat Enterprise Linux 7

Version: 4.9.3-1 (Optional)

Filename: kmod-hp-ixgbevf_bl-4.9.3-1.rhel7u8.x86_64.compsig; kmod-hp-ixgbevf_bl-4.9.3-

1.rhel7u8.x86_64.rpm; kmod-hp-ixgbevf_bl-4.9.3-1.rhel7u9.x86_64.compsig; kmod-hp-ixgbevf_bl-4.9.3-

1.rhel7u9.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Fixes

This product corrects an issue seen when enabling SRIOV, where the VFs have the same, duplicated MAC address.

Enhancements

This product now supports Red Hat Enterprise Linux 7, Updates 8 and 9.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbevf Drivers for Red Hat Enterprise Linux 8 Version: 4.9.3-1 (B) **(Optional)**

Filename: $kmod-hp-ixgbevf_bl-4.9.3-1.rhel8u2.x86_64.compsig$; $kmod-hp-ixgbevf_bl-4.9.3-1.rhel8u2.x86_64.rpm$; $kmod-hp-ixgbevf_bl-4.9.3-2.rhel8u3.x86_64.compsig$; $kmod-hp-ixgbevf_bl-4.9.3-2.rhel8u3.x86_64.rpm$

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbevf Drivers for SUSE Linux Enterprise Server 12

Version: 4.9.3-1 (Optional)

Filename: hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_120-1.sles12sp5.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_120-1.sles12sp5.x86_64.rpm; hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Fixes

This product corrects an issue seen when enabling SRIOV, where the VFs have the same, duplicated MAC address.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 SP5.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixgbevf Drivers for SUSE Linux Enterprise Server 15

Version: 4.9.3-1 (B) (Optional)

Filename: hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.9.3_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-ixgbevf_bl-kmp-default-4.9.3_k5.3.18_22-1.sles15sp2.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.9.3_k5.3.18_22-1.sles15sp2.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.2.3 or later, for use with these drivers.

Fixes

This product corrects an issue seen when enabling SRIOV, where the VFs have the same, duplicated MAC address.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 SP2.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixn Driver for Windows Server 2016

Version: 4.1.199.0 (Optional)

Filename: cp045176.compsig; cp045176.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.2.3 or later, for use with this driver.

Fixes

This product is updated to maintain compatibility with updated Windows installation libraries, ixtmsg.dll, nicco5.dll, and nicinitx.dll.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel ixn Driver for Windows Server 2019

Version: 4.1.197.0 (B) (Optional)

Filename: cp049075.compsig; cp049075.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.5.2 or later, for use with this driver.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel vxn Driver for Windows Server 2016

Version: 2.1.192.0 (Optional)

Filename: cp045179.compsig; cp045179.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.2.3 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.199.0 or later.

Fixes

This product is updated to maintain compatibility with updated Windows installation libraries, vxnmsq.dll, nicco5.dll, and nicinvxn.dll.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- o HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel vxn Driver for Windows Server 2019

Version: 2.1.191.0 (B) (Optional)

Filename: cp049076.compsig; cp049076.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.5.2 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.197.0 or later.

Enhancements

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- o HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5

Version: 2021.09.01 (Optional)

Filename: cp047831.compsig; cp047831.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.5.2 or later, for use with this driver.

<u>Fixes</u>

This product addresses a PSOD seen during device state changes without IDLE state.

This product addresses a PSOD seen during scheduling fabic login.

This product addresses a PSOD issue to enhance immediately flush in work queue and unload/quiesce mechanisms.

Enhancements

This product enhances PLOGI for the HPE XP7 Storage Array.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7

Version: 2021.09.01 (Optional)

Filename: cp047629.compsig; cp047629.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.5.2 or later, for use with this driver.

Fixes

This product addresses a PSOD seen while collecting data dump.

This product addresses a PSOD seen during uplink reset with failure conditions.

This product addresses a PSOD seen during device state changes without IDLE state.

This product addresses a PSOD seen during scheduling fabic login.

This product addresses a PSOD issue to enhance immediately flush in work queue and unload/quiesce mechanisms.

Enhancements

This product enhances PLOGI for the HPE XP7 Storage Array.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 7.0

Version: 2021.09.01 (Optional)

Filename: cp047630.compsig; cp047630.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.5.2 or later, for use with this driver.

Fixes

This product addresses a PSOD seen while collecting data dump.

This product addresses a PSOD seen during uplink reset with failure conditions.

This product addresses a PSOD seen during device state changes without IDLE state.

This product addresses a PSOD seen during scheduling fabic login.

This product addresses a PSOD issue to enhance immediately flush in work queue and unload/quiesce mechanisms.

Enhancements

This product now supports VMware ESXi 7.0 U3. This product enhances PLOGI for the HPE XP7 Storage Array.

Supported Devices and Features

These drivers support the following network adapters:

- HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 $\,$

Version: 7.14.80-5 (Optional)

Filename: kmod-netxtreme2_bl-7.14.80-5.rhel7u8.x86_64.compsig; kmod-netxtreme2_bl-7.14.80-5.rhel7u8.x86_64.rpm; kmod-netxtreme2_bl-7.14.80-5.rhel7u9.x86_64.compsig; kmod-netxtreme2_bl-7.14.80-5.rhel7u9.x86 64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux*, version 1.5.2 or later, for use with these drivers.

Enhancements

This product is updated to maintain compatibility with firmware version 1.5.x.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- O HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 8

Version: 7.14.80-5 (Optional)

Filename: kmod-netxtreme2_bl-7.14.80-5.rhel8u3.x86_64.compsig; kmod-netxtreme2_bl-7.14.80-5.rhel8u3.x86_64.rpm; kmod-netxtreme2_bl-7.14.80-5.rhel8u4.x86_64.compsig; kmod-netxtreme2_bl-7.14.80-5.rhel8u4.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux*, version 1.5.2 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 8 Update 4.

This product now supports the HPE ProLiant BL660c Gen9 Server.

Supported Devices and Features

These drivers support the following network adapters:

- O HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 12

Version: 7.14.80-5 (Optional)

 $File name: netxtreme 2_bl-kmp-default-7.14.80_k4.12.14_120-5.sles 12 sp5.x86_64.compsig; netxtreme 2_bl-kmp-default-7.14.80_64.compsig; netxtreme 2_bl-kmp-default-7.14.80_64.compsig; netxtreme 2_bl-kmp-default-7.14.80_64.compsig; netxtreme 2_bl-kmp-d$

kmp-default-7.14.80_k4.12.14_120-5.sles12sp5.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux*, version 1.5.2 or later, for use with these drivers.

Enhancements

This product is updated to maintain compatibility with firmware version 1.5.x.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- O HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 15

Version: 7.14.80-5 (Optional)

Filename: netxtreme2_bl-kmp-default-7.14.80_k5.3.18_22-5.sles15sp2.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.80_k5.3.18_22-5.sles15sp2.x86_64.rpm; netxtreme2_bl-kmp-default-7.14.80_k5.3.18_57-5.sles15sp3.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.80_k5.3.18_57-5.sles15sp3.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.80_k5.3.18_57-5.sles15sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux*, version 1.5.2 or later, for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 SP3.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions

Version: 7.13.206.0 (Optional)

Filename: cp047540.compsig; cp047540.exe

Important Note!

HP recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.5.3 or later, for use with these drivers.

Fixes

This driver corrects an issue which results in a Windows Stop Error (BSOD) when an invalid vPort ID is used with NIC VMSwitch.

The driver addresses an issue where a network is intermittently disconnected when Virtual Machine Queue (VMQ) is enabled.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 12 SP3

Version: 2.11.5.13-3 (B) (Optional)

Filename: iscsiuio_bl-2.11.5.13-3.sles12sp3.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.sles12sp3.x86_64.rpm

<u>Fixes</u>

This product has been recompiled with a build setting that allows SUM to identify them correctly for installation on systems they support.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter

HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 15 SP1

Version: 2.11.5.13-3 (B) (Optional)

Filename: iscsiuio_bl-2.11.5.13-3.sles15sp1.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.sles15sp1.x86_64.rpm

<u>Fixes</u>

This product has been recompiled with a build setting that allows SUM to identify them correctly for installation on systems they support.

Supported Devices and Features

These drivers support the following network adapters:

- HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- O HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Broadcom NetXtreme-E Driver for Windows Server 2016

Version: 218.0.32.0 (Optional)

Filename: cp045020.compsig; cp045020.exe

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version,* 218.0.166000 or later, for use with this driver.

Fixes

- o This product corrects Wake-on-LAN (WoL) function unavailable.
- This product corrects an issue which fixes VF will not load on certain Virtual OS when Windows is host OS.
- This product corrects an issue which fixes user mode RDMA blue screen of death (BSoD) caused by an IRP SystemBuffer access race condition
- This product corrects a Windows Stop Error blue screen of death (BSoD) seen when uninstalling the NDIS driver.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

HPE Broadcom NetXtreme-E Driver for Windows Server 2019

Version: 219.0.44.0 (**Recommended**) Filename: cp047875.compsig; cp047875.exe

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Package for BCM5741x adapters Version*, 218.0.259000 or later, for use with this driver.

Fixes

- This product corrects an issue which System was unavailable to the create more than 32 Virtual Functions (VFs) per Virtual Functions (VFs).
- o This product corrects an issue which BSOD during heavy TX traffic.
- $\circ\quad$ This product corrects an issue which driver Initialization failure on Virtual functions.
- o This product corrects an issue which BSOD after updating the inbox driver on Windows 2019.
- This product corrects an issue which invalid link speed options on Base-T devices.
- o This product corrects an issue which VF invalid on Windows virtual machines host.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7

Version: 1.10.2-219.0.55.0 (Recommended)

Filename: kmod-bnxt_en-1.10.2-219.0.55.0.rhel7u8.x86_64.compsig; kmod-bnxt_en-1.10.2-

 $219.0.55.0. rhel 7u8.x86_64.rpm; \ kmod-bnxt_en-1.10.2-219.0.55.0. rhel 7u9.x86_64.compsig; \ kmod-bnxt_en-1.10.2-219.0. rhel 7u9.x86_64.compsi$

1.10.2-219.0.55.0.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version*, 218.0.259000 or later, for use with this driver.

Fixes

- This product addresses an issue where Receive (RX) packet crash under heavy traffic.
- This product addresses an issue where Virtual Functions (VFs) cannot be configured while the Physical Function (PF) interface is administratively down.
- This product addresses an issue where system crash when driver unloads while firmware reset is in progress.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
 HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- O HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 8

Version: 1.10.2-219.0.55.0 (Recommended)

Filename: kmod-bnxt en-1.10.2-219.0.55.0.rhel8u3.x86 64.compsig; kmod-bnxt en-1.10.2-

 $219.0.55.0. rhel 8u3.x86_64.rpm; \ kmod-bnxt_en-1.10.2-219.0.55.0. rhel 8u4.x86_64.compsig; \ kmod-bnxt_en-1.10.2-219.0. rhel 8u4.x86_64.compsi$

1.10.2-219.0.55.0.rhel8u4.x86_64.rpm; README

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version*, 218.0.259000 or later, for use with this driver.

Fixes

- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.
- This product addresses an issue where Virtual Functions (VFs) cannot be configured while the Physical Function (PF) interface is administratively down.

 This product addresses an issue where system crash when driver unloads while firmware reset is in progress.

Enhancements

This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- O HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12 x86 64

Version: 1.10.2-219.0.55.0 (Recommended)

Filename: bnxt_en-kmp-default-1.10.2_k4.12.14_120-219.0.55.0.sles12sp5.x86_64.compsig; bnxt_en-kmp-

default-1.10.2_k4.12.14_120-219.0.55.0.sles12sp5.x86_64.rpm; README

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version,* 218.0.259000 or later, for use with this driver.

Fixes

- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.
- This product addresses an issue where Virtual Functions (VFs) cannot be configured while the Physical Function (PF) interface is administratively down.
- This product addresses an issue where system crash when driver unloads while firmware reset is in progress.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 15

Version: 1.10.2-219.0.55.0 (Recommended)

Filename: bnxt_en-kmp-default-1.10.2_k5.3.18_22-219.0.55.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_22-219.0.55.0.sles15sp2.x86_64.rpm; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.55.0.sles15sp3.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.55.0.sles15sp3.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.55.0.sles15sp3.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.55.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.3.18_57-219.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.0.sles15sp2.x86_64.compsig; bnxt_en-kmp-default-1.10.2_k5.0.sles1

219.0.55.0.sles15sp3.x86_64.rpm; README

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version*, 218.0.259000 or later, for use with this driver.

<u>Fixes</u>

- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.
- This product addresses an issue where Virtual Functions (VFs) cannot be configured while the Physical Function (PF) interface is administratively down.
- This product addresses an issue where system crash when driver unloads while firmware reset is in progress.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
 HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.5

Version: 2021.09.04 (**Recommended**) Filename: cp049059.compsig; cp049059.zip

Important Note!

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 218.0.259000 or later, for use with this driver.

Enhancements

This product enhances that additional driver input/output control(ioctl) needed to support Firmware reset/error recovery counters.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.7

Version: 2021.09.04 (**Recommended**) Filename: cp047899.compsig; cp047899.zip

Important Note!

 This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file. HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 218.0.259000 or later, for use with this driver.

Enhancements

This product enhances that new query for Firmware health data.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- O HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- O HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 7.0

Version: 2021.09.04 (**Recommended**) Filename: cp047900.compsig; cp047900.zip

Important Note!

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 218.0.259000 or later, for use with this driver.

Enhancements

This product enhances that new query for Firmware health data.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- $\circ \quad \text{HPE Ethernet 10Gb 2-port 537SFP+ Adapter}$
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 8

Version: 219.0.8.0 (Recommended)

Filename: libbnxt_re-219.0.8.0-rhel7u8.x86_64.compsig; libbnxt_re-219.0.8.0-rhel7u8.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

<u>Fixes</u>

- This product addresses an issue where HardWare Resource Manager (HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state.
- This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter

o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 9

Version: 219.0.8.0 (Recommended)

Filename: libbnxt_re-219.0.8.0-rhel7u9.x86_64.compsig; libbnxt_re-219.0.8.0-rhel7u9.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

<u>Fixes</u>

- \circ This product addresses an issue where HardWare Resource Manager (HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state.
- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 8 Update 2.

Version: 218.0.7.0 (Optional)

Filename: libbnxt_re-218.0.7.0-rhel8u2.x86_64.compsig; libbnxt_re-218.0.7.0-rhel8u2.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 8, version 1.10.2-218.0.65.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 8 Update 3.

Version: 218.0.7.0 (Optional)

Filename: libbnxt re-218.0.7.0-rhel8u3.x86 64.compsig; libbnxt re-218.0.7.0-rhel8u3.x86 64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 8, version 1.10.2-218.0.65.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
 HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 8 Update 4.

Version: 219.0.8.0 (B) (Recommended)

 $Filename: libbnxt_re-219.0.8.0-rhel8u4.x86_64.compsig; libbnxt_re-219.0.8.0-rhel8u4.x86_64.rpm; README$

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 8, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Fixes

 This product addresses an issue where HardWare Resource Manager (HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state. o This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- O HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 12 SP4

Version: 218.0.7.0 (Optional)

Filename: libbnxt_re-218.0.7.0-sles12sp4.x86_64.compsig; libbnxt_re-218.0.7.0-sles12sp4.x86_64.rpm;

README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12, version 1.10.2-218.0.65.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Fixes

This product now supports rdma-core v29(rdma user space application)

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 12 SP5

Version: 219.0.8.0 (Recommended)

Filename: libbnxt_re-219.0.8.0-sles12sp5.x86_64.compsig; libbnxt_re-219.0.8.0-sles12sp5.x86_64.rpm;

README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Fixes

 This product addresses an issue where HardWare Resource Manager (HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state. o This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 15 SP2

Version: 219.0.8.0 (Recommended)

Filename: libbnxt_re-219.0.8.0-sles15sp2.x86_64.compsig; libbnxt_re-219.0.8.0-sles15sp2.x86_64.rpm;

README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 15, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

Fixes

- This product addresses an issue where HardWare Resource Manager (HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state.
- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 15 SP3

Version: 219.0.8.0 (B) (Recommended)

Filename: libbnxt_re-219.0.8.0-sles15sp3.x86_64.compsig; libbnxt_re-219.0.8.0-sles15sp3.x86_64.rpm;

README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 15, version 1.10.2-219.0.48.0 or later, must be installed before installing this product.

The libibverb and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

<u>Fixes</u>

- This product addresses an issue where HardWare Resource Manager(HWRM) timeouts observed when firmware undergoes reset in the ethernet interface down state.
- o This product addresses an issue where Receive (RX) packet crash under heavy traffic.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
 HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions

Version: 219.0.1.0 **(Recommended)** Filename: cp047793.compsig; cp047793.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.0 or later, for use with this driver.

<u>Fixes</u>

This product correct an issue which fixes Windows driver causes NMI/RSOD during OS shutdown

Enhancements

This product now supports Microsoft Windows Server 2022.

Supported Devices and Features

This driver supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- HPE Ethernet 1Gb 4-port 331FLR Adapter
- o HPE Ethernet 1Gb 4-port 331T Adapter
- o HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 3.139b-1 (Optional)

Filename: kmod-tg3-3.139b-1.rhel7u8.x86_64.compsig; kmod-tg3-3.139b-1.rhel7u8.x86_64.rpm; kmod-tg3-3.139b-1.rhel7u9.x86_64.compsig; kmod-tg3-3.139b-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64*, version 2.27.0 or later, for use with these drivers.

Fixes

The products fixes an a race condition issue where driver will still try to access the PHY(physical layer) although it was already brought down when the tg3 timer fires

Enhancements

This product now supports Red Hat Enterprise Linux 7 update 9

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- O HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HPE Ethernet 1Gb 4-port 331FLR Adapter
- o HPE Ethernet 1Gb 4-port 331T Adapter
- O HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux $8\,$

Version: 3.139b-1 (B) (Optional)

Filename: kmod-tg3-3.139b-1.rhel8u3.x86_64.compsig; kmod-tg3-3.139b-1.rhel8u3.x86_64.rpm; kmod-tg3-3.139b-1.rhel8u4.x86 64.compsig; kmod-tg3-3.139b-1.rhel8u4.x86 64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64*, version 2.28.0 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- O HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HPE Ethernet 1Gb 4-port 331FLR Adapter
- o HPE Ethernet 1Gb 4-port 331T Adapter
- O HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 3.139b-2 (B) (Optional)

Filename: README; tg3-kmp-default- $3.139b_k4.12.14_120-2.sles12sp5.x86_64.compsig$; tg3-kmp-default- $3.139b_k4.12.14_120-2.sles12sp5.x86_64.rpm$

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64*, version 2.28.0 or later, for use with these drivers.

Enhancements

This product removed SUSE Linux Enterprise Server 12 Service Pack 4 supports.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- o HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HPE Ethernet 1Gb 4-port 331FLR Adapter
- O HPE Ethernet 1Gb 4-port 331T Adapter

- O HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for SUSE Linux Enterprise Server 15

Version: 3.139b-2 (B) (Optional)

Filename: README; tg3-kmp-default-3.139b_k5.3.18_22-2.sles15sp2.x86_64.compsig; tg3-kmp-default-

3.139b k5.3.18 22-2.sles15sp2.x86 64.rpm; tg3-kmp-default-3.139b k5.3.18 57-

2.sles15sp3.x86_64.compsig; tg3-kmp-default-3.139b_k5.3.18_57-2.sles15sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64*, version 2.28.0 or later, for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

These drivers support the following network adapters:

- o HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- O HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- HPE Ethernet 1Gb 4-port 331FLR Adapter
- HPE Ethernet 1Gb 4-port 331T Adapter
- O HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- HPE Ethernet 1Gb 2-port 332T Adapter

HPE Emulex 10/20 GbE Driver for VMware vSphere 6.5

Version: 2020.09.14 (Optional)

Filename: cp044545.compsig; cp044545.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- o HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for VMware vSphere 6.7

Version: 2020.09.14 (Optional)

Filename: cp044546.compsig; cp044546.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- O HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2012 R2

Version: 12.0.1195.0 (C) (Optional) Filename: cp044540.compsig; cp044540.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- o HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2016

Version: 12.0.1195.0 (C) **(Optional)** Filename: cp044541.compsig; cp044541.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- O HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- o HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2019

Version: 12.0.1195.0 (C) **(Optional)** Filename: cp044542.compsig; cp044542.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- o HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- $\circ \quad \text{HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter} \\$

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- $\circ \quad \text{HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter} \\$
- o HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2012 R2 $\,$

Version: 12.0.1171.0 (C) **(Optional)** Filename: cp044560.compsig; cp044560.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2016

Version: 12.0.1171.0 (C) **(Optional)** Filename: cp044561.compsig; cp044561.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- o HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2019

Version: 12.0.1171.0 (C) **(Optional)** Filename: cp044562.compsig; cp044562.exe

Important Note!

HPE recommends the firmware provided in HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64), version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- O HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- o HPE CN1200E Dual Port Converged Network Adapter

o HPE CN1200E-T Adapter

HPE Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 12.0.1342.0-1 (Optional)

Filename: kmod-be2net-12.0.1342.0-1.rhel7u8.x86_64.compsig; kmod-be2net-12.0.1342.0-

1.rhel7u8.x86 64.rpm; kmod-be2net-12.0.1342.0-1.rhel7u9.x86 64.compsig; kmod-be2net-12.0.1342.0-

1.rhel7u9.x86 64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 8 and Red Hat Enterprise Linux 7 Update 9.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 8

Version: 12.0.1342.0-1 (Optional)

 $Filename: kmod-be2net-12.0.1342.0-1. rhel 8u2.x86_64. compsig; kmod-be2net-12.0.0.$

 $1. rhel 8u2. x86_64. rpm; \ kmod-be2net-12.0.1342.0-1. rhel 8u3. x86_64. compsig; \$

1.rhel8u3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

- This product now supports Red Hat Enterprise Linux 8 Update 2 and Red Hat Enterprise Linux 8 Update 3.
- This product now supports elx_net_install.sh installation script to install be2net driver on Red Hat Enterprise Linux 8 Update 1 or later.

Supported Devices and Features

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter

HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 12.0.1342.0-1 (Optional)

Filename: be2net-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.compsig; be2net-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.rpm; be2net-kmp-default-12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2net-kmp-default-12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 Service Pack 5

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 15

Version: 12.0.1342.0-1 (Optional)

Filename: be2net-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; be2net-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.rpm; be2net-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.compsig; be2net-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64), version 2019.12.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 Service Pack 2

This product now supports elx_net_install.sh installation script to install be2net driver on SUSE Linux Enterprise Server 12 Service Pack 1 or later.

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.5

Version: 2020.09.14 (Optional)

Filename: cp044543.compsig; cp044543.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- o HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- o HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7

Version: 2020.09.14 (Optional)

Filename: cp044544.compsig; cp044544.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7*, version 2019.03.01 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- o HP FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

Supported Devices and Features

This driver supports the following network adapters:

- $\circ \quad \text{HPE FlexFabric 10Gb 2-port 556FLR-T Adapter} \\$
- o HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- $\circ \quad \text{HPE CN1200E-T Adapter}$

HPE Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 7 \times 86_64

Version: 12.0.1342.0-1 (Optional)

Filename: kmod-be2iscsi-12.0.1342.0-1.rhel7u8.x86_64.compsig; kmod-be2iscsi-12.0.1342.0-1.rhel7u8.x86_64.rpm; kmod-be2iscsi-12.0.1342.0-1.rhel7u9.x86_64.compsig; kmod-be2iscsi-12.0.1342.0-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 8 and Red Hat Enterprise Linux 7 Update 9

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 8

Version: 12.0.1342.0-1 (Optional)

Filename: kmod-be2iscsi-12.0.1342.0-1.rhel8u2.x86_64.compsig; kmod-be2iscsi-12.0.1342.0-

1.rhel8u2.x86_64.rpm; kmod-be2iscsi-12.0.1342.0-1.rhel8u3.x86_64.compsig; kmod-be2iscsi-12.0.1342.0-

1.rhel8u3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 8 Update 2 and Red Hat Enterprise Linux 8 Update 3 $\,$

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 12.0.1342.0-1 (Optional)

Filename: be2iscsi-kmp-default- $12.0.1342.0_k4.12.14_120-1.s$ les $12sp5.x86_64.c$ ompsig; be2iscsi-kmp-default- $12.0.1342.0_k4.12.14_120-1.s$ les $12sp5.x86_64.r$ pm; be2iscsi-kmp-default- $12.0.1342.0_k4.12.14_94.41-1.s$ les $12sp4.x86_64.c$ ompsig; be2iscsi-kmp-default- $12.0.1342.0_k4.12.14_94.41-1.s$ les $12.0.1342.0_k4.12.14_94.41-1.s$ les $12sp4.x86_64.c$ ompsig; be2iscsi-kmp-default- $12.0.1342.0_k4.12.14_94.41-1.s$ les $12sp4.x86_64.c$ ompsig; be2iscsi

12.0.1342.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 12 Service Pack 5

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 15

Version: 12.0.1342.0-1 (Optional)

Filename: be2iscsi-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; be2iscsi-kmp-default-12.0.1342.0_k4.12.14_195-1.sles15sp1.x86_64.rpm; be2iscsi-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.compsig; be2iscsi-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2020.08.01 for use with these drivers.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 1 and SUSE Linux Enterprise Server 15 Service Pack 2

Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE CN1200E 10Gb Converged Network Adapter
- HPE CN1200E 10GBASE-T Dual Port Converged Network Adapter

HPE Intel E1R Driver for Windows Server 2016

Version: 12.16.4.1 **(Recommended)** Filename: cp047043.compsig; cp047043.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.0 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInE1R.dll and e1rmsq.dll.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- O HP Ethernet 1Gb 2-port 361i Adapter
- O HPE Ethernet 1Gb 2-port 361T Adapter
- o HP Ethernet 1Gb 2-port 363i Adapter
- O HP Ethernet 1Gb 4-port 366i Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board

- HPE Ethernet 1Gb 4-port 366FLR Adapter
- o HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel E1R Driver for Windows Server 2019 Version: 12.18.12.1 (**Recommended**) Filename: cp047044.compsig; cp047044.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.0 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInE1R.dll and e1rmsg.dll.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- o HP Ethernet 1Gb 2-port 361i Adapter
- HPE Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- o HP Ethernet 1Gb 4-port 366i Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- O HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 2.17.4-1 (Recommended)

Filename: kmod-hp-i40e-2.17.4-1.rhel7u8.x86_64.compsig; kmod-hp-i40e-2.17.4-1.rhel7u8.x86_64.rpm; kmod-hp-i40e-2.17.4-1.rhel7u9.x86_64.compsig; kmod-hp-i40e-2.17.4-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.22.50 or later, for use with these drivers.

Fixes

- O This product addresses an issue where double count in crc_error and size_error counter.
- This product addresses an issue where ethtool status triggers a warning due to invalid size on veb_tc when veb-stats was enabled.
- o This product addresses an issue where the kernel error message about PF reset failed.
- \circ This product addresses an issue where the adapter LED is not blinking via ethtool command.
- o This product addresses an issue where physical functions cannot synchronize tpid setting.
- This product addresses an issue where Linux kernel problem (kernel Oops) when Virtual Station Interface (VSI) reset.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- O HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter

- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 8

Version: 2.17.4-1 (Recommended)

Filename: kmod-hp-i40e-2.17.4-1.rhel8u3.x86_64.compsig; kmod-hp-i40e-2.17.4-1.rhel8u3.x86_64.rpm; kmod-hp-i40e-2.17.4-1.rhel8u4.x86 64.compsig; kmod-hp-i40e-2.17.4-1.rhel8u4.x86 64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.22.50 or later, for use with these drivers.

Fixes

- This product addresses an issue where double count in crc_error and size_error counter.
- This product addresses an issue where ethtool status triggers a warning due to invalid size on veb tc when veb-stats was enabled.
- o This product addresses an issue where the kernel error message about PF reset failed.
- o This product addresses an issue where the adapter LED is not blinking via ethtool command.
- This product addresses an issue where physical functions cannot synchronize tpid setting.
- This product addresses an issue where Linux kernel problem (kernel Oops) when Virtual Station Interface (VSI) reset.

Enhancements

This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368i Adapter
- o HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40e Drivers for SUSE Linux Enterprise Server 12 x86 64

Version: 2.17.4-1 (Recommended)

Filename: hp-i40e-kmp-default-2.17.4_k4.12.14_120-1.sles12sp5.x86_64.compsig; hp-i40e-kmp-default-2.17.4_k4.12.14_120-1.sles12sp5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.22.50 or later, for use with these drivers.

Fixes

- o This product addresses an issue where double count in crc_error and size_error counter.
- This product addresses an issue where ethtool status triggers a warning due to invalid size on veb_tc when veb-stats was enabled.
- O This product addresses an issue where the kernel error message about PF reset failed.
- o This product addresses an issue where the adapter LED is not blinking via ethtool command.
- \circ $\;$ This product addresses an issue where physical functions cannot synchronize tpid setting.

 This product addresses an issue where Linux kernel problem (kernel Oops) when Virtual Station Interface (VSI) reset.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40e Drivers for SUSE Linux Enterprise Server 15

Version: 2.17.4-1 (Recommended)

Filename: hp-i40e-kmp-default-2.17.4_k5.3.18_22-1.sles15sp2.x86_64.compsig; hp-i40e-kmp-default-2.17.4_k5.3.18_22-1.sles15sp2.x86_64.rpm; hp-i40e-kmp-default-2.17.4_k5.3.18_57-

1.sles15sp3.x86_64.compsig; hp-i40e-kmp-default-2.17.4_k5.3.18_57-1.sles15sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.22.50 or later, for use with these drivers.

Fixes

- This product addresses an issue where double count in crc_error and size_error counter.
- This product addresses an issue where ethtool status triggers a warning due to invalid size on veb tc when veb-stats was enabled.
- $\circ\quad$ This product addresses an issue where the kernel error message about PF reset failed.
- O This product addresses an issue where the adapter LED is not blinking via ethtool command.
- o This product addresses an issue where physical functions cannot synchronize tpid setting.
- This product addresses an issue where Linux kernel problem (kernel Oops) when Virtual Station Interface (VSI) reset.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2016

Version: 1.16.62.0 (**Recommended**) Filename: cp047045.compsig; cp047045.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library i40eamsq.dll.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2019

Version: 1.16.62.0 (**Recommended**) Filename: cp047046.compsig; cp047046.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library i40eamsg.dll.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40en Driver for VMware vSphere 6.5 Version: 2021.12.00 (**Recommended**) Filename: cp049058.compsig; cp049058.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

<u>Fixes</u>

This product corrects an issue where PSOD when drivers loading.

Supported Devices and Features

This product supports the following network adapters:

 $\circ \quad \text{ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter} \\$

- o HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel i40en Driver for VMware vSphere 6.7 Version: 2021.12.00 (**Recommended**) Filename: cp047109.compsig; cp047109.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

Fixes

This product corrects an issue where PSOD when drivers loading.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel i40en Driver for VMware vSphere 7.0 Version: 2021.12.00 (**Recommended**) Filename: cp045338.compsig; cp045338.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

Fixes

This product corrects an issue where PSOD when drivers loading.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 2-port 368i Adapter

- o HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568i Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel iavf Driver for Windows Server 2016

Version: 1.12.9.0 (Optional)

Filename: cp045011.compsig; cp045011.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.4.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.13.104.0 or later.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library iavfmsq.dll.

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

This product supports the following HPE Intel i40eb network adapters:

- O HPE Ethernet 10Gb 2-port 568i Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel iavf Driver for Windows Server 2019

Version: 1.12.9.0 (Optional)

Filename: cp045010.compsig; cp045010.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.4.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.13.104.0 or later.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library iavfmsg.dll.

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter

HPE Ethernet 10Gb 2-port 562SFP+ Adapter

This product supports the following HPE Intel i40eb network adapters:

- o HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel iavf Drivers for Red Hat Enterprise Linux 7 x86 64

Version: 4.2.7-1 (Recommended)

Filename: kmod-hp-iavf-4.2.7-1.rhel7u8.x86_64.compsig; kmod-hp-iavf-4.2.7-1.rhel7u8.x86_64.rpm; kmod-hp-iavf-4.2.7-1.rhel7u9.x86_64.compsig; kmod-hp-iavf-4.2.7-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.0 or later, for use with these drivers.

Fixes

- This product addresses an issue where HyperV Ping is lost after change MTU on VF interface in a VM linux
- This product addresses an issue which could lead to traffic interrupts and full traffic stop through the bond when VFs were added to bonding-alb/tlb modes

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel iavf Drivers for Red Hat Enterprise Linux 8

Version: 4.2.7-1 (Recommended)

Filename: kmod-hp-iavf-4.2.7-1.rhel8u3.x86_64.compsig; kmod-hp-iavf-4.2.7-1.rhel8u3.x86_64.rpm; kmod-hp-iavf-4.2.7-1.rhel8u4.x86_64.compsig; kmod-hp-iavf-4.2.7-1.rhel8u4.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.0 or later, for use with these drivers.

Fixes

- This product addresses an issue where HyperV Ping is lost after change MTU on VF interface in a VM linux
- This product addresses an issue which could lead to traffic interrupts and full traffic stop through the bond when VFs were added to bonding-alb/tlb modes

Enhancements

This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel lavf Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 4.2.7-1 (Recommended)

Filename: hp-iavf-kmp-default- $4.2.7_k4.12.14_120-1.s$ les $12sp5.x86_64.c$ ompsig; hp-iavf-kmp-default- $4.2.7_k4.12.14_120-1.s$ les $12sp5.x86_64.c$ mp; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.0 or later, for use with these drivers.

Fixes

- This product addresses an issue where HyperV Ping is lost after change MTU on VF interface in a VM linux
- This product addresses an issue which could lead to traffic interrupts and full traffic stop through the bond when VFs were added to bonding-alb/tlb modes

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel iavf Drivers for SUSE Linux Enterprise Server 15

Version: 4.2.7-1 (Recommended)

Filename: hp-iavf-kmp-default-4.2.7_k5.3.18_22-1.sles15sp2.x86_64.compsig; hp-iavf-kmp-default-4.2.7_k5.3.18_22-1.sles15sp2.x86_64.rpm; hp-iavf-kmp-default-4.2.7_k5.3.18_57-1.sles15sp3.x86_64.compsig; hp-iavf-kmp-default-4.2.7_k5.3.18_57-1.sles15sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.0 or later, for use with these drivers.

Fixes

 This product addresses an issue where HyperV Ping is lost after change MTU on VF interface in a VM linux This product addresses an issue which could lead to traffic interrupts and full traffic stop through the bond when VFs were added to bonding-alb/tlb modes

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 563i Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86 64

Version: 6.8.5-2 (Recommended)

Filename: kmod-hp-igb-6.8.5-2.rhel7u8.x86_64.compsig; kmod-hp-igb-6.8.5-2.rhel7u8.x86_64.rpm; kmod-hp-igb-6.8.5-2.rhel7u9.x86_64.compsig; kmod-hp-igb-6.8.5-2.rhel7u9.x86_64.rpm; README

Fixes

This product fixes an issue where the firmware update fail on Linux

Supported Devices and Features

These drivers support the following Intel network adapters:

- o HPE Ethernet 1Gb 2-port 361i Adapter
- o HPE Ethernet 1Gb 2-port 361T Adapter
- o HPE Ethernet 1Gb 2-port 363i Adapter
- O HPE Ethernet 1Gb 4-port 366FLR Adapter
- \circ HPE Ethernet 1Gb 4-port 366i Communication Board
- o HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 8

Version: 6.8.5-2 (Recommended)

Filename: kmod-hp-igb-6.8.5-2.rhel8u3.x86_64.compsig; kmod-hp-igb-6.8.5-2.rhel8u3.x86_64.rpm; kmod-hp-igb-6.8.5-2.rhel8u4.x86_64.compsig; kmod-hp-igb-6.8.5-2.rhel8u4.x86_64.rpm; README

Fixes

This product fix an issue where the firmware update fail on Linux

Supported Devices and Features

- O HPE Ethernet 1Gb 2-port 361i Adapter
- o HPE Ethernet 1Gb 2-port 361T Adapter
- O HPE Ethernet 1Gb 2-port 363i Adapter
- O HPE Ethernet 1Gb 4-port 366FLR Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board
- o HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 12 x86 64

Version: 6.8.5-2 (Recommended)

Filename: hp-igb-kmp-default-6.8.5_k4.12.14_120-2.sles12sp5.x86_64.compsig; hp-igb-kmp-default-

6.8.5_k4.12.14_120-2.sles12sp5.x86_64.rpm; README

Fixes

This product fixes an issue where the firmware update fail on Linux

Supported Devices and Features

These drivers support the following Intel network adapters:

- O HPE Ethernet 1Gb 2-port 361i Adapter
- o HPE Ethernet 1Gb 2-port 361T Adapter
- O HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board
- o HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 15

Version: 6.8.5-2 (Recommended)

Filename: hp-igb-kmp-default-6.8.5_k5.3.18_22-2.sles15sp2.x86_64.compsig; hp-igb-kmp-default-6.8.5_k5.3.18_22-2.sles15sp2.x86_64.rpm; hp-igb-kmp-default-6.8.5_k5.3.18_57-2.sles15sp3.x86_64.compsig; hp-igb-kmp-default-6.8.5_k5.3.18_57-2.sles15sp3.x86_64.rpm; README

<u>Fixes</u>

This product fixes an issue where the firmware update fail on Linux

Supported Devices and Features

These drivers support the following Intel network adapters:

- O HPE Ethernet 1Gb 2-port 361i Adapter
- O HPE Ethernet 1Gb 2-port 361T Adapter
- O HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- O HPE Ethernet 1Gb 4-port 366i Communication Board

o HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.5

Version: 2021.04.05 (Optional)

Filename: cp042677.compsig; cp042677.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.14.0 or later, for use with this driver.

Fixes

This product corrects an issue which handling duplex value passed of ESXi command.

Supported Devices and Features

These drivers support the following network adapters:

HPE Ethernet 1Gb 4-port 366T Adapter

```
    HPE Ethernet 1Gb 2-port 361i Adapter
    HPE Ethernet 1Gb 2-port 361T Adapter
    HPE Ethernet 1Gb 2-port 363i Adapter
    HPE Ethernet 1Gb 4-port 366FLR Adapter
    HPE Ethernet 1Gb 4-port 366i Adapter
    HPE Ethernet 1Gb 4-port 366i Communication Board
```

HPE Intel igbn Driver for VMware vSphere 6.7 Version: 2021.09.04 (**Recommended**) Filename: cp047110.compsig; cp047110.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.0 or later, for use with this driver.

Enhancements

This product enhances the reliability of TX/RX ring hang detection and recovery procedures.

Supported Devices and Features

These drivers support the following network adapters:

```
    HPE Ethernet 1Gb 2-port 361i Adapter
    HPE Ethernet 1Gb 2-port 361T Adapter
    HPE Ethernet 1Gb 2-port 363i Adapter
    HPE Ethernet 1Gb 4-port 366FLR Adapter
    HPE Ethernet 1Gb 4-port 366i Adapter
    HPE Ethernet 1Gb 4-port 366i Communication Board
    HPE Ethernet 1Gb 4-port 366T Adapter
```

HPE Intel igbn Driver for VMware vSphere 7.0 Version: 2021.09.04 (**Recommended**) Filename: cp047111.compsig; cp047111.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.0 or later, for use with this driver.

Enhancements

This product supports the following new server:

- O HPE ProLiant DL20 Gen10 Plus Server
- o HPE ProLiant ML30 Gen10 Plus Server

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 1Gb 2-port 361i Adapter HPE Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 4-port 366i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86 64

Version: 5.13.4-1 (Recommended)

Filename: kmod-hp-ixqbe-5.13.4-1.rhel7u8.x86 64.compsig; kmod-hp-ixqbe-5.13.4-1.rhel7u8.x86 64.rpm; kmod-hp-ixgbe-5.13.4-1.rhel7u9.x86_64.compsig; kmod-hp-ixgbe-5.13.4-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.22.50 or later, for use with these drivers.

Enhancements

This product enhances the mechanism that enable MDD (Malicious Driver Detection) when SRIOV is disabled.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 8

Version: 5.13.4-1 (Recommended)

Filename: kmod-hp-ixgbe-5.13.4-1.rhel8u3.x86_64.compsig; kmod-hp-ixgbe-5.13.4-1.rhel8u3.x86_64.rpm; kmod-hp-ixgbe-5.13.4-1.rhel8u4.x86_64.compsig; kmod-hp-ixgbe-5.13.4-1.rhel8u4.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.22.50 or later, for use with these drivers.

Enhancements

- This products enhances the mechanism that enable MDD(Malicious Driver Detection) when SRIOV is disabled.
- This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 560M Adapter
- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 5.13.4-1 (Recommended)

 $\label{lem:prop:sig} Filename: hp-ixgbe-kmp-default-5.13.4_k4.12.14_120-1.sles12sp5.x86_64.compsig; hp-ixgbe-kmp-default-5.13.4_k4.12.14_120-1.sles12sp5.x86_64.rpm; README$

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.50 or later, for use with these drivers.

Enhancements

This product enhances the mechanism that enable MDD (Malicious Driver Detection) when SRIOV is disabled.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 560M Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- \circ HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 15

Version: 5.13.4-1 (Recommended)

Filename: hp-ixgbe-kmp-default- $5.13.4_k5.3.18_22-1.s$ les $15sp2.x86_64.c$ ompsig; hp-ixgbe-kmp-default- $5.13.4_k5.3.18_22-1.s$ les $15sp2.x86_64.c$ ompsig; hp-ixgbe-kmp-default- $5.13.4_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ ompsig; hp-ixgbe-kmp-default- $15.13.4_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ ompsig; hp-ixgbe-kmp-default- $15.13.4_k5.0$

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.50 or later, for use with these drivers.

Enhancements

- This product enhances the mechanism that enable MDD (Malicious Driver Detection) when SRIOV is disabled.
- o This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

- o HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter
- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter

- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter

HPE Intel ixgben Driver for VMware vSphere 6.5 Version: 2021.12.00 (**Recommended**) Filename: cp049117.compsig; cp049117.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

<u>Fixes</u>

- This product corrects an issue where non-working MAC anti-spoofing
- This product corrects an issue where incorrect values in virtual function counters

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Intel ixgben Driver for VMware vSphere 6.7 Version: 2021.12.00 **(Recommended)** Filename: cp047114.compsig; cp047114.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

Fixes

- This product corrects an issue where non-working MAC anti-spoofing
- $\circ\quad$ This product corrects an issue where incorrect values in virtual function counters

Supported Devices and Features

- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter

- HPE Ethernet 10Gb 2-port 562T Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Intel ixgben Driver for VMware vSphere 7.0

Version: 2021.12.00 (**Recommended**) Filename: cp047115.compsig; cp047115.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.15.50 or later, for use with this driver.

<u>Fixes</u>

- o This product corrects an issue where non-working MAC anti-spoofing
- This product corrects an issue where incorrect values in virtual function counters

Supported Devices and Features

These drivers support the following network adapters:

- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 4.13.3-1 (Recommended)

Filename: kmod-hp-ixgbevf-4.13.3-1.rhel7u8.x86_64.compsig; kmod-hp-ixgbevf-4.13.3-

1.rhel7u8.x86_64.rpm; kmod-hp-ixgbevf-4.13.3-1.rhel7u9.x86_64.compsig; kmod-hp-ixgbevf-4.13.3-

1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.50 or later, for use with these drivers.

<u>Fixes</u>

- o This product addresses an issue where potential memory leak
- \circ This product addresses an issue where eXpress Data Path (XDP) frame size calculations.

Supported Devices and Features

- o HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 560M Adapter
- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- O HPE Ethernet 10Gb 2-port 562T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 8

Version: 4.13.3-1 (Recommended)

Filename: kmod-hp-ixgbevf-4.13.3-1.rhel8u3.x86_64.compsig; kmod-hp-ixgbevf-4.13.3-

1.rhel8u3.x86_64.rpm; kmod-hp-ixgbevf-4.13.3-1.rhel8u4.x86_64.compsig; kmod-hp-ixgbevf-4.13.3-

1.rhel8u4.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.22.50 or later, for use with these drivers.

<u>Fixes</u>

- This product addresses an issue where potential memory leak
- o This product addresses an issue where eXpress Data Path (XDP) frame size calculations.

Enhancements

This product now supports Red Hat Enterprise Linux 8 update 4

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter
- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 4.13.3-1 (Recommended)

Filename: hp-ixgbevf-kmp-default-4.13.3_k4.12.14_120-1.sles12sp5.x86_64.compsig; hp-ixgbevf-kmp-

default-4.13.3_k4.12.14_120-1.sles12sp5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.50 or later, for use with these drivers.

<u>Fixes</u>

- o This product addresses an issue where potential memory leak
- o This product addresses an issue where eXpress Data Path (XDP) frame size calculations.

