Release Notes for Gen10 Service Pack for ProLiant, v2019.12.0

BIOS - System ROM   **Top**
Online ROM Flash Component for Linux - HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 (U38) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u38-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u38-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 System ROM - U38

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

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Firmware Dependencies:

None

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 (U39) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u39-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u39-2.22_2019_11_13-1.1.x86_64.rpm

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Deliverable Name:

HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 System ROM - U39

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

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Firmware Dependencies:

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Known Issues:

None

Enhancements

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 (U40) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u40-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u40-2.22_2019_11_13-1.1.x86_64.rpm

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Deliverable Name:

HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 System ROM - U40

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

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Known Issues:

None

Prerequisites

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

Fixes

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 (U45) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u45-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u45-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

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Deliverable Name:

HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 System ROM - U45

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Prerequisites

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Fixes

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Firmware Dependencies:

None

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant BL460c Gen10 (I41) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-i41-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-i41-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

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Deliverable Name:

HPE ProLiant BL460c Gen10 System ROM - I41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

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Known Issues:

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Enhancements

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Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant DL160 Gen10/DL180 Gen10 (U31) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u31-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u31-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL160 Gen10/DL180 Gen10 System ROM - U31

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant DL20 Gen10 (U43) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u43-2.10_2019_09_12-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u43-2.10_2019_09_12-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL20 Gen10 System ROM - U43

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL325 Gen10 (A41) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: RPMS/x86_64/firmware-system-a41-2.30_2019_10_18-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-a41-2.30_2019_10_18-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 System ROM - A41

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

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:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL325 Gen10 Plus (A43) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-a43-1.10_2019_10_29-1.1.x86_64.rpm; RPMS/x86_64/firmware-system-a43-1.10_2019_10_29-1.1.x86_64_part1.compsig; RPMS/x86_64/firmware-system-a43-1.10_2019_10_29-1.1.x86_64_part2.compsig

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 Plus System ROM - A43

Release Version:

1.10_10-29-2019

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:

None

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

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL360 Gen10 (U32) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u32-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u32-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL360 Gen10 System ROM - U32

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe

graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant DL380 Gen10 (U30) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u30-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u30-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL380 Gen10 System ROM - U30

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant DL385 Gen10 (A40) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: RPMS/x86_64/firmware-system-a40-2.30_2019_10_18-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-a40-2.30_2019_10_18-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 System ROM - A40

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

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:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

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Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL385 Gen10 Plus (A42) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-a42-1.10_2019_10_29-1.1.x86_64.rpm; RPMS/x86_64/firmware-system-a42-1.10_2019_10_29-1.1.x86_64_part1.compsig; RPMS/x86_64/firmware-system-a42-1.10_2019_10_29-1.1.x86_64_part2.compsig

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 Plus System ROM - A42

Release Version:

1.10_10-29-2019

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:

None

Prerequisites

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

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant DL560 Gen10/DL580 Gen10 (U34) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u34-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u34-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL560 Gen10/DL580 Gen10 System ROM - U34

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant ML110 Gen10 (U33) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u33-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u33-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML110 Gen10 System ROM - U33

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

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Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot

Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant ML30 Gen10 (U44) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u44-2.10_2019_09_12-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u44-2.10_2019_09_12-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant ML30 Gen10 System ROM - U44

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Online ROM Flash Component for Linux - HPE ProLiant ML350 Gen10 (U41) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u41-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u41-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML350 Gen10 System ROM - U41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

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Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Linux - HPE ProLiant XL230k Gen10 (U37) Server
Version: 2.22_11-13-2019 **(Recommended)**
Filename: RPMS/x86_64/firmware-system-u37-2.22_2019_11_13-1.1.x86_64.compsig; RPMS/x86_64/firmware-system-u37-2.22_2019_11_13-1.1.x86_64.rpm

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant XL230k Gen10 System ROM - U37

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 (U38) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042121.compsig; cp042121.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 System ROM - U38

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log

(IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 (U39) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042142.compsig; cp042142.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 System ROM - U39

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 (U40) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042090.compsig; cp042090.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 System ROM - U40

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 (U45) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042127.compsig; cp042127.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 System ROM - U45

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant BL460c Gen10 (I41) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042145.compsig; cp042145.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant BL460c Gen10 System ROM - I41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant DL160 Gen10/DL180 Gen10 (U31) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042118.compsig; cp042118.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL160 Gen10/DL180 Gen10 System ROM - U31

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

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This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant DL20 Gen10 (U43) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: cp041406.compsig; cp041406.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL20 Gen10 System ROM - U43

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL325 Gen10 (A41) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: cp041577.compsig; cp041577.exe

<u>**Important Note!**</u>

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 System ROM - A41

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

<u>**Prerequisites**</u>

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL325 Gen10 Plus (A43) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: cp038597.exe; cp038597_part1.compsig; cp038597_part2.compsig

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 Plus System ROM - A43

Release Version:

1.10_10-29-2019

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:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL360 Gen10 (U32) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042124.compsig; cp042124.exe

<u>**Important Note!**</u>

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL360 Gen10 System ROM - U32

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant DL380 Gen10 (U30) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042148.compsig; cp042148.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL380 Gen10 System ROM - U30

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant DL385 Gen10 (A40) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: cp041574.compsig; cp041574.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 System ROM - A40

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL385 Gen10 Plus (A42) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: cp038318.exe; cp038318_part1.compsig; cp038318_part2.compsig

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 Plus System ROM - A42

Release Version:

1.10_10-29-2019

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:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant DL560 Gen10/DL580 Gen10 (U34) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042139.compsig; cp042139.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL560 Gen10/DL580 Gen10 System ROM - U34

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant ML110 Gen10 (U33) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042130.compsig; cp042130.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML110 Gen10 System ROM - U33

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant ML30 Gen10 (U44) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: cp041409.compsig; cp041409.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant ML30 Gen10 System ROM - U44

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

Online ROM Flash Component for Windows x64 - HPE ProLiant ML350 Gen10 (U41) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042136.compsig; cp042136.exe

<u>**Important Note!**</u>

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML350 Gen10 System ROM - U41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

<u>**Prerequisites**</u>

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Online ROM Flash Component for Windows x64 - HPE ProLiant XL230k Gen10 (U37) Server
Version: 2.22_11-13-2019 **(Recommended)**
Filename: cp042133.compsig; cp042133.exe

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant XL230k Gen10 System ROM - U37

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

<u>**Enhancements**</u>

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 (U38) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U38_2.22_11_13_2019.fwpkg

<u>**Important Note!**</u>

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 System ROM - U38

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

<u>**Fixes**</u>

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 (U39) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U39_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 System ROM - U39

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 (U40) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U40_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 System ROM - U40

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory

for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 (U45) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U45_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 System ROM - U45

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Filename: I41_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant BL460c Gen10 System ROM - I41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant DL160 Gen10/DL180 Gen10 (U31) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U31_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL160 Gen10/DL180 Gen10 System ROM - U31

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities.

The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant DL20 Gen10 (U43) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: U43_2.10_09_12_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL20 Gen10 System ROM - U43

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL325 Gen10 (A41) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: A41_2.30_10_18_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 System ROM - A41

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

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Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL360 Gen10 (U32) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U32_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL360 Gen10 System ROM - U32

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant DL380 Gen10 (U30) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U30_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL380 Gen10 System ROM - U30

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant DL385 Gen10 (A40) Servers
Version: 2.30_10-18-2019 **(Optional)**
Filename: A40_2.30_10_18_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 System ROM - A40

Release Version:

2.30_10-18-2019

Last Recommended or Critical Revision:

2.20_09-17-2019

Previous Revision:

2.20_09-17-2019

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

Addressed an issue where core counts for some processors such as AMD EPYC 7282 would be incorrectly displayed in iLO and some pre-boot pages. This was not a functional issue and only affected the count of enabled cores as displayed to the user. The cores would have been active even without this resolution.

Addressed an issue where the system may fail to boot if the RBSU Bifurcate option was set to anything other than Auto when using AMD EPYC 7002 series processors.

Addressed an issue where the system may immediately power on after issuing shutdown while running VMware ESXi.

Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where PCIe root ports were incorrectly indicating they supported PCIe Gen4. In rare cases this could cause a PCIe device to attempt to train at Gen4. Only PCIe Gen1, Gen2, and Gen3 are supported on the ProLiant DL385 Gen10. Without this resolution devices may run slower than their optimal frequency.

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Addressed an issue where some PCIe cards may not be available due to PCIe training issues.

Addressed an issue where some rare system configurations using LRDIMMs would incorrectly flag a memory training error during boot. The iml would be logged every boot on the system.

Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL560 Gen10/DL580 Gen10 (U34) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U34_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs

could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant DL560 Gen10/DL580 Gen10 System ROM - U34

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant ML110 Gen10 (U33) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U33_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML110 Gen10 System ROM - U33

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant ML30 Gen10 (U44) Servers
Version: 2.10_09-12-2019 **(Recommended)**
Filename: U44_2.10_09_12_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant ML30 Gen10 System ROM - U44

Release Version:

2.10_09-12-2019

Last Recommended or Critical Revision:

2.10_09-12-2019

Previous Revision:

2.00_09-05-2019

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Known Issues:

None

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 CVE-2017-5715, CVE-2019-11135, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130, and CVE-2018-11091. These issues are not unique to HPE servers.

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Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant ML350 Gen10 (U41) Servers
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U41_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant ML350 Gen10 System ROM - U41

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

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Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

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Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

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Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Firmware Package - HPE ProLiant XL230k Gen10 (U37) Server
Version: 2.22_11-13-2019 **(Recommended)**
Filename: U37_2.22_11_13_2019.fwpkg

Important Note!

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Deliverable Name:

HPE ProLiant XL230k Gen10 System ROM - U37

Release Version:

2.22_11-13-2019

Last Recommended or Critical Revision:

2.22_11-13-2019

Previous Revision:

2.16_09-12-2019

Firmware Dependencies:

None

Enhancements/New Features:

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

Addressed an issue where the system may become unresponsive during POST when both iLO and the server are reset simultaneously.

Addressed an issue where the server may experience a Red Screen (RSOD) during boot when a Matrox GPU is present and the server is booting in Legacy Boot Mode. This problem could occur with other optional PCIe graphics adapters. This issue is not intermittent and will occur on every boot with impacted optional PCIe graphics adapters with previous System ROM revisions. This issue is not seen with servers configured in UEFI Boot Mode or when using the embedded graphics controller.

Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM replaces the previously published v2.20 System ROM. The v2.20 System ROM introduced an issue where a small subset LRDIMMs could experience an uncorrectable memory error. This issue had been previously fixed in the v2.14 ROM of the System ROM. Please consult the following advisory for additional details. https://support.hpe.com/hpsc/doc/public/display?docId=emr_na-a00092445en_us

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest support for Intel Trusted eXecution Technology (TXT) which provides mitigation for CVE-2019-151. This mitigation is only needed for systems that have TXT enabled. This issue is not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel Reference Code support that provides mitigations for the multiple security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2019-11137, CVE-2019-152, and CVE-2019-11136. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an CVE-2017-5715, CVE-2019-11135 and CVE-2019-11139. These issues are not unique to HPE servers.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for an Intel sighting where under complex micro-architectural conditions, executing X87 or AVX or integer divide instructions may results in unpredictable system behavior. This issue is not unique to HPE servers.

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Addressed an issue where the system may incorrectly report that a DIMM has been mapped out after a memory training failure in the Integrated Management Log (IML) when the DIMM is still present in the system memory map. The IML will now correctly indicate the memory training failure, but will not indicate that the DIMM has been mapped out. This change only impacts the IML logging of the error and does not impact the operation of the system.

Known Issues:

None

Enhancements

Updated to the latest thermal support for the platform.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Universal Firmware Package - HPE ProLiant DL325 Gen10 Plus (A43) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: A43_1.10_10_29_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL325 Gen10 Plus System ROM - A43

Release Version:

1.10_10-29-2019

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:

None

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

ROM Flash Universal Firmware Package - HPE ProLiant DL385 Gen10 Plus (A42) Servers
Version: 1.10_10-29-2019 **(Recommended)**
Filename: A42_1.10_10_29_2019.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE ProLiant DL385 Gen10 Plus System ROM - A42

Release Version:

1.10_10-29-2019

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:

None

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This is the initial version of the firmware.

Known Issues:

None

Driver - Chipset
Identifiers for AMD EPYC Processors for Windows
Version: 3.0.0.0 (B) **(Optional)**
Filename: cp040146.compsig; cp040146.exe

Enhancements

Add support for HPE ProLiant Gen10 Plus servers.

Identifiers for Intel Xeon E-2xxx Processor for Windows
Version: 10.1.18015.8142 **(Optional)**
Filename: cp039323.compsig; cp039323.exe

Enhancements

Updated to match the latest version available from Intel. There are no functional differences between 10.1.17861.8101 and 10.1.18015.8142.

Identifiers for Intel Xeon Scalable Processors (First and Second Generation) for Windows
Version: 10.1.18015.8142 **(Optional)**
Filename: cp040561.compsig; cp040561.exe

Enhancements

Add support for Intel devices 203A, 203D, 2078, and 207A.

Driver - Network
Mellanox net-mst Kernel Driver Component for VMware ESXi 6.5 and 6.7
Version: 2019.01.02 **(Recommended)**
Filename: cp038662.compsig; cp038662.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 HPE vibsdepot.hpe.com webpage, plus an HPE specific CPXXXX.xml file.

Fixes

Mellanox NMST Kermel Module Driver Component for VMware ESXi 6.0 includes nmst version 4.12.0.105.

Enhancements

Mellanox NMST Kermel Module Driver Component for VMware ESXi 6.0 includes nmst version 4.12.0.105.

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
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022
868779-B21	HPE Synergy 6410C 25/50Gb Ethernet Adapter	HPE0000000006
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	HPE0000000014

HPE Blade Emulex 10/20GbE Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**

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:

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

HPE Blade Emulex 10/20GbE Driver for VMware vSphere 6.7
Version: 2019.12.20 (B) **(Optional)**
Filename: cp041867.compsig; cp041867.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
- ○ HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE Driver for Windows Server 2012 R2
Version: 12.0.1195.0 **(Optional)**
Filename: cp039927.compsig; cp039927.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:

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

HPE Blade Emulex 10/20GbE Driver for Windows Server 2016
Version: 12.0.1195.0 **(Optional)**
Filename: cp039928.compsig; cp039928.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:

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

Version: 12.0.1195.0 **(Optional)**
Filename: cp039929.compsig; cp039929.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:

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

HPE Blade Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 7
Version: 12.0.1216.1-1 **(Optional)**
Filename: kmod-be2net_bl-12.0.1216.1-1.rhel7u6.x86_64.compsig; kmod-be2net_bl-12.0.1216.1-1.rhel7u6.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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 Drivers for SUSE Linux Enterprise Server 12
Version: 12.0.1216.1-1 **(Optional)**
Filename: be2net_bl-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2net_bl-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; be2net_bl-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.compsig; be2net_bl-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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 Drivers for SUSE Linux Enterprise Server 15
Version: 12.0.1216.1-1 **(Optional)**
Filename: be2net_bl-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; be2net_bl-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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 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:

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

HPE Blade Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7
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
- ○ HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for Windows Server 2012 R2
Version: 12.0.1171.0 **(Optional)**
Filename: cp039930.compsig; cp039930.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:

- ○ HPE FlexFabric 20Gb 2-port 650FLB Adapter
- ○ 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:

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

HPE Blade Emulex 10/20GbE iSCSI Driver for Windows Server 2019
Version: 12.0.1171.0 **(Optional)**

Filename: cp039932.compsig; cp039932.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:

- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ○ HP FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 7
Version: 12.0.1216.1-1 **(Optional)**
Filename: kmod-be2iscsi_bl-12.0.1216.1-1.rhel7u6.x86_64.compsig; kmod-be2iscsi_bl-12.0.1216.1-1.rhel7u6.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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 12
Version: 12.0.1216.1-1 **(Optional)**
Filename: be2iscsi_bl-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; be2iscsi_bl-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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: 12.0.1216.1-1 **(Optional)**
Filename: be2iscsi_bl-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; be2iscsi_bl-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

Initial release.

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 Intel ixgbe Drivers for Red Hat Enterprise Linux 7
Version: 5.6.4-1 **(Optional)**
Filename: kmod-hp-ixgbe_bl-5.6.4-1.rhel7u6.x86_64.compsig; kmod-hp-ixgbe_bl-5.6.4-1.rhel7u6.x86_64.rpm; kmod-hp-ixgbe_bl-5.6.4-1.rhel7u7.x86_64.compsig; kmod-hp-ixgbe_bl-5.6.4-1.rhel7u7.x86_64.rpm

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes a issue where configuring the Maximum Transmission Unit (MTU) on a Virtual Function fails on a guest OS.

Enhancements

Initial release.

This product supports Red Hat Enterprise Linux 7 Update 7.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Blade Intel ixgbe Drivers for Red Hat Enterprise Linux 8
Version: 5.6.4-1 **(Optional)**
Filename: kmod-hp-ixgbe_bl-5.6.4-1.rhel8u0.x86_64.compsig; kmod-hp-ixgbe_bl-5.6.4-1.rhel8u0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Enhancements

Initial release.

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: 5.6.4-1 **(Optional)**
Filename: hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; hp-ixgbe_bl-kmp-default-5.6.4_k4.4.73_5-1.sles12sp3.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.6.4_k4.4.73_5-1.sles12sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes a issue where configuring the Maximum Transmission Unit (MTU) on a Virtual Function fails on a guest OS.