Supported Devices and Features

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 15

Version: 4.13.3-1 (Recommended)

Filename: hp-ixgbevf-kmp-default- $4.13.3_k5.3.18_22-1.s$ les $15sp2.x86_64.c$ ompsig; hp-ixgbevf-kmp-default- $4.13.3_k5.3.18_22-1.s$ les $15sp2.x86_64.r$ pm; hp-ixgbevf-kmp-default- $4.13.3_k5.3.18_57-1.s$ les $15sp2.x86_64.r$ pm; hp-ixgbevf-kmp-default- $15sp2.x86_64.r$ pm; hp-ixgbe

1.sles15sp3.x86_64.compsig; hp-ixgbevf-kmp-default-4.13.3_k5.3.18_57-1.sles15sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux* $x86_64$, version 1.22.50 or later, for use with these drivers.

<u>Fixes</u>

- This product addresses an issue where potential memory leak
- o This product addresses an issue where eXpress Data Path (XDP) frame size calculations.

Enhancements

This product now supports SUSE Linux Enterprise Server 15 Service Pack 3

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter
- O HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter

HPE Intel ixn Driver for Windows Server 2016 Version: 4.1.239.0 **(Recommended)** Filename: cp047056.compsig; cp047056.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInIXN.dll and ixnmsg.dll.

Supported Devices and Features

This component supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter

HPE Intel ixn Driver for Windows Server 2019 Version: 4.1.239.0 (**Recommended**)

Filename: cp047049.compsig; cp047049.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInIXN.dll and ixnmsq.dll.

Supported Devices and Features

This component supports the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter

HPE Intel ixt Driver for Windows Server 2016 Version: 4.1.229.0 (**Recommended**) Filename: cp047052.compsig; cp047052.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInIXT.dll and ixtmsg.dll.

Supported Devices and Features

This component supports the following network adapters:

- HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel ixt Driver for Windows Server 2019 Version: 4.1.228.0 **(Recommended)** Filename: cp047053.compsig; cp047053.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInIXT.dll and ixtmsg.dll.

Supported Devices and Features

This component supports the following network adapters:

- HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel vxn Driver for Windows Server 2016

Version: 2.1.243.0 **(Recommended)** Filename: cp047054.compsig; cp047054.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Prerequisites

This driver requires host driver version ixn 4.1.239.0, ixt 4.1.229.0 or later.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInVXN.dll and vxnmsg.dll.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter

This component supports the following HPE Intel ixt network adapters:

- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel vxn Driver for Windows Server 2019 Version: 2.1.241.0 (**Recommended**) Filename: cp047055.compsig; cp047055.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.50 or later, for use with this driver.

Prerequisites

This driver requires host driver version ixn 4.1.239.0, ixt 4.1.228.0 or later.

Enhancements

This product is updated to maintain compatibility with updated Windows installation library NicInVXN.dll and vxnmsg.dll.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- o HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter

This component supports the following HPE Intel ixt network adapters:

- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter

HPE Mellanox CX3 Driver for Windows Server 2012 R2

Version: 5.35.12978.0 (B) **(Optional)** Filename: cp040882.compsig; cp040882.exe

Enhancements

This product now removes supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following HPE Mellanox CX3 network adapters:

- o HP Ethernet 10Gb 2-port 546SFP+ Adapter
- O HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter
- o HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter

HPE Mellanox CX3 Driver for Windows Server 2016

Version: 5.35.12978.0 (D) **(Optional)** Filename: cp040866.compsig; cp040866.exe

Enhancements

This product now removes supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following HP Mellanox CX3 network adapters:

- o HP Ethernet 10Gb 2-port 546SFP+ Adapter
- o HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter
- o HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter

HPE Mellanox CX4LX and CX5 Driver for Microsoft Windows Server 2012 R2

Version: 2.60.23957.0 (Optional)

Filename: cp045130.compsig; cp045130.exe

Fixes

- This product addresses a Windows Stop Error (BSOD) seen when running Mellanox NdStat Utility (mlx5cmd -ndstat) while ND connections was closing.
- o This product corrects driver loading failures seen due to incorrect INF file.
- o This product corrects an issue where the vSwitch unavailable to assign on WS2012R2.

Supported Devices and Features

- HPE Ethernet 100Gb 1-port 842QSFP28 Adapter
- HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter
- O HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- O HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
 HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- o HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter

HPE Mellanox CX4LX and CX5 Driver for Microsoft Windows Server 2016

Version: 2.80.25134.0 (**Recommended**) Filename: cp050319.compsig; cp050319.exe

Fixes

- This product corrects an issue which fixed a possible system crash when deleting vPort under Rx traffic.
- This product corrects an issue which fixed an issue that allowed the installation process to be completed successfully even though one of the drivers was not updated.
- This product corrects an issue which fixed an issue that caused traffic lose and connection closure when TCP Timestamp option (ts-val) is present and the MSB is set together with RSC.

Enhancements

This driver now allows the Event Viewer to overcome an OS limitation related to long names.

Supported Devices and Features

This driver supports the following network adapters:

- O HPE Ethernet 100Gb 1-port 842QSFP28 Adapter
- O HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- o HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter
- o HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- O HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter

HPE Mellanox CX4LX and CX5 Driver for Microsoft Windows Server 2019

Version: 2.80.25134.0 (**Recommended**) Filename: cp050320.compsig; cp050320.exe

<u>Fixes</u>

- This product corrects an issue which fixed a possible system crash when deleting vPort under Rx traffic.
- This product corrects an issue which fixed an issue that allowed the installation process to be completed successfully even though one of the drivers was not updated.
- This product corrects an issue which fixed an issue that caused traffic lose and connection closure when TCP Timestamp option (ts-val) is present and the MSB is set together with RSC.

Enhancements

This driver now allows the Event Viewer to overcome an OS limitation related to long names.

Supported Devices and Features

- HPE Ethernet 100Gb 1-port 842QSFP28 Adapter
- o HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- o HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter
- o HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
- o HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- o HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter

HPE Mellanox MFT Driver and Firmware Tools for SUSE Linux Enterprise Server 15 SP3 (AMD64/EM64T) Version: 4.17 (Recommended)

Filename: kernel-mft-mlnx-kmp-default- $4.17.0_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ ompsig; kernel-mft-mlnx-kmp-default- $4.17.0_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ ompsig; mft-4.17.0-106.sles $15sp3.x86_64.c$ ompsig; mft- $15sp3.x86_64.c$ ompsig; mft

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

The following issues have been fixed in MFT version 4.17.

- Inconsistent flashing of the firmware while using the Intelligent Platform Management Bus/Bridge service.
- Occasional disconnections when the connected port was being activated.
- o Flag "--json" did not work with features that required a user confirmation.
- mlxconfig query for the BOOT_INTERRUPT_DIS TLV showed a wrong value in the "current value" field.
- mst version returned an incorrect string: "mst, MFT_VERSION_STR built on TOOLS_BUILD_TIME + Git SHA Hash: TOOLS_GIT_SHA".
- o MFT tools did not support using combined short flags without a separation between them.
- Performing a driver restart while burning the firmware resulted in firmware burning failure and occasionally device was not accessible.
- MVPD read errors occurred from the mlxfwmanager during fast reboot.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Changes and New features in MFT version 4.17:

- Enabled Anti-rollback protection to prevent old vulnerable firmware versions from being flashed to the device.
- Flint now supports the "--activate_delay_sec" flag which performs the activation on the newly burned firmware after the specified delay.
- Remote mst device now supports cable devices. The remote cables will be shown on the mst status and can be accessed via the mlxcables tool.
- Added support for the following
- Parallel firmware burning. Although DMA burning is supported in Virtual Machines as well, burning in such scenarios might be slower than on Physical Machines
- O Dual Small Form Factor Pluggable (DSFP) modules in mlxlink.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 15 SP3 (AMD64/EM64T) supported by this binary rpm are:

5.3.18.57-default and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Mellanox ConnectX-4, ConnectX-5 and ConnectX-6 Adapters for SUSE LINUX Enterprise Server 15 SP2 (AMD64/EM64T)

Version: 5.4 (Recommended)

Filename: mlnx-ofa_kernel-5.4-OFED.5.4.1.0.3.1.sles15sp2.x86_64.compsig; mlnx-ofa_kernel-5.4-OFED.5.4.1.0.3.1.sles15sp2.x86_64.rpm; mlnx-ofa_kernel-kmp-default-5.4_k5.3.18_22-

OFED.5.4.1.0.3.1.sles15sp2.x86_64.rpm

Important Note!

Mellanox Ethernet + RoCE Linux driver (mlnx-ofa_kernel RPMs) supports only Ethernet mode of operation for HPE Mellanox adapters. For customers requiring complete InfiniBand functionality or "InfiniBand + Ethernet" modes of operation on the same node, install MLNX-OFED drivers from "Mellanox OFED VPI Drivers and Utilities" Linux Software Delivery Repository (https://downloads.linux.hpe.com/SDR/project/mlnx_ofed/).

Prerequisites

Following packages must be installed from the respective OS distributions prior to installing the driver component:

o Python version 2.7

Fixes

The following issues have been fixed in version 5.4:

- To support scalability, function representor channels were limited to 4. However, in scenarios when SF (Scalable Function) was not used, certain use cases required representors to support a large number of channels. Hence, representor channel limit to 4 was applicable only when a PCI device, such as Scalable Function support, was enabled.
- o Matching on ipv4_ihl (internet header length) was supported only for outer headers.
- When using one counter for both pop/push VLAN actions, the counter value was incorrect.
 Hence, Spliting the counter for pop_vlan_action_counter and push_vlan_action_counter.
- Incorrect L3 decapsulation occurred when the original inner frame was small and was padded to comply with minimum frame size of 64-bytes.
- dapl and libmlx4 were needed by libdat2 and libdpdk to remove or update dapl and libmlx4, their dependencies had to be removed.
- o In fork situation, if parent/children processes happen to have same virtual address, then the doorbell mechanism did not work well and may led to errors in application behavior.
- An override of log_max_qp by other devices occured if the devices share the same mlx5_core module.
- A synchronization issue where closing and opening channels (which might happen on configuration changes such as changing number of channels) may cause null pointer to dereference in function mlx5e select gueue.
- o Enabling tx-udp_tnl-csum-segmentation had no effect on the driver.
- Old udevd versions could get stuck renaming network devices, leaving interfaces named eth* instead of enp*.
- Flows with t commit action with ct state -trk were not be offloaded (i.e., table=0,ct_state=-trk,ip actions=ct(commit,table=1)).
- Connection tracking over VF LAG with tunnel encapsulation/decapsulation was not supported and caused traffic drop.
- OFED compilation failed when stack size was limited to 1024.
- O Setting rate/burst values higher than 2,147,483,648 were rejected.
- Offloaded remote mirroring flows on tunnel device caused forwarded traffic to VF to not be decapsulated.
- Trying to set VPort match mode on VF (cat/sys/class/net/enp8s0f2/compat/devlink/vport match mode), leads to kernel crash.
- OVS flows were not being offloaded over socket-direct devices.
- When VXLAN was configured and illegal route was added, the system crashed with call trace.
- o If any traffic was sent before the netdev went up for the first time, a division by zero caused by a modulo operation occurred in ndo select queue, leading to a kernel panic.
- After restarting driver, the x86 host might be in grace period and might not recover on its own. As part of the fix, 5 FW_fatal recoveries are allowed within the 20-minute grace period. As a result, the grace period in the devlink health show command will appear as 0 for FW fatal reporter.

Enhancements

MLNX OFED v5.4 contains the following changes and new features:

For ConnectX-4 Adapters:

- Updated mlx5 driver to use auxiliary bus in order to integrate different driver components into driver core and optimize module load/unload sequences.
- WJH (What Just Happened) in NICs: WJH allows for visibility of dropped packets (i.e., receiving notice of drop counters increase, seeing content of the dropped packets, debugging, and more). WJH is a service in devlink context, and it is already implemented in the switch.
- Note: processing dropped packets (even for visibility purposes) may cause a degradation in performance and leaves the driver vulnerable for malicious attacks. The feature is disabled by default.
- Supported traps:
- VLAN mismatch: existing generic trap DEVLINK_TRAP_GENERIC_ID_DMAC_MISMATCH Traps received packets with wrong VLAN tag
- DMAC mismatch: new generic trap DEVLINK_TRAP_GENERIC_ID_DMAC_MISMATCH Traps received packets with wrong destination MAC
- Added support for enabling Relaxed Ordering for Kernel ULPs. Using relaxed ordering can improve performance in some setups. Since kernel ULPs are expected to support RO, it is enabled for them by default so they can benefit from it.

For ConnectX-4 Adapters and above:

In MLNX_OFED 5.4 GA, ConnectX-4/5/6 Ethernet network interfaces are now provided with permanent names. Prior to this release, the default interface names were provided by the kernel and udevd (ethX) remained as-is. From this release onwards, interface names are generated via new udevd rules. The generated names are now predictable, and the default names are automatically renamed to the predictable names by the udevd daemon, according to udev rules files installed by OFED.

For ConnectX-5 Adapters and above:

- Support to allow OVS (OpenVSwitch) kernel to support up to 128 matches (groups) per table and 16M entries per group.
- Offload ct_state flags rpl, inv, and rel.
- o For rpl, support was added for both set and not set matching offload (i.e., +rpl and -rpl).
- o For inv and rel, support was added only for the not set option (i.e., -rel and -inv).
- Scalable functions (also called subfunctions): This feature enables the user to create, configure, and deploy a scalable functions (e.g., RDMA and networking applications) and to assign them to a container when a container is started via mlxdevm tool. A scalable function can also be deployed in an untrusted guest/host system from the NIC/DPU. This enables full configuration of the function and its representors from the NIC/DPU before giving the function for a container to run in a host system.
- Scalable function QoS and QoS group via mlxdevm's rate commands were added. Run "man mlxdevm port" for details.
- "Signature API" which, on supported devices, allows application-level data-integrity checks via a signature handover mechanism. Various signature types, including CRC32 and T10-DIF, can be automatically calculated and checked, stripped, or appended during the transfer at full wire speed.
- DR support for matching on RAW tunnel headers using the misc5 parameters, this feature allows matching on each bit of the header,
- o inducing reserved fields.

For ConnectX-6 Dx Adapters:

- Mapping a QP (Queue Pair) to AH over DEVX API, which enables DC/UD QPs to use multiple CC algorithms in the same data center.
- Better insertion rate in software steering was supported. This includes multi-QP which skips areas in the code that may be for debug only.
- Improved rate of updating steering rules, insertion, and deletion. The feature includes definers, multi-qp approach, and better memory usage.
- Added support for ability to allow or prevent insertion of duplicate rules, so the user can choose one of the following behaviors:
- o Prevent duplicate rules, so that already-existing rule and fail can be detected.
- Allow duplicate rules, to enable updating the rule's action (this will only take effect once the previous rule is deleted). By default, duplicate rules are allowed.
- Made it so that all rule's insertion occurs in a defined time using defined (export) size of Htble and decreased use of dynamic allocation.

For all HCA's:

- As of version 5.4, the driver is set so that udev rules will change the names of network interfaces created from NVIDIA adapters. The udev rules are shipped to "/lib/udev/rules.d" and may be overridden by placing a file with the same name in "/etc/udev/rules.d".
- Example: /etc/udev/rules.d/82-net-setup-link.rules
- OvS-DPDK deprecated the command "ovs-appctl dpctl/dump-e2e-stats". Instead, the command has been integrated into the existing command "ovs-appctl dpctl/offload-statsshow -m" (when e2e-cache is enabled).
- OVS-DPDK ct-ct-nat offloads is now disabled by default.
- Before version 5.4, /etc/udev/rules.d/90-ib.rules was potentially automatically edited by installation scripts in case the options —umad-dev-rw or —umad-dev-na were used. From version 5.4 and above, those changes are made in /etc/udev/rules.d/91-ib-permissions.rules which (if exist) only include the settings for those command-line options.
- ibv_query_qp_data_in_order() API: This API enables an application to check if the given QP data is guaranteed to be in order, enabling poll for data instead of poll for completion.
- Added ethtool extended link state to mlx5e. ethtool can be used to get more information to help troubleshoot the state.
- Moved all Python scripts and some other common scripts out of the mlnxofa_ kernel packages. This removed the python dependency from that package when rebuilding it and avoided unnecessary errors when rebuilding them for custom kernels.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 15 SP2 (AMD64/EM64T) supported by this binary rpm are:

5.3.18-22-default - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Mellanox ConnectX-4, ConnectX-5 and ConnectX-6 Adapters for SUSE LINUX Enterprise Server 15 SP3 (AMD64/EM64T)

Version: 5.4 (Recommended)

Filename: mlnx-ofa_kernel-5.4-OFED.5.4.1.0.3.1.sles15sp3.x86_64.compsig; mlnx-ofa_kernel-5.4-

OFED.5.4.1.0.3.1.sles15sp3.x86_64.rpm; mlnx-ofa_kernel-kmp-default-5.4_k5.3.18_57-

OFED.5.4.1.0.3.1.sles15sp3.x86 64.compsig; mlnx-ofa kernel-kmp-default-5.4 k5.3.18 57-

OFED.5.4.1.0.3.1.sles15sp3.x86_64.rpm

Important Note!

Mellanox Ethernet + RoCE Linux driver (mlnx-ofa_kernel RPMs) supports only Ethernet mode of operation for HPE Mellanox adapters. For customers requiring complete InfiniBand functionality or "InfiniBand + Ethernet" modes of operation on the same node, install MLNX-OFED drivers from "Mellanox OFED VPI Drivers and Utilities" Linux Software Delivery Repository (https://downloads.linux.hpe.com/SDR/project/mlnx_ofed/).

Prerequisites

Following packages must be installed from the respective OS distributions prior to installing the driver component:

o Python version 2.7

Fixes

The following issues have been fixed in version 5.4:

- To support scalability, function representor channels were limited to 4. However in scenarios when SF (Scalable Function) was not used, certain use cases required representors to support a large number of channels. Hence, representor channel limit to 4 was applicable only when a PCI device, such as Scalable Function support, was enabled.
- Matching on ipv4 ihl (internet header length) was supported only for outer headers.
- When using one counter for both pop/push VLAN actions, the counter value was incorrect.
 Hence, Spliting the counter for pop_vlan_action_counter and push_vlan_action_counter.

- Incorrect L3 decapsulation occured when the original inner frame was small and was padded to comply with minimum frame size of 64-bytes.
- o dapl and libmlx4 were needed by libdat2 and libdpdk. In order to remove or update dapl and libmlx4, their dependencies had to be removed.
- o In fork situation, if parent/children processes happen to have samevirtual address, then the doorbell mechanism did not work well and may led to errors in application behavior.
- An override of log_max_qp by other devices occured if the devices share the same mlx5_core module.
- A synchronization issue where closing and opening channels (which might happen on configuration changes such as changing number of channels) may cause null pointer to dereference in function mlx5e_select_queue.
- o Enabling tx-udp_tnl-csum-segmentation had no effect on the driver.
- Old udevd versions could get stuck renaming network devices, leaving interfaces named eth* instead of enp*.
- Flows with t commit action with ct state -trk were not be offloaded (i.e., table=0,ct_state=-trk,ip actions=ct(commit,table=1)).
- Connection tracking over VF LAG with tunnel encapsulation/decapsulation was not supported and caused traffic drop.
- OFED compilation failed when stack size was limited to 1024.
- o Setting rate/burst values higher than 2,147,483,648 were rejected.
- Offloaded remote mirroring flows on tunnel device caused forwarded traffic to VF to not be decapsulated.
- Trying to set VPort match mode on VF (cat/sys/class/net/enp8s0f2/compat/devlink/vport_match_mode), leads to kernel crash.
- OVS flows were not being offloaded over socket-direct devices.
- o When VXLAN was configured and illegal route was added, the system crashed with call trace.
- o If any traffic was sent before the netdev went up for the first time, a division by zero caused by a modulo operation occured in ndo_select_queue, leading to a kernel panic.
- After restarting driver, the x86 host might be in grace period and might not recover on its own. As part of the fix, 5 FW_fatal recoveries are allowed within the 20-minute grace period. As a result, the grace period in the devlink health show command will appear as 0 for FW fatal reporter.

Enhancements

MLNX OFED v5.4 contains the following changes and new features:

For ConnectX-4 Adapters:

- Updated mlx5 driver to use auxiliary bus in order to integrate different driver components into driver core and optimize module load/unload sequences.
- WJH (What Just Happened) in NICs: WJH allows for visibility of dropped packets (i.e., receiving notice of drop counters increase, seeing content of the dropped packets, debugging, and more). WJH is a service in devlink context, and it is already implemented in the switch.
- Note: processing dropped packets (even for visibility purposes) may cause a degradation in performance and leaves the driver vulnerable for malicious attacks. The feature is disabled by default.
- Supported traps:
- VLAN mismatch: existing generic trap DEVLINK_TRAP_GENERIC_ID_DMAC_MISMATCH Traps received packets with wrong VLAN tag
- DMAC mismatch: new generic trap DEVLINK_TRAP_GENERIC_ID_DMAC_MISMATCH Traps received packets with wrong destination MAC
- Added support for enabling Relaxed Ordering for Kernel ULPs. Using relaxed ordering can improve performance in some setups. Since kernel ULPs are expected to support RO, it is enabled for them by default so they can benefit from it.

For ConnectX-4 Adapters and above:

O In MLNX_OFED 5.4 GA, ConnectX-4/5/6 Ethernet network interfaces are now provided with permanent names. Prior to this release, the default interface names were provided by the kernel and udevd (ethX) remained as-is. From this release onwards, interface names are generated via new udevd rules. The generated names are now predictable, and the default names are automatically renamed to the predictable names by the udevd daemon, according to udev rules files installed by OFED.

For ConnectX-5 Adapters and above:

- Support to allow OVS (OpenVSwitch) kernel to support up to 128 matches (groups) per table and 16M entries per group.
- Offload ct_state flags rpl, inv, and rel.
- For rpl, support was added for both set and not set matching offload (i.e., +rpl and -rpl).
- For inv and rel, support was added only for the not set option (i.e., -rel and -inv).
- Scalable functions (also called subfunctions): This feature enables the user to create, configure, and deploy a scalable functions (e.g., RDMA and networking applications) and to assign them to a container when a container is started via mlxdevm tool.A scalable function can also be deployed in an untrusted guest/host system from the NIC/DPU. This enables full configuration of the function and its representors from the NIC/DPU before giving the function for a container to run in a host system.
- Scalable function QoS and QoS group via mlxdevm's rate commands were added. Run "man mlxdevm port" for details.
- "Signature API" which, on supported devices, allows application-level data-integrity checks via a signature handover mechanism. Various signature types, including CRC32 and T10-DIF, can be automatically calculated and checked, stripped, or appended during the transfer at full wire speed.
- DR support for matching on RAW tunnel headers using the misc5 parameters, this feature allows matching on each bit of the header,
- o inducing reserved fields.

For ConnectX-6 Dx Adapters:

- Mapping a QP (Queue Pair) to AH over DEVX API, which enables DC/UD QPs to use multiple CC algorithms in the same data center.
- Better insertion rate in software steering was supported. This includes multi-QP which skips areas in the code that may be for debug only.
- Improved rate of updating steering rules, insertion, and deletion. The feature includes definers, multi-qp approach, and better memory usage.
- Added support for ability to allow or prevent insertion of duplicate rules, so the user can choose one of the following behaviors:
- o Prevent duplicate rules, so that already-existing rule and fail can be detected.
- Allow duplicate rules, to enable updating the rule's action (this will only take effect once the previous rule is deleted). By default, duplicate rules are allowed.
- Made it so that all rule's insertion occurs in a defined time using defined (export) size of Htble and decreased use of dynamic allocation.

For all HCA's:

- As of version 5.4, the driver is set so that udev rules will change the names of network interfaces created from NVIDIA adapters. The udev rules are shipped to "/lib/udev/rules.d" and may be overridden by placing a file with the same name in "/etc/udev/rules.d".
- Example: /etc/udev/rules.d/82-net-setup-link.rules
- OvS-DPDK deprecated the command "ovs-appctl dpctl/dump-e2e-stats". Instead, the command has been integrated into the existing command "ovs-appctl dpctl/offload-statsshow -m" (when e2e-cache is enabled).
- OVS-DPDK ct-ct-nat offloads is now disabled by default.
- Before version 5.4, /etc/udev/rules.d/90-ib.rules was potentially automatically edited by installation scripts in case the options —umad-dev-rw or —umad-dev-na were used. From version 5.4 and above, those changes are made in /etc/udev/rules.d/91-ib-permissions.rules which (if exist) only include the settings for those command-line options.
- ibv_query_qp_data_in_order() API: This API enables an application to check if the given QP data is guaranteed to be in order, enabling poll for data instead of poll for completion.
- Added ethtool extended link state to mlx5e. ethtool can be used to get more information to help troubleshoot the state.
- Moved all Python scripts and some other common scripts out of the mlnxofa_ kernel packages. This removed the python dependency from that package when rebuilding it and avoided unnecessary errors when rebuilding them for custom kernels.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 15 SP3 (AMD64/EM64T) supported by this binary rpm

are:

5.3.18-46-default - (AMD64/EM64T) and future update kernels.

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 8.55.15.0-1 (Recommended)

Filename: kmod-qlgc-fastlinq-8.55.15.0-1.rhel7u8.x86_64.compsig; kmod-qlgc-fastlinq-8.55.15.0-1.rhel7u8.x86_64.rpm; kmod-qlgc-fastlinq-8.55.15.0-1.rhel7u9.x86_64.compsig; kmod-qlgc-fastlinq-8.55.15.0-1.rhel7u9.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27 (B) or later.
- HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.20.1 or later.

Enhancements

This product improves error log during error return of rdma memory allocate

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 8

Version: 8.55.15.0-1 (Recommended)

Filename: kmod-qlgc-fastlinq-8.55.15.0-1.rhel8u4.x86_64.compsig; kmod-qlgc-fastlinq-8.55.15.0-1.rhel8u4.x86_64.rpm; kmod-qlgc-fastlinq-8.59.6.0-1.rhel8u5.x86_64.compsig; kmod-qlgc-fastlinq-8.59.6.0-1.rhel8u5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27 (B) or later.
- HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.20.1 or later.

Enhancements

This product improves error log during error return of rdma memory allocate

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter

- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 8.55.15.0-1 (Recommended)

 $File name: qlgc-fastlinq-kmp-default-8.55.15.0_k4.12.14_120-1.sles 12 sp5.x86_64. compsig; qlgc-fastlinq-kmp-default-8.55.15.0_k4.12.14_12.0_tompsig; qlgc-fastlinq-kmp-default-8.55.15.0_tompsig; qlg-fastling-8.55.0_tompsig; qlg-fastling-8.55.0_tompsig; qlg-fastling-8.55.0_tompsig; ql$

default-8.55.15.0 k4.12.14 120-1.sles12sp5.x86 64.rpm; README

Important Note!

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27 (B) or later.
- HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.20.1 or later.

Enhancements

This product improves error log during error return of rdma memory allocate

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for SUSE Linux Enterprise Server 15

Version: 8.55.15.0-1 (Recommended)

Filename: qlgc-fastlinq-kmp-default-8. $55.15.0_k5.3.18_22-1.s$ les15sp2.x86_64.compsig; qlgc-fastlinq-kmp-default-8.55.15.0_k5.3.18_22-1.sles15sp2.x86_64.rpm; qlgc-fastlinq-kmp-default-8.55.15.0_k5.3.18_57-1.sles15sp3.x86_64.compsig; qlgc-fastlinq-kmp-default-8.55.15.0_k5.3.18_57-1.sles15sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27 (B) or later
- HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.20.1 or later.

Enhancements

This product improves error log during error return of rdma memory allocate

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 10Gb 2-port 521T Adapter

- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions

Version: 8.58.20.0 (**Recommended**) Filename: cp049989.compsig; cp049989.exe

Important Note!

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27(B) or later.
- HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.2.6.0 or later.

Fixes

This product corrects an issue that the system potentially occurred Bugcheck 0xE4 in qenda network driver.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.5

Version: 2021.09.04 (**Recommended**) Filename: cp049003.compsig; cp049003.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE QLogic FastLinQ Firmware Package for Arrowhead adapters*, version 8.55.27 or later, for use with these drivers.

Enhancements

This product enhances that collection of Firmware debug data in different scenarios.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 521T Adapter
- O HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- O HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter

- o HPE StoreFabric CN1200R-T Converged Network Adapter
- o HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.7

Version: 2022.03.23 (**Recommended**) Filename: cp050054.compsig; cp050054.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided as below for use with these drivers,

- o HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27(B) or later.
- o HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware, version 1.20.1 or later.

Fixes

This product addresses an issue which Virtual Network Adapters is not present on Linux and VMware OS after SR-IOV configuration.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter
- O HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- o HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 7.0

Version: 2022.03.23 (**Recommended**) Filename: cp049986.compsig; cp049986.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided as below for use with these drivers,

- HPE QLogic FastLinQ Firmware Package for Arrowhead adapters, version 8.55.27(B) or later.
- \circ HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware, version 1.20.1 or later.

Fixes

This product addresses an issue which Virtual Network Adapters is not present on Linux and VMware OS after SR-IOV configuration.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- o HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- O HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5

Version: 2021.09.04 (**Recommended**) Filename: cp047871.compsig; cp047871.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.29.0 or later, for use with this driver.

Enhancements

This product enhances the mechanism that collation of data log.

Supported Devices and Features

These drivers support the following network adapters:

- o HPE Ethernet 10Gb 2-port 530T Adapter
- O HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- o HPE FlexFabric 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- O HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R 10GBASE-T Dual Port Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7

Version: 2022.03.23 (**Recommended**) Filename: cp050055.compsig; cp050055.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.30.0 or later, for use with this driver.

Fixes

This product addresses an issue which PSOD when setting XVLAN environment.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 530T Adapter
- HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R 10GBASE-T Dual Port Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 7.0

Version: 2022.03.23 (**Recommended**) Filename: cp049987.compsig; cp049987.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for VMware*, version 1.30.0 or later, for use with this driver.

Fixes

This product addresses an issue which PSOD when setting XVLAN environment.

Supported Devices and Features

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 530T Adapter
- O HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- o HPE FlexFabric 10Gb 2-port 533FLR-T Adapter
- O HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HPE StoreFabric CN1100R Dual Port Converged Network Adapter

HPE StoreFabric CN1100R 10GBASE-T Dual Port Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86 64

Version: 7.15.02-1 (Recommended)

Filename: kmod-netxtreme2-7.15.02-1.rhel7u8.x86 64.compsig; kmod-netxtreme2-7.15.02-

1.rhel7u8.x86_64.rpm; kmod-netxtreme2-7.15.02-1.rhel7u9.x86_64.compsig; kmod-netxtreme2-7.15.02-

1.rhel7u9.x86 64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux* $x86_64$, version 2.30.0 or later, for use with these drivers.

Fixes

This product fixed when Widows virtual machine guest over Linux host leads to Firmware asserts

Supported Devices and Features

These drivers support the following network adapters:

- O HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- HPE Ethernet 10Gb 2-port 530T Adapter
- o HPE Ethernet 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- O HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 8

Version: 7.15.02-1 (Recommended)

Filename: kmod-netxtreme2-7.15.02-1.rhel8u4.x86_64.compsig; kmod-netxtreme2-7.15.02-

1.rhel8u4.x86_64.rpm; kmod-netxtreme2-7.15.03-2.rhel8u5.x86_64.compsig; kmod-netxtreme2-7.15.03-

2.rhel8u5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux* $x86_64$, version 2.30.0 or later, for use with these drivers.

Fixes

This product fixed when Widows virtual machine guest over Linux host leads to Firmware asserts

Enhancements

This product now supports RedHat Linux Enterprise Server 8 Update 5

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 10Gb 2-port 530SFP+ Adapter
- o HP Ethernet 10Gb 2-port 530T Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

HPE OLogic NX2 10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 12 x86 64

Version: 7.15.02-1 (Recommended)

 $Filename: netxtreme2-kmp-default-7.15.02_k4.12.14_120-1.sles12sp5.x86_64.compsig; netxtreme2-kmp-default-7.15.02_k4.12.14_120-1.sles12sp5.x86_64.rpm; README$

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64*, version 2.30.0 or later, for use with these drivers.

Fixes

This product fixed when Widows virtual machine guest over Linux host leads to Firmware asserts

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- o HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 15

Version: 7.15.02-1 (Recommended)

Filename: $netxtreme^2-kmp-default-7.15.02_k5.3.18_22-1.sles15sp2.x86_64.compsig$; $netxtreme2-kmp-default-7.15.02_k5.3.18_22-1.sles15sp2.x86_64.rpm$; $netxtreme2-kmp-default-7.15.02_k5.3.18_27-1.sles15sp2.x86_64.rpm$

 $1. sles 15 sp 3. x 86_64. compsig; netxtreme 2-kmp-default-7.15.02_k 5.3.18_57-1. sles 15 sp 3. x 86_64. rpm; README$

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux* $x86_64$, version 2.29.0 or later, for use with these drivers.

Fixes

This product fixed when Widows virtual machine quest over Linux host leads to Firmware asserts

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- o HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HP StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions

Version: 7.13.206.0 (**Recommended**) Filename: cp047060.compsig; cp047060.exe

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.5.0 or later, for use with these drivers.

Fixes

- This product corrects an issue where System crash while upgrading with NPAR SRIOV-EP mode enabled.
- This product corrects an issue where BSOD in Windows NDIS driver while in WS2022 PCS Configuration.

Enhancements

This product now supports Microsoft Windows Server 2022.

Supported Devices and Features

This driver supports the following network adapters:

- $\circ \quad \text{ HPE Ethernet 10Gb 2-port 530SFP+ Adapter}$
- HPE Ethernet 10Gb 2-port 530T Adapter
- O HPE Ethernet 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Converged Network Adapter

nmlx4_en Driver Component for VMware 6.5 Version: 2020.11.11 **(Recommended)** Filename: cp046261.compsig; cp046261.zip

Important Note!

Known Issues:

- ConnectX-3 Pro 10G adapter cards incorrectly report support for 40G speed when running the "esxcli network nic get" command.
- When the port is DOWN, the management interface "port type" field indicates one of the port types supported by the device, in the following order: TP, FIBER, DA, NONE. If the port supports several cable types, the first type in the list mentioned above will be printed.
- When the port is UP, the management interface port type field (nmlx_en_MgmtIFPortType) indicates which one of all possible supported types is currently connected.
- Managment interface port type field reports SFP-to-RJ45 cable as FIBER.
- Management interface auto negotiation field is equivalent to "esxcli network nic get -n vmnicX" field "Pause Autonegotiate".

For further information on the release notes for ESXi 6.5 Driver Version 3.16.11.10 follow the below link:

https://www.mellanox.com/page/products_dyn?product_family=29&mtag=vmware_driver_

Enhancements

Changes and New Features in version 3.16.70.2:

- o Resolved an issue that caused the network adapter traffic to stop.
- Fixed an internal multicast loopback issue that broke LACP(Link Aggregation Control Protocol) bonding protocol.

Supported Devices and Features

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764784-B71	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764785-B71	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
1/h4/Xh-B/I	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004

nmlx4_en Driver Component for VMware 7.0 Version: 2020.11.11 (A) **(Recommended)** Filename: cp047457.compsig; cp047457.zip

Important Note!

Known Issues:

- ConnectX-3 Pro 10G adapter cards incorrectly report support for 40G speed when running the "esxcli network nic get" command.
- When the port is DOWN, the management interface "port type" field indicates one of the port types supported by the device, in the following order: TP, FIBER, DA, NONE. If the port supports several cable types, the first type in the list mentioned above will be printed.
- When the port is UP, the management interface port type field (nmlx_en_MgmtIFPortType) indicates which one of all possible supported types is currently connected.
- o Managment interface port type field reports SFP-to-RJ45 cable as FIBER.
- Management interface auto negotiation field is equivalent to "esxcli network nic get -n vmnicX" field "Pause Autonegotiate".

For further information on the release notes for ESXi 6.5 Driver Version 3.19.70.1 follow the below link:

https://www.mellanox.com/page/products_dyn?product_family=29&mtag=vmware_driver_

Fixes

No fixes are included in version 3.19.70.1:

Enhancements

Changes and New Features in version 3.19.70.1:

- Resolved an issue that caused the network adapter traffic to stop.
- Fixed an internal multicast loopback issue that broke LACP (Link Aggregation Control Protocol) bonding protocol.

Supported Devices and Features

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004

nmlx4_en driver component for VMware ESXi 6.7

Version: 2020.11.11 (**Recommended**) Filename: cp046262.compsig; cp046262.zip

Important Note!

Known issues in version 3.17.70.1:

- ConnectX-3 Pro 10G adapter cards wrongly report support for 40G speed when running the "esxcli network nic get" command.
- When the port is DOWN, the management interface port type field (nmlx_en_MgmtIFPortType) indicates one of the port types supported by the device, in the following order: TP, FIBER, DA, NONE. If the cable supports several types, the first type in the list mentioned above will be printed.
- When the port is UP, the management interface port type field (nmlx_en_MgmtIFPortType) indicates which one of all possible supported types is currently connected.
- Management interface port type field (nmlx_en_MgmtIFPortType) reports SFP-to-RJ45 cable as FIBER.
- Management interface auto negotiation field (nmlx_en_MgmtIFAutoNegMode) is equivalent to "esxcli network nic get -n vmnicX" field "Pause Autonegotiate"

Enhancements

Changes and New features in version 3.17.70.1:

o Adapter card's PSID is now displayed in the Privstats (Private statistics).

Supported Devices and Features

HPE Part Number Device Name	PSID	
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764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004

VMware ESXi 6.5 and 6.7 MST Drivers Offline Bundle for Mellanox Adapters

Version: 4.12.0.105 (Recommended)

Filename: MLNX-NMST-ESX-6.5.0-4.12.0.105.zip

Prerequisites

NA

Enhancements

VM65/67 nmst 4.12.0.105

VMware ESXi 7.0 MST Drivers Offline Bundle for Mellanox Adapters

Version: 4.14.3.3 (Recommended)

Filename: Mellanox-NATIVE-NMST_4.14.3.3-10EM.700.1.0.15525992_16211416.zip

Prerequisites

NA

Enhancements

VM70 nmst 4.14.3.3

Driver - StorageDynamic Smart Array B140i Controller Driver for 64-bit Microsoft Windows Server 2012/2012 R2/2016/2019

Editions

Version: 62.16.2.64 (Recommended)

Filename: cp042594.exe

<u>Fixes</u>

 Fix error handling of AHCI reported Fatal errors with NCQ and Non-NCQ commands in SATL potentially causing RAID stack timeouts and excessive read/write command timeouts leading to SCSI bus reset with M.2 SSD drives configured with SW RAID.

Driver - Storage Controller

Top

HPE Dynamic Smart Array B140i Controller Driver for VMware vSphere 6.5 (Driver Component).

Version: 2021.09.01 (**Recommended**) Filename: cp048936.compsig; cp048936.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Fixes

Fix error handling of AHCI reported Fatal errors with NCQ and Non-NCQ commands in SATL potentially causing RAID stack timeouts and excessive read/write command timeouts leading to SCSI bus reset with M.2 SSD drives configured with SW RAID.

Enhancements

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HPE Dynamic Smart Array B140i Controller Driver for VMware vSphere 6.7 (Driver Component).

Version: 2021.09.01 (**Recommended**) Filename: cp048935.compsig; cp048935.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Fixes

Fix error handling of AHCI reported Fatal errors with NCQ and Non-NCQ commands in SATL potentially causing RAID stack timeouts and excessive read/write command timeouts leading to SCSI bus reset with M.2 SSD drives configured with SW RAID.

Enhancements

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HPE Dynamic Smart Array B140i SATA RAID Controller Driver for Red Hat Enterprise Linux 7 (64-bit) Version: 1.2.10-196 (Recommended)

Filename: kmod-hpdsa-1.2.10-196.rhel7u8.x86_64.compsig; kmod-hpdsa-1.2.10-196.rhel7u8.x86_64.rpm; kmod-hpdsa-1.2.10-196.rhel7u9.x86_64.compsig; kmod-hpdsa-1.2.10-196.rhel7u9.x86_64.rpm

Enhancements

Add support for Red Hat Enterprise Linux 7 Update 9

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for Red Hat Enterprise Linux 8 (64-bit) Version: 1.2.10-200 (Recommended)

Filename: kmod-hpdsa-1.2.10-200.rhel8u4.x86_64.compsig; kmod-hpdsa-1.2.10-200.rhel8u4.x86_64.rpm; kmod-hpdsa-1.2.10-200.rhel8u5.x86_64.compsig; kmod-hpdsa-1.2.10-200.rhel8u5.x86_64.rpm

Enhancements

Adding RHEL8.5 support

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for SUSE LINUX Enterprise Server 12 (64-bit) Version: 1.2.10-196 (Recommended)

Filename: hpdsa-kmp-default-1.2.10-196.sles12sp4.x86_64.compsig; hpdsa-kmp-default-1.2.10-196.sles12sp4.x86_64.rpm; hpdsa-kmp-default-1.2.10-196.sles12sp5.x86_64.compsig; hpdsa-kmp-default-1.2.10-196.sles12sp5.x86_64.compsig; hpdsa-kmp-default-1.2.10-196.sles12sp5.x86_64.rpm

Enhancements

Aligned the driver version with SLES15

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 (64-bit) supported by this binary rpm are: 4.4.21-69-default - SUSE LINUX Enterprise Server 12 (64-bit) SP2 plus future errata.

- SUSE LINUX Enterprise Server 12 (64-bit) SP3 plus future errata.

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for SUSE LINUX Enterprise Server 15 (64-bit)

Version: 1.2.10-196 (B) (Recommended)

Filename: hpdsa-kmp-default-1.2.10-196.sles15sp2.x86_64.compsig; hpdsa-kmp-default-1.2.10-

 $196. sles 15 sp 2. x 86_64. rpm; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. 10-196. sles 15 sp 3. x 86_64. compsig; \ hpds a-kmp-default-1.2. hpds a-kmp-$

1.2.10-196.sles15sp3.x86_64.rpm

Enhancements

Add support for SUSE Linux Enterprise Services 15 SP3

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 15 (64-bit) supported by this binary rpm are: 4.12.14-23 - SUSE LINUX Enterprise Server 15 (64-bit) SP0 plus future errata.

default - SUSE LINUX Enterprise Server 15 (64-bit) SP1 plus future errata

HPE Dynamic Smart Array Controller Driver for VMware vSphere 6.5 (Bundle file).

Version: 6.0.0.76-1 (Recommended)

Filename: hpdsa-6.0.0.76-1-offline_bundle-18283990.zip

<u>Fixes</u>

Fix error handling of AHCI reported Fatal errors with NCQ and Non-NCQ commands in SATL potentially causing RAID stack timeouts and excessive read/write command timeouts leading to SCSI bus reset with M.2 SSD drives configured with SW RAID.

Enhancements

Initial build

HPE Dynamic Smart Array Controller Driver for VMware vSphere 6.7 (Bundle file).

Version: 6.0.0.76-1 (Recommended)

Filename: hpdsa-6.0.0.76-1-offline bundle-18283990.zip

<u>Fixes</u>

Fix error handling of AHCI reported Fatal errors with NCQ and Non-NCQ commands in SATL potentially causing RAID stack timeouts and excessive read/write command timeouts leading to SCSI bus reset with M.2 SSD drives configured with SW RAID.

Enhancements

Initial build

HPE H2xx SAS/SATA Host Bus Adapter (64-bit) Driver for vSphere 6.5

Version: 15.10.07.00-1 (A) (Optional)

Filename: mpt2sas-15.10.07.00-esxi5.5-4778920.zip

Fixes

Change implemented in version 15.10.07.00-1(A):

Updated to support Service Pack for ProLiant version 2017.07.0.
 Note: If driver version 15.10.07.00-1 was previously installed, then it is not necessary to upgrade to version 15.10.07.00-1(A).

Issues resolved in version 15.10.07.00-1:

o Fixes minor installation issue with the driver on VMware vSphere 6.5.

Supported Devices and Features

NOTE: HPE H221 Host Bus Adapter does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE H2xx SAS/SATA Host Bus Adapter (64-bit) Driver for vSphere 6.5 (Driver Component).

Version: 2017.01.20 (A) (Optional)

Filename: cp032277.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Fixes

Change implemented in version 2017.01.20(A):

Updated to support Service Pack for ProLiant version 2017.07.0.
 Note: If component version 2017.01.20 was previously installed, then it is not necessary to upgrade to version 2017.01.20(A).

Issues resolved in version 2017.01.20:

o Fixes minor installation issue with the driver on VMware vSphere 6.5.

Supported Devices and Features

NOTE: HPE H221 Host Bus Adapter does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE H2xx SAS/SATA Host Bus Adapter Driver for 64-bit Microsoft Windows Server 2016 Editions

Version: 2.68.64.2 (C) (Recommended)

Filename: cp037731.exe

Important Note!

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

Enhancements

Improved integration with Smart Update Manager

Supported Devices and Features

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers

HPE H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2012 R2 64-bit Editions Version: 2.68.64.1 (B) **(Optional)**

Filename: cp032453.exe

Enhancements

Change implemented in version 2.68.64.1(B):

Updated to support Service Pack for ProLiant version 2017.07.0.
 Note: If driver version 2.68.64.1 was previously installed, then it is not necessary to upgrade to version 2.68.64.1(B).

Enhancements/New Features implemented in version 2.68.64.1:

- Added support for Windows 8.1 and Windows Server 2012R2 to the build scripts.
- Add build support for new Windows Event Logging.
- Add support for automatic selection of the default driver build parameters file during the build

Supported Devices and Features

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE H2xx SAS/SATA Host Bus Adapter Driver for Red Hat Enterprise Linux 7 (64-bit)

Version: 15.10.09.00-2 (Recommended)

Filename: kmod-mpt2sas-15.10.07.00-3.rhel7u5.x86_64.compsig; kmod-mpt2sas-15.10.07.00-

3.rhel7u5.x86_64.rpm; kmod-mpt2sas-15.10.09.00-2.rhel7u6.x86_64.compsig; kmod-mpt2sas-15.10.09.00-

2.rhel7u6.x86_64.rpm

Enhancements

Added support for Red Hat Enterprise Linux 7 Update 6

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 7 (64-bit) supported by this binary rpm are:

3.10.0-693.el7- Red Hat Enterprise Linux 7 Update 4 (64-bit) and future errata kernels for update 4. 3.10.0-862.el7- Red Hat Enterprise Linux 7 Update 5 (64-bit) and future errata kernels for update 5.

Note: This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE H2xx SAS/SATA Host Bus Adapter Driver for SUSE LINUX Enterprise Server 12 (64-bit)

Version: 15.10.09.00-1 (Recommended)

Filename: lsi-mpt2sas-kmp-default-15.10.09.00-1.sles12sp4.x86_64.compsig; lsi-mpt2sas-kmp-default-

15.10.09.00-1.sles12sp4.x86_64.rpm

Enhancements

Added support for SUSE Linux Enterprise Server 12 SP4

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 (64-bit) supported by this binary rpm are: -SUSE LINUX Enterprise Server 12 (64-bit) SP4 plus future errata.

Note: This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE ProLiant Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)

Version: 3.4.20-208 (Recommended)

Filename: kmod-hpsa-3.4.20-208.rhel7u8.x86_64.compsig; kmod-hpsa-3.4.20-208.rhel7u8.x86_64.rpm;

kmod-hpsa-3.4.20-208.rhel7u9.x86_64.compsig; kmod-hpsa-3.4.20-208.rhel7u9.x86_64.rpm

Enhancements

Aligned the driver version with RHEL8

HPE ProLiant Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 8 (64-bit)

Version: 3.4.20-211 (Recommended)

Filename: kmod-hpsa-3.4.20-211.rhel8u4.x86_64.compsig; kmod-hpsa-3.4.20-211.rhel8u4.x86_64.rpm;

kmod-hpsa-3.4.20-211.rhel8u5.x86_64.compsig; kmod-hpsa-3.4.20-211.rhel8u5.x86_64.rpm

Enhancements

Added RHEL8.5 support

HPE ProLiant Smart Array Controller (64-bit) Driver for SUSE LINUX Enterprise Server 12 (64-bit)

Version: 3.4.20-208 (Recommended)

Filename: hpsa-kmp-default-3.4.20-208.sles12sp4.x86_64.compsig; hpsa-kmp-default-3.4.20-208.sles12sp4.x86_64.compsig; hpsa-kmp-default-3.4.20-208.sles12sp5.x86_64.compsig; hpsa-kmp-default-

3.4.20-208.sles12sp5.x86 64.rpm

Enhancements

Updated and Aligned the driver version with SLES15

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 (64-bit) supported by this binary rpm are: 4.4.21-69-default - SUSE LINUX Enterprise Server 12 (64-bit) SP2 plus future errata. 4.4.73-5.1 - SUSE LINUX Enterprise Server 12 (64-bit) SP3 plus future errata.

HPE ProLiant Smart Array Controller (64-bit) Driver for SUSE LINUX Enterprise Server 15 (64-bit)

Version: 3.4.20-210 (B) (Recommended)

Filename: hpsa-kmp-default-3.4.20-210.sles15sp2.x86_64.compsig; hpsa-kmp-default-3.4.20-

210.sles15sp2.x86_64.rpm; hpsa-kmp-default-3.4.20-210.sles15sp3.x86_64.compsig; hpsa-kmp-default-

3.4.20-210.sles15sp3.x86_64.rpm

Enhancements

Add support for SUSE Linux Enterprise Services 15 SP3

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 15 (64-bit) supported by this binary rpm are: 4.12.14-23 - SUSE LINUX Enterprise Server 15 (64-bit) SP0 plus future errata.

 $\ \ \, \text{default - SUSE LINUX Enterprise Server 15 (64-bit) SP1 plus future errata.}$

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.5 (Bundle file)

Version: 0072.0.149 (Recommended)

Filename: VMW-ESX-6.5.0-nhpsa-65.0072.0.149-offline_bundle-17204132.zip

Fixes

This release provides the following fixes:

- Fix failed TUR cmds hung in queue.
- Fix internal cmd reservation broken.
- Update for new version number scheme.
- o Fix verbose error messages on common innocuous errors.
- o Failed logical volumes not being properly handled via offline state.
- O Scsi sense and status returns are incorrect for some error conditions.
- $\hspace{1cm} \circ \hspace{1cm} \text{Incorrect 'unavailable' status seen during hot-plug recovery}. \\$
- Displayed target ID is incorrect in some driver log messages.

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).

Version: 2021.01.01 (**Recommended**) Filename: cp042874.compsig; cp042874.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Fixes

This release provides the following fixes:

- o Fix failed TUR cmds hung in queue
- Fix internal cmd reservation broken
- Update for new version number scheme
- Fix verbose error messages on common innocuous errors
- o Failed logical volumes not being properly handled via offline state.
- O Scsi sense and status returns are incorrect for some error conditions.
- o Incorrect 'unavailable' status seen during hot-plug recovery.
- \circ Displayed target ID is incorrect in some driver log messages.

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.7 (Bundle file)

Version: 0072.0.149 (Recommended)

Filename: HPE-nhpsa_67.0072.0.149-10EM.670.0.0.8169922-offline_bundle-17300270.zip

<u>Fixes</u>

This release provides the following fixes:

- o Fix failed TUR cmds hung in queue
- Fix internal cmd reservation broken
- Update for new version number scheme
- Fix verbose error messages on common innocuous errors
- o Failed logical volumes not being properly handled via offline state.
- Scsi sense and status returns are incorrect for some error conditions.
- $\hspace{1cm} \circ \hspace{1cm} \text{Incorrect 'unavailable' status seen during hot-plug recovery}. \\$
- O Displayed target ID is incorrect in some driver log messages.

Version: 2021.01.01 (**Recommended**) Filename: cp042875.compsig; cp042875.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Fixes

This release provides the following fixes:

- Fix failed TUR cmds hung in queue
- Fix internal cmd reservation broken
- o Update for new version number scheme
- o Fix verbose error messages on common innocuous errors
- o Failed logical volumes not being properly handled via offline state.
- Scsi sense and status returns are incorrect for some error conditions.
- Incorrect 'unavailable' status seen during hot-plug recovery.
- Displayed target ID is incorrect in some driver log messages.

HPE ProLiant Smart Array HPCISSS3 Controller Driver for 64-bit Microsoft Windows Server 2012 R2/2016/2019

Editions

Version: 106.26.0.64 (B) (Recommended) Filename: cp048869.compsig; cp048869.exe

<u>Fixes</u>

System could potentially display a BSOD while executing a hot replace due to a memory alignment problem

Enhancements

o Remove Microsoft Windows Server 2012 from supported OS

Driver - Storage Fibre Channel and Fibre Channel Over Ethernet

<u>Top</u>

HPE Blade Storage mezzanine Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2012R2/2016

Version: 12.0.1192.0 (**Recommended**)
Filename: cp048530.compsig; cp048530.exe

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.0.1192.0

Removed the raw driver file folder. The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

brcmdrvr-fcoe-version.exe /q2 extract=2

The extracted files are located:

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Broadcom\Drivers\FCoE-version\x64\win2012

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Storage Mezzanine Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2019

Version: 12.0.1192.0 (**Recommended**) Filename: cp048529.compsig; cp048529.exe

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.0.1192.0

Removed the raw driver file folder. The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

brcmdrvr-fcoe-version.exe /q2 extract=2

The extracted files are located:

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server

2012R2

Version: 12.8.334.6 (**Recommended**) Filename: cp049104.compsig; cp049104.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.334.6

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- \circ HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- \circ HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- o HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2016

Version: 12.8.351.7 (**Recommended**) Filename: cp048601.compsig; cp048601.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.351.7

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2019

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- \circ HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- $\circ \quad \text{HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter} \\$
- $\circ \quad \text{HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter} \\$

32Gb FC Adapter:

- o HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2019 Version: 12.8.351.7 (**Recommended**)

Filename: cp048600.compsig; cp048600.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.351.7

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2019

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server

2012R2

Version: 9.4.1.20 (Recommended)

Filename: cp049108.compsig; cp049108.exe

Important Note!

Release Notes:

HPE OLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the QLogic Storport Driver v9.4.2.20, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.1.20

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- O HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- $\hbox{\scriptsize o \ } \hbox{\scriptsize HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter}$
- o HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2016

Version: 9.4.5.20 (Recommended)

Filename: cp048729.compsig; cp048729.exe

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

Fixes

Fixed the following:

- Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the QLogic Storport Driver v9.4.2.20, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.5.20

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- O HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- $\circ\quad$ HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2019

Version: 9.4.5.20 (**Recommended**) Filename: cp048730.compsig; cp048730.exe

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- o Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the QLogic Storport Driver v9.4.2.20, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.5.20

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- $\circ\quad$ HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2012R2/2016

Version: 12.0.1192.0 (**Recommended**) Filename: cp048542.compsig; cp048542.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.0.1192.0

Removed the raw driver file folder. The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

brcmdrvr-fcoe-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Broadcom\Drivers\FCoE-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Broadcom\Drivers\FCoE-version\x64\win2012

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows

Server 2019

Version: 12.0.1192.0 (**Recommended**) Filename: cp048541.compsig; cp048541.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.0.1192.0

Removed the raw driver file folder. The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

brcmdrvr-fcoe-version.exe /q2 extract=2

The extracted files are located:

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Broadcom\Drivers\FCoE-version\x64\win2012

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows

Server 2012R2

Version: 12.8.334.6 (**Recommended**) Filename: cp049106.compsig; cp049106.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.334.6

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

o HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows

Server 2016

Version: 12.8.351.7 (**Recommended**) Filename: cp048582.compsig; cp048582.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.351.7

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2019

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

o HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows

Server 2019

Version: 12.8.351.7 **(Recommended)** Filename: cp048581.compsig; cp048581.exe

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to driver version 12.8.351.7

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fc-version.exe /q2 extract=2

The extracted files are located:

 $C: \verb|\Users\Administrator\Documents\Emulex\Drivers\FC-version|$

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2019

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

o HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

 $\label{prop:eq:heaviside} \mbox{HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows}$

Server 2012R2

Version: 9.4.1.20 (Recommended)

Filename: cp049109.compsig; cp049109.exe

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- o Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the <u>QLogic Storport Driver v9.4.2.20</u>, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.1.20

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows

Server 2016

Version: 9.4.5.20 (Recommended)

Filename: cp048716.compsig; cp048716.exe

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- o Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters - HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the QLogic Storport Driver v9.4.2.20, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.5.20

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Storage Mezzanine Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows

Server 2019

Version: 9.4.5.20 (Recommended)

Filename: cp048717.compsig; cp048717.exe

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- o Removed the "fwload" registry parameter.
- Fixed an unwanted behavior where Link up/down messages were not always logged in the Window System Event log.
- Fixed unwanted behavior with the reporting of Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) statistics.
- Fixed an unwanted behavior where connections to tape drives may fail to recover in the event of "SCSI Check Condition" commands or cable pulls.
- Fixed an unwanted behavior where the server may encounter a Blue Screen Of Death (BSOD) 0x0000009f message during shutdown as described in <u>Advisory: HPE Host Bus Adapters HPE Platforms Running a Microsoft Windows Server 2016 / 2019 Hyper-V Environment, and Configured With Certain HPE HBAs With the QLogic Storport Driver v9.4.2.20, May Experience a Bug Check 0x9F Event
 </u>

Enhancements

Added the following:

 Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation (USCM) Congestion Management algorithms.

Updated to version 9.4.5.20

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Red Hat Enterprise Linux 7 Update 8 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and

Mezzanine Host Bus Adapters

Version: 12.8.528.7 (Recommended)

Filename: kmod-elx-lpfc-12.8.528.7-1.rhel7u8.x86 64.compsig; kmod-elx-lpfc-12.8.528.7-

1.rhel7u8.x86_64.rpm

Important Note!

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Enhancements

Updated to driver version 12.8.528.7

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- O HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE Fibre Channel 16Gb LPe1605 Mezz

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Update 8 Server Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 10.02.01.00.a14-k1 (Recommended)

Filename: kmod-qlgc-qla2xxx-10.02.01.00.a14_k1-1.rhel7u8.x86_64.compsig; kmod-qlgc-qla2xxx-

10.02.01.00.a14_k1-1.rhel7u8.x86_64.rpm

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

NOTE:

- 1. The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.
- 2. On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 10.02.01.00.a14-k1

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- $\circ\quad$ HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Update 8 Server Fibre Channel over Ethernet (FCoE) Driver Kit for HPE Storage Emulex (BRCM) Converged Network Adapters and mezzanine Converged Network Adapters (CNAs) Version: 12.0.1342.0 (Recommended)

Filename: kmod-brcmfcoe-12.0.1342.0-1.rhel7u8.x86_64.compsig; kmod-brcmfcoe-12.0.1342.0-1.rhel7u8.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to Driver version 12.0.1342.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- o HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

Red Hat Enterprise Linux 7 Update 9 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 12.8.528.7 (Recommended)

Filename: kmod-elx-lpfc-12.8.528.7-1.rhel7u9.x86_64.compsig; kmod-elx-lpfc-12.8.528.7-

1.rhel7u9.x86_64.rpm

Important Note!

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE

Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 12.8.528.7

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- \circ HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Update 9 Server Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 10.02.01.00.a14-k1 (Recommended)

Filename: kmod-qlgc-qla2xxx-10.02.01.00.a14_k1-1.rhel7u9.x86_64.compsig; kmod-qlgc-qla2xxx-

10.02.01.00.a14_k1-1.rhel7u9.x86_64.rpm

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

NOTE:

- 1. The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.
- 2. On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 10.02.01.00.a14-k1

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- O HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Update 9 Server Fibre Channel over Ethernet (FCoE) Driver Kit for HPE Storage Emulex (BRCM) Converged Network Adapters and mezzanine Converged Network Adapters (CNAs)

Version: 12.0.1342.0 (Recommended)

Filename: kmod-brcmfcoe-12.0.1342.0-1.rhel7u9.x86_64.compsig; kmod-brcmfcoe-12.0.1342.0-

1.rhel7u9.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to Driver version 12.0.1342.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- o HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter

HPE FlexFabric 20Gb 2-port 650M Adapter

Red Hat Enterprise Linux 8 Update 3 Server Fibre Channel over Ethernet (FCoE) Driver Kit for HPE Storage Emulex (BRCM) Converged Network Adapters and mezzanine Converged Network Adapters (CNAs)

Version: 12.0.1342.0 (Recommended)

Filename: kmod-brcmfcoe-12.0.1342.0-1.rhel8u3.x86_64.compsig; kmod-brcmfcoe-12.0.1342.0-

1.rhel8u3.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to Driver version 12.0.1342.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

SUSE Linux Enterprise Server 12 Service Pack 5 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 12.8.528.7 (Recommended)

Filename: elx-lpfc-kmp-default-12.8.528.7 k4.12.14 120-1.sles12sp5.x86 64.compsig; elx-lpfc-kmp-default-

12.8.528.7_k4.12.14_120-1.sles12sp5.x86_64.rpm

Important Note!

Rewrite of same Driver version has to be performed using -reinstall option

Example: rpm -Uvh elx-lpfc-kmp-default-<version>.<OSupdate>.x86_64.rpm -reinstall

For more information please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr-na-a00109772en-us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 12.8.528.7

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- O HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- O HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

32Gb FC Adapter:

- o HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 12 Service Pack 5 Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 10.02.01.00.a14-k1 (Recommended)

 $Filename: qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k4.12.14_120-1.sles12sp5.x86_64.compsig; qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k4.12.14_120-1.sles12sp5.x86_64.rpm$

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

NOTE:

- 1. The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlqc" driver are supported.
- 2. Rewrite of same Driver version has to be performed using -force or --replacepkgs with --nodeps option

Example: rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -force --nodeps

rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -replacepkgs --

nodeps

For more information, please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

3. On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Enhancements

Updated to driver version 10.02.01.00.a14-k1

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 12 service pack 5 Fibre Channel over Ethernet (FCoE) Driver Kit for HPE Storage Emulex (BRCM) Converged Network Adapters and mezzanine Converged Network Adapters (CNAs)

Version: 12.0.1342.0 (Recommended)

 $Filename: brcmfcoe-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.compsig; brcmfcoe-kmp-default-12.0.1342.0_k4.12.14_120-1.sles12sp5.x86_64.rpm$

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to Driver version 12.0.1342.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- o HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- o HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

SUSE Linux Enterprise Server 15 Service Pack 2 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 12.8.528.7 (Recommended)

Filename: elx-lpfc-kmp-default-12.8.528.7_k5.3.18_22-1.sles15sp2.x86_64.compsig; elx-lpfc-kmp-default-12.8.528.7_k5.3.18_22-1.sles15sp2.x86_64.rpm

Important Note!

Rewrite of same Driver version has to be performed using -reinstall option

Example: rpm -Uvh elx-lpfc-kmp-default-<version>.<OSupdate>.x86_64.rpm -reinstall

For more information please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 12.8.528.7

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- O HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- O HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- $\verb|O HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter \\$
- o HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE Fibre Channel 16Gb LPe1605 Mezz

32Gb FC Adapter:

- o HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 15 Service Pack 2 Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 10.02.01.00.a14-k1 (Recommended)

Filename: qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k5.3.18_22-1.sles15sp2.x86_64.compsig; qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k5.3.18_22-1.sles15sp2.x86_64.rpm

Important Note!

NOTE:

1. Rewrite of same Driver version has to be performed using \neg force or \neg -replacepkgs with \neg -nodeps option

 $\label{lem:condition} \mbox{Example: rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -force --nodeps}$

rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -replacepkgs --

nodeps

For more information please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

2. On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 10.02.01.00.a14-k1

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- o HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- \circ HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- \circ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 15 service pack 2 Fibre Channel over Ethernet (FCoE) Driver Kit for HPE Storage Emulex(BRCM) Converged Network Adapters and mezzanine Converged Network Adapters(CNAs)

Version: 12.0.1342.0 (Recommended)

Filename: brcmfcoe-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.compsig; brcmfcoe-kmp-default-12.0.1342.0_k5.3.18_22-1.sles15sp2.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Enhancements

Updated to Driver version 12.0.1342.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- O HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
 HPE FlexFabric 20Gb 2-port 650M Adapter

SUSE Linux Enterprise Server 15 Service Pack 3 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 12.8.528.7 (Recommended)

Filename: elx-lpfc-kmp-default- $12.8.528.7_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ ompsig; elx-lpfc-kmp-default- $12.8.528.7_k5.3.18_57-1.s$ les $15sp3.x86_64.c$ pm

Important Note!

Rewrite of same Driver version has to be performed using -reinstall option

Example: rpm -Uvh elx-lpfc-kmp-default-<version>.<OSupdate>.x86_64.rpm -reinstall

For more information, please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Added the following support:

o Added support for S:ES 15 SP3

Updated to driver version 12.8.528.7

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- o HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- o HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- \circ HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
 HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- o HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE Fibre Channel 16Gb LPe1605 Mezz

32Gb FC Adapter:

- o HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 15 Service Pack 3 Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and Mezzanine Host Bus Adapters

Version: 10.02.01.00.a14-k1 (Recommended)

 $\label{eq:filename:qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k5.3.18_57-4.sles 15 sp 3.x 86_64. compsig; qlgc-qla2xxx-kmp-default-10.02.01.00.a14_k1_k5.3.18_57-4.sles 15 sp 3.x 86_64. rpm$

Important Note!

NOTE:

1. Rewrite of same Driver version has to be performed using –force or --replacepkgs with --nodeps option

Example: rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -force --nodeps

rpm -Uvh kmod-qla2xxx-<version>.<OSupdate>.x86_64.rpm -replacepkgs --

nodeps

For more information, please refer to the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

2. On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr na-a00109772en us.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

NOTE:

On any HPE Gen 9 Servers running Linux with secure boot enabled, must install the HPE-DB-2016 secure-boot key in NVRAM in order to load this Driver. For more information please go through the support document with title "HPE Gen9 Servers with Secure Boot Enabled Must Install the New HPE Db Key to Update Drivers" available at the following

link: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00109772en_us.

Enhancements

Updated to driver version 10.02.01.00.a14-k1

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- o HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Driver - System Top

HPE Non-Volatile Memory Drivers for Microsoft Windows Server 2012 R2 and 2016

Version: 3.0.2.0 (Recommended)

Filename: cp042922.compsig; cp042922.exe

Important Note!

This Smart Component version 3.0.2.0 contains the HPE NVM Bus Driver HpeNvmBus.sys version 3.0.2.0 and the HPE NVM Disk Driver HpeNvmDisk0101 version 3.0.2.0.

Enhancements

These Non-Volatile Memory drivers enable support for Persistent Memory technology on select HPE Servers running Microsoft Windows Server 2012 R2 and 2016.

- Added support for Microsoft virtual NVDIMMs (aka vNVDIMMs) presented by Hyper-V Server 2019, on WS2012R2 and WS2016 guests.
- Added support for HPE Persistent Memory devices (featuring Intel Optane DC Persistent Memory), on WS2012R2 and WS2016.
- o Added support for HPE 16GB NVDIMM devices, on WS2012R2.
- Changed block sector size from 512B to 4096B. Old data won't be accessible and must be backed up first if it needs to be preserved.

For more information about Persistent Memory technology offered on HPE Servers, please consult the following links:

- o https://www.hpe.com/us/en/servers/persistent-memory.html
- o https://persistentmemory.hpe.com/windows/nvdimm

Driver - System Management

Top

HPE ProLiant Gen9 Chipset Identifier for Windows Server 2012 R2 to Server 2019

Version: 10.1.17969.8134 (Optional)

Filename: cp040885.exe

Enhancements

- Updated to match the latest version available from Intel for the devices supported by this component.
- Removed Windows Server 2012 to align operating system support with the production Service Pack for ProLiant.

iLO 3/4 Channel Interface Driver for Windows Server 2008 to Server 2012 R2

Version: 3.30.0.0 (**Optional**) Filename: cp029394.exe

Important Note!

The Channel Interface Driver was separated into its own component when the ProLiant Support Pack version 9.00 was released. Previously, the driver was a part of the *iLO 3 Management Controller Driver Package* component.

Fixes

Ensure that work items created by the driver are properly terminated if the driver has been restarted.

iLO 4 Channel Interface Driver for Windows Server 2012 and Server 2012 R2 $\,$

Version: 4.0.0.0 (**Optional**) Filename: cp035107.exe

Important Note!

The Channel Interface Driver was separated into its own component when the ProLiant Support Pack version 9.00 was released. Previously, the driver was a part of the *iLO 3 Management Controller Driver Package* component.

Enhancements

Aligned system and operating system support with the production Service Pack for ProLiant:

- o Removed support for Windows Server 2008 and Windows Server 2008 R2.
- o Removed support for iLO 3.
- o Removed support for HP ProLiant G7 and HP ProLiant Gen8 systems.

iLO 4 Channel Interface Driver for Windows Server 2012 and Server 2012 R2

Version: 4.1.0.0 (Recommended)

Filename: cp039984.exe

Important Note!

The Channel Interface Driver was separated into its own component when the ProLiant Support Pack version 9.00 was released. Previously, the driver was a part of the *iLO 3 Management Controller Driver Package* component.

Fixes

Corrected a potential Windows bugcheck 0x50 (PAGE_FAULT_IN_NONPAGED_AREA) that could occur if Windows restarts the driver without unloading it.

iLO 4 Channel Interface Driver for Windows Server 2016 and Server 2019

Version: 4.0.0.0 **(Optional)** Filename: cp035108.exe

Enhancements

Add support for Windows Server 2019.

iLO 4 Channel Interface Driver for Windows Server 2016 and Server 2019

Version: 4.1.0.0 (Recommended)

Filename: cp039985.exe

Fixes

Corrected a potential Windows bugcheck 0x50 (PAGE_FAULT_IN_NONPAGED_AREA) that could occur if Windows restarts the driver without unloading it.

iLO 4 Management Controller Driver Package for Windows Server 2012 and Server 2012 R2

Version: 4.0.0.0 **(Optional)** Filename: cp035109.exe

Prerequisites

The *iLO 3/4 Channel Interface Driver for Windows Server 2008 to Server 2012 R2* (version 3.4.0.0 or later) must be installed prior to this component. The Channel Interface Driver was previously included within this component but is now installed separately.

Enhancements

Aligned system and operating system support with the production Service Pack for ProLiant:

- $\circ\quad$ Removed support for Windows Server 2008 and Windows Server 2008 R2.
- \circ Removed support for iLO 3.

o Removed support for HP ProLiant G7 and HP ProLiant Gen8 systems.

iLO 4 Management Controller Driver Package for Windows Server 2016 and Server 2019

Version: 4.0.0.0 (B) (Optional) Filename: cp037927.exe

Prerequisites

The iLO 3/4 Channel Interface Driver for Windows Server 2016 must be installed prior to this component.

Fixes

Fixed a component installation failure (error message "The iLO 4 Core Driver must be installed before installing this package") when Windows Device Guard is enabled.

Driver - Video Top

 ${\tt Matrox~G200eH~Video~Controller~Driver~for~Windows~Server~2012~and~Server~2012~R2}$

Version: 9.15.1.224 (**Optional**) Filename: cp038691.exe

<u>Fixes</u>

- \circ Fix for random screen corruption when changing resolution that could occur with driver versions 9.15.1.184 and 9.15.1.218.
- Fix for a display freeze that could occur when running the Windows Display Diagnostics tool (dispdiag.exe).

Matrox G200eH Video Controller Driver for Windows Server 2016 and Server 2019

Version: 9.15.1.224 (Optional) Filename: cp038692.exe

Fixes

- Fix for random screen corruption when changing resolution that could occur with driver versions 9.15.1.184 and 9.15.1.218.
- Fix for a display freeze that could occur when running the Windows Display Diagnostics tool (dispdiag.exe).

Firmware - Blade Infrastructure

Top

HPE BladeSystem c-Class Virtual Connect Firmware, Ethernet plus 8Gb 20-port and 8/16Gb 24-port FC Edition Component for Windows

Version: 4.85 (**Recommended**) Filename: cp043332.exe

Prerequisites

The 4.85 version of HPE Virtual Connect Release Notes contains the prerequisites and can also be found in the following URL: http://www.hpe.com/info/vc/manuals

Fixes

The list of issues resolved in 4.85 version can be found in the HPE Virtual Connect Release Notes at URL: http://www.hpe.com/info/vc/manuals

Enhancements

The list of enhancements in 4.85 version can be found in the HPE Virtual Connect Release Notes at URL: http://www.hpe.com/info/vc/manuals

Supported Devices and Features

HPE Virtual Connect FlexFabric 10Gb/24-port Module for c-Class BladeSystem

HPE Virtual Connect 8Gb 24-port Fibre Channel Module for c-Class BladeSystem

HPE Virtual Connect 8Gb 20-port Fibre Channel Module for c-Class BladeSystem

HPE Virtual Connect Flex-10/10D Module for c-Class BladeSystem

HPE Virtual Connect FlexFabric-20/40 F8 Module for HPE BladeSystem c-Class

HPE Virtual Connect 16Gb 24-port Fibre Channel Module for c-Class BladeSystem

HPE BladeSystem c-Class Virtual Connect Firmware, Ethernet plus 8Gb 20-port and 8/16Gb 24-port FC Edition Component for Linux

Version: 4.85 (Recommended)

Filename: RPMS/x86_64/firmware-vceth-4.85-1.1.x86_64.rpm

Prerequisites

The 4.85 version of HPE Virtual Connect Release Notes contains the prerequisites and can be found in the following URL: http://www.hpe.com/info/vc/manuals

Fixes

The list of issues resolved in 4.85 version can be found in the HPE Virtual Connect Release Notes at URL: http://www.hpe.com/info/vc/manuals

Enhancements

The list of enhancements in 4.85 version can be found in the HPE Virtual Connect Release Notes at URL: http://www.hpe.com/info/vc/manuals

Supported Devices and Features

HPE Virtual Connect FlexFabric 10Gb/24-port Module for c-Class BladeSystem

HPE Virtual Connect 8Gb 24-port Fibre Channel Module for c-Class BladeSystem

HPE Virtual Connect 8Gb 20-port Fibre Channel Module for c-Class BladeSystem

HPE Virtual Connect Flex-10/10D Module for c-Class BladeSystem

HPE Virtual Connect FlexFabric-20/40 F8 Module for HPE BladeSystem c-Class

HPE Virtual Connect 16Gb 24-port Fibre Channel Module for c-Class BladeSystem

Online HP 6Gb SAS BL Switch Firmware Smart Component for Linux (x86/x64)

Version: 4.3.6.0 (B) (Optional)

Filename: RPMS/i586/firmware-solex6gb-solex-4.3.6.0-2.1.i586.rpm

Important Note!

Note: If version 4.3.6.0 was previously installed, then it is not necessary to upgrade to version 4.3.6.0 (B).

Enhancements

Online HPE 6Gb SAS BL Switch Firmware Smart Component for Windows (x86/x64)

Version: 4.3.6.0 (C) (Optional)

Filename: cp038273.exe

Enhancements

Improved integration with Smart Update Manager

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Linux

Version: 4.97 (Recommended)

Filename: RPMS/x86 64/firmware-oa-4.97-1.1.x86 64.rpm

Important Note!

Important Notes

- o Firmware Upgrade
 - Starting OA 4.50 release, a standardized code signing, and validation mechanism has been introduced to enhance the firmware image authenticity.
 - For customers using Firmware ROM image to upgrade OA:
 - For OAs with firmware version less than 3.50, first update to OA 3.50 and then continue updating to OA 4.50 or above.
 - For customers using Smart Components to upgrade OA:
 - OA firmware update mechanisms which rely on HPE Smart Components (example: EFM), will not be affected by this change. The Smart Component will automatically perform the intermediate upgrade to OA 3.50 before performing the OA 4.50 or above upgrade.
- o EFM
 - The OA only supports SPP ISO images that are less than 4 GB in size, whether hosted directly via the Enclosure DVD feature or an attached USB key, or mounted remotely via a specified URL. If an ISO image exceeds 4 GB, the CLI SHOW FIRMWARE MANAGEMENT command displays ISO URL Status as "Invalid URL."
 - If an SPP ISO image exceeds 4 GB, it is necessary to create a custom ISO image that excludes components unnecessary to the OA EFM blade firmware update process. At a minimum, the custom ISO must contain the firmware components for HPE ProLiant BL servers. (When using HPE SUM to create the custom ISO image, select Firmware as the Component Type, and select HPE ProLiant BL Series as the Server Type.) For information about creating a custom ISO image compatible for OA EFM functionality, see the HPE BladeSystem Onboard Administrator User Guide. More HPE SUM information can be found via HPE Smart Update Manager online help or at https://www.hpe.com/servers/hpsum/documentation.
- o FIPS
- Onboard Administrator 4.71 is FIPS certified as referenced in the 140-2 In Process list located at http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140InProcess.pdf.
- o IPv6
 - When the Enable DHCPv6 or Enable SLAAC enclosure IPv6 settings are disabled on the Onboard Administrator, the respective DHCPv6 or SLAAC addresses of the iLOs in the enclosure are retained until these addresses expire automatically based on their respective configurations. A manual reset of the iLO releases these addresses immediately

Prerequisites

To access the OA web interface, you must have the OA IP address and a compatible web browser. You must access the

application through HTTPS (HTTP packets exchanged over an SSL/TLS-encrypted session).

The OA web interface requires an XSLT-enabled browser with support for JavaScript 1.3 or the equivalent.

Supported browsers include:

- Microsoft Internet Explorer 11
- Mozilla Firefox 67.0.4(64-bit)
- Google Chrome 77.0.3865.90 (Official Build) (64-bit)

Fixes

General

- Addressed an issue, where running concurrent UPDATE ILO cli command from different SSH sessions cause few of the commands to end in operation failure.
- o Fixed an issue in SET SERVER DVD CONNECT cli command usage in IPv6 environment.
- Addressed an issue where blade's ProductID update in System Rom RBSU is not reflected in the Onboard Administrator.
- o Harnessed certificate read operation from flash to minimize certificate read failures.
- Fixed an issue in SNMP v3 protocol where EngineTime was not reset on increment of EngineBoot count.
- o Addressed an issue related to blade discovery failure.
- Fixed an issue in Smart Component where it fails to establish communication with Onboard Administrator using DHE ciphers.
- o Addressed an issue related to ECDSA ciphers enable/disable feature.
- Added SSH cipher list to the configuration script
- Fixed an issue in Onboard Administrator GUI where IPv4 DynamicDNS could not be enabled when enclosure is configured for static IP configuration.
- Fixed help message display issues in CLI commands SET SSL_SESSION TIMEOUT and SET SECURESH.
- Addressed an issue in SNMP where EngineBoot count was incremented by two for add/delete of trap receiver.
- Fixed Online Help (OLH) pages display issue that occur when language pack is uploaded into Onboard Administrator.

Security

The following security vulnerabilities are fixed:

- Onboard Administrator's web server response is enhanced to include X-Content-Type-Options security header.
- O CVE-2011-3026 libpng: Heap buffer overflow
- o CVE-2018-1000517 BusyBox wget version contains a Buffer Overflow vulnerability
- O CVE-2020-1971 EDIPARTYNAME NULL pointer de-reference
- o CVE-2020-15861 Net-SNMP allows Escalation of Privileges
- CVE-2020-15862 Net-SNMP provides the ability to run arbitrary commands as root.
- O CVE-2019-20892 SNMPv3 get bulk request issue

Issues and workarounds

Browsers

- OA GUI is not accessible in Chrome versions 43.0.2357.10 to 44.0.2383. The issue was caused by a "regression" in Chrome (or WebKit). Customers should use an alternative browser like Firefox or Internet Explorer or try a different version of Chrome.
- O SSO-to-iLO connection from the OA using an iLO host name fails with Microsoft Internet Explorer11 on Windows 8. On a Windows 8 system with Internet Explorer 10 or Internet Explorer 11, if the OA web GUI session is loaded using a host name instead of an IP address, an attempt to open an iLO window using SSO from the OA web GUI might result in the iLO page loading in the OA web GUI window instead of the intended new window. This issue was determined to be a bug in Internet Explorer and is expected to be fixed in a future release or update for Internet Explorer. To work around this issue, either use an IP address to load the OA Web GUI or turn off Protected Mode for the appropriate zone in Internet Explorer's settings. This issue occurs only on Internet Explorer browsers.

FIPS

Certificates smaller than 2048 bits in size are not compliant with FIPS requirements as enforced by the OA firmware starting with OA 4.20. When the OA running OA firmware version 4.40 or greater is operating in FIPS Mode ON/DEBUG and is configured with a 1024-bit LDAP certificate that was installed when running a previous version of OA firmware, FIPS Mode ON/DEBUG is considered to be operating in a degraded state due to the presence of the non-compliant certificate. While operating in this FIPS-Degraded Mode operational state, attempts to set FIPS Mode OFF from the OA GUI Network Access>FIPS tab will fail and show the error message The selected FIPS mode is already enabled. When the non-compliant certificate is removed, the FIPS-Degraded operational status is cleared, FIPS Mode can then be successfully set to OFF from the GUI interface. Note that the OA CLI command SET FIPS MODE OFF can be successfully used to set FIPS Mode OFF even with non-compliant 1024-bit LDAP certificates installed in the OA.

IRC

Unable to open .net IRC console for Gen10 Blades, Gen9 Blades also have the same issue. The Java applet and Webstart however, loads but the virtual media mounting fails. The work around is to launch the IRC through IRC Application (HPE Lights-Out Stand Alone Remote Console) which is installed on terminal client.

EFM

To use EFM on Gen 10 Blades, please select options/filters "Make Bootable ISO file" and "Enclosure Firmware Management" while creating custom SPP ISO on HPE SUM 8.0.0. Please refer to HPE SUM 8.0.0 User guide for further details.

CAC

- o In the CAC mode SSH, Telnet and XML Reply protocols will be disabled.
- o Linked enclosure login will not work if the linked enclosure in CAC mode.
- o If accurate Service account details are not provided, LDAP user login with certificate will fail.
- O It is highly recommended to establish a recovery plan before getting started with CAC. If something goes wrong with the OA configuration, the OA may be recovered through the serial port or Insight Display panel and USB KEY. Both methods require physical access to the OA. However, if an LCD PIN has been configured (and forgotten) and local accounts have been disabled or CAC has been incorrectly configured then, the only way to recover is through a serial port. The two most common situations where OA recovery is needed are when LDAP has been configured incorrectly with local accounts disabled or when CAC has been configured without certificate access.

Configurable SSH Port Number

If a Standby OA is running firmware version less than 4.85 and it is updated to firmware version greater than or equal to 4.85 using synchronize firmware feature from Active OA, after the firmware update and reboot of the Standby OA, SSH port will not open in the configured port number. The work around is to reboot the Standby OA and SSH port will open in the configured port in next boot. This issue will not occur in the case where SSH port is configured to default port 22 in the Active OA.

Smart component

When OA is in FIPS ON or FIPS TOP-SECRET mode and any of the ciphers that use Diffie-Hellman (DH) keys are enabled, firmware upgrade or downgrade using OA Smart Component 4.96 or earlier versions may fail with following error:

Error: 1013: Client cannot connect with the Onboard Administrator. Verify the target address is correct and can be accessed from your system.

FIPS ON

TLS_DHE_RSA_WITH_3DES_EDE_CBC_SHA TLS_DHE_RSA_WITH_AES_128_GCM_SHA25 TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 TLS_DHE_RSA_WITH_AES_128_CBC_SHA256 TLS_DHE_RSA_WITH_AES_256_CBC_SHA256

FIPS TOP-SECRET

TLS_DHE_RSA_WITH_AES_256_GCM_SHA384

Same error may occur when OA upgrade or downgrade is performed through Smart

Update Manager (SUM) resulting in the following error message in the SUM.

Component	Package	Deployment Status	Log
cpC39063	Online HPE	Update returned an	View Log
	BladeSystem c-	error	
	Class Onboard		
	Administrator for		
	Windows		

When this failure occurs, the following message can be seen in the OA Smart Component log file.

Error: 1013: Client cannot connect with the Onboard Administrator.

Verify The target address is correct and can be accessed from your system.

The work-around for this problem is to disable all the ciphers that use DH key and rerun the firmware upgrade or downgrade

Disabling ciphers can be done using the CLI command DISABLE SSL CIPHER or through the GUI. The disabled ciphers can be re-enabled once the firmware upgrade or downgrade is completed.

ILO5 Firmware Update

The UPDATE ILO command is failing to update the iLO5 firmware versions 2.10 and later on OA version 4.90 and less than 4.90. This issue is caused by the introduction of new signature in the iLO5 firmware version 2.10

. The work-around is to update the OA firmware to 4.95 and then try the UPDATE ILO command. This issue will not occur with OA versions $\,$ 4.95 and later.

Enhancements

Onboard Administrator 4.97 provides support for the following enhancements:

Hardware additions

None

Features: additions and changes

General

- O A new feature is added to SNMP to support enable/disable options for v1/v2c protocols.
- New SNMP traps were added for emergency brake (e-brake) activated and deactivated events.
- o Added support for firmware update of new NIDEC fans.
- o Enhanced PowerPIC firmware update to support firmware version 1.8.
- o In the Onboard Administrator GUI added support for iLO HTML5 IRC console.

Security

o A new feature is added in SSH to support enable/disable of Key Exchange (KEX) Algorithms.

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Windows

Version: 4.97 (Recommended)

Filename: cp046217.exe

Important Note!

Important Notes

Firmware Upgrade

- Starting OA 4.50 release, a standardized code signing and validation mechanism has been introduced to enhance the firmware image authenticity.
- For customers using Firmware ROM image to upgrade OA:
 - For OAs with firmware version less than 3.50, first update to OA 3.50 and then continue updating to OA 4.50 or above.
- For customers using Smart Components to upgrade OA:
 - OA firmware update mechanisms which rely on HPE Smart Components (example: EFM), will not be affected by this change. The Smart Component will automatically perform the intermediate upgrade to OA 3.50 before performing the OA 4.50 or above upgrade.

o EFM

■ The OA only supports SPP ISO images that are less than 4 GB in size, whether hosted directly via the Enclosure DVD feature or an attached USB key, or mounted

- remotely via a specified URL. If an ISO image exceeds 4 GB, the CLI SHOW FIRMWARE MANAGEMENT command displays ISO URL Status as "Invalid URL."
- If an SPP ISO image exceeds 4 GB, it is necessary to create a custom ISO image that excludes components unnecessary to the OA EFM blade firmware update process. At a minimum, the custom ISO must contain the firmware components for HPE ProLiant BL servers. (When using HPE SUM to create the custom ISO image, select Firmware as the Component Type, and select HPE ProLiant BL Series as the Server Type.) For information about creating a custom ISO image compatible for OA EFM functionality, see the HPE BladeSystem Onboard Administrator User Guide. More HPE SUM information can be found via HPE Smart Update Manager online help or at https://www.hpe.com/servers/hpsum/documentation.

o FIPS

Onboard Administrator 4.71 is FIPS certified as referenced in the 140-2 In Process list located at http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140InProcess.pdf.

o IPv6

When the Enable DHCPv6 or Enable SLAAC enclosure IPv6 settings are disabled on the Onboard Administrator, the respective DHCPv6 or SLAAC addresses of the iLOs in the enclosure are retained until these addresses expire automatically based on their respective configurations. A manual reset of the iLO releases these addresses immediately.

Prerequisites

To access the OA web interface, you must have the OA IP address and a compatible web browser. You must access the

application through HTTPS (HTTP packets exchanged over an SSL/TLS-encrypted session).

The OA web interface requires an XSLT-enabled browser with support for JavaScript 1.3 or the equivalent.

Supported browsers include:

- Microsoft Internet Explorer 11
- Mozilla Firefox 67.0.4(64-bit)
- Google Chrome 77.0.3865.90 (Official Build) (64-bit)

Fixes

General

- Addressed an issue, where running concurrent UPDATE ILO cli command from different SSH sessions cause few of the commands to end in operation failure.
- o Fixed an issue in SET SERVER DVD CONNECT cli command usage in IPv6 environment.
- Addressed an issue where blade's ProductID update in System Rom RBSU is not reflected in the Onboard Administrator.
- o Harnessed certificate read operation from flash to minimize certificate read failures.
- Fixed an issue in SNMP v3 protocol where EngineTime was not reset on increment of EngineBoot count.
- o Addressed an issue related to blade discovery failure.
- Fixed an issue in Smart Component where it fails to establish communication with Onboard Administrator using DHE ciphers.
- o Addressed an issue related to ECDSA ciphers enable/disable feature.
- o Added SSH cipher list to the configuration script.
- Fixed an issue in Onboard Administrator GUI where IPv4 DynamicDNS could not be enabled when enclosure is configured for static IP configuration.
- Fixed help message display issues in CLI commands SET SSL_SESSION TIMEOUT and SET SECURESH.
- Addressed an issue in SNMP where EngineBoot count was incremented by two for add/delete of trap receiver.

 Fixed Online Help (OLH) pages display issue that occur when language pack is uploaded into Onboard Administrator.