Enhancements

Initial release.

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 15
Version: 5.6.4-1 **(Optional)**
Filename: hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_23-1.sles15sp0.x86_64.compsig; hp-ixgbe_bl-kmp-default-5.6.4_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes an issue where configuring the Maximum Transmission Unit (MTU) for a Virtual Function fails on a guest OS.

Enhancements

Initial release.

This product supports SUSE Linux Enterprise Server 15 SP1.

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 ixgben Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp039952.compsig; cp039952.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:

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

- 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: 4.6.2-1 **(Optional)**
Filename: kmod-hp-ixgbevf_bl-4.6.2-1.rhel7u6.x86_64.compsig; kmod-hp-ixgbevf_bl-4.6.2-1.rhel7u6.x86_64.rpm; kmod-hp-ixgbevf_bl-4.6.2-1.rhel7u7.x86_64.compsig; kmod-hp-ixgbevf_bl-4.6.2-1.rhel7u7.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes an issue where configuring the Maximum Transmission Unit (MTU) for a Virtual Function fails on a guest OS.

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

Initial release.

This product supports Red Hat Enterprise Linux 7 Update 7.

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 ixgbevf Drivers for Red Hat Enterprise Linux 8
Version: 4.6.2-1 **(Optional)**
Filename: kmod-hp-ixgbevf_bl-4.6.2-1.rhel8u0.x86_64.compsig; kmod-hp-ixgbevf_bl-4.6.2-1.rhel8u0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Enhancements

Initial release.

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 ixgbevf Drivers for SUSE Linux Enterprise Server 12
Version: 4.6.2-1 **(Optional)**
Filename: hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; hp-ixgbevf_bl-kmp-default-4.6.2_k4.4.73_5-1.sles12sp3.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.6.2_k4.4.73_5-1.sles12sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes an issue where configuring the Maximum Transmission Unit (MTU) for a Virtual Function fails on a guest OS.

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

Initial release.

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 ixgbevf Drivers for SUSE Linux Enterprise Server 15
Version: 4.6.2-1 **(Optional)**
Filename: hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_23-1.sles15sp0.x86_64.compsig; hp-ixgbevf_bl-kmp-default-4.6.2_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Linux*, version 1.0.14 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.

This product fixes an issue where configuring the Maximum Transmission Unit (MTU) for a Virtual Function fails on a guest OS.

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

Initial release.

This product supports SUSE Linux Enterprise Server 15 SP1.

HPE Blade Intel ixn Driver for Windows Server 2012 R2
Version: 3.14.132.0 **(Optional)**
Filename: cp039939.compsig; cp039939.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

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

HPE Blade Intel ixn Driver for Windows Server 2016
Version: 4.1.131.0 **(Optional)**
Filename: cp039940.compsig; cp039940.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

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

HPE Blade Intel ixn Driver for Windows Server 2019
Version: 4.1.143.0 **(Optional)**
Filename: cp039941.compsig; cp039941.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

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

HPE Blade Intel vxn Driver for Windows Server 2012 R2
Version: 1.0.16.1 **(Optional)**
Filename: cp039943.compsig; cp039943.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Enhancements

Initial release.

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: 2.0.210.0 **(Optional)**
Filename: cp039944.compsig; cp039944.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Enhancements

Initial release.

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: 2.1.138.0 **(Optional)**
Filename: cp039945.compsig; cp039945.exe

Important Note!

HPE recommends the firmware provided in *HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.5 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.143.0 or later.

Enhancements

Initial release.

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: 2019.12.20 **(Optional)**
Filename: cp039954.compsig; cp039954.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 1.0.8 or later, for use with this driver.

Fixes

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off.

This product addresses a PSOD seen with FCoE.

Enhancements

Initial release.

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: 2019.12.20 **(Optional)**
Filename: cp039955.compsig; cp039955.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 1.0.8 or later, for use with this driver.

Fixes

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off.

This product addresses a PSOD seen with FCoE.

Enhancements

Initial release.

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
- ○ 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: 7.14.63-1 **(Optional)**
Filename: kmod-netxtreme2_bl-7.14.63-1.rhel7u6.x86_64.compsig; kmod-netxtreme2_bl-7.14.63-1.rhel7u6.x86_64.rpm; kmod-netxtreme2_bl-7.14.63-1.rhel7u7.x86_64.compsig; kmod-netxtreme2_bl-7.14.63-1.rhel7u7.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux,* version 1.0.9 or later, for use with these drivers.

Fixes

This product fixes an issue where the driver reports a DMAE timeout due to an incorrect maximum sg count.

This product fixes an issue of Tx Silent Drops cause a hardware error when statistics is not enabled for the client.

This product fixes a ping failure between VF and PF with MCoS.

This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

Initial release.

This product now supports sending iSCSI initiator and target ipaddress in OCBB data.

This product supports Red Hat Enterprise Linux 7 Update 7.

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
- ○ 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 8
Version: 7.14.63-1 **(Optional)**
Filename: kmod-netxtreme2_bl-7.14.63-1.rhel8u0.x86_64.compsig; kmod-netxtreme2_bl-7.14.63-1.rhel8u0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux,* version 1.0.9 or later, for use with these drivers.

Fixes

This product fixes an issue where the driver reports a DMAE timeout due to an incorrect maximum sg count.

This product fixes an issue of Tx Silent Drops cause a hardware error when statistics is not enabled for the client.

This product fixes a ping failure between VF and PF with MCoS.

This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

Initial release.

This product now supports sending iSCSI initiator and target ipaddress in OCBB data.

These drivers support the following network adapters:

- ○ HPE FlexFabric 10Gb 2-port 534M Adapter
- ○ 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 SUSE Linux Enterprise Server 12
Version: 7.14.63-1 **(Optional)**
Filename: netxtreme2_bl-kmp-default-7.14.63_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.63_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; netxtreme2_bl-kmp-default-7.14.63_k4.4.73_5-1.sles12sp3.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.63_k4.4.73_5-1.sles12sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux,* version 1.0.9 or later, for use with these drivers.

Fixes

This product fixes an issue where the driver reports a DMAE timeout due to an incorrect maximum sg count.

This product fixes an issue of Tx Silent Drops cause a hardware error when statistics is not enabled for the client.

This product fixes a ping failure between VF and PF with MCoS.

This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

Initial release.

This product now supports sending iSCSI initiator and target ipaddress in OCBB data.

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
- ○ 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: 7.14.63-1 **(Optional)**
Filename: netxtreme2_bl-kmp-default-7.14.63_k4.12.14_195-1.sles15sp1.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.63_k4.12.14_195-1.sles15sp1.x86_64.rpm; netxtreme2_bl-kmp-default-7.14.63_k4.12.14_23-1.sles15sp0.x86_64.compsig; netxtreme2_bl-kmp-default-7.14.63_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux,* version 1.0.9 or later, for use with these drivers.

Fixes

This product fixes an issue where the driver reports a DMAE timeout due to an incorrect maximum sg count.

This product fixes an issue of Tx Silent Drops cause a hardware error when statistics is not enabled for the client.

This product fixes a ping failure between VF and PF with MCoS.

This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

Initial release.

This product now supports sending iSCSI initiator and target ipaddress in OCBB data.

This product supports SUSE Linux Enterprise 15 SP1.

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
- ○ 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: 7.13.171.0 **(Optional)**
Filename: cp039942.compsig; cp039942.exe

Important Note!

HP recommends the firmware provided in *HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 1.0.0.8 or later, for use with these drivers.

Fixes

This product addresses an Adapter Link Down error that ocurrs due to the detection of a pause flood by the switch.

This product addresses Assert failures seen when powering on SR-IOV-enabled Virtual Machines with Virtual Functions from a single OneView function.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE FlexFabric 10Gb 2-port 534M Adapter
- ○ 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 iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 6
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.rhel7u6.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.rhel7u6.x86_64.rpm

Fixes

This product addresses an iSCSI discovery failure with VLAN.

This product addresses an issue where an iSCSI portal is discovered with invalid an VLAN ID.

Enhancements

Initial release.

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
- ○ HPE FlexFabric 20Gb 2-port 630FLB Adapter
- ○ HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 7
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.rhel7u7.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.rhel7u7.x86_64.rpm

Enhancements

Initial release.

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
- ○ HPE FlexFabric 20Gb 2-port 630FLB Adapter
- ○ HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Blade QLogic NX2 iSCSI Offload IO Daemon for Red Hat Enterprise Linux 8 Update 0
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.rhel8u0.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.rhel8u0.x86_64.rpm

Enhancements

Initial release.

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
- ○ 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

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

Fixes

This product addresses an iSCSI discovery failure with VLAN.

This product addresses an issue where an iSCSI portal is discovered with invalid an VLAN ID.

Enhancements

Initial release.

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
- ○ 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 SP4
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.sles12sp4.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.sles12sp4.x86_64.rpm

Fixes

This product addresses an iSCSI BFS failure with VLAN.