Security

The following security vulnerabilities are fixed:

- Onboard Administrator's web server response is enhanced to include X-Content-Type-Options security header.
- CVE-2011-3026 libpng: Heap buffer overflow
- o CVE-2018-1000517 BusyBox wget version contains a Buffer Overflow vulnerability
- O CVE-2020-1971 EDIPARTYNAME NULL pointer de-reference
- o CVE-2020-15861 Net-SNMP allows Escalation of Privileges
- o CVE-2020-15862 Net-SNMP provides the ability to run arbitrary commands as root.
- CVE-2019-20892 SNMPv3 get bulk request issue

Issues and workarounds

Browsers

- OA GUI is not accessible in Chrome versions 43.0.2357.10 to 44.0.2383. The issue was caused by a "regression" in Chrome (or WebKit). Customers should use an alternative browser like Firefox or Internet Explorer or try a different version of Chrome.
- SSO-to-iLO connection from the OA using an iLO host name fails with Microsoft Internet Explorer11 on Windows 8. On a Windows 8 system with Internet Explorer 10 or Internet Explorer 11, if the OA web GUI session is loaded using a host name instead of an IP address, an attempt to open an iLO window using SSO from the OA web GUI might result in the iLO page loading in the OA web GUI window instead of the intended new window. This issue was determined to be a bug in Internet Explorer and is expected to be fixed in a future release or update for Internet Explorer. To work around this issue, either use an IP address to load the OA Web GUI, or turn off Protected Mode for the appropriate zone in Internet Explorer's settings. This issue occurs only on Internet Explorer browsers.

FIPS

Certificates smaller than 2048 bits in size are not compliant with FIPS requirements as enforced by the OA firmware starting with OA 4.20. When the OA running OA firmware version 4.40 or greater is operating in FIPS Mode ON/DEBUG and is configured with a 1024-bit LDAP certificate that was installed when running a previous version of OA firmware, FIPS Mode ON/DEBUG is considered to be operating in a degraded state due to the presence of the non-compliant certificate. While operating in this FIPS-Degraded Mode operational state, attempts to set FIPS Mode OFF from the OA GUI Network Access>FIPS tab will fail and show the error message The selected FIPS mode is already enabled. When the non-compliant certificate is removed, the FIPS-Degraded operational status is cleared, FIPS Mode can then be successfully set to OFF from the GUI interface. Note that the OA CLI command SET FIPS MODE OFF can be successfully used to set FIPS Mode OFF even with non-compliant 1024-bit LDAP certificates installed in the OA.

IRC

Unable to open .net IRC console for Gen10 Blades, Gen9 Blades also have the same issue. The Java applet and Webstart however, loads but the virtual media mounting fails. The work around is to launch the IRC through IRC Application (HPE Lights-Out Stand Alone Remote Console) which is installed on terminal client.

EFM

To use EFM on Gen 10 Blades, please select options/filters "Make Bootable ISO file" and "Enclosure Firmware Management" while creating custom SPP ISO on HPE SUM 8.0.0. Please refer to HPE SUM 8.0.0 User guide for further details.

CAC

- o In the CAC mode SSH, Telnet and XML Reply protocols will be disabled.
- o Linked enclosure login will not work if the linked enclosure in CAC mode.
- o If accurate Service account details are not provided, LDAP user login with certificate will fail.
- O It is highly recommended to establish a recovery plan before getting started with CAC. If something goes wrong with the OA configuration, the OA may be recovered through the serial port or Insight Display panel and USB KEY. Both methods require physical access to the OA. However, if an LCD PIN has been configured (and forgotten) and local accounts have been disabled or CAC has been incorrectly configured then, the only way to recover is through a serial port. The two most common situations where OA recovery is needed are when LDAP has been configured incorrectly with local accounts disabled or when CAC has been configured without certificate access.

Configurable SSH Port Number

If a Standby OA is running firmware version less than 4.85 and it is updated to firmware version greater than or equal to 4.85 using synchronize firmware feature from Active OA, after the firmware update and reboot of the Standby OA, SSH port will not open in the configured port number. The work around is to reboot the Standby OA and SSH port will open in the configured port in next boot. This issue will not occur in the case where SSH port is configured to default port 22 in the Active OA.

Smart component

When OA is in FIPS ON or FIPS TOP-SECRET mode and any of the ciphers that use Diffie-Hellman (DH) keys are enabled, firmware upgrade or downgrade using OA Smart Component 4.96 or earlier versions may fail with following error:

Error: 1013: Client cannot connect with the Onboard Administrator. Verify the target address is correct and can be accessed from your system.

FIPS ON

TLS_DHE_RSA_WITH_3DES_EDE_CBC_SHA TLS_DHE_RSA_WITH_AES_128_GCM_SHA25 TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 TLS_DHE_RSA_WITH_AES_128_CBC_SHA256 TLS_DHE_RSA_WITH_AES_256_CBC_SHA256

FIPS TOP-SECRET

TLS_DHE_RSA_WITH_AES_256_GCM_SHA384

Same error may occur when OA upgrade or downgrade is performed through Smart

Update Manager (SUM) resulting in the following error message in the SUM.

Component	Package	Deployment Status	Log
cpC39063	Online HPE	Update returned an	View Log
	BladeSystem c-	error	
	Class Onboard		
	Administrator for		
	Windows		

When this failure occurs, the following message can be seen in the OA Smart Component log file.

Error: 1013: Client cannot connect with the Onboard Administrator.

Verify The target address is correct and can be accessed from your system.

The work-around for this problem is to disable all the ciphers that use DH key and rerun the firmware upgrade or downgrade.

Disabling ciphers can be done using the CLI command DISABLE SSL CIPHER or through the GUI. The disabled ciphers can be re-enabled once the firmware upgrade or downgrade is completed.

ILO5 Firmware Update

The UPDATE ILO command is failing to update the iLO5 firmware versions 2.10 and later on OA version 4.90 and less than 4.90. This issue is caused by the introduction of new signature in the iLO5 firmware version 2.10.

The work-around is to update the OA firmware to 4.95 and then try the UPDATE ILO command. This issue will not occur with OA versions 4.95 and later.

Enhancements

Onboard Administrator 4.97 provides support for the following enhancements:

Hardware additions

o None

Features: additions and changes

General

- O A new feature is added to SNMP to support enable/disable options for v1/v2c protocols.
- New SNMP traps were added for emergency brake (e-brake) activated and deactivated events.
- o Added support for firmware update of new NIDEC fans.
- o Enhanced PowerPIC firmware update to support firmware version 1.8.
- o In the Onboard Administrator GUI added support for iLO HTML5 IRC console.

Security

A new feature is added in SSH to support enable/disable of Key Exchange (KEX) Algorithms.

Firmware - Network Top

HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Linux (x64)

Version: 2021.10.01 (Recommended)

Filename: RPMS/x86_64/firmware-cna-mezz-emulex-2021.10.01-1.7.x86_64.compsig;

RPMS/x86_64/firmware-cna-mezz-emulex-2021.10.01-1.7.x86_64.rpm

Important Note!

This component is only supported on RHEL7u8, RHEL7u9, RHEL8u3, SLES12SP5, SLES15SP2 OS's.

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The OOB NIC driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Additional requirements:

The target environment must have the libsysfs or sysfsutils package installed prior to the installation of the firmware update kit. If not already present, the libsysfs or sysfsutils package can be obtained from the operating system installation media.

Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex HBAs/CNAs

Environment must be running the syslog daemon for the flash engine to run $% \left\{ 1\right\} =\left\{ 1\right\} =$

Note: To enable the FCoE/iSCSI protocol on devices that support it, please install the appropriate Emulex FCoE/iSCSI driver. The FCoE protocol also requires the HPE Emulex FCoE Enablement Kit be installed. The drivers and enablement kit are also available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FCoE Driver Kit, reboot, and then install the Enablement Kit.

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a converged network adapter update component.

This component is only supported on RHEL7u8, RHEL7u9, RHEL8u3, SLES12SP5, SLES15SP2 OS's.

Updated CNA (XE100 series) firmware

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Microsoft Windows Server

2012R2(x64)

Version: 2021.10.01 (**Recommended**) Filename: cp049112.compsig; cp049112.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex NIC driver must be installed prior to this firmware component being identified by SUM for deployment. The latest driver is available on the HPE.com website at http://www.hpe.com/.

The FCoE/iSCSI OOB driver and FCoE enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for Microsoft Windows Server

2016/2019(x64)

Version: 2021.10.01 (**Recommended**) Filename: cp048528.compsig; cp048528.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex NIC driver must be installed prior to this firmware component being identified by SUM for deployment. The latest driver is available on the HPE.com website at http://www.hpe.com/.

The FCoE/iSCSI OOB driver and FCoE enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a converged network adapter update component.

Updated CNA (XE100 series) firmware

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for VMware vSphere 6.5

Version: 2021.10.01 (Recommended) Filename: CP048524.compsig; CP048524.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated CNA (XE100 series) firmware

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Firmware Flash for Emulex Mezzanine Converged Network Adapters for VMware vSphere 6.7

Version: 2021.10.01 **(Recommended)** Filename: CP048525.compsig; CP048525.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated CNA (XE100 series) firmware

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE FlexFabric 20Gb 2-port 650FLB Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 20Gb 2-port 650M Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Intel Online Firmware Upgrade Utility for Linux

Version: 1.2.3 (Optional)

Filename: firmware-nic-intel-bl-1.2.3-1.1.x86_64.compsig; firmware-nic-intel-bl-1.2.3-1.1.x86_64.rpm

Important Note!

HPE recommends the *HPE Blade Intel ixgbe Drivers for Linux*, versions 5.9.4 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

This product now supports Red Hat Enterprise Linux 7, Updates 8 and 9.

This product now supports Red Hat Enterprise Linux 8, Updates 2 and 3.

This product now supports SUSE Linux Enterprise Server 12 SP5.

This product now supports SUSE Linux Enterprise Server 15 SP2.

Supported Devices and Features

This package supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel Online Firmware Upgrade Utility for VMware

Version: 1.2.3 (Optional)

Filename: CP045076.compsig; CP045076.zip

Important Note!

HPE recommends the *HPE Blade Intel ixgben Driver for VMware*, version 2020.12.09 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

This product now supports VMware vSphere 7.0 U1. This product now supports VMware vSphere 6.7 U3. This product now supports VMware vSphere 6.5 U3.

Supported Devices and Features

This package supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 1.0.5.2 (Optional)

Filename: cp047539.compsig; cp047539.exe

Important Note!

HPE recommends one of the following drivers, as appropriate for your system, for use with this firmware:

- o HPE Blade Intel ixn Driver for Windows Server 2016, version 4.1.199.0 or later
- o HPE Blade Intel ixn Driver for Windows Server 2019, version 4.1.197.0(B) or later

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product no longer supports Windows Server 2012 R2.

Supported Devices and Features

This package supports the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- o HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux

Version: 1.5.2 (Optional)

Filename: firmware-nic-qlogic-nx2-bl-1.5.2-1.1.x86_64.compsig; firmware-nic-qlogic-nx2-bl-1.5.2-

1.1.x86 64.rpm

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for Linux*, versions 7.14.80-5 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (*ifup ethX* or *ifconfig ethX up*) before firmware can be updated.

Fixes

This product addresses an issue where the Maximum Transmission Unit (MTU) value of iSCSI function port is displayed as 0 bytes in AHS log.

Enhancements

This product now supports Red Hat Enterprise Linux 8 Update 4. This product now supports SuSE Linux Enterprise Server 15 SP3.

Supported Devices and Features

This product supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware

Version: 1.5.2 (Optional)

Filename: CP047647.compsig; CP047647.zip

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20 GbE Multifunction Driver for VMware*, version 2021.09.01 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

<u>Fixes</u>

This product addresses an issue where the Maximum Transmission Unit (MTU) value of iSCSI function port is displayed as 0 bytes in AHS log.

Enhancements

This product now supports VMware ESXi 7.0 U3.

Supported Devices and Features

This product supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 534M Adapter
- o HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 1.0.5.3 (Optional)

Filename: cp047538.compsig; cp047538.exe

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for Windows Server x64 Editions*, version 7.13.206.0 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses an issue where the Maximum Transmission Unit (MTU) value of iSCSI function port is displayed as 0 bytes in AHS log.

Supported Devices and Features

This product supports the following network adapters:

- o HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630FLB Adapter
- o HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64

Version: 1.12.1 (Recommended)

Filename: firmware-nic-bcm-nxe-1.12.1-1.1.x86_64.compsig; firmware-nic-bcm-nxe-1.12.1-1.1.x86_64.rpm

Important Note!

HPE recommends the HPE Broadcom NetXtreme-E Drivers for Linux, versions 1.10.2-219.0.55.0 or later, for use with this firmware.

Prerequisites

This package requires the appropriate driver for your network adapter to be installed and all Ethernet ports brought up before firmware can be updated.

- o Follow the command line to bring up ethernet device:
 - # ifup ethX or ifconfig ethX up or wicked ifup ethX

If local system doesn't configure any network interface for the adapter that are necessary then to create the network config file to bring up interface.

o For example in sles15sp1, To create ifcfg-ethX files under /etc/sysconfig/network/

<u>Fixes</u>

- $\circ\quad$ This product addresses an issue a packet missing problem after some amounts of multicast UDP streams transmitted.
- This product addresses an issue the port identifier LED problem on HPE Ethernet 10Gb 2-port 535T Adapter.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- o HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware

Version: 5.14.1 (Recommended)

Filename: CP050625.compsig; CP050625.zip

Important Note!

HPE recommends *HPE Broadcom NetXtreme-E Drivers for VMware*, versions 2022.03.04 or later, for use with this firmware.

This software package contains NVM Image version 218.0.303000 with the following firmware versions:

NIC	Bootcode Version	NCSI Version	MBA Version	UEFI Version	CCM Version	RoCE Version
HPE Ethernet 10Gb 2-port 535FLR-T Adapter						
HPE Ethernet 10Gb 2-port 535T Adapter						
HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	218.0.229.0	218.0.173.0	218.0.38.0	218.0.93.0	218.0.28.0	218.0.5.0
HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter						

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

<u>Fixes</u>

- $\circ\quad$ This product addresses an issue a packet missing problem after some amounts of multicast UDP streams transmitted.
- This product addresses an issue the port identifier LED problem on HPE Ethernet 10Gb 2-port 535T Adapter.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- O HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.2.6.0 (Recommended)

Filename: cp050626.compsig; cp050626.exe

Important Note!

HPE recommends *HPE Broadcom NetXtreme-E Driver for Windows*, versions 219.0.44.0 or later, for use with this firmware.

This software package contains NVM Image version 218.0.303000 with the following firmware versions:

NIC	Bootcode Version	NCSI Version	MBA Version	UEFI Version	CCM Version	RoCE Version
HPE Ethernet 10Gb 2-port 535FLR-T Adapter						
HPE Ethernet 10Gb 2-port 535T Adapter						
HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	218.0.229.0	218.0.173.0	218.0.38.0	218.0.93.0	218.0.28.0	218.0.5.0
HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter						

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

 This product addresses an issue a packet missing problem after some amounts of multicast UDP streams transmitted. This product addresses an issue the port identifier LED problem on HPE Ethernet 10Gb 2-port 535T Adapter.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- o HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- o HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.29.0 (Recommended)

Filename: firmware-nic-broadcom-2.29.0-1.1.x86 64.compsig; firmware-nic-broadcom-2.29.0-

1.1.x86_64.rpm

Important Note!

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.139b or later, for use with this firmware.

Prerequisites

his package requires the appropriate driver for your network adapter to be installed and all Ethernet ports brought up before firmware can be updated.

- o Follow the command line to bring up ethernet device:
 - # ifup ethX or ifconfig ethX up or wicked ifup ethX

If local system doesn't configure any network interface for the adapter that are necessary then to create the network config file to bring up interface.

o For example in sles15sp1, To create ifcfg-ethX files under /etc/sysconfig/network/

<u>Fixes</u>

This product addresses an abnormal reporting on link status of HPE 331i Adapter under IML log.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HPE Ethernet 1Gb 4-port 331FLR Adapter
- \circ HPE Ethernet 1Gb 4-port 331T Adapter
- o HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware

Version: 1.30.0 (Recommended)

Filename: CP050425.compsig; CP050425.zip

Important Note!

This software package contains combo image v20.19.51 with the following firmware versions:

NIC	Boot Code Version	PXE Version	NCSI Version	UEFI Version	CCM Version
HPE Ethernet 1Gb 2-port 330i Adapter (22BD)	2.10	21.6.0	1.5.33	21.6.28	218.0.10.0
HPE Ethernet 1Gb 4-port 331i Adapter (22BE) HPE Ethernet 1Gb 4-port 331FLR Adapter HPE Ethernet 1Gb 4-port 331T Adapter	1.46	21.6.0	1.5.33	21.6.28	218.0.10.0
HPE Ethernet 1Gb 2-port 332i Adapter (22E8) HPE Ethernet 1Gb 2-port 332T Adapter	1.42	21.6.0	1.5.33	21.6.28	218.0.10.0

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses an abnormal reporting on link status of HPE 331i Adapter under IML log.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- O HPE Ethernet 1Gb 4-port 331FLR Adapter
- o HPE Ethernet 1Gb 4-port 331T Adapter
- O HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.2.6.0 (Recommended)

Filename: cp050426.compsig; cp050426.exe

Important Note!

HPE recommends *HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions*, version 219.0.1.0C or later, for use with this firmware.

This software package contains combo image v20.19.51 with the following firmware versions:

NIC	Boot Code Version	PXE Version	NCSI Version	UEFI Version	CCM Version
HPE Ethernet 1Gb 2-port 330i Adapter (22BD)	2.10	21.6.0	1.5.33	21.6.28	218.0.10.0
HPE Ethernet 1Gb 4-port 331i Adapter (22BE) HPE Ethernet 1Gb 4-port 331FLR Adapter	1.46	21.6.0	1.5.33	21.6.28	218.0.10.0

HPE Ethernet 1Gb 4-port 331T Adapter					
HPE Ethernet 1Gb 2-port 332i Adapter (22E8) HPE Ethernet 1Gb 2-port 332T Adapter	1.42	21.6.0	1.5.33	21.6.28	218.0.10.0

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses an abnormal reporting on link status of HPE 331i Adapter under IML log.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- O HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HPE Ethernet 1Gb 4-port 331FLR Adapter
- o HPE Ethernet 1Gb 4-port 331T Adapter
- o HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HPE Ethernet 1Gb 2-port 332T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for Linux (x64)

Version: 2021.10.01 (Recommended)

Filename: RPMS/x86_64/firmware-cna-emulex-2021.10.01-1.5.x86_64.compsig; RPMS/x86_64/firmware-cna-emulex-2021.01-1.5.x86_64.compsig; RPMS/x86_64/firmware-cna-emulex-2021.01-1.5.x86_64/firmware-cna-emulex-2021.01-1.5.x86_64.compsig; RPMS/x86_64/fi

emulex-2021.10.01-1.5.x86_64.rpm

Important Note!

This component is only supported on RHEL7u8, RHEL7u9, RHEL8u3, SLES12SP5, SLES15SP2 OS's.

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR- SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The OOB NIC driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Additional requirements:

The target environment must have the libsysfs or sysfsutils package installed prior to the installation of the firmware update kit. If not already present, the libsysfs or sysfsutils package can be obtained from the operating system installation media.

Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex HBAs/CNAs

Environment must be running the syslog daemon for the flash engine to run

Note: To enable the FCoE/iSCSI protocol on devices that support it, please install the appropriate Emulex FCoE/iSCSI driver. The FCoE protocol also requires the HPE Emulex FCoE Enablement Kit be installed. The drivers and enablement kit are also available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FCoE Driver Kit, reboot, and then install the Enablement Kit.

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a converged network adapter update component.

This component is only supported on RHEL7u8, RHEL7u9, RHEL8u3, SLES12SP5, SLES15SP2 OS's.

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for Microsoft Windows Server 2012R2(x64)

Version: 2021.10.01 **(Recommended)** Filename: cp049111.compsig; cp049111.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex NIC driver must be installed prior to this firmware component being identified by SUM for deployment. The latest driver is available on the HPE.com website at http://www.hpe.com/.

The FCoE/iSCSI OOB driver and FCoE enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

Updated CNA (XE100 series) firmware

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter			12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter			12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1336.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for Microsoft Windows Server 2016/2019(x64)

Version: 2021.10.01 (**Recommended**) Filename: cp048540.compsig; cp048540.exe

Important Note!

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex NIC driver must be installed prior to this firmware component being identified by SUM for deployment. The latest driver is available on the HPE.com website at http://www.hpe.com/.

The FCoE/iSCSI OOB driver and FCoE enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter			12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter			12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: CP048536.compsig; CP048536.zip

Important Note!

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter			12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR- SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7

Version: 2021.10.01 (**Recommended**) Filename: CP048537.compsig; CP048537.zip

Important Note!

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware version:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot BIOS
HPE FlexFabric 10Gb 2-port 556FLR-T Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	10Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E Dual Port Converged Network Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0
HPE CN1200E-T Dual Port Adapter	20Gb	12.0.1277.0	12.0.1345.0	12.0.1269.0	12.0.1171.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Intel Online Firmware Upgrade Utility for Linux x86_64

Version: 1.22.50 (Recommended)

Filename: firmware-nic-intel-1.22.50-1.1.x86_64.compsig; firmware-nic-intel-1.22.50-1.1.x86_64.rpm

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- O HPE Intel igb Drivers for Linux, versions 6.7.2 or later
- o HPE Intel ixgbe Drivers for Linux, versions 5.13.4 or later
- o HPE Intel i40e Drivers for Linux, versions 2.17.4 or later

Prerequisites

This package requires the appropriate driver for your network adapter to be installed and all Ethernet ports brought up before firmware can be updated.

o Follow the command line to bring up ethernet device:

ifup ethX or ifconfig ethX up or wicked ifup ethX

If local system doesn't configure any network interface for the adapter that are necessary then to create the network config file to bring up interface.

o For example in sles15sp1, To create ifcfg-ethX files under /etc/sysconfig/network/

Fixes

- This product addresses an issue where link flipping is seen with HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter.
- This product addresses an issue where the link speed isn't consistent with HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter when system shutdown.

Supported Devices and Features

This package supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 361i Adapter
- o HPE Ethernet 1Gb 2-port 361T Adapter
- O HPE Ethernet 1Gb 2-port 363i Adapter
- O HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 2-port 368i Adapter
- o HPE Ethernet 1Gb 4-port 366FLR Adapter
- O HPE Ethernet 1Gb 4-port 366i Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board
- HPE Ethernet 1Gb 4-port 366T Adapter
- O HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- O HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- O HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568i Adapter

HPE Intel Online Firmware Upgrade Utility for VMware

Version: 3.15.50 (Recommended)

Filename: CP049895.compsig; CP049895.zip

Important Note!

This software package contains the following firmware versions for the below listed supported network adapters:

NIC	EEPROM/NVM Version	OROM Version	Single NVM Version
HPE Ethernet 1Gb 2-port 361i Adapter	8000106F	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 361T Adapter	80001147	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 363i Adapter	80000D00	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366i Communication Board	80000EBF	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366i Adapter	8000105E	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366FLR Adapter	80001148	1.3089.0	N/A

HPE Ethernet 1Gb 4-port 366T Adapter	80001146	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 368i Adapter	80003373	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter	80003370	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 369i Adapter	80003371	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 560FLR- SFP+ Adapter	800009E0	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 560SFP+ Adapter	800009E1	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 561T Adapter	80000636	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 561FLR-T Adapter	800005B6	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 568i Adapter	80003372	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter	80003370	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter	80003370	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 563i Adapter	800035C0	1.1375.0	N/A
HPE Ethernet 10Gb 2-port 562FLR- SFP+ Adapter	8000B749	1.3089.0	10.57.2
HPE Ethernet 10Gb 2-port 562FLR-T Adapter	800016F1	1.3089.0	10.55.3
HPE Ethernet 10Gb 2-port 562SFP+ Adapter	8000B748	1.3089.0	10.57.2
HPE Ethernet 10Gb 2-port 562T Adapter	800016EF	1.3089.0	10.55.3

The combo image v1.3089.0 includes: Boot Agent: 1GbE - v1.5.89, 10GbE - v2.4.45, 40GbE - v1.1.31 & UEFI Drivers: 1GbE - v9.7.06, 10GbE - v8.1.00, 40GbE - v4.8.08

The combo image v1.1375.0 includes: Boot Agent: 1GbE - v1.5.72, 10GbE - v2.3.46, 40GbE - v1.0.21 & UEFI Drivers: 1GbE - v6.9.13, 10GbE - v5.0.20, 40GbE - v1.5.14

Single NVM Version is new firmware format which represent a unified version in place of the previously used EEPROM/NVM Version or OROM version.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

- This product addresses an issue where link flipping is seen with HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter.
- This product addresses an issue where the link speed isn't consistent with HPE Ethernet 10Gb
 2-port 568FLR-MMT Adapter when system shutdown.

Supported Devices and Features

This package supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 361i Adapter
- O HPE Ethernet 1Gb 2-port 361T Adapter
- O HPE Ethernet 1Gb 2-port 363i Adapter

- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- o HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 4-port 366FLR Adapter
- o HPE Ethernet 1Gb 4-port 366i Adapter
- O HPE Ethernet 1Gb 4-port 366i Communication Board
- o HPE Ethernet 1Gb 4-port 366T Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- o HPE Ethernet 10Gb 2-port 568i Adapter

HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.2.6.0 (Recommended)

Filename: cp050582.compsig; cp050582.exe

Important Note!

This software package contains the following firmware versions for the below listed supported network adapters:

NIC	EEPROM/NVM Version	OROM Version	Single NVM Version
HPE Ethernet 1Gb 2-port 361i Adapter	8000106F	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 361T Adapter	80001147	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 363i Adapter	80000D00	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366i Communication Board	80000EBF	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366i Adapter	8000105E	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366FLR Adapter	80001148	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 366T Adapter	80001146	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 368i Adapter	80003373	1.3089.0	N/A
HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter	80003370	1.3089.0	N/A
HPE Ethernet 1Gb 4-port 369i Adapter	80003371	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 560FLR- SFP+ Adapter	800009E0	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 560SFP+ Adapter	800009E1	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 561T Adapter	80000636	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 561FLR-T Adapter	800005B6	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 568i Adapter	80003372	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 568FLR- MMSFP+ Adapter	80003370	1.3089.0	N/A

HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter	80003370	1.3089.0	N/A
HPE Ethernet 10Gb 2-port 563i Adapter	800035C0	1.1375.0	N/A
HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	8000B749	1.3089.0	10.57.2
HPE Ethernet 10Gb 2-port 562FLR-T Adapter	800016F1	1.3089.0	10.55.3
HPE Ethernet 10Gb 2-port 562SFP+ Adapter	8000B748	1.3089.0	10.57.2
HPE Ethernet 10Gb 2-port 562T Adapter	800016EF	1.3089.0	10.55.3

The combo image v1.3089.0 includes: Boot Agent: 1GbE - v1.5.89, 10GbE - v2.4.45, 40GbE - v1.1.31 & UEFI Drivers: 1GbE - v9.7.06, 10GbE - v8.1.00, 40GbE - v4.8.08

The combo image v1.1375.0 includes: Boot Agent: 1GbE - v1.5.72, 10GbE - v2.3.46, 40GbE - v1.0.21 & UEFI Drivers: 1GbE - v6.9.13, 10GbE - v5.0.20, 40GbE - v1.5.14

Single NVM Version is new firmware format which represent an unified version in place of the previously used EEPROM/NVM Version or OROM version.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

This product is now supported Microsoft Windows Server 2022.

Supported Devices and Features

This package supports the following network adapters:

- O HPE Ethernet 1Gb 2-port 361i Adapter
- HPE Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 1Gb 2-port 363i Adapter
- o HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- O HPE Ethernet 1Gb 2-port 368i Adapter
- O HPE Ethernet 1Gb 4-port 366FLR Adapter
- O HPE Ethernet 1Gb 4-port 366i Adapter
- o HPE Ethernet 1Gb 4-port 366i Communication Board
- O HPE Ethernet 1Gb 4-port 366T Adapter
- o HPE Ethernet 1Gb 4-port 369i Adapter
- O HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- o HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- $\circ \qquad \text{HPE Ethernet 10Gb 2-port 562FLR-T Adapter}$
- O HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- o HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- o HPE Ethernet 10Gb 2-port 568i Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64

Version: 1.20.1 (Recommended)

Filename: firmware-nic-qlogic-flq-1.20.1-1.1.x86_64.compsig; firmware-nic-qlogic-flq-1.20.1-1.1.x86_64.rpm

HPE recommends *HPE QLogic FastLinQ 10/25/50GbE Drivers for Linux*, versions 8.55.15.0-1 or later, for use with the firmware in this product.

Prerequisites

This package requires the appropriate driver for your network adapter to be installed and all Ethernet ports brought up before firmware can be updated.

- Follow the command line to bring up ethernet device:
 - # ifup ethX or ifconfig ethX up or wicked ifup ethX

If local system doesn't configure any network interface for the adapter that are necessary then to create the network config file to bring up interface.

o For example in sles15sp1, To create ifcfg-ethX files under /etc/sysconfig/network/

Fixes

This product addresses the problem that the MAC being modified after Firmware update

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter
- o HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- O HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- o HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- o HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware

Version: 4.15.1 (Recommended)

Filename: CP050213.compsig; CP050213.zip

Important Note!

HPE recommends *HPE QLogic FastLinQ 10/25/50GbE Multifunction Drivers for VMware*, versions 2022.03.23 or later, for use with this firmware.

This software package contains combo image version v8.55.27 includes:

■ Boot Code (MFW): 8.55.43.0

UEFI: 4.1.13.1PXE: 2.0.19

The users will only see the combo image versions in the interactive mode firmware update or while using HPSUM/SPP to update the firmware on the supported adapters.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses the problem that the MAC being modified after Firmware update

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.2.6.0 (Recommended)

Filename: cp050214.compsig; cp050214.exe

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

 HPE QLogic FastLinQ 10/25/50GbE Driver for Windows Server x64 Editions, versions 8.58.20.0

This combo image version v8.55.27 includes:

o Boot Code (MFW): 8.55.43.0

UEFI: 4.1.13.1PXE: 2.0.19

The users will only see the combo image versions in the interactive mode firmware update or while using HPSUM/SPP to update the firmware on the supported adapters.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

<u>Fixes</u>

This product addresses the problem that the MAC being modified after Firmware update

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.30.2 (Recommended)

Filename: firmware-nic-qlogic-nx2-2.30.2-1.1.x86_64.compsig; firmware-nic-qlogic-nx2-2.30.2-

1.1.x86_64.rpm

Important Note!

HPE recommends *HPE QLogic NX2 10/20GbE Multifunction Drivers for Linux*, versions 7.15.02 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate driver for your network adapter be installed an all Ethernet ports brought up (*ifup ethX or ifconfig ethX up or wicked ifup ethX*) before firmware can be updated.

If local system doesn't configure any network interface for the adapter that are necessary to create the network config file to bring up interface.

- For example in sles15sp1, To create ifcfg-ethX files under /etc/sysconfig/network/.

Fixes

 This product addresses a cosmetic change in the adapter configuration page to reflect that DCBx is enabled and as long as LLDP is enabled.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 530T Adapter
- HPE Ethernet 10Gb 2-port 533FLR-T Adapter
- o HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for VMware

Version: 1.30.2 (Recommended)

Filename: CP050210.compsig; CP050210.zip

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for VMware, versions 2022.03.23 or later, for use with this firmware.

This software package contains combo image v7.19.02 with the following firmware versions:

NIC	Boot Code Version	PXE Version	UEFI Version	iSCSI Version	FCoE Version	CCM Version	L2 Version
HPE Ethernet 10Gb 2-port 530SFP+ Adapter HPE Ethernet 10Gb 2-port 530T Adapter	7.16.05	7.14.13	8.9.2	n/a	n/a	7.14.4	7.12.25
HPE Ethernet 10Gb 2-port 533FLR-T Adapter HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter HPE FlexFabric 10Gb 4-port 536FLR-T Adapter HPE StoreFabric CN1100R Dual Port Converged Network Adapter HPE StoreFabric CN1100R-T Converged Network Adapter	7.16.05	7.14.13	8.9.2	7.14.0	7.14.3	7.14.4	7.12.25

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

 This product addresses a cosmetic change in the adapter configuration page to reflect that DCBx is enabled and as long as LLDP is enabled.

Supported Devices and Features

This product supports the following network adapters:

- O HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 530T Adapter
- o HPE Ethernet 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- o HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.2.6.0 (Recommended)

Filename: cp050211.compsig; cp050211.exe

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

 HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server x64 Editions, version 7.13.206.0 or later

This software package contains combo image v7.19.02 with the following firmware versions:

NIC	Boot Code Version	PXE Version	UEFI Version	iSCSI Version	FCoE Version	CCM Version	L2 Version
HPE Ethernet 10Gb 2-port 530SFP+ Adapter HPE Ethernet 10Gb 2-port 530T Adapter	7.16.05	7.14.13	8.9.2	n/a	n/a	7.14.4	7.12.25
HPE Ethernet 10Gb 2-port 533FLR-T Adapter HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter HPE FlexFabric 10Gb 4-port 536FLR-T Adapter HPE StoreFabric CN1100R Dual Port Converged Network Adapter HPE StoreFabric CN1100R-T Converged Network Adapter	7.16.05	7.14.13	8.9.2	7.14.0	7.14.3	7.14.4	7.12.25

The users will only see the combo image versions in the interactive mode firmware update or while using HPESUM/SPP to update the firmware on the supported adapters.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

- This product addresses the WOL failure on HPE Ethernet 10Gb 2-port 533FLR-T Adapter after shutting down from Windows.
- This product addresses a cosmetic change in the adapter configuration page to reflect that DCBx is enabled and as long as LLDP is enabled.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 530SFP+ Adapter
- O HPE Ethernet 10Gb 2-port 530T Adapter
- o HPE Ethernet 10Gb 2-port 533FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Converged Network Adapter

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters

Version: 1.0.10 (Recommended)

Filename: CP046583.compsig; CP046583.zip

Important Note!

The Firmware Upgrade Utility has been split into 2 packages for Mellanox Ethernet Only NIC adpaters, one supporting Synergy platforms and the other supporting ProLiant and Apollo platforms. This package supports Mellanox Ethernet Only NIC adapters on ProLiant and Apollo servers.

Prerequisites

Use iLO5 firmware version 2.30 or higher with ConnectX4/ConnectX5 firmware version 14.28.1002/16.28.1002 respectively. Thermal sensor reporting on the adapter will not be functional with older versions of iLO5 firmware.

Fixes

Fixes included in firmware version 2.42.5044:

 An issue that prevented the firmware from detecting a link_down event thus preventing the IB bond interface from going to a failover mode.

The following issues have been fixed in version 14.31.1200:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode.
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.

Additional Fixes included in version 14.31.1200:

- Fixed the rate select mechanism in QSFP modules.
- o Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

The following issues have been fixed in version 16.31.1014:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode.
- An assert that was caused when trying to open 1024 functions on the device and the maximum number of functions was 1023.
- Occasional performance issues related to RC QPs using E2E-credits (not connected to SRQ and doing send/receive traffic) when the ROCE_ACCL tx_window was enabled.
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- o A rare issue that caused RX pipe to hang.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.
- CRT_DCR with index larger than 1 << 21 occasionally collided with the CRT_SW_RESERVED address.
- An issue that caused the TX queue to get into an unresponsive state when the VF rate limiter was set.

Additional Fixes included in version 16.31.1014:

- Disabled the CNP counter "rp_cnp_ignored " (triggered by OOS (out-of-sequence)) when all ports are IB.
- o Fixed the TMP421 sensor temperature reporting.
- o Fixed the rate select mechanism in QSFP modules.
- Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

Enhancements

Firmware for the following devices are updated to 2.42.5044:

```
779799-B21 (HPE Ethernet 10G 2-port 546FLR-SFP+ Adapter) 779793-B21 (HPE Ethernet 10G 2-port 546SFP+ Adapter)
```

Firmware for the following devices are updated to 14.31.1200:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.31.1200:

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.31.1014:

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.31.1200:

 NVconfig per Port for a Specific Finisar Module: Added a new NVconfig per Port for a specific Finisar module. This new NVconfig sets the port to work in AN mode and sets the module to No DME. This change does not affect the speed logic, only the FEC logic (FEC override).
 Note: If the port does not go up, switch to Force mode.

New features and changes in version 16.31.1014:

- \circ NIC scheduling feature support has been disabled for non-privileged functions.
- o Implemented a new NC-SI command get_debug_info to get mstdump via the NC-SI protocol to debug a device if the PCI link fails for any given reason.
- Added support for Enabling/Disabling NIC and RDMA (port/partition) via the UEFI HII system settings.
 - **Note:** Values set in this option only take effect when is Ethernet mode.
- \circ Increased the maximum number of MSIX per VF to 127.
- Asymmetrical MSIX Configuration: This feature allows the device to be configured with a different number of MSIX

vectors per physical PCI functions.

To use this feature, please follow these steps:

- Clear NUM PF MSIX VALID to disable global symmetrical MSIX configuration.
- Set PF_NUM_PF_MSIX_VALID to enable asymmetrical per Physical Function MSIX configuration.
- Configure PF_NUM_PF_MSIX per physical PCI function.
- Support for RDMA partitioning and RDMA counters in IB mode.
- A new bit ("data_in_order") was added to query the QP and allow a process/library to detect when the AR is enabled.
- o A new flex parser to support GENEVE hardware offload and ICMP.
- When the non-page-supplier-FLR funcion is initiated, the firmware triggers a page event to the page supplier to indicate that all pages should be returned for the FLR function.
 Pages are returned by the driver to the kernel without issuing the MANAGE_PAGES commands to the firmare.
- o Enabled UID 0 to create resources with UMEM (User Memory).
- Receiving and sending native IB packets from/to the software (including all headers) via raw IBL2 OPs.
- RX RDMA NIC flow table on an IB port. Now the software can steer native IB packets to raw IB receive queues according to the DLID and the DQPN.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE000000014

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on

VMware ESXi 6.5

Version: 1.0.7 (Recommended)

Filename: CP045902.compsig; CP045902.zip

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5056, 2.42.5700:

 When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.

Workaround: Reboot the server.

- Enabling/disabling cq_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit.
 Meaning, the orange LED will not be active while the ETH link is in an idle mode.
- In SR-IOV setup, using mlxconfig when the Packet Filter (PF) is passed through to a VM requires a reboot of the Hypervisor.
- Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot.

Workaround: Reboot the server.

- On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/ driver utilities that read the GUID via device firmware (e.g., using ibstat). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value should be used.
 - Workaround: Please use the GUID value returned by the fabric/driver utilities (not 0xfffff).
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX-3 adapters.
- o On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- RHEL6.3 Inbox driver causes kernel panic when SRIOV is enabled on VPI cards due to driver compatibility issue.
- o **Workaround**: Set the "do_- sense=false" parameter in the [IB_TAB] i.
- In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's,

preventing them from operating.

Workaround: Enable SR-IOV in the BIOS.

- Mellanox Firmware Tools (MFT) might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.
 - Workaround: Clear the semaphore using MFT command: 'flint -clear_semaphore'
- o Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module.
- Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV.
- o Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, the following message is displayed due to the mlxconfig tool: You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do you want to continue? (y/n) [n]: y You are trying to restore default configuration, do you want to continue? (y/n) [n]: y.
- o DMFS should not be enabled when working with InfiniBand on MLNX OFED-2.0.3
- ConnectX®-3 Pro VF device ID is presented the same as ConnectX®-3 VF device ID due to driver limitations.

Workaround: Use the physical function device ID to identify the device.

- Virtual Product Data (VPD) read-only fields are writable.
 - **Workaround**: Do not write to read-only fields if you wish to preserve them.
- When working in Virtual Path Identifier (VPI) mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.
- O CQ and EQ cannot be configured to different stride sizes.
- Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
 - **Workaround**: 1. Unplug the cable from the switch 2. Restart driver 3. Change the protocol via the appropriate tools.
- Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
- Adapter card MCX349A-XCCN does not respond to ethtool "identify" command (ethtool -p/-identify).
- Remote Desktop Protocol (RDP) over IPv6 is currently not functional.
 - **Workaround:** Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE)
- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule".
- Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
- o 56GbE link is not raised when using 100GbE optic cables.
- When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx4_en_get_drvinfo() that is called from asynchronous event handler.
- When running ibdump, loopback traffic is mirroring into the kernel driver.
- MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.
- The adapter card cannot raise a 10G link vs. a 40GE capable switch port in C7000 enclosure.
 It can raise a 1G Link and only if the switch port allows it.
- MTUSB communication via I2C header on primary I2C bus is supported only in live-fish mode.

Fixes

Fixes in version 2.42.5000:

- o PortRcvPkts counter was prevented from being cleared after resetting it.
- The system Timed Out on the configuration cycle of the Virtual Functions (VFs) when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.
- The server hangs and results in NMI when running "mlxfwtop -d mt4103_pci_cr0" while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.
- o In flow_steering, BMC could not receive a ping over IPV6 after running bmc_reboot.
- While closing the HCA, the RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.

- The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.
- o ibdump could not capture all MADs packets.
- o link did not go up after reboot.
- Fixed a rare issue that cause the PCIe configuration cycle that arrived during the time of sw reset to generate 2 completions.
- Network Controller Sideband Interface (NC-SI) did not work when adding the disable_static_steering_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

Fixes in version 2.42.5056:

 Fixed an issue that resulted in reading from invalid I/O address on handover from UEFI boot to OS boot, when a port was configured as InfiniBand on a VPI adapter device.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

764282-B21 764286-B21

Firmware for the following devices are updated to 2.42.5056:

764283-B21 764284-B21

Firmware for the following device is updated to 2.42.5700:

764285-B21

New features in firmware version 2.42.5000:

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

New features and changes in firmware version 2.42.5700.

 Modified the mlx_cmd_get_mlx_link_status command return value to return "Link Type = Ethernet" in Ethernet adapter cards.

Supported Devices and Features

Supported Devices:

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HPE_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HPE_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HPE_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HPE_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HPE_1390110023

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters

Version: 1.0.6 (Recommended)

Filename: CP046584.compsig; CP046584.zip

Important Note!

The Firmware Upgrade Utility has been split into 2 packages for Mellanox Ethernet Only NIC adpaters, one supporting Synergy platforms and the other supporting ProLiant and Apollo platforms. This package supports Mellanox Ethernet Only NIC adapters on ProLiant and Apollo servers.

Prerequisites

Use iLO5 firmware version 2.30 or higher with ConnectX4/ConnectX5 firmware version 14.28.1002/16.28.1002 respectively. Thermal sensor reporting on the adapter will not be functional with older versions of iLO5 firmware.

Fixes

Fixes included in firmware version 2.42.5044:

 An issue that prevented the firmware from detecting a link_down event thus preventing the IB bond interface from going to a failover mode.

The following issues have been fixed in version 14.31.1200:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.

Additional Fixes included in version 14.31.1200:

- o Fixed the rate select mechanism in QSFP modules.
- o Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

The following issues have been fixed in version 16.31.1014:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode.
- An assert that was caused when trying to open 1024 functions on the device and the maximum number of functions was 1023.
- Occasional performance issues related to RC QPs using E2E-credits (not connected to SRQ and doing send/receive traffic) when the ROCE_ACCL tx_window was enabled.
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- A rare issue that caused RX pipe to hang.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.
- CRT_DCR with index larger than 1 << 21 occasionally collided with the CRT_SW_RESERVED address.
- An issue that caused the TX queue to get into an unresponsive state when the VF rate limiter was set.

Additional Fixes included in version 16.31.1014:

- Disabled the CNP counter "rp_cnp_ignored " (triggered by OOS (out-of-sequence)) when all ports are IB.
- o Fixed the TMP421 sensor temperature reporting.
- o Fixed the rate select mechanism in QSFP modules.
- o Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

Enhancements

Firmware for the following devices are updated to 2.42.5044:

779799-B21 (HPE Ethernet 10G 2-port 546FLR-SFP+ Adapter) 779793-B21 (HPE Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.31.1200:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.31.1200:

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.31.1014:

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.31.1200:

NVconfig per Port for a Specific Finisar Module: Added a new NVconfig per Port for a specific Finisar module. This new NVconfig sets the port to work in AN mode and sets the module to No DME. This change does not affect the speed logic, only the FEC logic (FEC override).
 Note: If the port does not go up, switch to Force mode.

New features and changes in version 16.31.1014:

- o NIC scheduling feature support has been disabled for non-privileged functions.
- o Implemented a new NC-SI command get_debug_info to get mstdump via the NC-SI protocol to debug a device if the PCI link fails for any given reason.
- Added support for Enabling/Disabling NIC and RDMA (port/partition) via the UEFI HII system settings.

Note: Values set in this option only take effect when is Ethernet mode.

- o Increased the maximum number of MSIX per VF to 127.
- Asymmetrical MSIX Configuration: This feature allows the device to be configured with a different number of MSIX

vectors per physical PCI functions.