This product addresses an iSCSI discovery failure with VLAN.

This product addresses an issue where an iSCSI portal is discovered with invalid an VLAN ID.

Enhancements

Initial release.

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
- ○ 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 SP0
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.sles15sp0.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.sles15sp0.x86_64.rpm

Fixes

This product addresses an iSCSI BFS failure with VLAN.

This product addresses an iSCSI discovery failure with VLAN.

This product addresses an issue where an iSCSI portal is discovered with invalid an VLAN ID.

Enhancements

Initial release.

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
- ○ 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 **(Optional)**
Filename: iscsiuio_bl-2.11.5.13-3.sles15sp1.x86_64.compsig; iscsiuio_bl-2.11.5.13-3.sles15sp1.x86_64.rpm

Enhancements

Initial release.

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
- HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Broadcom NetXtreme-E Driver for Windows Server 2012 R2
Version: 214.0.177.0 (B) **(Optional)**
Filename: cp040546.compsig; cp040546.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Driver for Windows Server 2016
Version: 214.0.177.0 (B) **(Optional)**
Filename: cp040547.compsig; cp040547.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Driver for Windows Server 2019
Version: 214.0.177.0 (B) **(Optional)**
Filename: cp040548.compsig; cp040548.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7
Version: 1.9.2-214.0.182.0 (C) **(Optional)**
Filename: kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u6.x86_64.compsig; kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u6.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64*, version 1.6.4 or later, for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 1.9.2-214.0.182.0 (B) **(Optional)**
Filename: bnxt_en-kmp-default-1.9.2_k4.12.14_94.41-214.0.182.0.sles12sp4.x86_64.compsig; bnxt_en-kmp-default-1.9.2_k4.12.14_94.41-214.0.182.0.sles12sp4.x86_64.rpm; bnxt_en-kmp-default-1.9.2_k4.4.73_5-214.0.182.0.sles12sp3.x86_64.compsig; bnxt_en-kmp-default-1.9.2_k4.4.73_5-214.0.182.0.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64*, version 1.6.4 or later, for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 15
Version: 1.9.2-214.0.182.0 (B) **(Optional)**
Filename: bnxt_en-kmp-default-1.9.2_k4.12.14_23-214.0.182.0.sles15.x86_64.compsig; bnxt_en-kmp-default-1.9.2_k4.12.14_23-214.0.182.0.sles15.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64*, version 1.6.4 or later, for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp039893.compsig; cp039893.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 Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware*, version 5.9.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp039894.compsig; cp039894.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 Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware*, version 5.9.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 6
Version: 214.0.181.0 (C) **(Optional)**
Filename: libbnxt_re-214.0.181.0-rhel7u6.x86_64.compsig; libbnxt_re-214.0.181.0-rhel7u6.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7, version 1.9.2-214.0.182.0(C) or later, must be installed before installing this product.

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

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 12 SP3
Version: 214.0.181.0 (B) **(Optional)**
Filename: libbnxt_re-214.0.181.0-sles12sp3.x86_64.compsig; libbnxt_re-214.0.181.0-sles12sp3.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12, version 1.9.2-214.0.182.0(B) or later, must be installed before installing this product.

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

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 12 SP4
Version: 214.0.181.0 (B) **(Optional)**
Filename: libbnxt_re-214.0.181.0-sles12sp4.x86_64.compsig; libbnxt_re-214.0.181.0-sles12sp4.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 12, version 1.9.2-214.0.182.0(B) or later, must be installed before installing this product.

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

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E RoCE Library for SUSE Linux Enterprise Server 15
Version: 214.0.181.0 (B) **(Optional)**
Filename: libbnxt_re-214.0.181.0-sles15.x86_64.compsig; libbnxt_re-214.0.181.0-sles15.x86_64.rpm; README

Prerequisites

HPE Broadcom NetXtreme-E Drivers for SUSE Linux Enterprise Server 15, version 1.9.2-214.0.182.0(B) or later, must be installed before installing this product.

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

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions
Version: 214.0.0.0 (C) **(Optional)**
Filename: cp040545.compsig; cp040545.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

    ○ HP Ethernet 1Gb 2-port 330i Adapter (22BD)
    ○ HP Ethernet 1Gb 4-port 331i Adapter (22BE)
    ○ HPE Ethernet 1Gb 4-port 331FLR Adapter
    ○ HPE Ethernet 1Gb 4-port 331T Adapter
    ○ HP 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: 3.137y-1 (B) **(Optional)**
Filename: kmod-tg3-3.137y-1.rhel7u6.x86_64.compsig; kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.24.0 or later, for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom tg3 Ethernet Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 3.137y-2 (B) **(Optional)**
Filename: README; tg3-kmp-default-3.137y_k4.12.14_94.41-2.sles12sp4.x86_64.compsig; tg3-kmp-default-3.137y_k4.12.14_94.41-2.sles12sp4.x86_64.rpm; tg3-kmp-default-3.137y_k4.4.73_5-2.sles12sp3.x86_64.compsig; tg3-kmp-default-3.137y_k4.4.73_5-2.sles12sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.24.0 or later, for use with these

drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom tg3 Ethernet Drivers for SUSE Linux Enterprise Server 15
Version: 3.137y-2 (B) **(Optional)**
Filename: README; tg3-kmp-default-3.137y_k4.12.14_23-2.sles15.x86_64.compsig; tg3-kmp-default-3.137y_k4.12.14_23-2.sles15.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.24.0 or later, for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- ○ HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- ○ HPE Ethernet 1Gb 4-port 331FLR Adapter
- ○ HPE Ethernet 1Gb 4-port 331T Adapter
- ○ 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: 2019.12.20 **(Optional)**
Filename: cp039594.zip; cp039594.compsig

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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp039595.compsig; cp039595.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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter

      ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2012 R2
Version: 12.0.1195.0 (B) **(Optional)**
Filename: cp040850.compsig; cp040850.exe

<u>Important Note!</u>

    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.

<u>Enhancements</u>

    This product now remove supports Synergy and Blade Server.

<u>Supported Devices and Features</u>

    This driver supports the following network adapters:

      ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
      ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2016
Version: 12.0.1195.0 (B) **(Optional)**
Filename: cp040851.compsig; cp040851.exe

<u>Important Note!</u>

    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.

<u>Enhancements</u>

    This product now remove supports Synergy and Blade Server.

<u>Supported Devices and Features</u>

    This driver supports the following network adapters:

      ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
      ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2019
Version: 12.0.1195.0 (B) **(Optional)**
Filename: cp040878.compsig; cp040878.exe

<u>Important Note!</u>

    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.

<u>Enhancements</u>

    This product now remove supports Synergy and Blade Server.

<u>Supported Devices and Features</u>

    This driver supports the following network adapters:

      ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
      ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2012 R2
Version: 12.0.1171.0 (B) **(Optional)**
Filename: cp040852.compsig; cp040852.exe

<u>Important Note!</u>

    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.

<u>Enhancements</u>

    This product now remove supports Synergy and Blade Server.

<u>Supported Devices and Features</u>

    This driver supports the following network adapters:

      ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
      ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2016
Version: 12.0.1171.0 (B) **(Optional)**

Filename: cp040853.compsig; cp040853.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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2019
Version: 12.0.1171.0 (B) **(Optional)**
Filename: cp040877.compsig; cp040877.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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 12.0.1216.1-1 (B) **(Optional)**
Filename: kmod-be2net-12.0.1216.1-1.rhel7u6.x86_64.compsig; kmod-be2net-12.0.1216.1-1.rhel7u6.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 12.0.1216.1-1 (B) **(Optional)**
Filename: be2net-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2net-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; be2net-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.compsig; be2net-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE Drivers for SUSE Linux Enterprise Server 15
Version: 12.0.1216.1-1 (B) **(Optional)**
Filename: be2net-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; be2net-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp040828.compsig; cp040828.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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp040824.compsig; cp040824.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 remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 12.0.1216.1-1 (B) **(Optional)**
Filename: kmod-be2iscsi-12.0.1216.1-1.rhel7u6.x86_64.compsig; kmod-be2iscsi-12.0.1216.1-1.rhel7u6.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 12.0.1216.1-1 (B) **(Optional)**

Filename: be2iscsi-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; be2iscsi-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; be2iscsi-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.compsig; be2iscsi-kmp-default-12.0.1216.1_k4.4.103_6.38-1.sles12sp3MU5.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Drivers for SUSE Linux Enterprise Server 15
Version: 12.0.1216.1-1 (B) **(Optional)**
Filename: be2iscsi-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; be2iscsi-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2019.03.01 for use with these drivers.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Intel E1R Driver for Windows Server 2012 R2
Version: 12.14.8.1 **(Optional)**
Filename: cp040854.compsig; cp040854.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HP Ethernet 1Gb 4-port 366T Adapter
- ○ HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel E1R Driver for Windows Server 2016
Version: 12.15.184.7 **(Optional)**
Filename: cp040879.compsig; cp040879.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which override and copy constructor to MSIX_AFFINITY_MANAGEMENT class to eliminate KW issues with double freeing memory.
This product correct an issue which fixed e1r compile to exclude Nahum Icelake defines.
This product correct an issue which fixed conversion of timestamp into 64bit value.
This product correct an issue which fix for NDIS Miniport Kernel Pointer Leakage

Enhancements

This product now remove supports Synergy and Blade Server.

This product add Wrapping and fix Support To Cometlake,and added thermal sensor support for fiber NIC.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HPE Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HPE Ethernet 1Gb 4-port 366FLR Adapter
- ○ HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel E1R Driver for Windows Server 2019
Version: 12.18.9.1 **(Optional)**
Filename: cp040874.compsig; cp040874.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which override and copy constructor to MSIX_AFFINITY_MANAGEMENT class to eliminate KW issues with double freeing memory.
This product correct an issue which fixed e1r compile to exclude Nahum Icelake defines.
This product correct an issue which fixed conversion of timestamp into 64bit value.
This product correct an issue which fix for NDIS Miniport Kernel Pointer Leakage

Enhancements

This product now remove supports Synergy and Blade Server.

This product add Wrapping and fix Support To Cometlake,and added thermal sensor support for fiber NIC.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HPE Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HPE Ethernet 1Gb 4-port 366FLR Adapter
- ○ HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 2.10.19.30-2 **(Optional)**
Filename: kmod-hp-i40e-2.10.19.30-2.rhel7u6.x86_64.compsig; kmod-hp-i40e-2.10.19.30-2.rhel7u6.x86_64.rpm; kmod-hp-i40e-2.10.19.30-2.rhel7u7.x86_64.compsig; kmod-hp-i40e-2.10.19.30-2.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where unexpected error message appears in dmesg when driver is loaded.
This product addresses an issue where the Ingress/Egress mirroring to VF 0 doesn't work.
This product addresses an issue where the NVMUpdate cannot initialize adapter in recovery mode.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 563i Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 8
Version: 2.10.19.30-2 **(Optional)**
Filename: kmod-hp-i40e-2.10.19.30-2.rhel8u0.x86_64.compsig; kmod-hp-i40e-2.10.19.30-2.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 563i Adapter
- ○ 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: 2.10.19.30-2 **(Optional)**
Filename: hp-i40e-kmp-default-2.10.19.30_k4.12.14_94.41-2.sles12sp4.x86_64.compsig; hp-i40e-kmp-default-2.10.19.30_k4.12.14_94.41-2.sles12sp4.x86_64.rpm; hp-i40e-kmp-default-2.10.19.30_k4.4.73_5-2.sles12sp3.x86_64.compsig; hp-i40e-kmp-default-2.10.19.30_k4.4.73_5-2.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where unexpected error message appears in dmesg when driver is loaded.
This product addresses an issue where the Ingress/Egress mirroring to VF 0 doesn't work.
This product addresses an issue where the NVMUpdate cannot initialize adapter in recovery mode.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 563i Adapter
- ○ 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 15
Version: 2.10.19.30-2 **(Optional)**
Filename: hp-i40e-kmp-default-2.10.19.30_k4.12.14_195-2.sles15sp1.x86_64.compsig; hp-i40e-kmp-default-2.10.19.30_k4.12.14_195-2.sles15sp1.x86_64.rpm; hp-i40e-kmp-default-2.10.19.30_k4.12.14_23-2.sles15sp0.x86_64.compsig; hp-i40e-kmp-default-2.10.19.30_k4.12.14_23-2.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where unexpected error message appears in dmesg when driver is loaded.
This product addresses an issue where the Ingress/Egress mirroring to VF 0 doesn't work.
This product addresses an issue where the NVMUpdate cannot initialize adapter in recovery mode.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 563i Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2012 R2
Version: 1.11.101.0 **(Optional)**
Filename: cp040855.compsig; cp040855.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which BSOD when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

   ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
   ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2016
Version: 1.11.101.0 **(Optional)**
Filename: cp040856.compsig; cp040856.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which fix swidx to vf and vport id tracking and rdma vf id lookup
This product correct an issue which Windows crashes after setting the value MSISupported =1 and MessageNumberLimit=1
This product correct an issue which BSOD when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

   ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
   ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2019
Version: 1.11.101.0 **(Optional)**
Filename: cp040857.compsig; cp040857.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which Windows crashes after setting the value MSISupported =1 and MessageNumberLimit=1
This product correct an issue which fix swidx to vf and vport id tracking and rdma vf id lookup
This product correct an issue which Host suffers KERNEL_SECURITY_CHECK_FAILURE BugCheck 139 BSOD
This product correct an issue which BSOD when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

   ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
   ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40eb Driver for Windows Server 2012 R2
Version: 1.11.101.0 **(Optional)**
Filename: cp040858.compsig; cp040858.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which Windows crashes after setting the value MSISupported =1 and MessageNumberLimit=1
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.
This product correct an issue which BSOD when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 568i Adapter
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40eb Driver for Windows Server 2016
Version: 1.11.101.0 **(Optional)**
Filename: cp040859.compsig; cp040859.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which Windows crashes after setting the value MSISupported =1 and MessageNumberLimit=1
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.
This product correct an issue which Blue Screen of Death (BSoD) when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.
This product corrects an issue which Blue Screen of Death (BSoD) occurred while during server shutdown or restart.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 568i Adapter
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40eb Driver for Windows Server 2019
Version: 1.11.101.0 **(Optional)**
Filename: cp040860.compsig; cp040860.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Fixes

This product correct an issue which Champagne Fountain (v1.10.102.0) blue screens on Device.Network.LAN.AzureStack PCS test.
This product correct an issue which Host suffers KERNEL_SECURITY_CHECK_FAILURE BugCheck 139 BSOD.
This product correct an issue which fix Rdma VFs for ports greater than zero and Concurrent VFReset.
This product correct an issue which removed PCS fix for WS2019 to investigate ghost queue problem.
This product correct an issue which BSOD when change speed from 10G/25Gbps to Autonegotiation in localized OS as well as in ENU.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 568i Adapter
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel i40en Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp040369.compsig; cp040369.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 3.12.0 or later, for use with this driver.

Fixes

This product addresses an issue where VLAN tag traffic dropped problem.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ 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: 2019.12.20 **(Optional)**
Filename: cp040370.compsig; cp040370.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 3.12.0 or later, for use with this driver.

Fixes

This product addresses an issue where VLAN tag traffic dropped problem.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ 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 Driver for Windows Server 2012 R2
Version: 1.7.119.0 **(Optional)**
Filename: cp040867.compsig; cp040867.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.11.101.0 or later.

Enhancements

initial release.

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

- ○ 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:

- ○ 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 Driver for Windows Server 2016
Version: 1.7.119.0 **(Optional)**
Filename: cp040868.compsig; cp040868.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.11.101.0 or later.

Enhancements

initial release.

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

- ○ 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:

- ○ 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 Driver for Windows Server 2019
Version: 1.7.119.0 **(Optional)**
Filename: cp040869.compsig; cp040869.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.11.101.0 or later.

Enhancements

initial release.

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

- ○ 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:

- ○ 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: 3.7.61.20-1 **(Optional)**
Filename: kmod-hp-iavf-3.7.61.20-1.rhel7u6.x86_64.compsig; kmod-hp-iavf-3.7.61.20-1.rhel7u6.x86_64.rpm; kmod-hp-iavf-3.7.61.20-1.rhel7u7.x86_64.compsig; kmod-hp-iavf-3.7.61.20-1.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses spurious error message when interface down by given longer timeout value to complete.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel iavf Drivers for Red Hat Enterprise Linux 8
Version: 3.7.61.20-1 **(Optional)**
Filename: kmod-hp-iavf-3.7.61.20-1.rhel8u0.x86_64.compsig; kmod-hp-iavf-3.7.61.20-1.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel iavf Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 3.7.61.20-1 **(Optional)**
Filename: hp-iavf-kmp-default-3.7.61.20_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-iavf-kmp-default-3.7.61.20_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; hp-iavf-kmp-default-3.7.61.20_k4.4.73_5-1.sles12sp3.x86_64.compsig; hp-iavf-kmp-default-3.7.61.20_k4.4.73_5-1.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses spurious error message when interface down by given longer timeout value to complete.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel iavf Drivers for SUSE Linux Enterprise Server 15
Version: 3.7.61.20-1 **(Optional)**
Filename: hp-iavf-kmp-default-3.7.61.20_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-iavf-kmp-default-3.7.61.20_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-iavf-kmp-default-3.7.61.20_k4.12.14_23-1.sles15sp0.x86_64.compsig; hp-iavf-kmp-default-3.7.61.20_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses spurious error message when interface down by given longer timeout value to complete.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

This product now allow permanent MAC address to be changed.

Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 368i Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 6.2.1-1 **(Optional)**
Filename: kmod-hp-igb-6.2.1-1.rhel7u6.x86_64.compsig; kmod-hp-igb-6.2.1-1.rhel7u6.x86_64.rpm; kmod-hp-igb-6.2.1-1.rhel7u7.x86_64.compsig; kmod-hp-igb-6.2.1-1.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where failure of driver installation.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 8
Version: 6.2.1-1 **(Optional)**
Filename: kmod-hp-igb-6.2.1-1.rhel8u0.x86_64.compsig; kmod-hp-igb-6.2.1-1.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 6.2.1-1 **(Optional)**
Filename: hp-igb-kmp-default-6.2.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; hp-igb-kmp-default-6.2.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; hp-igb-kmp-default-6.2.1_k4.4.73_5-1.sles12sp3.x86_64.compsig; hp-igb-kmp-default-6.2.1_k4.4.73_5-1.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where failure of driver installation.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following Intel network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 15
Version: 6.2.1-1 **(Optional)**
Filename: hp-igb-kmp-default-6.2.1_k4.12.14_195-1.sles15sp1.x86_64.compsig; hp-igb-kmp-default-6.2.1_k4.12.14_195-1.sles15sp1.x86_64.rpm; hp-igb-kmp-default-6.2.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; hp-igb-kmp-default-6.2.1_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where failure of driver installation.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

Supported Devices and Features

These drivers support the following Intel network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp040825.compsig; cp040825.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 3.12.0 or later, for use with this driver.

Fixes

This product addresses an issue where race condition during NIC adapter reset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp040829.compsig; cp040829.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 3.12.0 or later, for use with this driver.

Fixes

This product addresses an issue where race condition during NIC adapter reset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 5.6.4-2 **(Optional)**
Filename: kmod-hp-ixgbe-5.6.4-2.rhel7u6.x86_64.compsig; kmod-hp-ixgbe-5.6.4-2.rhel7u6.x86_64.rpm; kmod-hp-ixgbe-5.6.4-2.rhel7u7.x86_64.compsig; kmod-hp-ixgbe-5.6.4-2.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.
This product fixes an issue of an typo in ethtool stats.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

These drivers support the following network adapters:

- ○ HP Ethernet 10Gb 2-port 560FLB Adapter
- ○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 560M Adapter
- ○ HP Ethernet 10Gb 2-port 560SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 8
Version: 5.6.4-2 **(Optional)**
Filename: kmod-hp-ixgbe-5.6.4-2.rhel8u0.x86_64.compsig; kmod-hp-ixgbe-5.6.4-2.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following network adapters:

- ○ HP Ethernet 10Gb 2-port 560FLB Adapter
- ○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 560M Adapter
- ○ HP Ethernet 10Gb 2-port 560SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 5.6.4-2 **(Optional)**
Filename: hp-ixgbe-kmp-default-5.6.4_k4.12.14_94.41-2.sles12sp4.x86_64.compsig; hp-ixgbe-kmp-default-5.6.4_k4.12.14_94.41-2.sles12sp4.x86_64.rpm; hp-ixgbe-kmp-default-5.6.4_k4.4.73_5-2.sles12sp3.x86_64.compsig; hp-ixgbe-kmp-default-5.6.4_k4.4.73_5-2.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.
This product fixes an issue of an typo in ethtool stats.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 15
Version: 5.6.4-2 **(Optional)**
Filename: hp-ixgbe-kmp-default-5.6.4_k4.12.14_195-2.sles15sp1.x86_64.compsig; hp-ixgbe-kmp-default-5.6.4_k4.12.14_195-2.sles15sp1.x86_64.rpm; hp-ixgbe-kmp-default-5.6.4_k4.12.14_23-2.sles15sp0.x86_64.compsig; hp-ixgbe-kmp-default-5.6.4_k4.12.14_23-2.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product fixes an issue of an infinite recursion in device shutdown path due to a corner case when PCIe link was down.
This product fixes an issue of an typo in ethtool stats.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgben Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp040371.compsig; cp040371.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 3.12.0 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

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgben Driver for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp040372.compsig; cp040372.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 3.12.0 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

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
○ HP Ethernet 10Gb 2-port 560SFP+ Adapter
○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 4.6.2-2 **(Optional)**
Filename: kmod-hp-ixgbevf-4.6.2-2.rhel7u6.x86_64.compsig; kmod-hp-ixgbevf-4.6.2-2.rhel7u6.x86_64.rpm; kmod-hp-ixgbevf-4.6.2-2.rhel7u7.x86_64.compsig; kmod-hp-ixgbevf-4.6.2-2.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

These drivers support the following network adapters:

○ HP Ethernet 10Gb 2-port 560FLB Adapter
○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
○ HP Ethernet 10Gb 2-port 560M Adapter
○ HP Ethernet 10Gb 2-port 560SFP+ Adapter
○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 8
Version: 4.6.2-2 **(Optional)**
Filename: kmod-hp-ixgbevf-4.6.2-2.rhel8u0.x86_64.compsig; kmod-hp-ixgbevf-4.6.2-2.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following network adapters:

○ HP Ethernet 10Gb 2-port 560FLB Adapter
○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
○ HP Ethernet 10Gb 2-port 560M Adapter
○ HP Ethernet 10Gb 2-port 560SFP+ Adapter
○ 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: 4.6.2-2 **(Optional)**
Filename: hp-ixgbevf-kmp-default-4.6.2_k4.12.14_94.41-2.sles12sp4.x86_64.compsig; hp-ixgbevf-kmp-default-4.6.2_k4.12.14_94.41-2.sles12sp4.x86_64.rpm; hp-ixgbevf-kmp-default-4.6.2_k4.4.73_5-2.sles12sp3.x86_64.compsig; hp-ixgbevf-kmp-default-4.6.2_k4.4.73_5-2.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 15
Version: 4.6.2-2 **(Optional)**
Filename: hp-ixgbevf-kmp-default-4.6.2_k4.12.14_195-2.sles15sp1.x86_64.compsig; hp-ixgbevf-kmp-default-4.6.2_k4.12.14_195-2.sles15sp1.x86_64.rpm; hp-ixgbevf-kmp-default-4.6.2_k4.12.14_23-2.sles15sp0.x86_64.compsig; hp-ixgbevf-kmp-default-4.6.2_k4.12.14_23-2.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.19.0 or later, for use with these drivers.

Fixes

This product addresses an issue where a link is lost on a Virtual Machine when hypervisor is restored from low-power state, such as freeze or suspend.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixn Driver for Windows Server 2012 R2
Version: 3.14.132.0 (B) **(Optional)**
Filename: cp040861.compsig; cp040861.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This component supports the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter

HPE Intel ixn Driver for Windows Server 2016
Version: 4.1.131.0 (B) **(Optional)**
Filename: cp040862.compsig; cp040862.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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 ixn Driver for Windows Server 2019
Version: 4.1.143.0 (C) **(Optional)**
Filename: cp040876.compsig; cp040876.exe

Important Note!

    HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

    This product now remove supports Synergy and Blade Server.

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 ixs Driver for Windows Server 2012 R2
Version: 3.14.132.0 (B) **(Optional)**
Filename: cp040863.compsig; cp040863.exe

Important Note!

    HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

    This product now remove supports Synergy and Blade Server.

Supported Devices and Features

    This driver supports the following network adapters:

       o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
       o HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixs Driver for Windows Server 2016
Version: 4.1.131.0 (B) **(Optional)**
Filename: cp040864.compsig; cp040864.exe

Important Note!

    HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

    This product now remove supports Synergy and Blade Server.

Supported Devices and Features

    This driver supports the following network adapters:

       o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
       o HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixs Driver for Windows Server 2019
Version: 4.1.143.0 (B) **(Optional)**
Filename: cp040865.compsig; cp040865.exe

Important Note!

    HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

    This product now remove supports Synergy and Blade Server.

Supported Devices and Features

    This driver supports the following network adapters:

       o HPE Ethernet 10Gb 2-port 562FLR-T Adapter
       o HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel vxn Driver for Windows Server 2012 R2

Filename: cp040881.compsig; cp040881.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- ○ 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:

- ○ HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 561T Adapter

HPE Intel vxn Driver for Windows Server 2016
Version: 2.0.210.0 (D) **(Optional)**
Filename: cp040880.compsig; cp040880.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- ○ HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 560SFP+ Adapter

HPE Intel vxn Driver for Windows Server 2019
Version: 2.1.138.0 (B) **(Optional)**
Filename: cp040870.compsig; cp040870.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.143.0 or later.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This component supports the following HPE Intel ixn network adapters:

- ○ HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 560SFP+ Adapter

HPE Intel vxs Driver for Windows Server 2012 R2
Version: 1.2.131.0 (B) **(Optional)**
Filename: cp040871.compsig; cp040871.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 3.14.132.0 (B) or later.

Enhancements

This product now remove supports Synergy and Blade Server.