To use this feature, please follow these steps:

- Clear NUM_PF_MSIX_VALID to disable global symmetrical MSIX configuration.
- Set PF_NUM_PF_MSIX_VALID to enable asymmetrical per Physical Function MSIX configuration.
- Configure PF_NUM_PF_MSIX per physical PCI function.
- Support for RDMA partitioning and RDMA counters in IB mode.
- A new bit ("data_in_order") was added to query the QP and allow a process/library to detect when the AR is enabled.
- A new flex parser to support GENEVE hardware offload and ICMP.
- When the non-page-supplier-FLR funcion is initiated, the firmware triggers a page event to the page supplier to indicate that all pages should be returned for the FLR function.
 Pages are returned by the driver to the kernel without issuing the MANAGE_PAGES commands to the firmare.
- o Enabled UID 0 to create resources with UMEM (User Memory).
- Receiving and sending native IB packets from/to the software (including all headers) via raw IBL2 QPs.
- RX RDMA NIC flow table on an IB port. Now the software can steer native IB packets to raw IB receive queues according to the DLID and the DOPN.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023

779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE000000014

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 6.7

Version: 1.0.5 (Recommended)

Filename: CP045903.compsig; CP045903.zip

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5056, 2.42.5700:

 When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.

Workaround: Reboot the server.

- Enabling/disabling cq_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit.
 Meaning, the orange LED will not be active while the ETH link is in an idle mode.
- In SR-IOV setup, using mlxconfig when the Packet Filter (PF) is passed through to a VM requires a reboot of the Hypervisor.
- Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot.

Workaround: Reboot the server.

- On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/ driver utilities that read the GUID via device firmware (e.g., using ibstat). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value should be used.
 - Workaround: Please use the GUID value returned by the fabric/driver utilities (not 0xfffff).
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX-3 adapters.
- On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- RHEL6.3 Inbox driver causes kernel panic when SRIOV is enabled on VPI cards due to driver compatibility issue.
- Workaround: Set the "do_- sense=false" parameter in the [IB_TAB] i.
- $\circ\quad$ In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.

Workaround: Enable SR-IOV in the BIOS.

- Mellanox Firmware Tools (MFT) might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.
 - Workaround: Clear the semaphore using MFT command: 'flint -clear_semaphore'
- Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module.
- Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only)..
 PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV.
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, the following message is displayed due to the mlxconfig tool: You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do you want to continue? (y/n) [n]: y You are trying to restore default configuration, do you want to continue? (y/n) [n]: y.
- o DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
- ConnectX®-3 Pro VF device ID is presented the same as ConnectX®-3 VF device ID due to driver limitations.

Workaround: Use the physical function device ID to identify the device.

- Virtual Product Data (VPD) read-only fields are writable.
 - **Workaround**: Do not write to read-only fields if you wish to preserve them.
- When working in Virtual Path Identifier (VPI) mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- Setting the device to 128Byte CQ/EQ stride will cause misbehaviour of sideband management resulting in communication loss.
- o CQ and EQ cannot be configured to different stride sizes.
- Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
 - **Workaround**: 1. Unplug the cable from the switch 2. Restart driver 3. Change the protocol via the appropriate tools.
- Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
- Adapter card MCX349A-XCCN does not respond to ethtool "identify" command (ethtool -p/-identify).
- o Remote Desktop Protocol (RDP) over IPv6 is currently not functional.
 - **Workaround:** Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE)
- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule".
- Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
- 56GbE link is not raised when using 100GbE optic cables.
- When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx4_en_get_drvinfo() that is called from asynchronous event handler.
- When running ibdump, loopback traffic is mirroring into the kernel driver.
- MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.
- The adapter card cannot raise a 10G link vs. a 40GE capable switch port in C7000 enclosure.
 It can raise a 1G Link and only if the switch port allows it.
- MTUSB communication via I2C header on primary I2C bus is supported only in live-fish mode

Fixes

Fixes in version 2.42.5000:

- PortRcvPkts counter was prevented from being cleared after resetting it.
- The system Timed Out on the configuration cycle of the Virtual Functions (VFs) when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.
- The server hangs and results in NMI when running "mlxfwtop -d mt4103_pci_cr0" while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.
- In flow_steering, BMC could not receive a ping over IPV6 after running bmc_reboot.
- While closing the HCA, the RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.
- The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.
- o ibdump could not capture all MADs packets.
- o link did not go up after reboot.
- Fixed a rare issue that cause the PCIe configuration cycle that arrived during the time of sw_reset to generate 2 completions.
- Network Controller Sideband Interface (NC-SI) did not work when adding the disable_static_steering_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

Fixes in version 2.42.5056:

 Fixed an issue that resulted in reading from invalid I/O address on handover from UEFI boot to OS boot, when a port was configured as InfiniBand on a VPI adapter device.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

764282-B21 764286-B21

Firmware for the following devices are updated to 2.42.5056:

764283-B21 764284-B21

Firmware for the following device is updated to 2.42.5700:

764285-B21

New features in firmware version 2.42.5000:

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

New features and changes in firmware version 2.42.5700.

 Modified the mlx_cmd_get_mlx_link_status command return value to return "Link Type = Ethernet" in Ethernet adapter cards.

Supported Devices and Features

Supported Devices:

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HPE_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HPE_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HPE_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HPE_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HPE_1390110023

Online Firmware Upgrade Utility (ESXi 7.0) for HPE Mellanox Ethernet only adapters

Version: 1.0.2 (Recommended)

Filename: CP046592.compsig; CP046592.zip

Important Note!

The Firmware Upgrade Utility has been split into 2 packages for Mellanox Ethernet Only NIC adpaters, one supporting Synergy platforms and the other supporting ProLiant and Apollo platforms. This package supports Mellanox Ethernet Only NIC adapters on ProLiant and Apollo servers.

Prerequisites

Use iLO5 firmware version 2.30 or higher with ConnectX4/ConnectX5 firmware version 14.28.1002/16.28.1002 respectively. Thermal sensor reporting on the adapter will not be functional with older versions of iLO5 firmware.

Fixes

Fixes included in firmware version 2.42.5044:

 An issue that prevented the firmware from detecting a link_down event thus preventing the IB bond interface from going to a failover mode.

The following issues have been fixed in version 14.31.1200:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode.
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.

Additional Fixes included in version 14.31.1200:

- o Fixed the rate select mechanism in QSFP modules.
- Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

The following issues have been fixed in version 16.31.1014:

- TX PRBS was not changed even after reconfiguring it, all PRBS mode were enabled in test mode.
- An assert that was caused when trying to open 1024 functions on the device and the maximum number of functions was 1023.
- Occasional performance issues related to RC QPs using E2E-credits (not connected to SRQ and doing send/receive traffic) when the ROCE_ACCL tx_window was enabled.
- A fatal error occurred and eventually resulted in the HCA to get into an unresponsive state when a packet was larger than a strided receive WQE that was being scattered.
- A rare issue that caused RX pipe to hang.
- The resource number size (a 64 bit number) was overwritten with a 32 bit number and erased the high bits when de-allocating the resource number.
- CRT_DCR with index larger than 1 << 21 occasionally collided with the CRT_SW_RESERVED address
- An issue that caused the TX queue to get into an unresponsive state when the VF rate limiter was set.

Additional Fixes included in version 16.31.1014:

- Disabled the CNP counter "rp_cnp_ignored" (triggered by OOS (out-of-sequence)) when all ports are IB.
- \circ Fixed the TMP421 sensor temperature reporting.
- Fixed the rate select mechanism in QSFP modules.
- o Fixed classification issues for "Passive" cables to be more robust.
- Initialized the rate table in the static configuration so it will be configured at the link-not-up scenarios.

Enhancements

Firmware for the following devices are updated to 2.42.5044:

779799-B21 (HPE Ethernet 10G 2-port 546FLR-SFP+ Adapter) 779793-B21 (HPE Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.31.1200:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.31.1200:

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.31.1014:

New features and changes in version 14.31.1200:

 NVconfig per Port for a Specific Finisar Module: Added a new NVconfig per Port for a specific Finisar module. This new NVconfig sets the port to work in AN mode and sets the module to No DME. This change does not affect the speed logic, only the FEC logic (FEC override).
 Note: If the port does not go up, switch to Force mode.

New features and changes in version 16.31.1014:

- o NIC scheduling feature support has been disabled for non-privileged functions.
- o Implemented a new NC-SI command get_debug_info to get mstdump via the NC-SI protocol to debug a device if the PCI link fails for any given reason.
- Added support for Enabling/Disabling NIC and RDMA (port/partition) via the UEFI HII system settings.

Note: Values set in this option only take effect when is Ethernet mode.

- Increased the maximum number of MSIX per VF to 127.
- Asymmetrical MSIX Configuration: This feature allows the device to be configured with a different number of MSIX

vectors per physical PCI functions.

To use this feature, please follow these steps:

- Clear NUM_PF_MSIX_VALID to disable global symmetrical MSIX configuration.
- Set PF_NUM_PF_MSIX_VALID to enable asymmetrical per Physical Function MSIX configuration.
- Configure PF NUM PF MSIX per physical PCI function.
- Support for RDMA partitioning and RDMA counters in IB mode.
- A new bit ("data_in_order") was added to query the QP and allow a process/library to detect when the AR is enabled.
- o A new flex parser to support GENEVE hardware offload and ICMP.
- When the non-page-supplier-FLR funcion is initiated, the firmware triggers a page event to the page supplier to indicate that all pages should be returned for the FLR function. Pages are returned by the driver to the kernel without issuing the MANAGE_PAGES commands to the firmare.
- o Enabled UID 0 to create resources with UMEM (User Memory).
- Receiving and sending native IB packets from/to the software (including all headers) via raw IBL2 OPs.
- RX RDMA NIC flow table on an IB port. Now the software can steer native IB packets to raw IB receive queues according to the DLID and the DQPN.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE000000014

Online Firmware Upgrade Utility (ESXi 7.0) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 7.0

Version: 1.0.1 (Recommended)

Filename: CP045904.compsig; CP045904.zip

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5056, 2.42.5700:

When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.

Workaround: Reboot the server.

- o Enabling/disabling cq_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit.
 Meaning, the orange LED will not be active while the ETH link is in an idle mode.
- In SR-IOV setup, using mlxconfig when the Packet Filter (PF) is passed through to a VM requires a reboot of the Hypervisor.
- Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot.

Workaround: Reboot the server.

On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/ driver utilities that read the GUID via device firmware (e.g., using ibstat). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value should be used.

Workaround: Please use the GUID value returned by the fabric/driver utilities (not 0xfffff).

- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX-3 adapters.
- o On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- RHEL6.3 Inbox driver causes kernel panic when SRIOV is enabled on VPI cards due to driver compatibility issue.
- Workaround: Set the "do_- sense=false" parameter in the [IB_TAB] i.
- In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.

Workaround: Enable SR-IOV in the BIOS.

Mellanox Firmware Tools (MFT) might leave the flash semaphore locked if the tool operation
is forced stopped. The locked semaphore prevents the firmware from accessing the flash and
causes firmware hang.

Workaround: Clear the semaphore using MFT command: 'flint -clear_semaphore'

- Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module.
- Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- o PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV.
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, the following message is displayed due to the mlxconfig tool: You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do you want to continue? (y/n) [n]: y You are trying to restore default configuration, do you want to continue? (y/n) [n]: y.
- O DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
- ConnectX®-3 Pro VF device ID is presented the same as ConnectX®-3 VF device ID due to driver limitations.

Workaround: Use the physical function device ID to identify the device.

- O Virtual Product Data (VPD) read-only fields are writable.
 - Workaround: Do not write to read-only fields if you wish to preserve them.
- When working in Virtual Path Identifier (VPI) mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- Setting the device to 128Byte CQ/EQ stride will cause misbehaviour of sideband management resulting in communication loss.
- CQ and EQ cannot be configured to different stride sizes.
- Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.

Workaround: 1. Unplug the cable from the switch 2. Restart driver 3. Change the protocol via the appropriate tools.

- Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
- Adapter card MCX349A-XCCN does not respond to ethtool "identify" command (ethtool -p/-identify).
- o Remote Desktop Protocol (RDP) over IPv6 is currently not functional.
 - **Workaround:** Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE)
- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule".
- Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
- o 56GbE link is not raised when using 100GbE optic cables.
- When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx4_en_get_drvinfo() that is called from asynchronous event handler.
- \circ When running ibdump, loopback traffic is mirroring into the kernel driver.

- o MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.
- The adapter card cannot raise a 10G link vs. a 40GE capable switch port in C7000 enclosure.
 It can raise a 1G Link and only if the switch port allows it.
- MTUSB communication via I2C header on primary I2C bus is supported only in live-fish mode.

Fixes

Fixes in version 2.42.5000:

- o PortRcvPkts counter was prevented from being cleared after resetting it.
- The system Timed Out on the configuration cycle of the Virtual Functions (VFs) when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.
- The server hangs and results in NMI when running "mlxfwtop -d mt4103_pci_cr0" while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.
- o In flow steering, BMC could not receive a ping over IPV6 after running bmc reboot.
- While closing the HCA, the RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.
- The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.
- o ibdump could not capture all MADs packets.
- o link did not go up after reboot.
- Fixed a rare issue that cause the PCIe configuration cycle that arrived during the time of sw reset to generate 2 completions.
- Network Controller Sideband Interface (NC-SI) did not work when adding the disable_static_steering_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

Fixes in version 2.42.5056:

 Fixed an issue that resulted in reading from invalid I/O address on handover from UEFI boot to OS boot, when a port was configured as InfiniBand on a VPI adapter device.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

764282-B21 764286-B21

Firmware for the following devices are updated to 2.42.5056:

764283-B21 764284-B21

Firmware for the following device is updated to 2.42.5700:

764285-B21

New features in firmware version 2.42.5000:

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

New features and changes in firmware version 2.42.5700.

 Modified the mlx_cmd_get_mlx_link_status command return value to return "Link Type = Ethernet" in Ethernet adapter cards.

Supported Devices and Features

Supported Devices:

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HPE_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HPE_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HPE_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HPE_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HPE_1390110023

Online Firmware Upgrade Utility (Linux x86_64) for HPE Intel OPA adapters

Version: 1.9.2 (Recommended)

Filename: firmware-nic-intel-opa-hfi-1.9.2-1.1.x86_64.compsig; firmware-nic-intel-opa-hfi-1.9.2-

1.1.x86_64.rpm

Prerequisites

The smart component requires Intel IFS or Basic software v10.9.2.0.9 to be installed as a prerequisite.

Fixes

Following issues have been resolved in version 1.9.2:

 Due to a SLES 15 kernel setting, hfi1_eprom cannot work while the HFI driver is loaded. The tool and driver are mutually exclusive.

Enhancements

Changes and New Features in version 1.9.2:

- Added hfi1_eprom v10_9_2_0_0.
- Loader ROM HfiPcieGen3Loader_1.9.2.0.0.rom and driver EFI HfiPcieGen3_1.9.2.0.0.efi were added.

Supported Devices and Features

HP Part Number	OPA HFI Adapter Type	SSID
829334-B21	HPE 100Gb 1-Port OP101 QSFP28 x8 OPA Adapter	E7
829335-B21	HPE 100Gb 1-Port OP101 QSFP28 x16 OPA Adapter	E8
851226-B21	HPE Apollo 100Gb 1-port Intel Omni-Path Architecture 860z Mezzanine FIO Adapter	21C

Online Firmware Upgrade Utility (Linux $x86_64$) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Linux $x86_64$ platform

Version: 1.0.12 (Recommended)

 $Filename: firmware-hca-mellanox-vpi-eth-ib-1.0.12-1.1.x86_64.compsig; firmware-hca-mellanox-vpi-eth-ib-1.0.x86_64.compsig; firmware-hca-mellanox-vpi-eth-ib$

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5056, 2.42.5700:

 When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.

Workaround: Reboot the server.

- o Enabling/disabling cq_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit.
 Meaning, the orange LED will not be active while the ETH link is in an idle mode.
- In SR-IOV setup, using mlxconfig when the Packet Filter (PF) is passed through to a VM requires a reboot of the Hypervisor.
- Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot.

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- o On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- RHEL6.3 Inbox driver causes kernel panic when SRIOV is enabled on VPI cards due to driver compatibility issue.
- Workaround: Set the "do_- sense=false" parameter in the [IB_TAB] i.
- \circ In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.

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- Mellanox Firmware Tools (MFT) might leave the flash semaphore locked if the tool operation
 is forced stopped. The locked semaphore prevents the firmware from accessing the flash and
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- Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module.
- O Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- \circ $\,$ PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV.
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- DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
- ConnectX®-3 Pro VF device ID is presented the same as ConnectX®-3 VF device ID due to driver limitations.

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- Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
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- Remote Desktop Protocol (RDP) over IPv6 is currently not functional.
 - **Workaround**: Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE)
- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule".
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- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.

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- MTUSB communication via I2C header on primary I2C bus is supported only in live-fish mode.

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Fixes in version 2.42.5000:

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- The system Timed Out on the configuration cycle of the Virtual Functions (VFs) when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.
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- While closing the HCA, the RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.
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 Fixed an issue that resulted in reading from invalid I/O address on handover from UEFI boot to OS boot, when a port was configured as InfiniBand on a VPI adapter device.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

764282-B21 764286-B21

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Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Windows x86 64 platform

Version: 1.0.0.12 (Recommended)

Filename: cp045905.compsig; cp045905.exe

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5056, 2.42.5700:

- When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
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Firmware - PCIe NVMe Storage Disk

Top

Online NVMe SSD Flash Component for Linux (x64) - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN and VK001920KWDUH Drives

Version: HPK4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b45e49679c-HPK4-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b45e49679c-HPK4-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ, MO2000KEFHR, MT0800KEXUU and MT1600KEXUV Drives

Version: HPK4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-2a5b65f157-HPK4-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2a5b65f157-HPK4-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - VS000480KWDUP, VS000960KWDUQ, MS000400KWDUR

and MS000800KWDUT Drives

Version: HPK4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-95a2e5abcb-HPK4-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-95a2e5abcb-HPK4-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - ET000750KWJTF, E0000750KWTXC and

EO000375KWJUC Drives

Version: 4ICSHPK4 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-c4355d15c4-4ICSHPK4-3.1.x86_64.compsig;

 $rpm/RPMS/x86_64/firmware-hdd-c4355d15c4-4ICSHPK4-3.1.x86_64.rpm$

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - KCD6XVUL800G, KCD6XVUL1T60, KCD6XVUL3T20, KCD6XVUL6T40, KCD6XVUL12T8, KCD6XLUL960G, KCD6XLUL1T92, KCD6XLUL3T84, KCD6XLUL7T68 and KCD6XLUL15T3 Drives

Version: GPK3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-6fc985bd3b-GPK3-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6fc985bd3b-GPK3-2.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - KCM6XVUL800G, KCM6XVUL1T60, KCM6XVUL3T20, KCM6XVUL6T40, KCM6XRUL960G, KCM6XRUL1T92, KCM6XRUL3T84 and KCM6XRUL7T68 Drives Version: GPK3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-3815d4b024-GPK3-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3815d4b024-GPK3-2.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - L00400KEFJQ, L00800KEFJR, L01600KEFJT, L02000KEFJU, LT0800KEXVA, LT1600KEXVB and LT2000KEXVC Drives

Version: HPK4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d64642c780-HPK4-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d64642c780-HPK4-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - MK000800KWWFE, MK001600KWWFF, MK003200KWWFH, MK006400KWWFK, VK000960KWWFL, VK001920KWWFN, VK003840KWWFP and VK007680KWWFQ Drives

Version: HPK3 (F) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-54addf5312-HPK3-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-54addf5312-HPK3-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- This FW change resolves a MCTP VDM compliance issue seen by iLO version 2.30.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111061en_us

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - M0001600KWVNB, M0003200KWVNC, M0006400KWVND, MT001600KWSTB, MT003200KWSTC and MT006400KWSTD Drives Version: HPK3 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-cea219e4b1-HPK3-3.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-cea219e4b1-HPK3-3.1.x86 64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - MO001600KWZQP and MO003200KWZQQ Drives

Version: HPK5 (D) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-95b6ae2e85-HPK5-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-95b6ae2e85-HPK5-4.1.x86_64.rpm

Important Note!

 \circ Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Optimized T-offset setting.
- Change MQES setting to 8192.
- Fixed LED Behavior misaligned specs issue.
- Fixed performance drop issue when 4+ SSD are installed.
- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives

Version: HPK1 (C) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-8e8ddc5265-HPK1-3.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8e8ddc5265-HPK1-3.1.x86_64.rpm

Fixes

- Firmware corrects an issue where the drive will be in a failed state after an unexpected power loss. When this occurs, the drive will not recover after subsequent power cycles and will not be accessible by the system configuration and Host applications.
- Refer Customer Bulletin for workarounds https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00042733en_us

Online NVMe SSD Flash Component for Linux (x64) - MZPLJ1T6HBJR-000H3, MZPLJ3T2HBJR-000H3 and MZPLJ6T4HALA-000H3 Drives

Version: EPK75H3Q (B) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-6628fce235-EPK75H3Q-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-6628fce235-EPK75H3Q-2.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Fixed False UECC issue at idle power mode.
- Old FW download Blocking (EPK70H3Q~EPK74H3Q).
- FW is changed off the option of TX data alignment for each lane.
- FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - MZXL5800HBHQ-000H3, MZXL51T6HBJR-000H3, MZXL53T2HBLS-000H3, MZXL56T4HALA-000H3, MZXL512THALA-000H3, MZXL5960HBHQ-000H3, MZXL51T9HBJR-000H3, MZXL53T8HBLS-000H3, MZXL57T6HALA-000H3 and MZXL515THALA-00H3 Drive Version: MPK75H5Q (C) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-e320db791d-MPK75H5Q-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-e320db791d-MPK75H5Q-3.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

- Fixed False UECC issue at idle power mode (12.8TB and 15.36TB only).
- Apply PCLK running PHY option, PLL clock disable can be avoided in lane 0 missing case.
- Old FW download Blocking.
- FW is changed off the option of TX data alignment for each lane.
- FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.
- For more information, refer to HPE Customer Bulletin at the following
 URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - VO000960KXAVL, VO001920KXAVP, VO003840KXAVQ, VO007680KXAVR, MO000800KXAVN, MO001600KXAVT, MO003200KXAVU and MO006400KXAVV Drives Version: HPK3 (B) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-035a863453-HPK3-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-035a863453-HPK3-2.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- This Firmware release contains various drive interoperability enhancements and code fixes accumulated since the last firmware release, as well as a change to disable MCTP over PCIe VDM function per requested of HPE, and a PHY setting change for improved compatibility with Intel Ice Lake based Gen10 Plus DL360 platform.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00115201en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives

Version: 4ICDHPK1 (B) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-1656c1b14a-4ICDHPK1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1656c1b14a-4ICDHPK1-2.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- This firmware corrects the potential for a drive to become disabled and nonfunctional during certain conditions or workloads.
- After the drive is upgraded to firmware version HPK1, it cannot be downgraded to firmware version HPK0.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - V0001920KWVMT, V0003840KWVMU, and V0007680KWVMV Drives

Version: HPK3 (C) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-fe9c474847-HPK3-3.1.x86_64.compsig;$

rpm/RPMS/x86 64/firmware-hdd-fe9c474847-HPK3-3.1.x86 64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - V0001920KWZQR and V0003840KWZQT Drives

Version: HPK5 (D) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-2af7385a1e-HPK5-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2af7385a1e-HPK5-4.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Optimized T-offset setting.
- Change MQES setting to 8192.
- o Fixed LED Behavior misaligned specs issue.
- o Fixed performance drop issue when 4+ SSD are installed.
- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - VO002000KWVVC, VO004000KWVUR, MO001600KWVUU, MO003200KWVUV and MO006400KWVVA Drives

Version: 4ICRHPK3 (C) (Critical)

Filename: rpm/RPMS/x86 64/firmware-hdd-92d876cfea-4ICRHPK3-3.1.x86 64.compsig;

 $rpm/RPMS/x86_64/firmware-hdd-92d876cfea-4ICRHPK3-3.1.x86_64.rpm$

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- The issue affects SSDs with an HPE firmware version prior to 4ICRHPK3 that may result in SSD failure starting at 4,700 hours of operation, neither the SSD nor the data can be recovered, after the SSD failure occurs.
- For more information, refer to HPE Customer Bulletin at the following
 URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00111900en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for Linux (x64) - VO0400KEFJB, VO1200KEFJC and VO2000KEFJD Drives Version: HPK4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-9a826ccd8a-HPK4-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9a826ccd8a-HPK4-6.1.x86_64.rpm

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online NVMe SSD Flash Component for VMware ESXi - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN and VK001920KWDUH Drives

Version: HPK4 (G) (**Recommended**) Filename: CP048486.compsig; CP048486.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MO001600KWZQP and MO003200KWZQQ Drives

Version: HPK5 (C) (Critical)

Filename: CP048472.compsig; CP048472.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Optimized T-offset setting.
- Change MQES setting to 8192.
- Fixed LED Behavior misaligned specs issue.
- Fixed performance drop issue when 4+ SSD are installed.
- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ,

MO2000KEFHR, MT0800KEXUU and MT1600KEXUV Drives

Version: HPK4 (E) (**Recommended**) Filename: CP048489.compsig; CP048489.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MT001600KWHAC, MT003200KWHAD and

MT006400KWHAE Drives Version: HPK1 (Critical)

Filename: CP050549.compsig; CP050549.zip

<u>Fixes</u>

 Firmware corrects an issue where the drive will be in a failed state after an unexpected power loss. When this occurs, the drive will not recover after subsequent power cycles and will not be accessible by the system configuration and Host applications.

Refer Customer Bulletin for workarounds https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00042733en_us

Online NVMe SSD Flash Component for VMware ESXi - VO001920KWVMT, VO003840KWVMU, and

VO007680KWVMV Drives

Version: HPK3 (B) (Recommended)

Filename: CP048469.compsig; CP048469.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - VO001920KWZQR and VO003840KWZQT Drives

Version: HPK5 (C) (Critical)

Filename: CP048473.compsig; CP048473.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Optimized T-offset setting.
- Change MQES setting to 8192.
- Fixed LED Behavior misaligned specs issue.
- Fixed performance drop issue when 4+ SSD are installed.
- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - VS000480KWDUP, VS000960KWDUQ,

MS000400KWDUR and MS000800KWDUT Drives

Version: HPK4 (E) (**Recommended**) Filename: CP048484.compsig; CP048484.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - ET000750KWJTF, E0000750KWTXC and

EO000375KWJUC Drives

Version: 4ICSHPK4 (B) (Recommended) Filename: CP048513.compsig; CP048513.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - KCD6XVUL800G, KCD6XVUL1T60, KCD6XVUL3T20, KCD6XVUL6T40, KCD6XVUL12T8, KCD6XLUL960G, KCD6XLUL1T92, KCD6XLUL3T84, KCD6XLUL7T68 and KCD6XLUL15T3 Drives

Version: GPK3 (B) (**Recommended**) Filename: CP049279.compsig; CP049279.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - KCM6XVUL800G, KCM6XVUL1T60, KCM6XVUL3T20, KCM6XVUL6T40, KCM6XRUL960G, KCM6XRUL1T92, KCM6XRUL3T84 and KCM6XRUL7T68 Drives

Version: GPK3 (B) (**Recommended**) Filename: CP049284.compsig; CP049284.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB, and LT2000KEXVC Drives

Version: HPK4 (E) **(Recommended)**Filename: CP045718.compsig; CP045718.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MK000800KWWFE, MK001600KWWFF, MK003200KWWFH, MK006400KWWFK, VK000960KWWFL, VK001920KWWFN, VK003840KWWFP and VK007680KWWFQ Drives

Version: HPK3 (C) (Critical)

Filename: CP048467.compsig; CP048467.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- \circ This FW change resolves a MCTP VDM compliance issue seen by iLO version 2.30.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111061en_us

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MO001600KWVNB, MO003200KWVNC, MO006400KWVND, MT001600KWSTB, MT003200KWSTC and MT006400KWSTD Drives

Version: HPK3 (B) (Recommended)

Filename: CP048478.compsig; CP048478.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MZPLJ1T6HBJR-000H3, MZPLJ3T2HBJR-000H3 and

MZPLJ6T4HALA-000H3 Drives Version: EPK75H3Q (B) (Critical)

Filename: CP048458.compsig; CP048458.zip

Fixes

- Fixed False UECC issue at idle power mode.
- Old FW download Blocking (EPK70H3Q~EPK74H3Q).
- o FW is changed off the option of TX data alignment for each lane.
- o FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - MZXL5800HBHQ-000H3, MZXL51T6HBJR-000H3, MZXL53T2HBLS-000H3, MZXL56T4HALA-000H3, MZXL512THALA-000H3, MZXL5960HBHQ-000H3, MZXL51T9HBJR-000H3, MZXL53T8HBLS-000H3, MZXL57T6HALA-000H3 and MZXL515THALA-00H3 Drive

Version: MPK75H5Q (B) (Critical)

Filename: CP048456.compsig; CP048456.zip

<u>Fixes</u>

- Fixed False UECC issue at idle power mode (12.8TB and 15.36TB only).
- Apply PCLK running PHY option, PLL clock disable can be avoided in lane 0 missing case.
- Old FW download Blocking.
- FW is changed off the option of TX data alignment for each lane.
- FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - VO000960KXAVL, VO001920KXAVP, VO003840KXAVQ, VO007680KXAVR, MO000800KXAVN, MO001600KXAVT, MO003200KXAVU and MO006400KXAVV Drives Version: HPK3 (B) (Critical)

Filename: CP049302.compsig; CP049302.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- This Firmware release contains various drive interoperability enhancements and code fixes accumulated since the last firmware release, as well as a change to disable MCTP over PCIe VDM function per requested of HPE, and a PHY setting change for improved compatibility with Intel Ice Lake based Gen10 Plus DL360 platform.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00115201en_us

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives

Version: 4ICDHPK1 (B) (Recommended) Filename: CP048471.compsig; CP048471.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- This firmware corrects the potential for a drive to become disabled and nonfunctional during certain conditions or workloads.
- After the drive is upgraded to firmware version HPK1, it cannot be downgraded to firmware version HPK0.

Enhancements

o Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - V0002000KWVVC, V0004000KWVUR, M0001600KWVUU, M0003200KWVUV and M0006400KWVVA Drives

Version: 4ICRHPK3 (B) (Critical)

Filename: CP048511.compsig; CP048511.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to 4ICRHPK3 that may result in SSD failure starting at 4,700 hours of operation, neither the SSD nor the data can be recovered, after the SSD failure occurs.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00111900en_us

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for VMware ESXi - VO0400KEFJB, VO1200KEFJC and VO2000KEFJD Drives Version: HPK4 (E) **(Recommended)**

Filename: CP045719.compsig; CP045719.zip

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online NVMe SSD Flash Component for Windows (x64) - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN and VK001920KWDUH Drives

Version: HPK4 (D) (Recommended)

Filename: cp048479.compsig; cp048479.exe; cp048479.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ, MO2000KEFHR, MT0800KEXUU and MT1600KEXUV Drives

Version: HPK4 (D) (Recommended)

Filename: cp048475.compsig; cp048475.exe; cp048475.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - MT001600KWHAC, MT003200KWHAD and

MT006400KWHAE Drives Version: HPK1 (Critical)

Filename: cp050550.compsig; cp050550.exe; cp050550.md5

<u>Fixes</u>

Firmware corrects an issue where the drive will be in a failed state after an unexpected power loss. When this occurs, the drive will not recover after subsequent power cycles and will not be accessible by the system configuration and Host applications.

Refer Customer Bulletin for workarounds https://support.hpe.com/hpsc/doc/public/display?docId=emr_na- a00042733en us

Online NVMe SSD Flash Component for Windows (x64) - VS000480KWDUP, VS000960KWDUQ,

MS000400KWDUR and MS000800KWDUT Drives

Version: HPK4 (D) (Recommended)

Filename: cp048487.compsig; cp048487.exe; cp048487.md5

Important Note!

Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - ET000750KWJTF, EO000750KWTXC and

EO000375KWJUC Drives

Version: 4ICSHPK4 (B) (Recommended)

Filename: cp048692.compsig; cp048692.exe; cp048692.md5

Important Note!

Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - KCD6XVUL800G, KCD6XVUL1T60, KCD6XVUL3T20, KCD6XVUL6T40, KCD6XVUL12T8, KCD6XLUL960G, KCD6XLUL1T92, KCD6XLUL3T84, KCD6XLUL7T68 and KCD6XLUL15T3 Drives

Version: GPK3 (B) (Recommended)

Filename: cp049282.compsig; cp049282.exe; cp049282.md5

Important Note!

Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online NVMe SSD Flash Component for Windows (x64) - KCM6XVUL800G, KCM6XVUL1T60, KCM6XVUL3T20, KCM6XVUL6T40, KCM6XRUL960G, KCM6XRUL1T92, KCM6XRUL3T84 and KCM6XRUL7T68 Drives

Version: GPK3 (B) (Recommended)

Filename: cp049285.compsig; cp049285.exe; cp049285.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online NVMe SSD Flash Component for Windows (x64) - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB, and LT2000KEXVC Drives

Version: HPK4 (D) (Recommended)

Filename: cp048428.compsig; cp048428.exe; cp048428.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online NVMe SSD Flash Component for Windows (x64) - MK000800KWWFE, MK001600KWWFF, MK003200KWWFH, MK006400KWWFK, VK000960KWWFL, VK001920KWWFN, VK003840KWWFP and VK007680KWWFQ Drives

Version: HPK3 (C) (Critical)

Filename: cp048463.compsig; cp048463.exe; cp048463.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- $\circ\quad$ This FW change resolves a MCTP VDM compliance issue seen by iLO version 2.30.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111061en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - MO001600KWVNB, MO003200KWVNC,

MO006400KWVND, MT001600KWSTB, MT003200KWSTC and MT006400KWSTD Drives

Version: HPK3 (B) (Recommended)

Filename: cp048684.compsig; cp048684.exe; cp048684.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - MO001600KWZQP and MO003200KWZQQ Drives

Version: HPK5 (C) (Critical)

Filename: cp048685.compsig; cp048685.exe; cp048685.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Optimized T-offset setting.
- Change MQES setting to 8192.
- Fixed LED Behavior misaligned specs issue.
- Fixed performance drop issue when 4+ SSD are installed.
- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - MZPLJ1T6HBJR-000H3, MZPLJ3T2HBJR-000H3 and

MZPLJ6T4HALA-000H3 Drives Version: EPK75H3Q (B) (Critical)

Filename: cp048301.compsig; cp048301.exe; cp048301.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- o Fixed False UECC issue at idle power mode.
- Old FW download Blocking (EPK70H3Q~EPK74H3Q).
- o FW is changed off the option of TX data alignment for each lane.
- o FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.

 For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

o Added support for Microsoft Windows Server 2022.

Online NVMe SSD Flash Component for Windows (x64) - MZXL5800HBHQ-000H3, MZXL51T6HBJR-000H3, MZXL53T2HBLS-000H3, MZXL56T4HALA-000H3, MZXL512THALA-000H3, MZXL5960HBHQ-000H3, MZXL51T9HBJR-000H3, MZXL53T8HBLS-000H3, MZXL57T6HALA-000H3 and MZXL515THALA-0 Drives Version: MPK75H5Q (B) (Critical)

Filename: cp048464.compsig; cp048464.exe; cp048464.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Fixed False UECC issue at idle power mode (12.8TB and 15.36TB only).
- Apply PCLK running PHY option, PLL clock disable can be avoided in lane 0 missing case.
- Old FW download Blocking.
- FW is changed off the option of TX data alignment for each lane.
- FW is changed to clear the interrupt after TLP Complete when PCIe config read operation.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00113342en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - VO000960KXAVL, VO001920KXAVP, VO003840KXAVQ, VO007680KXAVR, MO000800KXAVN, MO001600KXAVT, MO003200KXAVU and MO006400KXAVV Drives

Version: HPK3 (B) (Critical)

Filename: cp049303.compsig; cp049303.exe; cp049303.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- This Firmware release contains various drive interoperability enhancements and code fixes accumulated since the last firmware release, as well as a change to disable MCTP over PCIe VDM function per requested of HPE, and a PHY setting change for improved compatibility with Intel Ice Lake based Gen10 Plus DL360 platform.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00115201en_us

Enhancements

o Added support for Microsoft Windows Sever 2022.

Online NVMe SSD Flash Component for Windows (x64) - V0001000KWJSE, V0002000KWJSF, V0004000KWJSH, VT004000KWJSU, M0001600KWJSN and M0003200KWJSQ Drives

Version: 4ICDHPK1 (B) (Critical)

Filename: cp048438.compsig; cp048438.exe; cp048438.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- This firmware corrects the potential for a drive to become disabled and nonfunctional during certain conditions or workloads.
- After the drive is upgraded to firmware version HPK1, it cannot be downgraded to firmware version HPK0.

Enhancements

Added support for Microsoft Server Windows 2022

Online NVMe SSD Flash Component for Windows (x64) - VO001920KWVMT, VO003840KWVMU, and VO007680KWVMV Drives

Version: HPK3 (B) (Recommended)

Filename: cp048462.compsig; cp048462.exe; cp048462.md5

Important Note!

 \circ Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - VO001920KWZQR and VO003840KWZQT Drives

Version: HPK5 (C) (Critical)

Filename: cp048687.compsig; cp048687.exe; cp048687.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- o Optimized T-offset setting.
- o Change MQES setting to 8192.
- o Fixed LED Behavior misaligned specs issue.
- o Fixed performance drop issue when 4+ SSD are installed.

- The Idle Power Management fix to keep the drive from entering and exiting the Lower Power Idle mode too frequently.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00112800en_us

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - VO002000KWVVC, VO004000KWVUR,

MO001600KWVUU, MO003200KWVUV and MO006400KWVVA Drives

Version: 4ICRHPK3 (B) (Critical)

Filename: cp048693.compsig; cp048693.exe; cp048693.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to 4ICRHPK3 that may result in SSD failure starting at 4,700 hours of operation, neither the SSD nor the data can be recovered, after the SSD failure occurs.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00111900en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online NVMe SSD Flash Component for Windows (x64) - VO0400KEFJB, VO1200KEFJC and VO2000KEFJD

Drives

Version: HPK4 (D) (Recommended)

Filename: cp048476.compsig; cp048476.exe; cp048476.md5

Important Note!

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Firmware - Power Management

<u>Top</u>

Online ROM Flash for Linux - Advanced Power Capping Microcontroller Firmware for HPE Gen9 Servers

Version: 1.0.9 (J) (Optional)

Filename: RPMS/i386/firmware-powerpic-gen9-1.0.9-10.1.i386.rpm

Important Notes:

Ver. 1.0.9(J) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision J if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE ProLiant Gen9 Servers

Release Version:

1.0.9

Last Recommended or Critical Revision:

1.0.7

Previous Revision:

1.0.7

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver" must be installed and running before using this flash component. If the driver is not running you will receive the following error message: "The software is not supported for installation on this system.

You must install the iLO Channel Interface driver to use this component."

Fixes

Important Notes:

Ver. 1.0.9(J) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision J if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Firmware Dependencies:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Online ROM Flash for Linux - Power Management Controller

Version: 4.1 (E) (Recommended)

Filename: RPMS/i386/hp-firmware-powerpic-dl580-4.1-5.i386.rpm

Important Note!

Important Notes:

Ver. 4.1 (E) contains a change to the Firmware RPM install command name from "cpqsetup" to "hpsetup" and is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision E if a previous component revision was used to upgrade the firmware to version 4.1.

Deliverable Name:

Power Management Controller

Release Version:

4.1(E)

Last Recommended or Critical Revision:

This is the initial version of the firmware.

Previous Revision:

This is the initial version of the firmware.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Problems Fixed:

None

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Prerequisites

The "HP ProLiant iLO 3/4 Channel Interface Driver" must be installed and running before using this flash component. If the driver is not running you will receive the following error message: "The software is not supported for installation on this system.

You must install the iLO Channel Interface driver to use this component."

Important Notes:

Ver. 4.1 (E) contains a change to the Firmware RPM install command name from "cpqsetup" to "hpsetup" and is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision E if a previous component revision was used to upgrade the firmware to version 4.1.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Online ROM Flash for VMware ESXi - Advanced Power Capping Microcontroller Firmware for HPE Gen9 Servers

Version: 1.0.9 (K) (Optional)

Filename: CP047167.compsig; CP047167.zip

Important Note!

Important Notes:

Ver. 1.0.9(K) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision K if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE ProLiant Gen9 Servers

Release Version:

1.0.9

Last Recommended or Critical Revision:

1.0.7

Previous Revision:

1.0.7

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Prerequisites

This component requires that the following HPE drivers be loaded before the component can run.

1. The "HPE ProLiant iLO 3/4 Channel Interface Driver" (CHIF) must be installed and running.

The minimum iLO version for ESXi 5.1, 5.5 and ESXi 6.0 and ESXi 6.5 is 1.4.

2. The "Compaq ROM Utility Driver" (CRU) must be installed and running

The minimum CRU version for ESXi 5.1 is 5.0.3.9.

The minimum CRU version for ESXi 5.5 is 5.5.4.1.

The minimum CRU version for ESXi 6.0 is 6.0.8.

The minimum CRU version for 6.5 is 6.5.8.

The minimum CRU version for 6.7 is 6.7.10.

Both drivers are integrated into the HPE VMware Custom Image which also contains other HPE advanced management tools. The drivers are also available from the OS specific "HPE Agentless Management Service Offline Bundle" for VMware vSphere 6.5, 6.0, 5.5, and 5.1 on vibsdepot.hpe.com.

Fixes

Important Notes:

Ver. 1.0.9(K) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision K if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Firmware Dependencies:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Online ROM Flash for VMware ESXi - Power Management Controller

Version: 4.1 (E) (Recommended)

Filename: CP026094.zip

Important Notes:

Ver. 4.1 (E) contains updates to the component packaging and is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision E if a previous component Revision was used to upgrade the firmware to version 4.1.

Deliverable Name:

Power Management Controller

Release Version:

4.1(E)

Last Recommended or Critical Revision:

This is the initial version of the firmware.

Previous Revision:

This is the initial version of the firmware.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Problems Fixed:

None

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Prerequisites

The "HP ProLiant iLO 3/4 Channel Interface Driver" must be installed and running before using this flash component. If the driver is not running you will receive the following error message: "The software is not supported for installation on this system.

You must install the iLO Channel Interface driver to use this component."

Enhancements

Important Notes:

Ver. 4.1 (E) contains updates to the component packaging and is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision E if a previous component Revision was used to upgrade the firmware to version 4.1.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Online ROM Flash for Windows x64 - Advanced Power Capping Microcontroller Firmware for HPE Gen9 Servers

Version: 1.0.9(I) **(Optional)** Filename: cp037781.exe

Important Note!

Important Notes:

Ver. 1.0.9(I) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision I if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE ProLiant Gen9 Servers

Release Version:

1.0.9

Last Recommended or Critical Revision:

1.0.7

Previous Revision:

1.0.7

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver for Windows" must be installed and running before using this flash component. If the driver is not running you will receive the following error message:

"The software is not supported for installation on this system. You must install the iLO Channel Interface driver to use this component."

Fixes

Important Notes:

Ver. 1.0.9(I) contains updates to the component packaging and is functionally equivalent to ver. 1.0.9. It is not necessary to upgrade with Revision I if a previous component Revision was used to upgrade the firmware to version 1.0.9.

Firmware Dependencies:

None

Problems Fixed:

Addresses an issue in which the minimum power capping value was incorrectly being calculated on certain systems. This fix increases the accuracy of the minimum capping value set during POST.

Known Issues:

None

Online ROM Flash for Windows x64 - Power Management Controller for HPE ProLiant DL580 Gen9/Gen8 Servers Version: 4.1 (F) (Recommended)

Filename: cp037764.exe

Important Note!

Important Notes:

Ver. 4.1 (F) adds support to perform the Online ROM Flash with Microsoft Windows Server 2016 by using Smart Update Manager. It is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision (F) if a previous component revision was used to upgrade the firmware to ver.4.1.

Deliverable Name:

Power Management Controller

Release Version:

4.1(F)

Last Recommended or Critical Revision:

This is the initial version of the firmware.

Previous Revision:

This is the initial version of the firmware.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Problems Fixed:

None

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Prerequisites

The "HPE ProLiant iLO 3/4 Channel Interface Driver for Windows" must be installed and running before using this flash component. If the driver is not running you will receive the following error message:

"The software is not supported for installation on this system.

You must install the iLO Channel Interface driver to use this component."

Enhancements

Important Notes:

Ver. 4.1 (F) adds support to perform the Online ROM Flash with Microsoft Windows Server 2016 by using Smart Update Manager. It is functionally equivalent to ver. 4.1. It is not necessary to upgrade with Revision (F) if a previous component revision was used to upgrade the firmware to ver.4.1.

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

The smart component prompts for reboot unnecessarily when the installation procedure is completed. Reboot is not required after installation for updates to take effect and hardware stability to be maintained.

Firmware - SAS Storage Disk

Top

Online HDD/SSD Flash Component for Linux (x64) - EG000300JWBHR Drive

Version: HPD5 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-2e4c61fc63-HPD5-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2e4c61fc63-HPD5-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG000300JWFVB Drive

Version: HPD3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-c5cd837c29-HPD3-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-c5cd837c29-HPD3-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG0006003WEBH and EG0003003WEBF Drives

Version: HPD5 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-aa9e289524-HPD5-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-aa9e289524-HPD5-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG0006003WFUV and EG0012003WFVA Drives

Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-f0c91d2fe3-HPD4-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-f0c91d2fe3-HPD4-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG000600JWJNP and EG001200JWJNQ Drives

Version: HPD4 (B) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-bdfb8e99d9-HPD4-2.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-bdfb8e99d9-HPD4-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD6 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b1c9eaf74c-HPD6-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-b1c9eaf74c-HPD6-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG0600JETKA, EG0900JETKB and EG1200JETKC Drives Version: HPD8 (B) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-7505dfb5ae-HPD8-2.1.x86_64.compsig;$

rpm/RPMS/x86_64/firmware-hdd-7505dfb5ae-HPD8-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EK0800JVYPN, EO1600JVYPP, MK0800JVYPQ and MO1600JVYPR Drives

Version: HPD7 (D) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-481c8ea9a7-HPD7-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-481c8ea9a7-HPD7-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD7 that results in SSD failure at 40,000 hours of operation (i.e., 4 years, 205 days 16 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- o For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00097382en_us.

Enhancements

 $\circ \quad \text{Added support for RHEL 8.4 and SLES15SP3.}$

Online HDD/SSD Flash Component for Linux (x64) - E0000400JWDKP, E0000800JWDKQ, E0001600JWDKR, M0000400JWDKU, M0000800JWDKV, M0001600JWDLA and M0003200JWDLB Drives

Version: HPD2 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-5dcf26fa42-HPD2-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-5dcf26fa42-HPD2-6.1.x86_64.rpm

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB002000JWFVN and MB004000JWFVP Drives Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d7af557f47-HPD4-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d7af557f47-HPD4-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB004000JWFVK and MB006000JWFVL Drives

Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-f6d00bd17e-HPD4-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-f6d00bd17e-HPD4-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000JVYZD and MB4000JVYZC Drives

Version: HPD4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-e800e8d3b9-HPD4-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-e800e8d3b9-HPD4-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD9 (B) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-b04257b77b-HPD9-2.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-b04257b77b-HPD9-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, EO000400JWUGC, EO000800JWUGD and EO001600JWUGE Drives Version: HPD3 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-ef93133161-HPD3-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ef93133161-HPD3-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - V0000960JWTBK, V0001920JWTBL, V0003840JWTBN, V0007680JWTBP, M0000400JWTBQ, M0000800JWTBR, M0001600JWTBT, M0003200JWTBU,

MO006400JWTCD, EO000400JWTBV, EO000800JWTCA and EO001600JWTCB Drives

Version: HPD9 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-9ad359dac1-HPD9-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-9ad359dac1-HPD9-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG000300JWSJP, EG000600JWJNH and EG001200JWJNK Drives

Version: HPD5 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-24fe569b72-HPD5-1.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-24fe569b72-HPD5-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

o This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for Linux (x64) - EG001800JWFVC Drive

Version: HPD4 (B) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-693b9a2853-HPD4-2.1.x86_64.compsig;$

rpm/RPMS/x86_64/firmware-hdd-693b9a2853-HPD4-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG001800JWJNL and EG002400JWJNN Drives Version: HPD5 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-852266afdf-HPD5-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-852266afdf-HPD5-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

o This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for Linux (x64) - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL and EG0900FCSPN Drives

Version: HPD2 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-7c1a1734f9-HPD2-8.1.x86_64.compsig;

 $rpm/RPMS/x86_64/firmware-hdd-7c1a1734f9-HPD2-8.1.x86_64.rpm$

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB and EG1200JEHMC Drives

Version: HPD5 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-31f91b8622-HPD5-9.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-31f91b8622-HPD5-9.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB and EG1200JEMDA Drives

Version: HPD6 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-ac3fda26eb-HPD6-9.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-ac3fda26eb-HPD6-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

 $\circ\quad$ Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG1800JEHMD Drive

Version: HPD6 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8a2c06af48-HPD6-9.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-8a2c06af48-HPD6-9.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG1800JEMDB Drive

Version: HPD5 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-0a38b25661-HPD5-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-0a38b25661-HPD5-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EG1800JFHMH Drive

Version: HPD8 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-7fc5497116-HPD8-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-7fc5497116-HPD8-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL and EH000900JWCPN Drives

Version: HPD7 (B) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-3d97759111-HPD7-2.1.x86 64.compsig;

rpm/RPMS/x86 64/firmware-hdd-3d97759111-HPD7-2.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH0006003WCPF and EH0009003WCPH Drives

Version: HPD9 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-a05f29cef3-HPD9-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-a05f29cef3-HPD9-2.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH000900JWHPK and EH000600JWHPH Drives

Version: HPD7 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-c7df7ceedb-HPD7-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-c7df7ceedb-HPD7-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH000900JWHPP, EH000600JWHPN and EH000300JWHPL Drives

Version: HPD7 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8d68452816-HPD7-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-8d68452816-HPD7-2.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH0300JDXBA, EH0450JDXBB and EH0600JDXBC Drives Version: HPD5 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-1cbab97ff0-HPD5-8.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1cbab97ff0-HPD5-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH0300JDYTH, EH0450JDYTK and EH0600JDYTL Drives Version: HPD6 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b9340d29be-HPD6-9.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b9340d29be-HPD6-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH0300JEDHC, EH0450JEDHD and EH0600JEDHE Drives

Version: HPD4 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8c4a212ff9-HPD4-9.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8c4a212ff9-HPD4-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - EH0600JDYTN Drive

Version: HPD7 (H) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-f3faa195ff-HPD7-8.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-f3faa195ff-HPD7-8.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

- Fixes a data integrity risk where stale data is mistakenly used from cache.
- Fixes a data integrity risk where stale data is returned on an unaligned overlapped write-read operation.
- Fixes a data integrity risk during a sequential read and write workload when a recovered error is encountered, which could cause incomplete data to be read.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - E0000400PXDBQ, E0000800PXDCK, E0001600PXDCH, MO000800PXDBP, MO001600PXDCC, MO003200PXDCD, MO006400PXDCE, VO000960PXDBN,

VO001920PXDBR, VO003840PXDBT, VO007680PXDBU and VO015300PXDBV Drives

Version: HPD2 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-42aff4675b-HPD2-1.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-42aff4675b-HPD2-1.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- o Fix command timeout and uncorrectable error improvement.
- Added features for SAS4 auto power swtiching and thermal requirement.

Online HDD/SSD Flash Component for Linux (x64) - MB004000JWKGU Drive

Version: HPD2 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-2c27a7a9a4-HPD2-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2c27a7a9a4-HPD2-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB004000JWWQB, MB002000JWWQA and MB001000JWWPV Drives

Version: HPD6 (B) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-adb3ab8147-HPD6-2.1.x86 64.compsig;

rpm/RPMS/x86_64/firmware-hdd-adb3ab8147-HPD6-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB006000JWKGN Drive

Version: HPD2 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-a886842a99-HPD2-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-a886842a99-HPD2-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB008000JWJRQ and MB006000JWJRP Drives

Version: HPD9 (B) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-faf39e0ff7-HPD9-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-faf39e0ff7-HPD9-2.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- O This firmware release provides additional protection against command timeouts.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB008000JWRTD Drive

Version: HPD2 (B) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-8b26d1ef02-HPD2-2.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-8b26d1ef02-HPD2-2.1.x86_64.rpm

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB008000JWWQP and MB006000JWWQN Drives Version: HPD6 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-ae6b41e855-HPD6-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ae6b41e855-HPD6-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB010000JWAYK and MB008000JWAYH Drives Version: HPD6 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/firmware-hdd-6ec35faf90-HPD6-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6ec35faf90-HPD6-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE Drives

Version: HPD2 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-cf0b6cabe1-HPD2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-cf0b6cabe1-HPD2-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB012000JWDFD Drive

Version: HPD3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-aaf1014ede-HPD3-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-aaf1014ede-HPD3-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB014000JWRTH, MB012000JWRTF and MB010000JWRTE Drives

Version: HPD2 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-10385ef3e6-HPD2-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-10385ef3e6-HPD2-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB014000JWTFD and MB012000JWTFC Drives

Version: HPD8 (B) (Critical)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-4ba9615f90-HPD8-2.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-4ba9615f90-HPD8-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o This firmware release provides additional protection against command timeouts.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB014000JWUDB Drive

Version: HPD3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-cfd7436fcc-HPD3-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-cfd7436fcc-HPD3-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB016000JWXKH Drive

Version: HPD9 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8a0371a425-HPD9-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8a0371a425-HPD9-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB016000JXLBA and MB018000JXLAU Drives Version: HPD2 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d550523365-HPD2-1.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-d550523365-HPD2-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

VENDOR IDENTIFICATION field changed from "HP" to "HPE" and Reliability improvements.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZO Drives

Version: HPD3 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b85516c7d2-HPD3-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b85516c7d2-HPD3-6.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB2000JFDSL and MB4000JFDSN Drives

Version: HPD4 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-46fc43ab26-HPD4-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-46fc43ab26-HPD4-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB2000JFEML and MB4000JFEMN Drives

Version: HPD6 (H) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-624b75c7e2-HPD6-8.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-624b75c7e2-HPD6-8.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- o The firmware also includes emergency power off improvements.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB2000JFEPA and MB4000JFEPB Drives Version: HPD5 (H) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-326de7c0f2-HPD5-8.1.x86 64.compsig;

rpm/RPMS/x86_64/firmware-hdd-326de7c0f2-HPD5-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB4000JEFNC and MB6000JEFND Drives

Version: HPD9 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-af802bb412-HPD9-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-af802bb412-HPD9-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB4000JEQNL and MB6000JEQNN Drives

Version: HPDB (H) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-2cfaac41db-HPDB-8.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-2cfaac41db-HPDB-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB4000JEXYA and MB6000JEXYB Drives

Version: HPD9 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-0f923833e9-HPD9-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-0f923833e9-HPD9-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000JEQUV and MB8000JEQVA Drives

Version: HPDB (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-df22f7effd-HPDB-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-df22f7effd-HPDB-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000JVYYV Drive

Version: HPD2 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-0595c2a887-HPD2-8.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-0595c2a887-HPD2-8.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB8000JFECQ Drive

Version: HPD7 (G) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-252770cdda-HPD7-7.1.x86 64.compsig;

rpm/RPMS/x86_64/firmware-hdd-252770cdda-HPD7-7.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MM1000JFJTH and MM002000JWCNF Drives

Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-fa46c607d6-HPD4-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-fa46c607d6-HPD4-2.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives Version: HPD5 (E) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b8a60fbe9a-HPD5-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b8a60fbe9a-HPD5-5.1.x86_64.rpm

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MO000800JXBEV, MO001600JXBFP, MO003200JXBFQ, MO006400JXBFR, MO000960JXBFA, MO001920JXBFT, MO003840JXBFU, MO007680JXBGA, MO015360JXBFV, E0000400JXBEU, E0000800JXBFL and E0001600JXBFN Drives

Version: HPD1 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-24384980ec-HPD1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-24384980ec-HPD1-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE and EO0800JEFPF Drives

Version: HPD3 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-71af849f3b-HPD3-8.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-71af849f3b-HPD3-8.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK and

MO3200JFFCL Drives

Version: HPD9 (D) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-edf6dcd906-HPD9-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-edf6dcd906-HPD9-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives

Version: HPD8 (E) (Critical)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-1e51a57347-HPD8-5.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-1e51a57347-HPD8-5.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

 $\circ \quad \text{Added support for RHEL 8.4 and SLES15SP3.}$

Online HDD/SSD Flash Component for Linux (x64) - VK0400JEABD, VK0800JEABE, and VO1600JEABF Drives Version: HPD4 (B) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-8a7ecf7465-HPD4-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8a7ecf7465-HPD4-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- If Power On Hours exceeds 70,000hrs, PM2R will report Hardware error (04/4C/A8) after the next Power Cycle and will not accept read/write commands. This fix will update storage location reporting when the maximum number of registrations in the Work Load Log read process reaches 70,000; the last registered 70,000th storage location will be modified to be read as the next (70,001st) storage location.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111296en_us

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VO000480JWDAR, VO000960JWDAT, VO001920JWDAU and VO003840JWDAV Drives

Version: HPD8 (D) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-2eb810cdd7-HPD8-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2eb810cdd7-HPD8-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- o For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VO000800JWZJP, VO001600JWZJQ, VO003200JWZJR and VO006400JWZJT Drives

Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-a07a420ed1-HPD4-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-a07a420ed1-HPD4-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VO000960JWZJF, VO001920JWZJH, VO003840JWZJK, VO007680JWZJL and VO015360JWZJN Drives

Version: HPD4 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-35fd24601f-HPD4-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-35fd24601f-HPD4-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - V0000960RWUEV, V0001920RWUFA, V0003840RWUFB, V0007680RWUFC, V0000960RWUFD, V0001920RWUFE and V0003840RWUFF Drives

Version: HPD6 (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-8fafc9efb2-HPD6-1.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8fafc9efb2-HPD6-1.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- o Reduced the occurrence probability of PMIC busy issue.
- o Fixed the system data error at the drive power on issue.
- When the PLP operation starts, the waiting Unmap request to the 4KB not-aligned host write area is cancelled to be able to complete PLP correctly.

Online HDD/SSD Flash Component for Linux (x64) - VO003840XZCLT, VO007680XZCMB, MO000800XZCLQ and MO001600XZCLV Drives

Version: HPD1 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8f501d6cf1-HPD1-1.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8f501d6cf1-HPD1-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- Fix command timeout and uncorrectable error improvement.
- O Added features for SAS4 auto power switching and thermal requirement.

Online HDD/SSD Flash Component for Linux (x64) - VO007680JWCNK and VO015300JWCNL Drives Version: HPD8 (D) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-4c048aaeb0-HPD8-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-4c048aaeb0-HPD8-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- o For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV and

VO3840JFDHA Drives

Version: HPD9 (D) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8ed8893abd-HPD9-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-8ed8893abd-HPD9-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VO1920JEUQQ Drive

Version: HPD3 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-5d9e841607-HPD3-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-5d9e841607-HPD3-8.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for VMware ESXi - EG000300JWBHR Drive

Version: HPD5 (B) (Recommended)

Filename: CP048248.compsig; CP048248.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- $\circ\quad$ In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG000300JWFVB Drive

Version: HPD3 (B) (Recommended)

Filename: CP048245.compsig; CP048245.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives

Version: HPD5 (B) **(Recommended)**Filename: CP049345.compsig; CP049345.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG000600JWFUV and EG001200JWFVA Drives

Version: HPD4 (B) (Recommended)

Filename: CP048250.compsig; CP048250.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG000600JWJNP and EG001200JWJNQ Drives

Version: HPD4 (B) (Recommended)

Filename: CP048251.compsig; CP048251.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD6 (B) **(Recommended)** Filename: CP048254.compsig; CP048254.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- \circ Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG0600JETKA, EG0900JETKB and EG1200JETKC Drives

Version: HPD8 (B) (**Recommended**) Filename: CP048264.compsig; CP048264.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH000900JWHPK and EH000600JWHPH Drives

Version: HPD7 (B) (Recommended)

Filename: CP049135.compsig; CP049135.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH000900JWHPP, EH000600JWHPN and

EH000300JWHPL Drives

Version: HPD7 (B) (**Recommended**) Filename: CP049136.compsig; CP049136.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH0600JDYTN Drive

Version: HPD7 (H) (Critical)

Filename: CP048294.compsig; CP048294.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o Fixes a data integrity risk where stale data is mistakenly used from cache.
- Fixes a data integrity risk where stale data is returned on an unaligned overlapped write-read operation.
- Fixes a data integrity risk during a sequential read and write workload when a recovered error is encountered, which could cause incomplete data to be read.Ã□Â

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - E0000400JWDKP, E0000800JWDKQ, E0001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives

Version: HPD2 (F) (Recommended)

Filename: CP048297.compsig; CP048297.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - E0000400PXDBQ, E0000800PXDCK, E0001600PXDCH, MO000800PXDBP, MO001600PXDCC, MO003200PXDCD, MO006400PXDCE, V0000960PXDBN,

VO001920PXDBR, VO003840PXDBT, VO007680PXDBU and VO015300PXDBV Drives

Version: HPD2 (Recommended)

Filename: CP050382.compsig; CP050382.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

- o Fix command timeout and uncorrectable error improvement.
- o Added features for SAS4 auto power switching and thermal requirement.

Online HDD/SSD Flash Component for VMware ESXi - MB002000JWFVN and MB004000JWFVP Drives

Version: HPD4 (B) (Recommended)

Filename: CP048318.compsig; CP048318.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB004000JWFVK and MB006000JWFVL Drives

Version: HPD4 (B) (Recommended)

Filename: CP048320.compsig; CP048320.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC

and MB016000JWZHE Drives

Version: HPD2 (B) (**Recommended**) Filename: CP049051.compsig; CP049051.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB012000JWDFD Drive

Version: HPD3 (B) (Recommended)

Filename: CP048404.compsig; CP048404.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- \circ In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB2000JFEML and MB4000JFEMN Drives

Version: HPD6 (I) (Critical)

Filename: CP048361.compsig; CP048361.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also includes emergency power off improvements.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB4000JEQNL and MB6000JEQNN Drives

Version: HPDB (I) (**Recommended**) Filename: CP048368.compsig; CP048368.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- \circ In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000JEQUV and MB8000JEQVA Drives

Version: HPDB (I) (Recommended)

Filename: CP048378.compsig; CP048378.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000JVYZD and MB4000JVYZC Drives

Version: HPD4 (G) (Recommended) Filename: CP048380.compsig; CP048380.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD9 (B) **(Recommended)** Filename: CP048391.compsig; CP048391.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MM1000JFJTH and MM002000JWCNF Drives

Version: HPD4 (B) (Recommended)

Filename: CP048392.compsig; CP048392.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, E0000400JWUGC, E0000800JWUGD and E0001600JWUGE Drives Version: HPD3 (C) (Recommended)

Filename: CP048397.compsig; CP048397.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO000960JWTBK, VO001920JWTBL, VO003840JWTBN, VO007680JWTBP, MO000400JWTBQ, MO000800JWTBR, MO001600JWTBT, MO003200JWTBU, MO006400JWTCD, EO000400JWTBV, EO000800JWTCA, EO001600JWTCB Drives

Version: HPD9 (B) (Recommended)

Filename: CP049147.compsig; CP049147.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO003840XZCLT, VO007680XZCMB, MO000800XZCLQ and MO001600XZCLV Drives

Version: HPD1 (Recommended)

Filename: CP050453.compsig; CP050453.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- o Fix command timeout and uncorrectable error improvement.
- o Added features for SAS4 auto power switching and thermal requirement.

 $On line\ HDD/SSD\ Flash\ Component\ for\ VMware\ ESXi-EG000300JWSJP,\ EG000600JWJNH\ and\ EG001200JWJNK$

Drives

Version: HPD5 (Recommended)

Filename: CP050179.compsig; CP050179.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

o This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for VMware ESXi - EG001800JWFVC Drive

Version: HPD4 (B) (Recommended)

Filename: CP048253.compsig; CP048253.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG001800JWJNL and EG002400JWJNN Drives

Version: HPD5 (Recommended)

Filename: CP050184.compsig; CP050184.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

O This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for VMware ESXi - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL and

EG0900FCSPN Drives

Version: HPD2 (I) (Recommended)

Filename: CP048255.compsig; CP048255.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and

EG1200JEHMC Drives

Version: HPD5 (J) (Recommended)

Filename: CP048261.compsig; CP048261.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB and

EG1200JEMDA Drives

Version: HPD6 (I) (Recommended)

Filename: CP048263.compsig; CP048263.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG1800JEHMD Drive

Version: HPD6 (J) (**Recommended**) Filename: CP048265.compsig; CP048265.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG1800JEMDB Drive

Version: HPD5 (I) (Recommended)

Filename: CP048266.compsig; CP048266.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EG1800JFHMH Drive

Version: HPD8 (B) (Recommended) Filename: CP048270.compsig; CP048270.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL and

EH000900JWCPN Drives

Version: HPD7 (B) (**Recommended**) Filename: CP048286.compsig; CP048286.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH000600JWCPF and EH000900JWCPH Drives

Version: HPD9 (B) (Recommended)

Filename: CP048272.compsig; CP048272.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH0300JDXBA, EH0450JDXBB and EH0600JDXBC Drives

Version: HPD5 (I) (Recommended)

Filename: CP048291.compsig; CP048291.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH0300JDYTH, EH0450JDYTK and EH0600JDYTL Drives

Version: HPD6 (J) (Recommended)

Filename: CP048292.compsig; CP048292.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EH0300JEDHC, EH0450JEDHD and EH0600JEDHE Drives

Version: HPD4 (J) (Recommended)

Filename: CP048293.compsig; CP048293.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - EK0800JVYPN, EO1600JVYPP, MK0800JVYPQ and

MO1600JVYPR Drives Version: HPD7 (D) (Critical)

Filename: CP048429.compsig; CP048429.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD7 that results in SSD failure at 40,000 hours of operation (i.e., 4 years, 205 days 16 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00097382en_us.

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB004000JWKGU Drive

Version: HPD2 (B) (**Recommended**) Filename: CP048321.compsig; CP048321.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB004000JWWQB, MB002000JWWQA and

MB001000JWWPV Drives

Version: HPD6 (B) **(Recommended)** Filename: CP048431.compsig; CP048431.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Version: HPD2 (B) (**Recommended**) Filename: CP048330.compsig; CP048330.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB008000JWJRQ and MB006000JWJRP Drives

Version: HPD9 (B) (Critical)

Filename: CP049132.compsig; CP049132.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- O This firmware release provides additional protection against command timeouts.
- For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB008000JWRTD Drive

Version: HPD2 (B) (Recommended)

Filename: CP048332.compsig; CP048332.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB008000JWWQP and MB006000JWWQN Drives

Version: HPD6 (B) (Recommended)

Filename: CP048426.compsig; CP048426.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB010000JWAYK and MB008000JWAYH Drives

Version: HPD6 (B) (Recommended)

Filename: CP048334.compsig; CP048334.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB014000JWTFD and MB012000JWTFC Drives

Version: HPD8 (B) (Critical)

Filename: CP049120.compsig; CP049120.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- o This firmware release provides additional protection against command timeouts.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB014000JWUDB Drive

Version: HPD3 (B) (**Recommended**) Filename: CP048341.compsig; CP048341.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB016000JWXKH Drive

Version: HPD9 (B) (Recommended)

Filename: CP049124.compsig; CP049124.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3.

Online HDD/SSD Flash Component for VMware ESXi - MB016000JXLBA and MB018000JXLAU Drives

Version: HPD2 (Recommended)

Filename: CP049256.compsig; CP049256.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

• VENDOR IDENTIFICATION field changed from "HP" to "HPE" and Reliability improvements.

Enhancements

o Added support for VMware 7.0 U3.

Online HDD/SSD Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and

MB4000JVYZQ Drives

Version: HPD3 (F) (**Recommended**) Filename: CP048344.compsig; CP048344.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- \circ Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB2000JFDSL and MB4000JFDSN Drives

Version: HPD4 (I) (Recommended)

Filename: CP048347.compsig; CP048347.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB2000JFEPA and MB4000JFEPB Drives

Version: HPD5 (I) (Recommended)

Filename: CP048362.compsig; CP048362.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB4000JEFNC and MB6000JEFND Drives

Version: HPD9 (I) **(Recommended)** Filename: CP048367.compsig; CP048367.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB4000JEXYA and MB6000JEXYB Drives

Version: HPD9 (F) (**Recommended**) Filename: CP048369.compsig; CP048369.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000JVYYV Drive

Version: HPD2 (I) (Recommended)

Filename: CP048379.compsig; CP048379.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB8000JFECQ Drive

Version: HPD7 (H) (**Recommended**) Filename: CP048382.compsig; CP048382.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives Version: HPD5 (F) (Recommended)

Filename: CP048393.compsig; CP048393.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MO000800JXBEV, MO001600JXBFP, MO003200JXBFQ, MO006400JXBFR, MO000960JXBFA, MO001920JXBFT, MO003840JXBFU, MO007680JXBGA, MO015360JXBFV, E0000400JXBEU, E0000800JXBFL and E0001600JXBFN Drives

Version: HPD1 (B) (**Recommended**) Filename: CP049157.compsig; CP049157.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE and EO0800JEFPF Drives

Version: HPD3 (I) (Recommended)

Filename: CP048401.compsig; CP048401.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK and

MO3200JFFCL Drives

Version: HPD9 (D) (Recommended) Filename: CP048439.compsig; CP048439.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives

Version: HPD8 (E) (Critical)

Filename: CP048446.compsig; CP048446.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK0400JEABD, VK0800JEABE, and VO1600JEABF Drives

Version: HPD4 (B) (Critical)

Filename: CP049410.compsig; CP049410.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- If Power On Hours exceeds 70,000hrs, PM2R will report Hardware error (04/4C/A8) after the next Power Cycle and will not accept read/write commands. This fix will update storage location reporting when the maximum number of registrations in the Work Load Log read process reaches 70,000; the last registered 70,000th storage location will be modified to be read as the next (70,001st) storage location.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111296en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO000480JWDAR, VO000960JWDAT, VO001920JWDAU

and VO003840JWDAV Drives Version: HPD8 (G) (Critical)

Filename: CP048445.compsig; CP048445.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO000800JWZJP, VO001600JWZJQ, VO003200JWZJR

and VO006400JWZJT Drives

Version: HPD4 (B) (**Recommended**) Filename: CP048454.compsig; CP048454.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO000960JWZJF, VO001920JWZJH, VO003840JWZJK,

VO007680JWZJL and VO015360JWZJN Drives Version: HPD4 (B) **(Recommended)**

Filename: CP048455.compsig; CP048455.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO000960RWUEV, VO001920RWUFA, VO003840RWUFB, VO007680RWUFC, VO000960RWUFD, VO001920RWUFE and VO003840RWUFF Drives

Version: HPD6 (Critical)

Filename: CP049363.compsig; CP049363.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- o Reduced the occurrence probability of PMIC busy issue.
- o Fixed the system data error at the drive power on issue.
- When the PLP operation starts, the waiting Unmap request to the 4KB not-aligned host write area is cancelled to be able to complete PLP correctly.

Online HDD/SSD Flash Component for VMware ESXi - VO007680JWCNK and VO015300JWCNL Drives

Version: HPD8 (E) (Critical)

Filename: CP048415.compsig; CP048415.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- $\circ\quad$ In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following URL:https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - V00480JFDGT, V00960JFDGU, V01920JFDGV and

VO3840JFDHA Drives

Version: HPD9 (D) (Recommended) Filename: CP048437.compsig; CP048437.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VO1920JEUQQ Drive

Version: HPD3 (I) **(Recommended)** Filename: CP048419.compsig; CP048419.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi -MB014000JWRTH, MB012000JWRTF and MB010000JWRTE Drives

Version: HPD2 (F) **(Recommended)** Filename: CP048340.compsig; CP048340.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for Windows (x64) - EG000300JWBHR Drive

Version: HPD5 (B) (Recommended)

Filename: cp048436.compsig; cp048436.exe; cp048436.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG000300JWFVB Drive

Version: HPD3 (B) (Recommended)

Filename: cp048433.compsig; cp048433.exe; cp048433.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG000300JWSJP, EG000600JWJNH and EG001200JWJNK Drives

Version: HPD5 (Recommended)

Filename: cp050181.compsig; cp050181.exe; cp050181.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations. Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

O This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives Version: HPD5 (B) (Recommended)

Filename: cp049346.compsig; cp049346.exe; cp049346.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG000600JWFUV and EG001200JWFVA Drives

Version: HPD4 (B) (Recommended)

Filename: cp048452.compsig; cp048452.exe; cp048452.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG000600JWJNP and EG001200JWJNQ Drives

Version: HPD4 (B) (Recommended)

Filename: cp048457.compsig; cp048457.exe; cp048457.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG001800JWFVC Drive

Version: HPD4 (B) (Recommended)

Filename: cp048459.compsig; cp048459.exe; cp048459.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG001800JWJNL and EG002400JWJNN Drives

Version: HPD5 (Recommended)

Filename: cp050186.compsig; cp050186.exe; cp050186.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

O This firmware mitigates a potential reliability concern.

Online HDD/SSD Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD6 (B) (Recommended)

Filename: cp048242.compsig; cp048242.exe; cp048242.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL and EG0900FCSPN Drives

Version: HPD2 (G) (Recommended)

Filename: cp048481.compsig; cp048481.exe; cp048481.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB and EG1200JEHMC Drives

Version: HPD5 (H) (Recommended)

Filename: cp048482.compsig; cp048482.exe; cp048482.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB and

EG1200JEMDA Drives

Version: HPD6 (G) (Recommended)

Filename: cp048483.compsig; cp048483.exe; cp048483.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG0600JETKA, EG0900JETKB and EG1200JETKC Drives Version: HPD8 (B) (Recommended)

Filename: cp048485.compsig; cp048485.exe; cp048485.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG1800JEHMD Drive

Version: HPD6 (H) (Recommended)

Filename: cp048507.compsig; cp048507.exe; cp048507.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG1800JEMDB Drive

Version: HPD5 (G) (Recommended)

Filename: cp048508.compsig; cp048508.exe; cp048508.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EG1800JFHMH Drive

Version: HPD8 (B) (Recommended)

Filename: cp048509.compsig; cp048509.exe; cp048509.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL and EH000900JWCPN Drives

Version: HPD7 (B) (Recommended)

Filename: cp048510.compsig; cp048510.exe; cp048510.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH000600JWCPF and EH000900JWCPH Drives

Version: HPD9 (B) (Recommended)

Filename: cp048516.compsig; cp048516.exe; cp048516.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH000900JWHPK and EH000600JWHPH Drives

Version: HPD7 (B) (Recommended)

Filename: cp049134.compsig; cp049134.exe; cp049134.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added supported for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH000900JWHPP, EH000600JWHPN and EH000300JWHPL Drives

Version: HPD7 (B) (Recommended)

Filename: cp049138.compsig; cp049138.exe; cp049138.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH0300JDXBA, EH0450JDXBB and EH0600JDXBC Drives

Version: HPD5 (G) (Recommended)

Filename: cp048517.compsig; cp048517.exe; cp048517.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH0300JDYTH, EH0450JDYTK and EH0600JDYTL Drives Version: HPD6 (H) (**Recommended**)

Filename: cp048515.compsig; cp048515.exe; cp048515.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH0300JEDHC, EH0450JEDHD and EH0600JEDHE Drives

Version: HPD4 (I) (Recommended)

Filename: cp048520.compsig; cp048520.exe; cp048520.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EH0600JDYTN Drive

Version: HPD7 (F) (Critical)

Filename: cp048553.compsig; cp048553.exe; cp048553.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Fixes a data integrity risk where stale data is mistakenly used from cache.
- Fixes a data integrity risk where stale data is returned on an unaligned overlapped write-read operation.
- Fixes a data integrity risk during a sequential read and write workload when a recovered error is encountered, which could cause incomplete data to be read.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EK0800JVYPN, EO1600JVYPP, MK0800JVYPQ and

MO1600JVYPR Drives

Version: HPD7 (D) (Critical)

Filename: cp048651.compsig; cp048651.exe; cp048651.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD7 that results in SSD failure at 40,000 hours of operation (i.e., 4 years, 205 days 16 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00097382en_us.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives Version: HPD2 (E) (Recommended)

Filename: cp048555.compsig; cp048555.exe; cp048555.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - EO000400PXDBQ, EO000800PXDCK, EO001600PXDCH, MO000800PXDBP, MO001600PXDCC, MO003200PXDCD, MO006400PXDCE, VO000960PXDBN, VO001920PXDBR, VO003840PXDBT, VO007680PXDBU and VO015300PXDBV Drives

Version: HPD2 (Recommended)

Filename: cp050385.compsig; cp050385.exe; cp050385.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

o Fix command timeout and uncorrectable error improvement.

o Added features for SAS4 auto power swtiching and thermal requirement.

Online HDD/SSD Flash Component for Windows (x64) - MB002000JWFVN and MB004000JWFVP Drives

Version: HPD4 (B) (Recommended)

Filename: cp048560.compsig; cp048560.exe; cp048560.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB004000JWFVK and MB006000JWFVL Drives

Version: HPD4 (B) (Recommended)

Filename: cp048562.compsig; cp048562.exe; cp048562.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB004000JWKGU Drive

Version: HPD2 (B) (Recommended)

Filename: cp048666.compsig; cp048666.exe; cp048666.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB004000JWWQB, MB002000JWWQA and

MB001000JWWPV Drives

Version: HPD6 (B) (Recommended)

Filename: cp048653.compsig; cp048653.exe; cp048653.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB006000JWKGN Drive

Version: HPD2 (B) (Recommended)

Filename: cp048677.compsig; cp048677.exe; cp048677.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB008000JWJRQ and MB006000JWJRP Drives

Version: HPD9 (B) (Critical)

Filename: cp049130.compsig; cp049130.exe; cp049130.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- This firmware release provides additional protection against command timeouts.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB008000JWRTD Drive

Version: HPD2 (B) (Recommended)

Filename: cp048670.compsig; cp048670.exe; cp048670.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB008000JWWQP and MB006000JWWQN Drives

Version: HPD6 (B) (Recommended)

Filename: cp048649.compsig; cp048649.exe; cp048649.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB010000JWAYK and MB008000JWAYH Drives

Version: HPD6 (B) (Recommended)

Filename: cp048672.compsig; cp048672.exe; cp048672.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB010000JWZHA, MB012000JWZHB,

MB014000JWZHC and MB016000JWZHE Drives

Version: HPD2 (B) (Recommended)

Filename: cp049052.compsig; cp049052.exe; cp049052.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB012000JWDFD Drive

Version: HPD3 (B) (Recommended)

Filename: cp048634.compsig; cp048634.exe; cp048634.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB014000JWRTH, MB012000JWRTF and

MB010000JWRTE Drives

Version: HPD2 (E) (Recommended)

Filename: cp048547.compsig; cp048547.exe; cp048547.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB014000JWTFD and MB012000JWTFC Drives

Version: HPD8 (B) (Critical)

Filename: cp049123.compsig; cp049123.exe; cp049123.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o This firmware release provides additional protection against command timeouts.
- o For more information, refer to HPE Customer Bulletin at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00117258en_us

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB014000JWUDB Drive

Version: HPD3 (B) (Recommended)

Filename: cp048563.compsig; cp048563.exe; cp048563.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB016000JWXKH Drive

Version: HPD9 (B) (Recommended)

Filename: cp049126.compsig; cp049126.exe; cp049126.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB016000JXLBA and MB018000JXLAU Drives

Version: HPD2 (Recommended)

Filename: cp049254.compsig; cp049254.exe; cp049254.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

VENDOR IDENTIFICATION field changed from "HP" to "HPE" and Reliability improvements.

Enhancements

 $\circ \quad \text{Added support for Microsoft Windows Server 2022.}$

Online HDD/SSD Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and

MB4000JVYZQ Drives

Version: HPD3 (E) (Recommended)

Filename: cp048569.compsig; cp048569.exe; cp048569.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB2000JFDSL and MB4000JFDSN Drives

Version: HPD4 (G) (Recommended)

Filename: cp048589.compsig; cp048589.exe; cp048589.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB2000JFEML and MB4000JFEMN Drives

Version: HPD6 (G) (Critical)

Filename: cp048590.compsig; cp048590.exe; cp048590.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- o The firmware also includes emergency power off improvements.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB2000JFEPA and MB4000JFEPB Drives

Version: HPD5 (G) (Recommended)

Filename: cp048591.compsig; cp048591.exe; cp048591.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB4000JEFNC and MB6000JEFND Drives

Version: HPD9 (G) (Recommended)

Filename: cp048607.compsig; cp048607.exe; cp048607.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB4000JEQNL and MB6000JEQNN Drives

Version: HPDB (G) (Recommended)

Filename: cp048608.compsig; cp048608.exe; cp048608.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB4000JEXYA and MB6000JEXYB Drives

Version: HPD9 (E) (Recommended)

Filename: cp048609.compsig; cp048609.exe; cp048609.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000JEQUV and MB8000JEQVA Drives

Version: HPDB (G) (Recommended)

Filename: cp048614.compsig; cp048614.exe; cp048614.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000JVYYV Drive Version: HPD2 (G) (Recommended)

Filename: cp048615.compsig; cp048615.exe; cp048615.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000JVYZD and MB4000JVYZC Drives

Version: HPD4 (E) (Recommended)

Filename: cp048617.compsig; cp048617.exe; cp048617.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB8000JFECQ Drive

Version: HPD7 (F) (Recommended)

Filename: cp048619.compsig; cp048619.exe; cp048619.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD9 (B) (Recommended)

Filename: cp048625.compsig; cp048625.exe; cp048625.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MM1000JFJTH and MM002000JWCNF Drives

Version: HPD4 (B) (Recommended)

Filename: cp048626.compsig; cp048626.exe; cp048626.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives Version: HPD5 (E) (Recommended)

Filename: cp048627.compsig; cp048627.exe; cp048627.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, EO000400JWUGC, EO000800JWUGD and EO001600JWUGE Drives

Version: HPD3 (C) (Recommended)

Filename: cp048628.compsig; cp048628.exe; cp048628.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MO000800JXBEV, MO001600JXBFP, MO003200JXBFQ, MO006400JXBFR, MO000960JXBFA, MO001920JXBFT, MO003840JXBFU, MO007680JXBGA, MO015360JXBFV, E0000400JXBEU, E0000800JXBFL and E0001600JXBFN Drives

Version: HPD1 (B) (Recommended)

Filename: cp049152.compsig; cp049152.exe; cp049152.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, E00200JEFPD, E00400JEFPE and E00800JEFPF Drives

Version: HPD3 (G) (Recommended)

Filename: cp048630.compsig; cp048630.exe; cp048630.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK and

MO3200JFFCL Drives

Version: HPD9 (D) (Recommended)

Filename: cp048661.compsig; cp048661.exe; cp048661.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives

Version: HPD8 (D) (Critical)

Filename: cp048665.compsig; cp048665.exe; cp048665.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- o For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK0400JEABD, VK0800JEABE, and VO1600JEABF

Drives

Version: HPD4 (B) (Critical)

Filename: cp049412.compsig; cp049412.exe; cp049412.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- If Power On Hours exceeds 70,000hrs, PM2R will report Hardware error (04/4C/A8) after the next Power Cycle and will not accept read/write commands. This fix will update storage location reporting when the maximum number of registrations in the Work Load Log read process reaches 70,000; the last registered 70,000th storage location will be modified to be read as the next (70,001st) storage location.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00111296en_us

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VO000480JWDAR, VO000960JWDAT, VO001920JWDAU

and VO003840JWDAV Drives Version: HPD8 (D) (Critical)

Filename: cp044739.compsig; cp044739.exe; cp044739.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

 The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.

- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VO000800JWZJP, VO001600JWZJQ, VO003200JWZJR and VO006400JWZJT Drives

Version: HPD4 (B) (Recommended)

Filename: cp048468.compsig; cp048468.exe; cp048468.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VO000960JWTBK, VO001920JWTBL, VO003840JWTBN, VO007680JWTBP, MO000400JWTBQ, MO000800JWTBR, MO001600JWTBT, MO003200JWTBU, MO006400JWTCD, E0000400JWTBV, E0000800JWTCA and E0001600JWTCB Drives

Version: HPD9 (B) (Recommended)

Filename: cp049146.compsig; cp049146.exe; cp049146.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VO000960JWZJF, VO001920JWZJH, VO003840JWZJK, VO007680JWZJL and VO015360JWZJN Drives

Version: HPD4 (B) (Recommended)

Filename: cp048466.compsig; cp048466.exe; cp048466.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - V0000960RWUEV, V0001920RWUFA, V0003840RWUFB, V0007680RWUFC, V0000960RWUFD, V0001920RWUFE and V0003840RWUFF Drives Version: HPD6 (Critical)

Filename: cp049365.compsig; cp049365.exe; cp049365.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

- o Reduced the occurrence probability of PMIC busy issue.
- o Fixed the system data error at the drive power on issue.
- When the PLP operation starts, the waiting Unmap request to the 4KB not-aligned host write area is cancelled to be able to complete PLP correctly.

Online HDD/SSD Flash Component for Windows (x64) - VO003840XZCLT, VO007680XZCMB, MO000800XZCLQ and MO001600XZCLV Drives

Version: HPD1 (Recommended)

Filename: cp050457.compsig; cp050457.exe; cp050457.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

- o Fix command timeout and uncorrectable error improvement.
- o Added features for SAS4 auto power switching and thermal requirement.

Online HDD/SSD Flash Component for Windows (x64) - VO007680JWCNK and VO015300JWCNL Drives

Version: HPD8 (D) (Critical)

Filename: cp048644.compsig; cp048644.exe; cp048644.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- The issue affects SSDs with an HPE firmware version prior to HPD8 that results in SSD failure at 32,768 hours of operation (i.e., 3 years, 270 days 8 hours), neither the SSD nor the data can be recovered, after the SSD failure occurs.
- In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092491en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - V00480JFDGT, V00960JFDGU, V01920JFDGV and V03840JFDHA Drives

Version: HPD9 (D) (Recommended)

Filename: cp048660.compsig; cp048660.exe; cp048660.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

 \circ Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VO1920JEUQQ Drive

Version: HPD3 (G) (Recommended)

Filename: cp048645.compsig; cp048645.exe; cp048645.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Firmware - SATA Storage Disk

Top

Online HDD/SSD Flash Component for Linux (x64) - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives

Version: HPG3 (G) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-5bf9355926-HPG3-7.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-5bf9355926-HPG3-7.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives Version: HPG6 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-68b12e54d2-HPG6-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-68b12e54d2-HPG6-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB001000GWFWK and MB002000GWFWL Drives Version: HPG6 (E) (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-bfc4af697b-HPG6-5.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-bfc4af697b-HPG6-5.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB Drives

Version: HPG1 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d39e7a7e75-HPG1-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-d39e7a7e75-HPG1-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives Version: HPG3 (H) (Optional)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-0b575b5895-HPG3-8.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0b575b5895-HPG3-8.1.x86_64.rpm$

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB004000GWKGV Drive

Version: HPG1 (E) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-ca21e169e2-HPG1-5.1.x86 64.compsig;

rpm/RPMS/x86 64/firmware-hdd-ca21e169e2-HPG1-5.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB004000GWWQH, MB002000GWWQF and MB001000GWWQE Drives

Version: HPG3 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-12304c1aca-HPG3-3.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-12304c1aca-HPG3-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

 $\circ \quad \text{Added support for RHEL 8.4 and SLES15SP3}.$

Online HDD/SSD Flash Component for Linux (x64) - MB006000GWBXQ and MB008000GWBYL Drives Version: HPG8 (F) (**Recommended**)

Filename: rpm/RPMS/x86_64/firmware-hdd-a1fd19f9ca-HPG8-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-a1fd19f9ca-HPG8-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB006000GWJRR and MB008000GWJRT Drives

Version: HPG4 (D) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-c993b31232-HPG4-4.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-c993b31232-HPG4-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB006000GWKGR Drive

Version: HPG1 (E) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-7f2a26e6d0-HPG1-5.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-7f2a26e6d0-HPG1-5.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB008000GWRTC Drive

Version: HPG1 (E) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-82894b9e0a-HPG1-5.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-82894b9e0a-HPG1-5.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB008000GWWQU and MB006000GWWQT Drives Version: HPG2 (D) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-18e328f036-HPG2-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-18e328f036-HPG2-4.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB010000GWAYN and MB008000GWAYL Drives

Version: HPG5 (G) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-cc819d4bff-HPG5-7.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-cc819d4bff-HPG5-7.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

This code corrects a potential data integrity issue related to unaligned write commands. This
issue was only found in supplier ongoing lab testing.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB012000GWDFE Drive

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-059b8654a6-HPG3-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-059b8654a6-HPG3-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB012000GWTFE and MB014000GWTFF Drives

Version: HPG7 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-b78255e146-HPG7-3.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-b78255e146-HPG7-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB014000GWRTN, MB012000GWRTL and

MB010000GWRTK Drives

Version: HPG2 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-6b7ce3da0e-HPG2-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-6b7ce3da0e-HPG2-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB014000GWUDA Drive

Version: HPG2 (E) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-41cdb1c9da-HPG2-5.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-41cdb1c9da-HPG2-5.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB016000GWXKK Drive

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-e4f147cdd2-HPG3-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-e4f147cdd2-HPG3-2.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA and MB4000GDUPB Drives

Version: HPG4 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-3ab4c70e64-HPG4-10.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3ab4c70e64-HPG4-10.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH and MB4000GVYZK Drives

Version: HPG4 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-0a7010918e-HPG4-10.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0a7010918e-HPG4-10.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

 \circ Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB2000GCWLT, MB3000GCWLU and MB4000GCWLV Drives

Version: HPG4 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-2e70ce7412-HPG4-10.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-2e70ce7412-HPG4-10.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB2000GFEMH and MB4000GFEMK Drives

Version: HPG6 (I) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-70e3962f98-HPG6-9.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-70e3962f98-HPG6-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB4000GEFNA and MB6000GEFNB Drives

Version: HPG6 (J) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-40277d55d3-HPG6-10.1.x86 64.compsig;

rpm/RPMS/x86 64/firmware-hdd-40277d55d3-HPG6-10.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB4000GEQNH and MB6000GEQNK Drives Version: HPGB (I) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-bfc95f0628-HPGB-9.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-bfc95f0628-HPGB-9.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000GEBTP Drive

Version: HPG4 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-3243fce9a0-HPG4-9.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-3243fce9a0-HPG4-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000GEQUT and MB8000GEQUU Drives

Version: HPGB (I) (Critical)

Filename: rpm/RPMS/x86 64/firmware-hdd-1d7f19120b-HPGB-9.1.x86 64.compsig;

rpm/RPMS/x86_64/firmware-hdd-1d7f19120b-HPGB-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

 Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was only found during supplier ongoing reliability testing.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000GEXXV Drive

Version: HPG2 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-a629fcea59-HPG2-10.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-a629fcea59-HPG2-10.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000GVYYU Drive

Version: HPG2 (I) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-bdc37cb37f-HPG2-9.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-bdc37cb37f-HPG2-9.1.x86 64.rpm

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB6000GVYZB and MB4000GVYZA Drives

Version: HPG4 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-0a7d4aa47f-HPG4-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-0a7d4aa47f-HPG4-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MB8000GFECR Drive

Version: HPG6 (F) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-6d922fc9a8-HPG6-6.1.x86 64.compsig;

rpm/RPMS/x86_64/firmware-hdd-6d922fc9a8-HPG6-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA and MK001920GWCFB Drives

Version: HPG3 (G) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-7677644a25-HPG3-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7677644a25-HPG3-7.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MK000480GWSSC, MK000960GWSSD, MK001920GWSSE and MK003840GWSSF Drives

Version: HPG3 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-f693ccc138-HPG3-3.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-f693ccc138-HPG3-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MK000480GWXFF, MK000960GWXFH, MK001920GWXFK and MK003840GWXFL Drives

Version: HPG2 (Recommended)

 $File name: rpm/RPMS/x86_64/firmware-hdd-8e1e8083c5-HPG2-1.1.x86_64.compsig; \\$

rpm/RPMS/x86_64/firmware-hdd-8e1e8083c5-HPG2-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

This FW release deploys an Enhanced Media Scan algorithm that addresses an issue when the host system does not provide enough idle time for drive's Foreground Media Scan to be activated, which is needed to ensure long term drive reliability. It also addresses few minor issues.