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel vxs Driver for Windows Server 2016
Version: 2.1.133.0 (B) **(Optional)**
Filename: cp040872.compsig; cp040872.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.131.0 (B) or later.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel vxs Driver for Windows Server 2019
Version: 2.1.138.0 (B) **(Optional)**
Filename: cp040873.compsig; cp040873.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 4.1.143.0 (B) or later.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2
Version: 2.30.21713.0 **(Optional)**
Filename: cp039897.compsig; cp039897.exe

Fixes

This product correct an issue which could be BSOD that occurred when calling the NDK connection OID, while increasing the number of connection.
This product correct an issue which system is reboot required when upgrading the driver in some cases.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- ○ HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
- ○ HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- ○ HPE Ethernet 10Gb 2-port 548SFP+ OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 642SFP28 OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 641SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter
- ○ HPE Infiniband FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
- ○ HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- ○ HPE Ethernet 100Gb 1-port 842QSFP28 Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016
Version: 2.30.21713.0 **(Optional)**
Filename: cp039898.compsig; cp039898.exe

Fixes

This product correct an issue which could be BSOD that occurred when calling the NDK connection OID, while increasing the number of connection.
This product correct an issue which system is reboot required when upgrading the driver in some cases.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- ○ HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
- ○ HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- ○ HPE Infiniband FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
- ○ HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- ○ HPE Ethernet 100Gb 1-port 842QSFP28 Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019
Version: 2.30.21713.0 **(Optional)**
Filename: cp039899.compsig; cp039899.exe

Fixes

This product correct an issue which could be BSOD that occurred when calling the NDK connection OID, while increasing the number of connection.
This product correct an issue which system is reboot required when upgrading the driver in some cases.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- ○ HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
- ○ HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- ○ HPE Infiniband FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter
- ○ HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter
- ○ HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter
- ○ HPE Ethernet 100Gb 1-port 842QSFP28 Adapter

HPE Mellanox MFT Driver and Firmware Tools for Red Hat Enterprise Linux 7 Update 6 (x86_64)
Version: 4.13 **(Optional)**
Filename: kmod-kernel-mft-mlnx-4.13.0-1.rhel7u6.x86_64.compsig; kmod-kernel-mft-mlnx-4.13.0-1.rhel7u6.x86_64.rpm; mft-4.13.0-102.rhel7u6.x86_64.compsig;
mft-4.13.0-102.rhel7u6.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 Update 6 (x86_64) supported by this binary rpm are:
3.10.0-957.el7 - (x86_64) and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for Red Hat Enterprise Linux 7 Update 7 (x86_64)
Version: 4.13 **(Optional)**
Filename: kmod-kernel-mft-mlnx-4.13.0-1.rhel7u7.x86_64.compsig; kmod-kernel-mft-mlnx-4.13.0-1.rhel7u7.x86_64.rpm; mft-4.13.0-102.rhel7u7.x86_64.compsig;
mft-4.13.0-102.rhel7u7.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 7 Update 7 (x86_64) supported by this binary rpm are:
3.10.0-1062.el7 - (x86_64) and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for Red Hat Enterprise Linux 8 (x86_64)
Version: 4.13 **(Optional)**
Filename: kmod-kernel-mft-mlnx-4.13.0-1.rhel8u0.x86_64.compsig; kmod-kernel-mft-mlnx-4.13.0-1.rhel8u0.x86_64.rpm; mft-4.13.0-102.rhel8u0.x86_64.compsig; mft-4.13.0-102.rhel8u0.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 8 (x86_64) supported by this binary rpm are:
4.18.0-80.el8 - (x86_64) and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for SUSE Linux Enterprise Server 12 SP3 (AMD64/EM64T)
Version: 4.13 **(Optional)**
Filename: kernel-mft-mlnx-kmp-default-4.13.0_k4.4.73_5-1.sles12sp3.x86_64.compsig; kernel-mft-mlnx-kmp-default-4.13.0_k4.4.73_5-1.sles12sp3.x86_64.rpm; mft-4.13.0-102.sles12sp3.x86_64.compsig; mft-4.13.0-102.sles12sp3.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 12 SP3 (AMD64/EM64T) supported by this binary rpm are:
4.4.73-5-default and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for SUSE Linux Enterprise Server 12 SP4 (AMD64/EM64T)
Version: 4.13 **(Optional)**
Filename: kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; mft-4.13.0-102.sles12sp4.x86_64.compsig; mft-4.13.0-102.sles12sp4.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 12 SP4 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-94.41-default and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for SUSE Linux Enterprise Server 15 SP0 (AMD64/EM64T)
Version: 4.13 **(Optional)**
Filename: kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_23-1.sles15sp0.x86_64.compsig; kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_23-1.sles15sp0.x86_64.rpm; mft-4.13.0-102.sles15sp0.x86_64.compsig; mft-4.13.0-102.sles15sp0.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 15 SP0 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-23-default and future update kernels.

HPE Mellanox MFT Driver and Firmware Tools for SUSE Linux Enterprise Server 15 SP1 (AMD64/EM64T)
Version: 4.13 **(Optional)**
Filename: kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; kernel-mft-mlnx-kmp-default-4.13.0_k4.12.14_195-1.sles15sp1.x86_64.rpm; mft-4.13.0-102.sles15sp1.x86_64.compsig; mft-4.13.0-102.sles15sp1.x86_64.rpm

Fixes

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Enhancements

MFT prerequisite RPMs for Mellanox adapter firmware update in Secure Boot mode.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 15 SP1 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-193-default and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)
Version: 4.7 **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u6.x86_64.compsig; kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u6.x86_64.rpm; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u6.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u6.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 4.7:

o When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
o Fixed the issue where software reset might have resulted in an order inversion of interface names.
o Server reboot might have resulted in a system crash.
o Virtual Function (VF) mirroring offload not supported issue have been fixed.
o The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

o **For ConnectX-4 Adapters and above:**
  ▪ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ▪ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
  ▪ Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
  ▪ Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.
o **For ConnectX-5 Adapters and above:**
  ▪ Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
  ▪ QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
  ▪ Added support for On-Demand Paging (ODP) over DC transport.
  ▪ Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA->MA translations and preventing PCI transactions from going to the root complex.
  ▪ Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 Update 6 (x86_64) supported by this binary rpm are:
3.10.0-957.el7 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 7 (x86_64)
Version: 4.7 **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u7.x86_64.compsig; kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u7.x86_64.rpm; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u7.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel7u7.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 4.7:

o When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
o Fixed the issue where software reset might have resulted in an order inversion of interface names.
o Server reboot might have resulted in a system crash.
o Virtual Function (VF) mirroring offload not supported issue have been fixed.
o The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

o **For ConnectX-4 Adapters and above:**
  ▪ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ▪ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
  ▪ Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
  ▪ Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.
o **For ConnectX-5 Adapters and above:**
  ▪ Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
  ▪ QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
  ▪ Added support for On-Demand Paging (ODP) over DC transport.
  ▪ Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA-> MA translations and preventing PCI transactions from going to the root complex.
  ▪ Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 Update 7 (x86_64) supported by this binary rpm are:
3.10.0-1062.el7 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 8 (x86_64)
Version: 4.7 **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel8u0.x86_64.compsig; kmod-mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel8u0.x86_64.rpm; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel8u0.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.rhel8u0.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 4.7:

o When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
o Fixed the issue where software reset might have resulted in an order inversion of interface names.
o Server reboot might have resulted in a system crash.
o Virtual Function (VF) mirroring offload not supported issue have been fixed.
o The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

o **For ConnectX-4 Adapters and above:**
  ▪ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ▪ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the

hardware according to the buffer memory layout.
- Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
- Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.

○ **For ConnectX-5 Adapters and above:**
- Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
- QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
- Added support for On-Demand Paging (ODP) over DC transport.
- Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA->MA translations and preventing PCI transactions from going to the root complex.
- Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 8 (x86_64) supported by this binary rpm are:
4.18.0-80.el8 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 12 SP3 (AMD64/EM64T)
Version: 4.7 **(Recommended)**
Filename: mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp3.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp3.x86_64.rpm; mlnx-ofa_kernel-kmp-default-4.7_k4.4.73_5-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp3.x86_64.compsig; mlnx-ofa_kernel-kmp-default-4.7_k4.4.73_5-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp3.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:

○ Python version 2.7

Fixes

The following issues have been fixed in version 4.7:

○ When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
○ Fixed the issue where software reset might have resulted in an order inversion of interface names.
○ Server reboot might have resulted in a system crash.
○ Virtual Function (VF) mirroring offload not supported issue have been fixed.
○ The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

○ **For ConnectX-4 Adapters and above:**
- Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
- Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
- Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
- Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.