Online HDD/SSD Flash Component for Linux (x64) - MK003840GWHTE Drive

Version: HPG8 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-ac20a1e1c6-HPG8-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-ac20a1e1c6-HPG8-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA)Â is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MK0960GECQK Drive

Version: HPG3 (K) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-3e34285be7-HPG3-11.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-3e34285be7-HPG3-11.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

 Firmware fixes intermittent data corruption issue associated with unaligned sequential write operations.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (H) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-ec908c3650-HPG8-8.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-ec908c3650-HPG8-8.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MM1000GFJTE Drive

Version: HPG5 (F) (Optional)

Filename: rpm/RPMS/x86_64/firmware-hdd-95af9a555e-HPG5-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-95af9a555e-HPG5-6.1.x86_64.rpm

<u>Important Note!</u>

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives

Version: HPGG (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-9196d4f720-HPGG-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-9196d4f720-HPGG-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000150GWCNN, VK000240GWCNP, VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives

Version: HPG1 (F) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-6e3845def5-HPG1-6.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-6e3845def5-HPG1-6.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GWCFD, VK000480GWCFE, VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives

Version: HPG3 (G) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-f42438de3d-HPG3-7.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-f42438de3d-HPG3-7.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives Version: HPGG (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-3db7640485-HPGG-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3db7640485-HPGG-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPQ Drives

Version: HPG5 (F) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-aef2a690c9-HPG5-6.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-aef2a690c9-HPG5-6.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o Fixes a rare link loss issue and adds enhancements for drive reliability.
- After HPG5 firmware is downloaded to the drive, the new HPG5 firmware will be active on the drive.
- $\circ\quad$ The new drive bootloader code will be activated after the next drive power cycle.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00072768en_us

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GWSRQ, VK000480GWSRR, VK000960GWSRT, VK001920GWSRU and VK003840GWSRV Drives

Version: HPG4 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-db687966b4-HPG4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-db687966b4-HPG4-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK, MK001920GWTTL and MK003840GWTTN Drives

Version: HPG6 (C) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-c566d63ca0-HPG6-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-c566d63ca0-HPG6-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000240GXAWE, VK000480GXAWK, VK000960GXAWL, VK001920GXAWN, VK003840GXAWP, VK007680GXAWQ, MK000480GXAWF, MK000960GXAXB, MK001920GXAWR, MK003840GXAWT, VR000240GXBBL, MR000480GXBGH and MR000960GXBGK Drives Version: HPG1 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-8f9bf23306-HPG1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8f9bf23306-HPG1-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH and MK001920GWUGK Drives

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-9e87eecb3f-HPG3-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9e87eecb3f-HPG3-2.1.x86_64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC and VK003840GWTHD Drives

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-492a9952f6-HPG3-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-492a9952f6-HPG3-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK Drives

Version: HPG2 (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-hdd-befd42bd64-HPG2-1.1.x86_64.compsig;\\$

rpm/RPMS/x86 64/firmware-hdd-befd42bd64-HPG2-1.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

O Support new PCB H/W with new temperature sensor.

Online HDD/SSD Flash Component for Linux (x64) - VK000960GXCLD, VK001920GXCGP, VK003840GXCGQ

and VK007680GXCGR Drives

Version: HPG2 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-4b4177239b-HPG2-2.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-4b4177239b-HPG2-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK003840GWSXL Drive

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d1cf327bc4-HPG3-2.1.x86_64.compsig;

rpm/RPMS/x86 64/firmware-hdd-d1cf327bc4-HPG3-2.1.x86 64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK007680GWSXN Drive

Version: HPG3 (B) (Recommended)

Filename: rpm/RPMS/x86 64/firmware-hdd-b460823f70-HPG3-2.1.x86 64.compsig;

rpm/RPMS/x86 64/firmware-hdd-b460823f70-HPG3-2.1.x86 64.rpm

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL and VK3840GFDKN Drives

Version: HPG1 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-a2d4b5c742-HPG1-10.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-a2d4b5c742-HPG1-10.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VK0240GEPQN, VK0480GEPQP and VK0960GEPQQ Drives Version: HPG1 (I) **(Recommended)**

Filename: rpm/RPMS/x86_64/firmware-hdd-1a516522d1-HPG1-9.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1a516522d1-HPG1-9.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - VR000150GWEPP and VR000480GWEPR Drives Version: HPG1 (G) (Critical)

Filename: rpm/RPMS/x86_64/firmware-hdd-b7eb905efe-HPG1-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b7eb905efe-HPG1-7.1.x86_64.rpm

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o Fixes an issue which caused the drive to become non-functional.
- Fixes VPD Log D0h reported drive Sanitize times.
- o Adds support for Security Log Page BBh.

Enhancements

o Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for Linux (x64) - XP0120GFJSL and XP0240GFJSN Drives

Version: HPS4 (J) (Recommended)

Filename: rpm/RPMS/x86_64/firmware-hdd-d355375539-HPS4-10.1.x86_64.compsig;

rpm/RPMS/x86_64/firmware-hdd-d355375539-HPS4-10.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for RHEL 8.4 and SLES15SP3.

Online HDD/SSD Flash Component for VMware ESXi - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives

Version: HPG3 (G) (Recommended) Filename: CP048295.compsig; CP048295.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG6 (F) (Recommended)

Filename: CP048300.compsig; CP048300.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB001000GWFWK and MB002000GWFWL Drives

Version: HPG6 (F) (Recommended)

Filename: CP048302.compsig; CP048302.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- $\circ\quad$ In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB001000GWJAN, MB002000GWFWA and

MB004000GWFWB Drives

Version: HPG1 (F) (**Recommended**) Filename: CP048313.compsig; CP048313.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (H) (Optional)

Filename: CP048317.compsig; CP048317.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB004000GWKGV Drive

Version: HPG1 (F) (Recommended)

Filename: CP048319.compsig; CP048319.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB004000GWWQH, MB002000GWWQF and

MB001000GWWQE Drives

Version: HPG3 (C) (**Recommended**) Filename: CP048430.compsig; CP048430.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB006000GWBXQ and MB008000GWBYL Drives

Version: HPG8 (F) (Recommended)

Filename: CP048328.compsig; CP048328.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB006000GWJRR and MB008000GWJRT Drives

Version: HPG4 (D) (**Recommended**) Filename: CP048447.compsig; CP048447.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB006000GWKGR Drive

Version: HPG1 (F) (**Recommended**) Filename: CP048329.compsig; CP048329.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB008000GWRTC Drive

Version: HPG1 (F) (**Recommended**) Filename: CP048331.compsig; CP048331.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB008000GWWQU and MB006000GWWQT Drives

Version: HPG2 (D) (**Recommended**) Filename: CP048425.compsig; CP048425.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB010000GWAYN and MB008000GWAYL Drives

Version: HPG5 (G) (Critical)

Filename: CP048333.compsig; CP048333.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

This code corrects a potential data integrity issue related to unaligned write commands. This
issue was only found in supplier ongoing lab testing.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB012000GWDFE Drive

Version: HPG3 (B) (Recommended)

Filename: CP048335.compsig; CP048335.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB012000GWTFE and MB014000GWTFF Drives

Version: HPG7 (C) (Recommended)

Filename: CP048336.compsig; CP048336.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB014000GWRTN, MB012000GWRTL and

MB010000GWRTK Drives

Version: HPG2 (F) (Recommended)

Filename: CP048337.compsig; CP048337.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB014000GWUDA Drive

Version: HPG2 (F) (**Recommended**) Filename: CP048339.compsig; CP048339.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB016000GWXKK Drive

Version: HPG3 (B) (Recommended)

Filename: CP049128.compsig; CP049128.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA and

MB4000GDUPB Drives

Version: HPG4 (K) (Recommended)

Filename: CP048342.compsig; CP048342.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH and

MB4000GVYZK Drives

Version: HPG4 (I) (**Recommended**) Filename: CP048343.compsig; CP048343.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB2000GCWLT, MB3000GCWLU and MB4000GCWLV

Drives

Version: HPG4 (K) **(Recommended)** Filename: CP048345.compsiq; CP048345.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB2000GFEMH and MB4000GFEMK Drives

Version: HPG6 (I) (Critical)

Filename: CP048346.compsig; CP048346.zip

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.
- Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB4000GEFNA and MB6000GEFNB Drives

 $\label{eq:Version: HPG6 (I) (Recommended)} Version: \ HPG6 \ (I) \ \textbf{(Recommended)}$

Filename: CP048365.compsig; CP048365.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB4000GEQNH and MB6000GEQNK Drives

Version: HPGB (I) (Critical)

Filename: CP048366.compsig; CP048366.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000GEBTP Drive

Version: HPG4 (I) (Recommended)

Filename: CP048370.compsig; CP048370.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000GEQUT and MB8000GEQUU Drives

Version: HPGB (I) (Critical)

Filename: CP048371.compsig; CP048371.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was only found during supplier ongoing reliability testing.
- o Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000GEXXV Drive

Version: HPG2 (K) (**Recommended**) Filename: CP048403.compsig; CP048403.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000GVYYU Drive

Version: HPG2 (I) (Recommended)

Filename: CP048372.compsig; CP048372.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB6000GVYZB and MB4000GVYZA Drives

Version: HPG4 (F) (Recommended)

Filename: CP048377.compsig; CP048377.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MB8000GFECR Drive

Version: HPG6 (G) (Recommended) Filename: CP048381.compsig; CP048381.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA

and MK001920GWCFB Drives

Version: HPG3 (G) (Recommended) Filename: CP048390.compsig; CP048390.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MK000480GWSSC, MK000960GWSSD, MK001920GWSSE

and MK003840GWSSF Drives

Version: HPG3 (C) (Recommended)

Filename: CP048432.compsig; CP048432.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MK000480GWXFF, MK000960GWXFH, MK001920GWXFK and MK003840GWXFL Drives

Version: HPG2 (Recommended)

Filename: CP049299.compsig; CP049299.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

This FW release deploys an Enhanced Media Scan algorithm that addresses an issue when the host system does not provide enough idle time for drive's Foreground Media Scan to be activated, which is needed to ensure long term drive reliability. It also addresses few minor issues.

Online HDD/SSD Flash Component for VMware ESXi - MK003840GWHTE Drive

Version: HPG8 (B) **(Recommended)** Filename: CP048383.compsig; CP048383.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MK0960GECQK Drive

Version: HPG3 (L) (Critical)

Filename: CP048387.compsig; CP048387.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

 Firmware fixes intermittent data corruption issue associated with unaligned sequential write operations.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives Version: HPG8 (H) **(Recommended)**

Filename: CP048388.compsig; CP048388.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MM1000GFJTE Drive

Version: HPG5 (F) (Optional)

Filename: CP048389.compsig; CP048389.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives

Version: HPGG (B) **(Recommended)** Filename: CP048402.compsig; CP048402.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000150GWCNN, VK000240GWCNP,

VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives

Version: HPG1 (F) (**Recommended**) Filename: CP048405.compsig; CP048405.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GWCFD, VK000480GWCFE, VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives.

Version: HPG3 (G) (Recommended) Filename: CP048407.compsig; CP048407.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives Version: HPGG (B) (Recommended)

Filename: CP048406.compsig; CP048406.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPQ Drives

Version: HPG5 (F) (Critical)

Filename: CP048444.compsig; CP048444.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- Fixes a rare link loss issue and adds enhancements for drive reliability.
- After HPG5 firmware is downloaded to the drive, the new HPG5 firmware will be active on the
- o The new drive bootloader code will be activated after the next drive power cycle.
- For more information, refer to HPE Customer Advisory at the following
 URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00072768en_us

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GWSRQ, VK000480GWSRR, VK000960GWSRT,

VK001920GWSRU, VK003840GWSRV Drives Version: HPG4 (C) **(Recommended)** Filename: CP048434.compsig; CP048434.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK, MK001920GWTTL and

MK003840GWTTN Drives

Version: HPG6 (C) (**Recommended**) Filename: CP048408.compsig; CP048408.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000240GXAWE, VK000480GXAWK, VK000960GXAWL, VK001920GXAWN, VK003840GXAWP, VK007680GXAWQ, MK000480GXAWF, MK000960GXAXB, MK001920GXAWR, MK003840GXAWT, VR000240GXBBL, MR000480GXBGH and MR000960GXBGK Drives Version: HPG1 (B) (Recommended)

Filename: CP049160.compsig; CP049160.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH and MK001920GWUGK Drives

Version: HPG3 (B) (**Recommended**) Filename: CP048409.compsig; CP048409.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC

and VK003840GWTHD Drives

Version: HPG3 (B) **(Recommended)** Filename: CP049275.compsig; CP049275.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK Drives

Version: HPG2 (Recommended)

Filename: CP050579.compsig; CP050579.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

<u>Fixes</u>

Support new PCB H/W with new temperature sensor.

 $On line\ HDD/SSD\ Flash\ Component\ for\ VMware\ ESXi-VK000960GXCLD,\ VK001920GXCGP,\ VK003840GXCGQ$

and VK007680GXCGR Drives

Version: HPG2 (B) (**Recommended**) Filename: CP049272.compsig; CP049272.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK003840GWSXL Drive

Version: HPG3 (B) (Recommended)

Filename: CP048410.compsig; CP048410.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK007680GWSXN Drive

Version: HPG3 (B) (Recommended)

Filename: CP048411.compsig; CP048411.zip

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL, and VK3840GFDKN Drives

Version: HPG1 (J) (Recommended)

Filename: CP048412.compsig; CP048412.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VK0240GEPQN, VK0480GEPQP and VK0960GEPQQ

Drives

Version: HPG1 (J) (Recommended)

Filename: CP048413.compsig; CP048413.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - VR000150GWEPP and VR000480GWEPR Drives

Version: HPG1 (G) (Critical)

Filename: CP048424.compsig; CP048424.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- o Fixes a timing issue which can cause the drive to become non-functional.
- o Fixes VPD Log D0h reported drive Sanitize times.
- Adds support for Security Log Page BBh.

Enhancements

 \circ Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for VMware ESXi - XP0120GFJSL and XP0240GFJSN Drives

Version: HPS4 (J) (**Recommended**) Filename: CP048423.compsig; CP048423.zip

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for VMware 7.0 U3

Online HDD/SSD Flash Component for Windows (x64) - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives

Version: HPG3 (F) (Recommended)

Filename: cp048554.compsig; cp048554.exe; cp048554.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives Version: HPG6 (E) (Recommended)

Filename: cp048556.compsig; cp048556.exe; cp048556.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB001000GWFWK and MB002000GWFWL Drives

Version: HPG6 (E) (Recommended)

Filename: cp048557.compsig; cp048557.exe; cp048557.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB Drives

Version: HPG1 (E) (Recommended)

Filename: cp048558.compsig; cp048558.exe; cp048558.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (G) (Optional)

Filename: cp048559.compsig; cp048559.exe; cp048559.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB004000GWKGV Drive

Version: HPG1 (E) (Recommended)

Filename: cp048561.compsig; cp048561.exe; cp048561.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB004000GWWQH, MB002000GWWQF and

MB001000GWWQE Drives

Version: HPG3 (C) (Recommended)

Filename: cp048652.compsig; cp048652.exe; cp048652.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB006000GWBXQ and MB008000GWBYL Drives Version: HPG8 (E) (Recommended)

Filename: cp048667.compsig; cp048667.exe; cp048667.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB006000GWJRR and MB008000GWJRT Drives Version: HPG4 (D) **(Recommended)**

Filename: cp048470.compsig; cp048470.exe; cp048470.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB006000GWKGR Drive Version: HPG1 (E) (**Recommended**)

Filename: cp048674.compsig; cp048674.exe; cp048674.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB008000GWRTC Drive

Version: HPG1 (E) (Recommended)

Filename: cp048669.compsig; cp048669.exe; cp048669.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB008000GWWQU and MB006000GWWQT Drives

Version: HPG2 (D) (Recommended)

Filename: cp048648.compsig; cp048648.exe; cp048648.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB010000GWAYN and MB008000GWAYL Drives

Version: HPG5 (F) (Critical)

Filename: cp048671.compsig; cp048671.exe; cp048671.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

This code corrects a potential data integrity issue related to unaligned write commands. This
issue was only found in supplier ongoing lab testing.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB012000GWDFE Drive

Version: HPG3 (B) (Recommended)

Filename: cp048673.compsig; cp048673.exe; cp048673.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB012000GWTFE and MB014000GWTFF Drives Version: HPG7 (C) (Recommended)

Filename: cp048543.compsig; cp048543.exe; cp048543.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB014000GWRTN, MB012000GWRTL and

MB010000GWRTK Drives

Version: HPG2 (E) (Recommended)

Filename: cp048544.compsig; cp048544.exe; cp048544.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB014000GWUDA Drive

Version: HPG3 (E) (Recommended)

Filename: cp048545.compsig; cp048545.exe; cp048545.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB016000GWXKK Drive

Version: HPG3 (B) (Recommended)

Filename: cp049127.compsig; cp049127.exe; cp049127.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA and MB4000GDUPB Drives

Version: HPG4 (I) (Recommended)

Filename: cp048564.compsig; cp048564.exe; cp048564.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH and MB4000GVYZK Drives

Version: HPG4 (I) (Recommended)

Filename: cp048568.compsig; cp048568.exe; cp048568.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB2000GCWLT, MB3000GCWLU and MB4000GCWLV Drives

Version: HPG4 (I) (Recommended)

Filename: cp048574.compsig; cp048574.exe; cp048574.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB2000GFEMH and MB4000GFEMK Drives

Version: HPG6 (H) (Critical)

Filename: cp048588.compsig; cp048588.exe; cp048588.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB4000GEFNA and MB6000GEFNB Drives

Version: HPG6 (I) (Recommended)

Filename: cp048592.compsig; cp048592.exe; cp048592.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB4000GEQNH and MB6000GEQNK Drives

Version: HPGB (H) (Critical)

Filename: cp048593.compsig; cp048593.exe; cp048593.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

- Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was found during supplier ongoing reliability testing.
- The firmware also corrects settings preservation after a code download and includes emergency power off improvements.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000GEBTP Drive

Version: HPG4 (H) (Recommended)

Filename: cp048610.compsig; cp048610.exe; cp048610.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Version: HPGB (H) (Critical)

Filename: cp048611.compsig; cp048611.exe; cp048611.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

 Corrects a potential data integrity issue caused by an in process write retry incorrectly starting at the wrong location. This issue was only found during supplier ongoing reliability testing.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000GEXXV Drive

Version: HPG2 (I) (Recommended)

Filename: cp048633.compsig; cp048633.exe; cp048633.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000GVYYU Drive

Version: HPG2 (H) (Recommended)

Filename: cp048612.compsig; cp048612.exe; cp048612.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB6000GVYZB and MB4000GVYZA Drives

Version: HPG4 (E) (Recommended)

Filename: cp048613.compsig; cp048613.exe; cp048613.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MB8000GFECR Drive

Version: HPG6 (E) (Recommended)

Filename: cp048618.compsig; cp048618.exe; cp048618.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA and MK001920GWCFB Drives

Version: HPG3 (F) (Recommended)

Filename: cp048624.compsig; cp048624.exe; cp048624.md5

Important Note!

 Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MK000480GWSSC, MK000960GWSSD,

MK001920GWSSE and MK003840GWSSF Drives

Version: HPG3 (C) (Recommended)

Filename: cp048654.compsig; cp048654.exe; cp048654.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MK000480GWXFF, MK000960GWXFH,

MK001920GWXFK and MK003840GWXFL Drives

Version: HPG2 (Recommended)

Filename: cp049300.compsig; cp049300.exe; cp049300.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

This FW release deploys an Enhanced Media Scan algorithm that addresses an issue when the host system does not provide enough idle time for drive's Foreground Media Scan to be activated, which is needed to ensure long term drive reliability. It also addresses few minor issues.

Online HDD/SSD Flash Component for Windows (x64) - MK003840GWHTE Drive

Version: HPG8 (B) (Recommended)

Filename: cp048620.compsig; cp048620.exe; cp048620.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MK0960GECQK Drive

Version: HPG3 (K) (Critical)

Filename: cp048621.compsig; cp048621.exe; cp048621.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Fixes

 Firmware fixes intermittent data corruption issue associated with unaligned sequential write operations.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (G) (Recommended)

Filename: cp048622.compsig; cp048622.exe; cp048622.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MM1000GFJTE Drive

Version: HPG5 (E) (Optional)

Filename: cp048623.compsig; cp048623.exe; cp048623.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives Version: HPGG (B) (Recommended)

Filename: cp048632.compsig; cp048632.exe; cp048632.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000150GWCNN, VK000240GWCNP, VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives

Version: HPG1 (E) (Recommended)

Filename: cp048635.compsig; cp048635.exe; cp048635.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

 Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GWCFD, VK000480GWCFE,

VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives

Version: HPG3 (F) (Recommended)

Filename: cp048637.compsig; cp048637.exe; cp048637.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives

Version: HPGG (B) (Recommended)

Filename: cp048636.compsig; cp048636.exe; cp048636.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and

MK001920GWJPQ Drives Version: HPG5 (E) (Critical)

Filename: cp048664.compsig; cp048664.exe; cp048664.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- o Fixes a rare link loss issue and adds enhancements for drive reliability.
- After HPG5 firmware is downloaded to the drive, the new HPG5 firmware will be active on the drive.
- o The new drive bootloader code will be activated after the next drive power cycle.
- For more information, refer to HPE Customer Advisory at the following URL: https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00072768en_us

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GWSRQ, VK000480GWSRR,

VK000960GWSRT, VK001920GWSRU and VK003840GWSRV Drives

Version: HPG4 (C) (Recommended)

Filename: cp048657.compsig; cp048657.exe; cp048657.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK,

MK001920GWTTL and MK003840GWTTN Drives

Version: HPG6 (C) (Recommended)

Filename: cp048241.compsig; cp048241.exe; cp048241.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes

- would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000240GXAWE, VK000480GXAWK, VK000960GXAWL, VK001920GXAWN, VK003840GXAWP, VK007680GXAWQ, MK000480GXAWF, MK000960GXAXB, MK001920GXAWR, MK003840GXAWT, VR000240GXBBL, MR000480GXBGH and MR000960GXBGK Drives

Version: HPG1 (B) (Recommended)

Filename: cp049159.compsig; cp049159.exe; cp049159.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH and MK001920GWUGK Drives

Version: HPG3 (B) (Recommended)

Filename: cp048638.compsig; cp048638.exe; cp048638.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC and VK003840GWTHD Drives

Version: HPG3 (B) (Recommended)

Filename: cp049277.compsig; cp049277.exe; cp049277.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK Drives

Version: HPG2 (Recommended)

Filename: cp050580.compsig; cp050580.exe; cp050580.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

O Support new PCB H/W with new temperature sensor.

Online HDD/SSD Flash Component for Windows (x64) - VK000960GXCLD, VK001920GXCGP, VK003840GXCGQ and VK007680GXCGR Drives

Version: HPG2 (B) (Recommended)

Filename: cp049274.compsig; cp049274.exe; cp049274.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Windows Server 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK003840GWSXL Drive

Version: HPG3 (B) (Recommended)

Filename: cp048639.compsig; cp048639.exe; cp048639.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK007680GWSXN Drive

Version: HPG3 (B) (Recommended)

Filename: cp048640.compsig; cp048640.exe; cp048640.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL and VK3840GFDKN Drives

Version: HPG1 (H) (Recommended)

Filename: cp048641.compsig; cp048641.exe; cp048641.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VK0240GEPQN, VK0480GEPQP and VK0960GEPQQ

Drives

Version: HPG1 (H) (Recommended)

Filename: cp048642.compsig; cp048642.exe; cp048642.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - VR000150GWEPP and VR000480GWEPR Drives Varsian: HDG1 (E) (Critical)

Version: HPG1 (F) (Critical)

Filename: cp048647.compsig; cp048647.exe; cp048647.md5

Important Note!

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

<u>Fixes</u>

- o Fixes a timing issue which can cause the drive to become non-functional.
- Fixes VPD Log D0h reported drive Sanitize times.
- o Adds support for Security Log Page BBh.

Enhancements

o Added support for Microsoft Server Windows 2022.

Online HDD/SSD Flash Component for Windows (x64) - XP0120GFJSL and XP0240GFJSN Drives

Version: HPS4 (H) (Recommended)

Filename: cp048646.compsig; cp048646.exe; cp048646.md5

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or a ProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

o Added support for Microsoft Server Windows 2022.

Firmware - Storage Controller

Top

Online ROM Flash Component for Linux - HPE Host Bus Adapters H221

Version: 15.10.10.00 (C) (Optional)

Filename: rpm/RPMS/i386/firmware-43d7eff89e-15.10.10.00-3.1.i386.rpm

Important Note!

Customers who already have firmware version 15.10.10.00 installed do not need to update to 15.10.10.00(C).

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

Enhancements

o Improved Integration with Smart Update Manager.

Supported Devices and Features

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

Online ROM Flash Component for Linux (x64) - HPE Apollo 2000 System - SAS Expander

Version: 1.52 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-smartarray-3bf7ece88e-1.52-1.1.x86_64.rpm

<u>Fixes</u>

Fixed an issue in the HPE Apollo 2000 System SAS Expander FW where the HDD Zoning Table would be set to default after upgrading to 1.51

Please reference Customer Advisory a00095304en us.

Online ROM Flash Component for VMware ESXi - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 5.10 (Recommended)

Filename: CP049281.compsig; CP049281.zip

Important Note!

 Do NOT downgrade FW to previous version if current firmware version on expander card is 5.10.

Fixes

- Valid flag is always set to true initially so that CRC check can be performed on initstring partition and test if it is really valid.
- Move Smart Carrier Authentication to later in the boot process and move the Exception Dumper task to earlier in the process in order to support Winbond alternative Flash

Online ROM Flash Component for VMware ESXi - HPE Apollo 2000 System - SAS Expander

Version: 1.52 (B) (Recommended)

Filename: CP045347.compsig; CP045347.zip

Enhancements

Added support for ESXi 7.0

Online ROM Flash Component for VMware ESXi - HPE Apollo 45xx Gen9 Backplane Expander Firmware

Version: 2.51 (Recommended)

Filename: CP043496.compsig; CP043496.zip

Important Note!

 Please un-plug and re-plug the power cord to the server for firmware upgrade from version 1.03 or earlier to take effect.

Fixes

Drive may show up missing after a system reboot.

Please reference Customer Advisory a00098241en_us

Online ROM Flash component for VMware ESXi - HPE Dual 8GB microSD USB

Version: 1.3.2.215 (B) (Recommended) Filename: CP037940.compsig; CP037940.zip

Fixes

o To show corresponding HPE Dual 8GB Micron SD part number in Agentless Management Service version 11.2.0 or later.

Online ROM Flash Component for VMware ESXi - HPE Express Bay Enablement Switch Card

Version: 1.78 (C) (Recommended)

Filename: CP044313.compsig; CP044313.zip

Important Note!

o Power cycle / cold reboot is required after installation for updates to take effect.

Prerequisites

 The HP ProLiant iLO firmware version must be v2.20 or later. If the HP ProLiant iLO firmware is older than v2.20 you will receive the following error message:

Check dependency failed.

Current version: iLOx x.xx

Minimum version required: iLO4 2.20

The software will not be installed on this system because the required hardware is not present in the system or the software/firmware doesn't apply to this system

Enhancements

Added support for the ESXi OS 7.0 changes

Online ROM Flash Component for VMware ESXi - Smart Array and Smart HBA H240ar, H240nr, H240, H241,

H244br, P240nr, P244br, P246br, P440ar, P440, P441, P542D, P741m, P840, P840ar, and P841

Version: 7.00 (D) (Recommended)

Filename: CP047335.compsig; CP047335.zip

Fixes

• Improved flash engine efficiency

Online ROM Flash Component for VMware ESXi - Smart Array P220i, P222, P420i, P420, P421, P721m, and

P822

Version: 8.32 (E) (Recommended)

Filename: CP045344.compsig; CP045344.zip

Enhancements

Added support for ESXi 7.0

Online ROM Flash Component for VMware ESXi - Smart Array P230i, P430, P431, P731m, P830i, and P830

Version: 5.02 (B) (Recommended)

Filename: CP045345.compsig; CP045345.zip

Enhancements

Added support for the ESXI OS7.0

Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 5.10 (Recommended)

Filename: cp049280.compsig; cp049280.exe; cp049280.md5

Important Note!

• Do NOT downgrade FW to previous version if current firmware version on expander card is 5.10.

<u>Fixes</u>

- Valid flag is always set to true initially so that CRC check can be performed on initstring partition and test if it is really valid.
- Move Smart Carrier Authentication to later in the boot process and move the Exception Dumper task to earlier in the process in order to support Winbond alternative Flash

Enhancements

• Add Windows 2022 support

Online ROM Flash Component for Windows (x64) - HPE Apollo 2000 System - SAS Expander

Version: 1.52 (Recommended)

Filename: cp041644.exe; cp041644.md5

<u>Fixes</u>

Fixed an issue in the HPE Apollo 2000 System SAS Expander FW where the HDD Zoning Table would be set to default after upgrading to 1.51

Please reference Customer Advisory a00095304en us.

Online ROM Flash Component for Windows (x64) - HPE Apollo 45xx Gen9 Backplane Expander Firmware

Version: 2.51 (Recommended)

Filename: cp043498.exe; cp043498.md5

Important Note!

 Please un-plug and re-plug the power cord to the server for firmware upgrade from version 1.03 or earlier to take effect.

Fixes

Drive may show up missing after a system reboot.

Please reference Customer Advisory a00098241en_us

Online ROM Flash Component for Windows (x64) - HPE Express Bay Enablement Switch Card

Version: 1.78 (C) (Optional)

Filename: cp037730.exe; cp037730.md5

Important Note!

Customers who already have firmware version 1.78 installed do not need to update to 1.78(C).

• Power cycle / cold reboot is required after installation for updates to take effect.

Prerequisites

• The "HP ProLiant iLO 3/4 Channel Interface Driver" must be installed and running before using this flash component. If the driver is not running you will receive the following error message:

"Setup is unable to load a setup DLL"

• The HP ProLiant iLO firmware version must be v2.20 or later. If the HP ProLiant iLO firmware is older than v2.20 you will receive the following error message:

Check dependency failed.

Current version: iLOx x.xx

Minimum version required: iLO4 2.20

The software will not be installed on this system because the required hardware is not present in the system or the software/firmware doesn't apply to this system.

Enhancements

Added support for Microsoft Windows Server 2019 OS

Online ROM Flash Component for Windows (x64) - HPE Host Bus Adapters H221

Version: 15.10.10.00 (E) **(Optional)** Filename: cp038049.exe; cp038049.md5

Important Note!

 $Customers \ who \ already \ have \ firmware \ version \ 15.10.10.00 \ installed \ do \ not \ need \ to \ update \ to \ 15.10.10.00(E).$

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

Enhancements

• Improved Integration with Smart Update Manager.

Supported Devices and Features

This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

Online ROM Flash Component for Windows (x64) - Smart Array and Smart HBA H240ar, H240nr, H240, H241, H244br, P240nr, P246br, P246br, P440ar, P440, P441, P542D, P741m, P840, P840ar, and P841

Version: 7.00 (Recommended)

Filename: cp039995.exe; cp039995.md5

Fixes

- Occasionally the drive will not accept any IO's after running Sanitize command for a period of time due to the FW being out of sync with the drive during that time
- Non-HPE drives could report "Task Set Full" due to the drives reaching the qdepth limit during heavy workload
- Raid volume is not discovered due to a bad drive consuming two slots during hotplug
- Data could become inaccessible when upgrading from firmware versions prior to 4.5x
- The controller could stop responding when executing a SCSI verify command due to a CPU exception
- The system could stop communicating due to an I/O command timeout
- While on HBA mode, a drive could stop responding due to an early allocated buffer release
- A SAS drive WWN is reported inaccuratelyy due to an incorrect report causing the driver to be out of sync with the device
- If using a 4G module, the controller could stop responding due to the SSD Cache metadata exceeding its limits during a Backup
- SSD Smart Cache module become disabled due to a reduction in usable cache space

Enhancements

Add optimization for the iLO communication interface in order to have a more effective mechanism to check for ownership of the communication buffer

Online ROM Flash Component for Windows (x64) - Smart Array P220i, P222, P420i, P420, P421, P721m, and

Version: 8.32 (C) (**Recommended**) Filename: cp037741.exe; cp037741.md5

Important Note!

Customers who already have firmware version 8.32 installed do not need to update to 8.32(C).

Enhancements

Improved Integration with Smart Update Manager

Online ROM Flash Component for Windows (x64) - Smart Array P230i, P430, P431, P731m, P830i, and P830

Version: 5.02 (Optional)

Filename: cp039412.exe; cp039412.md5

Fixes

- The firmware updates could fail while SmartCache is enabled due to active I/O in the Smart Cache.
- The serial output of the expander could fail to be populated in the controller logs due to the buffer not being handled appropriately by the controller

Supplemental Update / Online ROM Flash Component for Linux (x64) – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 5.10 (Recommended)

 $Filename: rpm/RPMS/x86_64/firmware-smartarray-1f19a4a64d-5.10-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-1f19a4a64d-5.10-1.1.x86_64.rpm$

Important Note!

 Do NOT downgrade FW to previous version if current firmware version on expander card is 5.10.

Fixes

• Valid flag is always set to true initially so that CRC check can be performed on initstring partition and test if it is really valid.

 Move Smart Carrier Authentication to later in the boot process and move the Exception Dumper task to earlier in the process in order to support Winbond alternative Flash

Supplemental Update / Online ROM Flash Component for Linux (x64) – HPE Apollo 45xx Gen9 Backplane Expander Firmware

Version: 2.51 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-smartarray-7bdfcd246b-2.51-1.1.x86_64.rpm

Important Note!

 Please un-plug and re-plug the power cord to the server for firmware upgrade from version 1.03 or earlier to take effect.

Fixes

Drive may show up missing after a system reboot.

Please reference Customer Advisory a00098241en_us

Supplemental Update / Online ROM Flash Component for Linux (x64) – HPE Express Bay Enablement Switch Card

Version: 1.78 (B) (Optional)

Filename: firmware-smartarray-94189dca85-1.78-2.1.x86_64.rpm

Important Note!

Customers who already have firmware version 1.78 installed do not need to update to 1.78(B).

• Power cycle / cold reboot is required after installation for updates to take effect.

Prerequisites

 Previous releases of HPE Express Bay Enablement Switch Card firmware Smart Component documented dependency on iLO 3/4 Channel Interface Driver. This driver is now included with the following Linux OSes:

Red Hat Enterprise Linux 7 Server

Red Hat Enterprise Linux 6 Server (x86-64)

SUSE Linux Enterprise Server 12

• The HP ProLiant iLO firmware version must be v2.20 or later. If the HP ProLiant iLO firmware is older than v2.20 you will receive the following error message:

Check dependency failed.

Current version: iLOx x.xx

Minimum version required: iLO4 2.20

The software will not be installed on this system because the required hardware is not present in the system or the software/firmware doesn't apply to this system.

Enhancements

Added support for SUSE Linux Enterprise Server 15 OS

Supplemental Update / Online ROM Flash Component for Linux (x64) - Smart Array and Smart HBA H240ar, H240nr, H240, H241, H244br, P240nr, P244br, P246br, P440ar, P440, P441, P542D, P741m, P840, P840ar, and P841

Version: 7.00 (Recommended)

Filename: rpm/RPMS/x86_64/firmware-smartarray-ea3138d8e8-7.00-1.1.x86_64.rpm

- In order to be detected properly, some controllers may need a newer version of the Smart Array driver installed prior to upgrading the controller firmware. If not installed, the component will fail with return code 3.
- When booting a system running Red Hat Enterprise Linux 7.1 Operating System, the HP Smart
 Array controllers might not be recognized. This issue is due to changes in the OS where the sg
 driver is no longer loaded during system boot. The work around for this issue is to manually issue
 a "modprobe sg" command which should load the sg driver. After the sg driver is loaded, the
 /dev/sg* devices should be present and the sg driver can be used to access SCSI devices.

Fixes

- Occasionally the drive will not accept any IO's after running Sanitize command for a period of time due to the FW being out of sync with the drive during that time
- Non-HPE drives could report "Task Set Full" due to the drives reaching the qdepth limit during heavy workload
- Raid volume is not discovered due to a bad drive consuming two slots during hotplug
- Data could become inaccessible when upgrading from firmware versions prior to 4.5x
- The controller could stop responding when executing a SCSI verify command due to a CPU exception
- The system could stop communicating due to an I/O command timeout
- While on HBA mode, a drive could stop responding due to an early allocated buffer release
- A SAS drive WWN is reported inaccuratelyy due to an incorrect report causing the driver to be out of sync with the device
- If using a 4G module, the controller could stop responding due to the SSD Cache metadata exceeding its limits during a Backup
- SSD Smart Cache module become disabled due to a reduction in usable cache space

Enhancements

Add optimization for the iLO communication interface in order to have a more effective mechanism to check for ownership of the communication buffer

Supplemental Update / Online ROM Flash Component for Linux (x64) - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822

Version: 8.32 (Recommended)

Filename: rpm/RPMS/x86 64/hp-firmware-smartarray-46a4d957a7-8.32-1.1.x86 64.rpm

Important Note!

When booting a system running Red Hat Enterprise Linux 7.1 Operating System, the HP Smart
Array controllers might not be recognized. This issue is due to changes in the OS where the sg
driver is no longer loaded during system boot. The work around for this issue is to manually issue
a "modprobe sg" command which should load the sg driver. After the sg driver is loaded, the
/dev/sg* devices should be present and the sg driver can be used to access SCSI devices.

Fixes

System can potentially stop responding with no lockup code due to livelock condition where the RAID Stack thread is polling a queue for a completion to be returned by the base code firmware

Enhancements

Improved accuracy of drive temperature reporting feature

Supplemental Update / Online ROM Flash Component for Linux (x64) - Smart Array P230i, P430, P431, P731m, P830i, and P830

Version: 5.02 (Recommended)

Filename: rpm/RPMS/x86 64/firmware-smartarray-112204add8-5.02-1.1.x86 64.rpm

Important Note!

When booting a system running Red Hat Enterprise Linux 7.1 Operating System, the HP Smart
Array controllers might not be recognized. This issue is due to changes in the OS where the sg
driver is no longer loaded during system boot. The work around for this issue is to manually issue
a "modprobe sg" command which should load the sg driver. After the sg driver is loaded, the
/dev/sg* devices should be present and the sg driver can be used to access SCSI devices.

<u>Fixes</u>

- The firmware updates could fail while SmartCache is enabled due to active I/O in the Smart Cache.
- The serial output of the expander could fail to be populated in the controller logs due to the buffer not being handled appropriately by the controller

Firmware - Storage Fibre Channel

Top

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)

Version: 2021.10.01 (Recommended)

Filename: RPMS/x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64.compsig; RPMS/x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.6.x86_64/firmware-fc-emulex-2021.10.01-1.00.01-1.00.01-1.00.01-1.00.01-1.00.01-1.00.01-1.00.01-1.00.01-1.00.01-1.0

emulex-2021.10.01-1.6.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Additional requirements:

Environment must be running the syslog daemon for the flash engine to run Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex Host Bus Adapters (HBAs)

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

Filename: cp049105.compsig; cp049105.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5

HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb		12.8.352.12		
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb		12.8.352.12		
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb		12.8.352.12		
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Microsoft Windows Server 2016/2019 x64 Version: 2021.10.01 (**Recommended**)

Filename: cp048599.compsig; cp048599.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0

HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5

Version: 2021.10.01 (Recommended) Filename: CP048595.compsig; CP048595.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image		UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2021.10.01 (Recommended)
Filename: CP048596.compsig; CP048596.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	12.80a3	2.10X6	12.8.183.0	12.8.9.0
HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0
HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Mezzanine Fibre Channel Host Bus Adapters for Linux (x64)

Version: 2021.10.01 (Recommended)

 $Filename: RPMS/x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64.compsig; RPMS/x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.10.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.01-1.5.x86_64/firmware-fc-mezz-emulex-2021.01-1.5.$

fc-mezz-emulex-2021.10.01-1.5.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Additional requirements:

Environment must be running the syslog daemon for the flash engine to run Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex Host Bus Adapters (HBAs)

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Firmware Flash for Emulex Mezzanine Fibre Channel Host Bus Adapters for Microsoft Windows Server

2012R2 x64

Version: 2021.10.01 (**Recommended**) Filename: cp049107.compsig; cp049107.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.352.12	12.8.352.12	12.8.352.10	12.8.352.5

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Firmware Flash for Emulex Mezzanine Fibre Channel Host Bus Adapters for Microsoft Windows Server

2016/2019 x64

Version: 2021.10.01 **(Recommended)** Filename: cp048580.compsig; cp048580.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Firmware Flash for Emulex Mezzanine Fibre Channel Host Bus Adapters for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: CP048576.compsig; CP048576.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

 ${\it HPE Firmware Flash for Emulex\ Mezzanine\ Fibre\ Channel\ Host\ Bus\ Adapters\ for\ VMware\ vSphere\ 6.7}$

Version: 2021.10.01 (**Recommended**) Filename: CP048577.compsig; CP048577.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class	16Gb	12.8.528.12	12.8.528.12	12.8.528.10	12.8.502.0

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios	
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HPE 16Gb LPe1605 Fibre Channel Host Bus	16Gh	12.8.528.12	12 8 528 12	12.8.528.10	12 8 502 0
Adapter for BladeSystem c-Class	1000	12.0.520.12	12.0.520.12	12.0.520.10	12.0.302.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)

Version: 2021.10.01 (Recommended)

Filename: RPMS/x86_64/firmware-fc-qlogic-2021.10.01-1.3.x86_64.compsig; RPMS/x86_64/firmware-fc-

qlogic-2021.10.01-1.3.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

This Firmware package contains following firmware versions:

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

• It is advised to provide read-write permissions on /var/tmp folder. Firmware deployment via Service Pack for ProLiant(SPP) might be unsuccessful in some cases , if read-write(rw) permissions are not enable on /tmp or /var/tmp directories.

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- $\bullet~$ HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Microsoft Windows Server 2012R2/2016/2019(x86_64)

Version: 2021.10.01 **(Recommended)** Filename: cp048728.compsig; cp048728.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed M	ИВІ	Firmware		Boot Bios	
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8Gb	3.82.00	8.08.207	7.00	3.56
8Gb	3.82.00	8.08.207	7.00	3.56
8Gb	3.82.00	8.08.207	7.00	3.56
16Gb	6.04.04	8.08.232	7.04	3.43
16Gb	6.04.04	8.08.232	7.04	3.43
16Gb	1.75.07	9.06.02	7.04	3.64
16Gb	1.75.07	9.06.02	7.04	3.64
32Gb	1.75.07	9.06.02	7.04	3.64
32Gb	1.75.07	9.06.02	7.04	3.64
	8Gb 8Gb 16Gb 16Gb 16Gb 32Gb	8Gb 3.82.00 8Gb 3.82.00 16Gb 6.04.04 16Gb 6.04.04 16Gb 1.75.07 16Gb 1.75.07 32Gb 1.75.07	8Gb 3.82.00 8.08.207 8Gb 3.82.00 8.08.207 16Gb 6.04.04 8.08.232 16Gb 6.04.04 8.08.232 16Gb 1.75.07 9.06.02 16Gb 1.75.07 9.06.02 32Gb 1.75.07 9.06.02	8Gb 3.82.00 8.08.207 7.00 8Gb 3.82.00 8.08.207 7.00 16Gb 6.04.04 8.08.232 7.04 16Gb 6.04.04 8.08.232 7.04 16Gb 1.75.07 9.06.02 7.04 16Gb 1.75.07 9.06.02 7.04 32Gb 1.75.07 9.06.02 7.04

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- $\bullet~$ HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: CP048724.compsig; CP048724.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	S
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	1
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	1
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	1
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	1
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	3:
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	3:

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	мві	Firmware	UEFI	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2021.10.01 (Recommended) Filename: CP048725.compsig; CP048725.zip

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	штын	Boot Bios
HPE 81Q 8Gb PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56

HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter	8Gb	3.82.00	8.08.207	7.00	3.56
HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	6.04.04	8.08.232	7.04	3.43
HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter	16Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64
HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	1.75.07	9.06.02	7.04	3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Mezzanine Fibre Channel Host Bus Adapters - Linux ($x86_64$)

Version: 2021.10.01 (Recommended)

 $File name: RPMS/x86_64/firmware-fc-mezz-qlogic-2021.10.01-1.6.x86_64.compsig; RPMS/x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-mezz-qlogic-2021.01-1.0.x86_64/firmware-fc-$

fc-mezz-qlogic-2021.10.01-1.6.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The target environment must have the libHBAAPI Package installed prior to the installation of the firmware as the discovery of adapters might not complete without the library. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

• It is advised to provide read-write permissions on /var/tmp folder. Firmware deployment via Service Pack for ProLiant(SPP) might be unsuccessful in some cases , if read-write(rw) permissions are not enable on /tmp or /var/tmp directories.

Enhancements

Updated the Firmware/BIOS/UEFI packages for 16 Gb products.

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Firmware Flash for QLogic Mezzanine Fibre Channel Host Bus Adapters - Microsoft Windows Server 2012R2/2016/2019 (x86_64)

Version: 2021.10.01 **(Recommended)** Filename: cp048715.compsig; cp048715.exe

Important Note!

This Firmware package contains following firmware versions:

Adapter	Speed	мві	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Enhancements

Updated the Firmware/BIOS/UEFI packages for 16 Gb products.

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Firmware Flash for QLogic Mezzanine Fibre Channel Host Bus Adapters for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: CP048711.compsig; CP048711.zip

Important Note!

Release Notes:

HPE OLogic Adapter Release Notes

This Firmware package contains following firmware versions:

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

Updated the Firmware/BIOS/UEFI packages for 16 Gb products.

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Firmware Flash for QLogic Mezzanine Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2021.10.01 (**Recommended**) Filename: CP048712.compsig; CP048712.zip

Important Note!

Release Notes:

HPE OLogic Adapter Release Notes

This Firmware package contains following firmware versions:

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

Enhancements

Updated the Firmware/BIOS/UEFI packages for 16 Gb products.

Adapter	Speed	МВІ	Firmware	UEFI	Boot Bios
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	16Gb	6.04.04	8.08.232	7.04	3.43

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Firmware - System Top

Online Flash Component for Linux - NVMe Backplane PIC Firmware

Version: 8.4 (D) (Optional)

Filename: RPMS/i386/firmware-nvmebackplane-8.4-4.1.i386.rpm

Important Note!

Note: If version 8.4 was previously installed, then it is not necessary to upgrade to version 8.4 (D).

Prerequisites

iLO 4 version 2.50 or later is required.

Enhancements

Added support for SUSE Linux Enterprise Server 15 OS

Online Flash Component for VMware - NVMe Backplane PIC Firmware

Version: 8.4 (D) (Optional)

Filename: CP035161.compsig; CP035161.zip

Important Note!

Note: If version 8.4 was previously installed, then it is not necessary to upgrade to version 8.4 (D).

Prerequisites

iLO 4 version 2.50 or later is required.

Enhancements

Added VMware vSphere 6.7 OS support

Online Flash Component for Windows x64 - NVMe Backplane PIC Firmware

Version: 8.4 (E) **(Optional)** Filename: cp037743.exe

Important Note!

Note: If version 8.4 was previously installed, then it is not necessary to upgrade to version 8.4 (E).

Prerequisites

iLO 4 version 2.50 or later is required.

Enhancements

Added support for Microsoft Windows Server 2019 OS

Firmware (Entitlement Required) - Storage Controller

Top

HP D2600/D2700 6Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)

Version: 0150 (B) (Recommended)

Filename: RPMS/x86_64/hp-firmware-d2600-d2700-0150-2.1.x86_64.rpm

Important Note!

Firmware upgrade to 150(B) is not necessary, if the device is currently running 150 firmware

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

NOTE: When disk enclosures are cascaded, I/O module A of one enclosure is connected to I/O module A of the subsequent enclosure. During a firmware update, I/O module A in the cascaded disk enclosures is automatically updated.

In dual-domain configurations, both I/O modules of the target disk enclosure and cascaded disk enclosures are automatically updated during the firmware installation process.

All firmware flash progress messages are logged to $\protect\ensuremath{\text{var/cpq/Component.log}}$.

Prerequisites

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

NOTE: When disk enclosures are cascaded, I/O module A of one enclosure is connected to I/O module A of the subsequent enclosure. During a firmware update, I/O module A in the cascaded disk enclosures is automatically updated.

In dual-domain configurations, both I/O modules of the target disk enclosure and cascaded disk enclosures are automatically updated during the firmware installation process.

All firmware flash progress messages are logged to /var/cpq/Component.log.

<u>Fixes</u>

The following fix is added in this version:

-Removed action over FAULT_SENSED bit due to incorrect algorithm.

Supported Devices and Features

The D2600/ D2700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters:

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P812 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller
- HP Smart Array P411 Controller
- HP Smart Array P212 ControllerHP Smart Array P222 Controller

HP D2600/D2700 6Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)

Version: 0150 (B) (Recommended)

Filename: cp028806.exe

Important Note!

Firmware upgrade to 150(B) is not necessary, if the device is currently running 150 firmware

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

NOTE: When disk enclosures are cascaded, I/O module A of one enclosure is connected to I/O module A of the subsequent enclosure. During a firmware update, I/O module A in the cascaded disk enclosures is automatically updated.

In dual-domain configurations, both I/O modules of the target disk enclosure and cascaded disk enclosures are automatically updated during the firmware installation process.

All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D2000.log and flash summary is logged to %systemdrive%\CPQSYSTEM\Log\cpqsetup.log.

Prerequisites

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

NOTE: When disk enclosures are cascaded, I/O module A of one enclosure is connected to I/O module A of the subsequent enclosure. During a firmware update, I/O module A in the cascaded disk enclosures is automatically updated.

In dual-domain configurations, both I/O modules of the target disk enclosure and cascaded disk enclosures are automatically updated during the firmware installation process.

All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D2000.log and flash summary is logged to %systemdrive%\CPQSYSTEM\Log\cpqsetup.log.

Fixes

The following fix is added in this version:

-Removed action over FAULT_SENSED bit due to incorrect algorithm.

Supported Devices and Features

The D2600/ D2700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters:

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P812 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P441 ControllerHP Smart Array P431 Controller
- HP Smart Array P431 Controller
- HP Smart Array P411 Controller
- HP Smart Array P212 Controller
- HP Smart Array P222 Controller

Software - Lights-Out Management

Top

HPE Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)

Version: 5.6.0-0 (Optional)

Filename: hponcfg-5.6.0-0.x86_64.compsig; hponcfg-5.6.0-0.x86_64.rpm

Prerequisites

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later
- Integrated Lights-Out 5 firmware v1.20 or later

The management interface driver and management agents must be installed on the server.

For iLO 5, openssl v1.0.x or later is required in addition to above packages. Customers who manually compile and install openssl or intentionally relocate /usr/bin/openssl, need to set PATH environment variable to direct HPONCFG to the right/intended openssl.

Fixes

Fixed an issue where HPONCFG was not able to detect openssl library when multiple 64-bit openssl installed.

Enhancements

Updated product name to HPE Lights-Out Online Configuration Utility for Linux (AMD64/EM64T).

HPE Lights-Out Online Configuration Utility for Windows x64 Editions

Version: 5.5.0.0 (A) (Optional)

Filename: cp046381.compsig; cp046381.exe

Prerequisites

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later
- Integrated Lights-Out 5 firmware v1.30 or later

The management interface driver must be installed on the server.

Microsoft .Net Framework 2.0 or later is required to launch HPONCFG GUI.

Fixes

Fixed an issue were HPONCFG Windows Smart Component was not installing when SW RAID configuration enabled in RBSU.

Software - Management

Top

HPE Agentless Management Bundle Smart Component for Gen9 on ESXi 7.0

Version: 2021.10.01 (**Recommended**) Filename: cp047519.compsig; cp047519.zip

Fixes

Agentless Management Service

• Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

HPE CRU Driver Bundle Smart Component for ESXi 7.0

Version: 2020.04.01 (A) (Recommended) Filename: cp044598.compsig; cp044598.zip

Enhancements

Add new supported servers

HPE Fiber Channel and Storage Enablement Bundle Smart Component for ESXi 7.0

Version: 2021.10.01 (**Recommended**) Filename: cp047521.compsig; cp047521.zip

Enhancements

Supports VMware ESXi 7.0 U2 and ESXi 7.0 U3

HPE iLO Driver Bundle Smart Component for ESXi 7.0

Version: 2021.09.01 **(Recommended)** Filename: cp047518.compsig; cp047518.zip

Fixes

• Fixed driver unload function to allow controller to function properly on reload and when Quickboot is enabled.

HPE Management Bundle Smart Component for ESXi 6.5 for Gen9 Servers

Version: 2021.10.00 (**Recommended**) Filename: cp049077.compsig; cp049077.zip

Fixes

Agentless Management Service

• Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

iLO Driver

• Fixed driver unload function to allow controller to function properly on reload.

HPE Management Bundle Smart Component for ESXi 6.7 for Gen9 Servers

Version: 2021.10.00 (**Recommended**) Filename: cp049078.compsig; cp049078.zip

Fixes

Agentless Management Service

• Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

iLO Driver

• Fixed driver unload function to allow controller to function properly on reload and when Quickboot is enabled

HPE SDK Python Module Version: 3.5.0 (Optional)

Filename: python-ilorest-library-3.5.0.0.zip

Fixes

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HPE SMX Provider Bundle Smart Component for ESXi 7.0

Version: 2020.04.01 (B) **(Recommended)** Filename: cp044960.compsig; cp044960.zip

Enhancements

Updated supported server list.

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 7.0

Version: 2022.03.01 **(Recommended)** Filename: cp049697.compsig; cp049697.zip

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing "expresslocalencryptioneula=?" command.

Software - Network Top

Version: 1.0.21-1 (Optional)

Filename: hp-tg3sd-1.0.21-1.x86_64.compsig; hp-tg3sd-1.0.21-1.x86_64.rpm; hp-tg3sd-1.0.21-1.x86_64.txt

Fixes

This product adddresses a library dependency issue seen when installing on a system running SUSE Linux Enterprise Server 15.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- HP Ethernet 1Gb 2-port 332T Adapter

Intel Active Health System Agent for HPE ProLiant Network Adapters for Linux x86_64

Version: 1.1.85.0-1 (B) (Optional)

Filename: hp-ocsbbd-1.1.85.0-1.x86_64.compsig; hp-ocsbbd-1.1.85.0-1.x86_64.rpm; hp-ocsbbd-1.1.85.0-

1.x86_64.txt

Fixes

This product fixes an issue that it takes long time to boot-up server due to ocsbbd service.

Enhancements

SUM no longer attempts to install this product on Gen10 servers, which this product does not support.

Supported Devices and Features

This software supports the following Intel network adapters:

- HPE Ethernet 1Gb 2-port 361i Adapter
- HPE Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 2-port 364i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
 Adapter
 Adapter
- HPE Ethernet 1Gb 4-port 366M Adapter
- HPE Ethernet 1Gb 4-port 366T Adapter
 HPE Ethernet 1Gb 4-port 366T Adapter
- HPE Ethernet 10Gb 2-port 560FLB Adapter
 HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- HPE Ethernet 10Gb 2-port 561T Adapter

Software - Storage Controller

<u>Top</u>

HPE ProLiant Smart Array SAS/SATA Event Notification Service for 64-bit Windows Server Editions

Version: 6.46.0.64 (E) (Optional)

Filename: cp037465.exe

Important Note!

Customers who already have firmware version 6.46.0.64 installed do not need to update to 6.46.0.64(E).

Enhancements

Added support for Microsoft Windows Server 2019.

Software - Storage Fibre Channel

Top

HPE QLogic Fibre Channel driver component for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: cp048721.compsig; cp048721.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- Addressed unwanted behavior with Fabric Port Identification Number (FPIN) based congestion throttling leading to poor performance.
- Fixed an unwanted behavior where stale connection IDs could be used with Fibre Channel- Non Volatile Memory Express (FC-NVMe) traffic.
- Fixed an unwanted behavior with response queue handling to avoid the problem referenced by https://kb.vmware.com/s/article/81721

Enhancements

Added the following:

- Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation(USCM) Congestion Management algorithm
- Implemented the vmkmgmt Application programming Interface (API) to report Non-Volatile Memory Express (NVMe) target info and send Non-Volatile Memory Express (NVMe) pass through commands

Driver version 2.1.101.0

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE OLogic Fibre Channel driver component for VMware vSphere 6.7

Version: 2021.10.01 (**Recommended**) Filename: cp048722.compsig; cp048722.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

<u>Fixes</u>

Fixed the following:

- Addressed unwanted behavior with Fabric Port Identification Number (FPIN) based congestion throttling leading to poor performance.
- Fixed an unwanted behavior where stale connection IDs could be used with Fibre Channel- Non Volatile Memory Express (FC-NVMe) traffic.
- Fixed an unwanted behavior with response queue handling to avoid the problem referenced by https://kb.vmware.com/s/article/81721

Enhancements

Added the following:

- Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation(USCM) Congestion Management algorithm
- Implemented the vmkmgmt Application programming Interface (API) to report Non-Volatile Memory Express (NVMe) target info and send Non-Volatile Memory Express (NVMe) pass through commands

Driver version 3.1.46.0

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE QLogic Mezzanine Fibre Channel driver component for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: cp048708.compsig; cp048708.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- Addressed unwanted behavior with Fabric Port Identification Number (FPIN) based congestion throttling leading to poor performance.
- Fixed an unwanted behavior where stale connection IDs could be used with Fibre Channel- Non Volatile Memory Express (FC-NVMe) traffic.
- Fixed an unwanted behavior with response queue handling to avoid the problem referenced by https://kb.vmware.com/s/article/81721

Enhancements

Added the following:

- Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation(USCM) Congestion Management algorithm
- Implemented the vmkmgmt Application programming Interface (API) to report Non-Volatile Memory Express (NVMe) target info and send Non-Volatile Memory Express (NVMe) pass through commands

Driver version 2.1.101.0

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE QLogic Mezzanine Fibre Channel driver component for VMware vSphere 6.7

Version: 2021.10.01 (**Recommended**) Filename: cp048709.compsig; cp048709.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fixed the following:

- Addressed unwanted behavior with Fabric Port Identification Number (FPIN) based congestion throttling leading to poor performance.
- Fixed an unwanted behavior where stale connection IDs could be used with Fibre Channel- Non Volatile Memory Express (FC-NVMe) traffic.
- Fixed an unwanted behavior with response queue handling to avoid the problem referenced by https://kb.vmware.com/s/article/81721

Enhancements

Added the following:

- Made improvements to the Fabric Port Identification Number (FPIN) and Universal Storage Area Network (SAN) Congestion Mitigation(USCM) Congestion Management algorithm
- Implemented the vmkmgmt Application programming Interface (API) to report Non-Volatile Memory Express (NVMe) target info and send Non-Volatile Memory Express (NVMe) pass through commands

Driver version 3.1.46.0

Supported Devices and Features

This version of the enablement kit supports the following devices:

16Gb Fibre Channel Host Bus Adapter:

• HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Storage Emulex Fibre Channel driver component for VMware vSphere 6.5

Version: 2021.10.01 **(Recommended)** Filename: cp048603.compsig; cp048603.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Added the following:-

- Changed the default Logical Unit Number (LUN) queue depth from 30 to 64
- Added Non-volatile memory express (NVMe) over Fibre Channel (FC) capability

Updated to Driver version 12.8.317.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E Quad Port 16Gb Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb 1Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Storage Emulex Fibre Channel driver component for VMware vSphere 6.7

Version: 2021.10.01 **(Recommended)** Filename: cp048604.compsig; cp048604.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to Driver version 12.8.528.14

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

• HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter

- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Storage Emulex Mezzanine Fibre Channel driver component for VMware vSphere 6.5

Version: 2021.10.01 (**Recommended**) Filename: cp048584.compsig; cp048584.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Added the following:

- Changed the default Logical Unit Number (LUN) queue depth from 30 to 64
- Added Non-volatile memory express (NVMe) over Fibre Channel (FC) capability

Updated to Driver version 12.8.317.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

HPE Storage Emulex Mezzanine Fibre Channel driver component for VMware vSphere 6.7

Version: 2021.10.01 (**Recommended**) Filename: cp048585.compsig; cp048585.zip

Important Note!

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Updated to Driver version 12.8.528.14

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

16Gb FC Adapter:

• HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

Software - Storage Fibre Channel HBA

Top

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL) Version: 4.1-1 (Optional)

Filename: fibreutils-4.1-1_rhel.x86_64.compsig; fibreutils-4.1-1_rhel.x86_64.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

This package supports only Red Hat Enterprise Linux (RHEL) Distros

Supported Devices and Features

Supports the following:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
 HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
 HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -SuSE Linux Enterprise Server(SLES)

Version: 4.1-1 (Optional)

Filename: fibreutils-4.1-1_sles.x86_64.compsig; fibreutils-4.1-1_sles.x86_64.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

This package supports only SuSE Linux Enterprise Server(SLES) Distros

Supported Devices and Features

Supports the following:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE 810 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE Emulex Fibre Channel Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for Red Hat Enterprise Linux 7 Server

Version: 12.8.526.0 (Recommended)

Filename: HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.rhel7.x86_64.compsig; HPE-CNA-FC-Emulex-

Enablement-Kit-12.8.526.0-1.rhel7.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version 12.8.526.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Mezzanine Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex Fibre Channel Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for Red Hat Enterprise Linux 8 Server

Version: 12.8.526.0 (Optional)

 $Filename: HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1. rhel8.x86_64. compsig; HPE-CNA-FC-Emulex-Enablement-Kit-12.8. rhel8.x86_64. compsig; HPE-CNA-FC-Emulex-Enablement-FC-Emulex-Enablement-FC-Emulex-Enablement-FC-Emulex-Enablement-FC-Emulex-Enablement-FC-$

 $Enablement\text{-}Kit\text{-}12.8.526.0\text{-}1.rhel8.x86_64.rpm$

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Added the following support:

• Added support for RHEL 8.4

Updated to version 12.8.526.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
 HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Mezzanine Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex Fibre Channel Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for SUSE Linux Enterprise Server 12

Version: 12.8.526.0 (Optional)

Filename: HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.sles12sp5.x86_64.compsig; HPE-CNA-FC-

Emulex-Enablement-Kit-12.8.526.0-1.sles12sp5.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Rewrite of same Enablement kit version on SuSE Linux Enterprise Server 12 service pack 5 has to be performed using –force or --replacepkgs with --nodeps option

 $\label{lem:condition} \begin{tabular}{ll} Example: rpm -Uvh HPE-CNA-FC-Emulex-Enablement-Kit-<version>.<OS>.<architecture>.rpm --force--nodeps \\ \end{tabular}$

 ${\it rpm-Uvh\ HPE-CNA-FC-Emulex-Enablement-Kit-<version>.} < os>. < architecture>. rpm-replacepkgs--nodeps$

For more information please refer the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version 12.8.526.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Mezzanine Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex Fibre Channel Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for SUSE Linux Enterprise Server 15

Version: 12.8.526.0 (Optional)

Filename: HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.sles15sp2.x86_64.compsig; HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.sles15sp2.x86_64.rpm; HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.sles15sp3.x86_64.compsig; HPE-CNA-FC-Emulex-Enablement-Kit-12.8.526.0-1.sles15sp3.x86_64.rpm

Important Note!

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Rewrite of same Enablement kit version on SuSE Linux Enterprise Server 15 service pack 2 and SuSE Linux Enterprise Server 15 service pack 3 has to be performed using --reinstall option

Example: rpm -Uvh HPE-CNA-FC-Emulex-Enablement-Kit-<version>.<OS>.<architecture>.rpm -- reinstall

For more information please refer the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Added the following support:

Added support for SLES 15 SP3

Updated to version 12.8.526.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Mezzanine Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex Smart SAN Enablement Kit for Linux

Version: 1.0.0.0-4 (Optional)

Filename: hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.compsig; hpe-emulex-smartsan-

enablement-kit-1.0.0.0-4.x86_64.rpm

Important Note!

The Smart SAN enablement kit will not execute when an operating system has only the inbox fibre channel driver installed. An out of box (OOB) fibre channel driver is needed to utilize Smart SAN functionality. If any OOB driver is installed, the enablement kit will pre-enable/disable Smart SAN functionality for future use. It can then be activated once a Smart SAN enabled OOB driver is installed (see Prerequisite Notes) and after a reboot has occured.

Obtain Smart SAN User Guide for 3PAR at following link: HPE Smart SAN for 3PAR 2.0 User Guide

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

Linux FC Driver Kit for HPE Emulex FC HBAs and mezz cards, version 12.8.482.2 for RedHat 7, RedHat 8 and SUSE 12, SUSE 15.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added support to SLES15SP3

Updated to version 1.0.0.0-4

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb 1Single Port Fibre Channel Host Bus Adapter
- HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex Smart SAN Enablement Kit for Microsoft Windows Server 2012R2/2016/2019 (x86_64)

Version: 1.0.0.1 (Optional)

Filename: cp048583.compsig; cp048583.exe

Important Note!

The Smart SAN enablement kit will not execute when an operating system has only the inbox fibre channel driver installed. An out of box (OOB) fibre channel driver is needed to utilize Smart SAN functionality. If any OOB driver is installed, the enablement kit will pre-enable/disable Smart SAN functionality for future use. It can then be activated once a Smart SAN enabled OOB driver is installed (see Prerequisite Notes) and after a reboot has occured.

Obtain Smart SAN User Guide for 3PAR at following link: HPE Smart SAN for 3PAR 2.0 User Guide

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The latest Emulex FC driver 12.8.351.7 is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed

Enhancements

Updated to version 1.0.0.1

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE 16Gb LPe1605 Fibre Channel Host Bus Adapter for BladeSystem c-Class

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for Red Hat Enterprise Linux 7 Server

Version: 12.0.1339.0 (Recommended)

Filename: HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.rhel7.x86_64.compsig; HPE-CNA-FC-

Broadcom-Enablement-Kit-12.0.1339.0-1.rhel7.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated EK version to 12.0.1339.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter

- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for Red Hat Enterprise Linux 8 Server

Version: 12.0.1339.0 (Recommended)

Filename: HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.rhel8.x86_64.compsig; HPE-CNA-FC-

Broadcom-Enablement-Kit-12.0.1339.0-1.rhel8.x86 64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version: 12.0.1339.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for SUSE Linux Enterprise Server 12

Version: 12.0.1339.0 (Recommended)

Filename: HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.sles12sp5.x86_64.compsig; HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.sles12sp5.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version: 12.0.1339.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Host Bus Adapters and Mezzanine Host Bus Adapters for SUSE Linux Enterprise Server 15

Version: 12.0.1339.0 (Recommended)

Filename: HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.sles15sp2.x86_64.compsig; HPE-CNA-FC-Broadcom-Enablement-Kit-12.0.1339.0-1.sles15sp2.x86_64.rpm

Important Note!

Release Notes:

HPE Emulex Adapters Release Notes

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version: 12.0.1339.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE NVMe Fibre Channel Enablement Kit for Emulex Host Bus Adapters for Linux Server

Version: 12.8.264.0 (Optional)

Filename: nvmefc-connect-12.8.264.0-1.rhel7u8.noarch.compsig; nvmefc-connect-12.8.264.0-

1.rhel7u8.noarch.rpm; nvmefc-connect-12.8.264.0-1.rhel7u9.noarch.compsig; nvmefc-connect-12.8.264.0-

1.rhel7u9.noarch.rpm

Important Note!

This package is applicable only on the below Operating Systems

Red Hat Enterprise Linux Server 7 update 8

Red Hat Enterprise Linux Server 7 update 9

Prerequisites

To successfully deploy nyme-connect rpm on target systems based on a Linux operating system, "nyme-cli" package has to be available on the target system. This package is available as part of the OS-distro.

Enhancements

Updated to version 12.8.264.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC Adapter:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb FC Adapter:

- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezzanine Host Bus Adapter

32Gb FC Adapter:

- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter

HPE QLogic Fibre Channel Enablement Kit for Host Bus Adapter and Mezzanine Host Bus Adapter for Linux Version: 6.0.0.0-16 (**Recommended**)

Filename: HPE-CNA-FC-hpeqlgc-Enablement-Kit-6.0.0.0-16.noarch.compsig; HPE-CNA-FC-hpeqlgc-Enablement-Kit-6.0.0.0-16.noarch.rpm

Important Note!

Release Notes:

HPE QLogic Adapters Release Notes

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

The Linux Enablement kit has been changed from "HP-CNA-FC-hpqlgc-Enablement-Kit" to "HPE-CNA-FC-hpeqlgc-Enablement-Kit". Upgrade from the older released Enablement kit is supported. However downgrade to earlier version "HP-CNA-FC-hpqlgc-Enablement-Kit" may not be successful and may report conflicts.

Workaround: Please uninstall the Enablement kit and install the older versions

Rewrite of same Enablement kit version on SuSE Linux Enterprise Server 12 service pack 4 and SuSE Linux Enterprise Server 12 service pack 5 has to be performed using –force or --replacepkgs with --nodeps option

Example: rpm -Uvh HPE-CNA-FC-hpeqlgc-Enablement-Kit-<version>.noarch.rpm --force --nodeps

rpm -Uvh HPE-CNA-FC-hpeqlgc-Enablement-Kit-<version>.noarch.rpm --replacepkgs --nodeps

Rewrite of same Enablement kit version on SuSE Linux Enterprise Server 15 service pack 1 and SuSE Linux Enterprise Server 15 service pack 2 has to be performed using --reinstall option

Example: rpm -Uvh HPE-CNA-FC-hpeqlgc-Enablement-Kit-<version>.noarch.rpm --force --nodeps

For more information please refer the Knowledge Base at: https://www.suse.com/support/kb/doc/?id=000019640

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Enhancements

Updated the kit to version 6.0.0.0-16

Supported Devices and Features

This driver supports the following HPE adapters:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

16Gb Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE QLogic Smart SAN Enablement Kit for Fibre Channel Host Bus Adapter for Microsoft Windows Server 2012R2/2016/2019 (x86_64)

Version: 1.0.0.1 (Optional)

Filename: cp048718.compsig; cp048718.exe

Important Note!

The Smart SAN enablement kit will not execute when an operating system has only the inbox fibre channel driver installed. An out of box (OOB) fibre channel driver is needed to utilize Smart SAN functionality. If any OOB driver is installed, the enablement kit will pre-enable/disable Smart SAN functionality for future use. It can then be activated once a Smart SAN enabled OOB driver is installed (see Prerequisite Notes) and after a reboot has occured.

Obtain Smart SAN User Guide for 3PAR at following link: <u>HPE Smart SAN for 3PAR 2.0 User Guide</u>

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The latest Qlogic FC driver 9.4.5.20 is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download/

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 1.0.0.1

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

- HPE 81Q PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE84Q 8Gb Quad Port Fibre Channel Host Bus Adapter

Gen 5 Fibre Channel Host Bus Adapter:

- HPE SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

HPE QLogic Smart SAN enablement kit for Linux

Version: 3.3-3 (Optional)

 $File name: hpe-qlogic-smarts an-enable ment-kit-3.3-3.x86_64. compsig; hpe-qlogic-smarts an-enablement-kit-3.3-3.x86_64. rpm$

Important Note!

Obtain Smart SAN User Guide for 3PAR at following link: HPE Smart SAN for 3PAR 2.0 User Guide

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link: http://www.hpe.com/storage/spock/

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

- Red Hat Enterprise Linux 7 Server (x86-64) FC Driver Kit for HPE Qlogic HBAs and mezzaine HBAs, version 10.02.01.00.a14-k1.
- Red Hat Enterprise Linux 8 Server FC Driver Kit for HPE QLogic HBAs and mezzaine HBAs, version 10.02.01.01.a2-k1 .

- SUSE Linux Enterprise Server 12 FC Driver Kit for HPE Qlogic HBAs and mezzaine HBAs, version 10.02.01.00.a14-k1.
- SUSE Linux Enterprise Server 15 FC Driver Kit for HPE QLogic HBAs and mezzaine HBAs, version 10.02.01.00.a14-k1.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 3.3-3

Supported Devices and Features

This version of the enablement kit supports the following devices:

8Gb Fibre Channel Host Bus Adapter:

- HPE 81Q PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 4P 8Gb Fibre Channel HBA

16Gb Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE SN1000Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16GB Single Port PCIe Fibre Channel Host Bus Adapter

32Gb Fibre Channel Host Bus Adapter:

- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Software - System Management

Top

HPE Agentless Management Bundle for ESXi 7.0 on Gen9

Version: 701.11.8.0 (Recommended)

Filename: amshelprComponent_701.11.8.0.12-1_18567695.zip

Fixes

Agentless Management Service

Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

HPE Fiber Channel and Storage Enablement Component for ESXi 7.0

Version: 3.8.0 (Recommended)

Filename: fc-enablement-component_700.3.8.0.6-1_18506758.zip

Enhancements

Supports VMware ESXi 7.0 U2 and ESXi 7.0 U3

HPE Insight Management Agents for Microsoft Windows Server x64 Editions

Version: 11.1.0.0 (Optional) Filename: cp041529.exe

Prerequisites

The HPE Insight Management Agents require the SNMP Service , HPE ProLiant iLO 3/4 Channel Interface and Management Controller Drivers for Windows x64 to be installed prior to this component.

In addition, the System Management Homepage (SMH) component is required for a single server web-based user interface.

Fixes

Fixed unusual Windows system events originating from SNMP network agents

HPE Insight Management WBEM Providers for Microsoft Windows x64

Version: 11.1.0.0 (**Optional**) Filename: cp048743.exe

Important Note!

WBEM providers smart component is including VC2015 redistributable package for installation. Without KB2919355 installed, the VC2015 redistributable package cannot be installed on Microsoft Windows Server 2012 R2.

Prerequisites

The HPE Insight Management WBEM Providers require the HPE ProLiant iLO 3/4 Channel Interface and Management Controller Drivers (version 3.4.0.0 or later) for Windows X64 to be installed prior to this component.

In addition, the System Management Homepage (SMH) component (version 7.2.2.9 or later) is required for a single server web-based user interface.

Make sure to apply all updates needed for the OS on the system by running Windows Update. Incomplete Windows Update may cause the HPE WBEM Providers installation failures.

Fixes

• Fixed the older WBEM version will still exist in Programs and Features after uninstalling it.

HPE Offline Bundle for ESXi 6.5 for HPE Gen9 Servers

Version: gen9.3.8.0 (Recommended)

Filename: esxi6.5uX-mgmt-bundle-gen9.3.8.0.12-1.zip

<u>Fixes</u>

Agentless Management Service

Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

iLO Driver

• Fixed driver unload function to allow controller to function properly on reload.

Supported Devices and Features

VMware vSphere version support:

- VMware vSphere 6.5 U2
- VMware vSphere 6.5 U3

HPE Offline Bundle for ESXi 6.7 for HPE Gen9 Servers

Version: gen9.3.8.0 (Recommended)

Filename: esxi6.7uX-mgmt-bundle-gen9.3.8.0.12-1.zip

Fixes

Agentless Management Service

• Applied fixes to net-snmp open source code for CVE-2018-18065, CVE-2018-18066, CVE-2015-5621

iLO Driver

• Fixed driver unload function to allow controller to function properly on reload and when Quickboot is enabled

HPE ProLiant Agentless Management Service for HPE Apollo, ProLiant and Synergy Gen9 servers

Version: 10.100.0.0 (Optional)

Filename: cp047524.exe

Prerequisites

The HPE ProLiant iLO 3/4 Channel Interface Driver for Windows X64 (version 3.4.0.0 or later) must be installed prior to this component.

Fixes

- Handled more running exceptions when AMS is querying iSCSI information.
- Removed software path restriction for software inventory.
- · Logged OS information to AHS again if AMS lost communication with iLO.

Enhancements

Added support OS uptime information.

HPE SNMP Agents for Red Hat Enterprise Linux 7 Server

Version: 10.9.4 (Optional)

Filename: hp-snmp-agents-10.94-689.8.rhel7.x86_64.compsig; hp-snmp-agents-10.94-

689.8.rhel7.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm -qp --requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- The hp-snmp-agent may show "NAME="SLES"" as OS description for all the SLES15 and subversion.
- The user may see the incorrect status for the connected NIC ports due to missing the ifconfig system command in SLES15 and subversion.
- The user may see interface information is missing on the SMH page due to the hp-snmp-agent for SLES 15 missing the systemd rpm during the package build.

HPE SNMP Agents for Red Hat Enterprise Linux 8 Server

Version: 10.9.4 (Optional)

Filename: hp-snmp-agents-10.94-689.8.rhel8.x86_64.compsig; hp-snmp-agents-10.94-

689.8.rhel8.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm -qp --requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- The hp-snmp-agent may show "NAME="SLES"" as OS description for all the SLES15 and subversion.
- The user may see the incorrect status for the connected NIC ports due to missing the ifconfig system command in SLES15 and subversion.
- The user may see interface information is missing on the SMH page due to the hp-snmp-agent for SLES 15 missing the systemd rpm during the package build.

HPE SNMP Agents for SUSE LINUX Enterprise Server 12

Version: 10.9.4 (Optional)

Filename: hp-snmp-agents-10.94-689.8.sles12.x86_64.compsig; hp-snmp-agents-10.94-

689.8.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm -qp --requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- The hp-snmp-agent may show "NAME="SLES"" as OS description for all the SLES15 and subversion.
- The user may see the incorrect status for the connected NIC ports due to missing the ifconfig system command in SLES15 and subversion.
- The user may see interface information is missing on the SMH page due to the hp-snmp-agent for SLES 15 missing the systemd rpm during the package build.

HPE SNMP Agents for SUSE LINUX Enterprise Server 15

Version: 10.9.4 (Optional)

Filename: hp-snmp-agents-10.94-689.8.sles15.x86_64.compsig; hp-snmp-agents-10.94-

689.8.sles15.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the $x86_64$ environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm -qp --requires hp-snmp-agents-<version>.rpm

<u>Fixes</u>

Fixed the following items:

- The hp-snmp-agent may show "NAME="SLES"" as OS description for all the SLES15 and subversion.
- The user may see the incorrect status for the connected NIC ports due to missing the ifconfig system command in SLES15 and subversion.
- The user may see interface information is missing on the SMH page due to the hp-snmp-agent for SLES 15 missing the systemd rpm during the package build.

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 7 Server Version: 10.9.3 (Optional)

Filename: hp-health-10.93-307.7.rhel7.x86 64.compsig; hp-health-10.93-307.7.rhel7.x86 64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm -qp -requires hp-health-< version >.rpm

<u>Fixes</u>

Fixed the following items:

• The hpasmcli utility may show DIMM status as "N/A" due to the SMBIOS data entry not correctly initializing the DIMM information.

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 8 Server Version: 10.9.3 (Optional)

Filename: hp-health-10.93-307.4.rhel8.x86 64.compsiq; hp-health-10.93-307.4.rhel8.x86 64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the $x86_64$ environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm -qp -requires hp-health-< version >.rpm

<u>Fixes</u>

Fixed the following items:

• The hpasmcli utility may show DIMM status as "N/A" due to the SMBIOS data entry not correctly initializing the DIMM information.

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 12

Version: 10.9.3 (Optional)

Filename: hp-health-10.93-307.6.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the $x86_64$ environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm -qp -requires hp-health-< version >.rpm

Fixes

Fixed the following items:

• The hpasmcli utility may show DIMM status as "N/A" due to the SMBIOS data entry not correctly initializing the DIMM information.

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 15

Version: 10.9.3 (Optional)

Filename: hp-health-10.93-307.5.sles15.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the $x86_64$ environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm -qp -requires hp-health-< version >.rpm

Fixes

Fixed the following items:

• The hpasmcli utility may show DIMM status as "N/A" due to the SMBIOS data entry not correctly initializing the DIMM information.

HPE System Management Homepage for Linux (AMD64/EM64T)

Version: 7.6.7-1 (Critical)

Filename: hpsmh-7.6.7-1.x86_64.rpm

Important Note!

SMH 7.6.0 & later versions, will support only Gen8 and Gen9 servers. Any future patch releases could be available, only on SMH web page. Please refer to HPE SMH Release Notes

Precautions for the user on Linux OS:

- Do not provide login access to the "hpsmh" user (created during installation) by editing the /etc/passwd file or any other means
- Do not add any user to the "hpsmh" group (created during installation)

Prerequisites

Before installing the SMH software, the RPM verifies that the required versions of Linux library dependencies are present. If any dependencies are not present, then a list of the missing dependencies is provided. The user must manually install all missing dependencies to satisfy the prerequisites before proceeding with the RPM installation.

<u>Fixes</u>

• Updated jquery to version 3.6.0(CVE-2020-11022 & CVE-2020-11023)

HPE System Management Homepage for Windows x64

Version: 7.6.7.2 (**Critical**) Filename: cp047446.exe

Important Note!

SMH 7.6.0 & later versions, will support only Gen 8 and Gen 9 servers. Any future patch releases could be available, only on SMH web page. Please refer to HPE SMH Release Notes

Fixes

• Updated jquery to version 3.6.0(CVE-2020-11022 & CVE-2020-11023)

HPE System Management Homepage Templates for Linux

Version: 10.8.1 (Optional)

Filename: hp-smh-templates-10.8.1-1487.3.noarch.rpm

Prerequisites

The **hp-smh-templates** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-smh-templates type:

rpm -qp --requires hp-smh-templates-<version>.rpm

Fixes

Initial support for Red Hat Enterprise Linux 8 Server

HPE Utilities Offline Bundle for ESXi 6.5 Version: 10.8.0 (Recommended)

Filename: HPE-Utility-Component_10.8.0.650-26.zip

Important Note!

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.5 which is located at www.hpe.com/info/vmware/proliant-docs.

Fixes

hpessacli

- Fixed an issue where the "Turn off" LED operation momentarily turns on all Identify LED.
- Fixed an issue where an NVME drive was failed after flashing drive firmware.
- Fixed an issue where an operation failure message was observed while deleting a volume with status "Not Available".
- Fixed an issue that SSAScripting reported incorrect size for some drives greater than 1TB. This did not affect SSACLI.

Enhancements

hpessacli

- Added initial passive SED support.
- Added new "unchanged" Drive Write Cache (DWC) policy to the applications.
- Added support for discovering and reporting failed drives that are not part of a RAID volume.

NVMe Drive Eject NMI Fix for Intel Xeon v3 and Xeon v4 Processors for Windows Server 2012 R2 to Server

Version: 1.0.5.0 (C) (Optional)

Filename: cp035799.exe

Enhancements

Add support for Windows Server 2019.

Smart Storage Administrator (SSA) CLI for Linux 64-bit

Version: 5.30.6.0 (Recommended)

Filename: ssacli-5.30-6.0.x86_64.compsig; ssacli-5.30-6.0.x86_64.rpm; ssacli-5.30-6.0.x86_64.txt

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing

"expresslocalencryptioneula=?" command.

Smart Storage Administrator (SSA) CLI for VMware 6.5

Version: 5.20.8.0 (Recommended)

Filename: MIS_bootbank_ssacli-5.20.8.0-6.5.0.4240417.oem.vib

Fixes

- Fixed an issue where the "Turn off" LED operation momentarily turns on all Identify LED.
- Fixed an issue where an NVME drive was failed after flashing drive firmware.
- Fixed an issue where an operation failure message was observed while deleting a volume with status "Not Available".
- Fixed an issue that SSAScripting reported incorrect size for some drives greater than 1TB. This did not affect SSACLI.

Enhancements

- Added initial passive SED support.
- Added new "unchanged" Drive Write Cache (DWC) policy to the applications.
- Added support for discovering and reporting failed drives that are not part of a RAID volume.

Smart Storage Administrator (SSA) CLI for VMware 6.5

Version: 5.30.6.0 (Recommended)

Filename: MIS_bootbank_ssacli_5.30.6.0-6.5.0.4240417.oem.vib

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing

"expresslocalencryptioneula=?" command.

Smart Storage Administrator (SSA) CLI for VMware 6.7

Version: 5.30.6.0 (Recommended)

Filename: MIS_bootbank_ssacli_5.30.6.0-6.7.0.7535516.oem.vib

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing

 $"express local encryption eula=?" \ command.\\$

Smart Storage Administrator (SSA) CLI for VMware 7.0

Version: 5.30.6.0 (Recommended)

 $Filename: ssacli-component_5.30.6.0-7.0.0_19263463.zip$

Enhancements

Initial build

Smart Storage Administrator (SSA) CLI for Windows 64-bit

Version: 5.30.6.0 (**Recommended**) Filename: cp049695.compsig; cp049695.exe

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- · Fixed an issue in SSACLI where an error message was displaying when executing

"expresslocalencryptioneula=?" command.

Smart Storage Administrator (SSA) for Linux 64-bit

Version: 5.30.6.0 (Recommended)

Filename: ssa-5.30-6.0.x86_64.compsig; ssa-5.30-6.0.x86_64.rpm; ssa-5.30-6.0.x86 64.txt

Prerequisites

The Smart Storage Administrator for Linux requires the System Management Homepage software to be installed on the server. If the System Management Homepage software is not already installed on your server, please download it from HPE.com and install it before installing the Smart Storage Administrator for Linux.

IMPORTANT UPDATE: SSA (GUI) for Linux can now be run without requiring the System Management Homepage. SSA now supports a Local Application Mode for Linux. The System Management Homepage is still supported, but no longer required to run the SSA GUI.

To invoke, enter the following at the command prompt:

ssa -local

The command will start SSA in a new Firefox browser window. When the browser window is closed, SSA will automatically stop. This is only valid for the loopback interface, and not visible to external network connections.

Enhancements

· Update to the latest SOULAPI version.

Smart Storage Administrator (SSA) for Windows 64-bit

Version: 5.30.6.0 (**Recommended**) Filename: cp049694.compsig; cp049694.exe

Enhancements

• Update to the latest SOULAPI version.

Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Linux 64-bit

Version: 5.30.6.0 (Recommended)

Filename: ssaducli-5.30-6.0.x86_64.compsig; ssaducli-5.30-6.0.x86_64.rpm; ssaducli-5.30-6.0.x86_64.txt

<u>Fixes</u>

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing "expresslocalencryptioneula=?" command.

Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit

Version: 5.30.6.0 (**Recommended**) Filename: cp049696.compsig; cp049696.exe

Important Note!

This stand alone version of the Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use Smart Storage Administrator (SSA).

Fixes

- Fixed an issue where in Windows SSACLI was not showing the Slot # on non-zero segment (expansion chassis) on SDFlex.
- Fixed an issue in SSACLI where an error message was displaying when executing

"expresslocalencryptioneula=?" command.