○ **For ConnectX-5 Adapters and above:**
- Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
- QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
- Added support for On-Demand Paging (ODP) over DC transport.
- Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA->MA translations and preventing PCI transactions from going to the root complex.
- Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 12 SP3 (AMD64/EM64T) supported by this binary rpm are:
4.4.73-5-default - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 12 SP4 (AMD64/EM64T)
Version: 4.7 **(Recommended)**
Filename: mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp4.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp4.x86_64.rpm; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_94.41-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp4.x86_64.compsig; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_94.41-OFED.4.7.1.0.0.1.g1c4bf42.sles12sp4.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 4.7:

o When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
o Fixed the issue where software reset might have resulted in an order inversion of interface names.
o Server reboot might have resulted in a system crash.
o Virtual Function (VF) mirroring offload not supported issue have been fixed.
o The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

o **For ConnectX-4 Adapters and above:**
  ▪ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ▪ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
  ▪ Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
  ▪ Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.
o **For ConnectX-5 Adapters and above:**
  ▪ Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
  ▪ QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
  ▪ Added support for On-Demand Paging (ODP) over DC transport.
  ▪ Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA->MA translations and preventing PCI transactions from going to the root complex.
  ▪ Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 12 SP4 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-94.41-default - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 15 SP0 (AMD64/EM64T)
Version: 4.7 **(Recommended)**
Filename: mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp0.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp0.x86_64.rpm; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_23-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp0.x86_64.compsig; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_23-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp0.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 4.7:

o When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.

○ Fixed the issue where software reset might have resulted in an order inversion of interface names.
○ Server reboot might have resulted in a system crash.
○ Virtual Function (VF) mirroring offload not supported issue have been fixed.
○ The number of guaranteed counters per VF have been changed and now calculated based on the number of ports mapped to that VF. This allows more VFs to have counters allocated.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.7:

○ **For ConnectX-4 Adapters and above:**
  ■ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ■ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
  ■ Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
  ■ Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.
○ **For ConnectX-5 Adapters and above:**
  ■ Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
  ■ QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
  ■ Added support for On-Demand Paging (ODP) over DC transport.
  ■ Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA-> MA translations and preventing PCI transactions from going to the root complex.
  ■ Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 15 SP0 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-23-default - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 15 SP1 (AMD64/EM64T)
Version: 4.7 **(Recommended)**
Filename: mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp1.x86_64.compsig; mlnx-ofa_kernel-4.7-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp1.x86_64.rpm; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_195-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp1.x86_64.compsig; mlnx-ofa_kernel-kmp-default-4.7_k4.12.14_195-OFED.4.7.1.0.0.1.g1c4bf42.sles15sp1.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:

○ Python version 2.7

Fixes

The following issues have been fixed in version 4.7:

○ When configuring the Time-stamping feature, Completion Queue Events (CQE) compression would be disabled. This fix entailed the removal of a warning message that appeared upon attempting to disable CQE compression when it has already been disabled.
○ Fixed the issue where software reset might have resulted in an order inversion of interface names.
○ Server reboot might have resulted in a system crash.
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Enhancements

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○ **For ConnectX-4 Adapters and above:**
  ■ Added support for monitoring selected counters and generating a notification event(Monitor_Counter_Change event) upon changes made to these counters. The counters to be monitored are selected using the SET_MONITOR_COUNTER command.
  ■ Added a new API which enables posting a single WR that completes the Protection Information (PI) operation internally. This reduces CPU utilization for posting and processing multiple Work Requests (WRs) and improves performance by choosing the optimal Management key (mkey) for the hardware according to the buffer memory layout.
  ■ Added support to read additional Electrically Erasable Programmable Read-only Memory (EEPROM) information from high pages of modules such as SFF-8436 and SFF-8636. Such information can be: 1. Application Select table 2. User writable EEPROM 3. Thresholds and alarms - Ethtool dump works on active cables only (e.g. optic), but thresholds and alarms can be read with "offset" and "length" parameters in any cable by running: ethtool -m <DEVNAME> offset X length Y
  ■ Added the ability to create rules to steer Remote Direct Memory Access(RDMA) traffic, with two destinations supported:DevX object and Queue Pair (QP). Multiple priorities are also supported.
○ **For ConnectX-5 Adapters and above:**
  ■ Incorporated the documentation of Accelerated Switching And Packet Processing (ASAP2): Hardware Offloading for vSwitches into MLNX_OFED Release Notes and User Manual.
  ■ QP counters and flow counters are now set per Process ID (PID) to allow better visibility of RDMA error states. Users will be able to manually tune

the Q counter to monitor specific QPs, or automatically monitor QPs according to predefined criteria, such as the QP type.
- Added support for On-Demand Paging (ODP) over DC transport.
- Added support for Address Translation Services (ATS) feature, which improves performance for virtualized PeerDirect applications by caching PA-> MA translations and preventing PCI transactions from going to the root complex.
- Added support for Device Emulation in BlueField. This mechanism allows function-A to perform operations on behalf of function-B. The emulation manager creates a channel (named VHCA_TUNNEL general object) that acts as the direct command interface between the emulated function host and the HCA hardware. The emulation software creates this tunnel for every managed function and issues commands via the DevX general command interface.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 15 SP1 (AMD64/EM64T) supported by this binary rpm are:
4.12.14-193-default - (AMD64/EM64T) and future update kernels.

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 8.42.8.0-1 **(Optional)**
Filename: kmod-qlgc-fastlinq-8.42.8.0-1.rhel7u6.x86_64.compsig; kmod-qlgc-fastlinq-8.42.8.0-1.rhel7u6.x86_64.rpm; kmod-qlgc-fastlinq-8.42.8.0-1.rhel7u7.x86_64.compsig; kmod-qlgc-fastlinq-8.42.8.0-1.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.8.0 or later, for use with these drivers.

Fixes

This product addresses VM crash with VFs
This product addresses an issue where qedr unload causes HW error after creating bonding interfaces using NPAR functions
This product addresses an issue where the system crash while running VF RDMA traffic in max VFs configuration
This product addresses an issue where the system crash while collecting GRC dump

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 521T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE StoreFabric CN1300R Converged Network Adapter
- ○ HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 8
Version: 8.42.8.0-1 **(Optional)**
Filename: kmod-qlgc-fastlinq-8.42.8.0-1.rhel8u0.x86_64.compsig; kmod-qlgc-fastlinq-8.42.8.0-1.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.8.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:
- •HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- •HPE Ethernet 10Gb 2-port 521T Adapter
- •HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Adapter
- •HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- •HPE StoreFabric CN1300R Converged Network Adapter
- •HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 8.42.8.0-1 **(Optional)**
Filename: qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; qlgc-fastlinq-kmp-default-8.42.8.0_k4.4.73_5-1.sles12sp3.x86_64.compsig; qlgc-fastlinq-kmp-default-8.42.8.0_k4.4.73_5-1.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.8.0 or later, for use with these drivers.

Fixes

This product addresses VM crash with VFs
This product addresses an issue where qedr unload causes HW error after creating bonding interfaces using NPAR functions

This product addresses an issue where the system crash while running VF RDMA traffic in max VFs configuration
This product addresses an issue where the system crash while collecting GRC dump

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:
•HPE Ethernet 10Gb 2-port 524SFP+ Adapter
•HPE Ethernet 10Gb 2-port 521T Adapter
•HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Adapter
•HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
•HPE StoreFabric CN1300R Converged Network Adapter
•HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for SUSE Linux Enterprise Server 15
Version: 8.42.8.0-1 **(Optional)**
Filename: qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_195-1.sles15sp1.x86_64.compsig; qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_195-1.sles15sp1.x86_64.rpm;
qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_23-1.sles15sp0.x86_64.compsig; qlgc-fastlinq-kmp-default-8.42.8.0_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.8.0 or later, for use with these drivers.

Fixes

This product addresses VM crash with VFs
This product addresses an issue where qedr unload causes HW error after creating bonding interfaces using NPAR functions
This product addresses an issue where the system crash while running VF RDMA traffic in max VFs configuration
This product addresses an issue where the system crash while collecting GRC dump

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

Supported Devices and Features

This product supports the following network adapters:
•HPE Ethernet 10Gb 2-port 524SFP+ Adapter
•HPE Ethernet 10Gb 2-port 521T Adapter
•HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Adapter
•HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
•HPE StoreFabric CN1300R Converged Network Adapter
•HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions
Version: 8.42.10.0 **(Optional)**
Filename: cp039900.compsig; cp039900.exe

Important Note!

HPE recommends the firmware provided in *HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with these drivers.

Fixes

This product correct an issue which vlan indication did not arrive when the driver is in UFP mode.
This product correct an issue that Windows system crash when VF driver on BB.
This product correct an issue which BSOD in windows 2019 VM when installing NDIS driver.
This product correct an issue which BSOD on Windows 2019 bugcheck 0x139 on QENDA.sys driver.

Enhancements

This product now remove supports Synergy and Blade Server.

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 10Gb 2-port 524SFP+ OCP3 Adapter
o HPE Ethernet 10Gb 2-port 523T OCP3 Adapter
o HPE Ethernet 10Gb 2-port 523T 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 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp039895.compsig; cp039895.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 Online Firmware Upgrade Utility for VMware*, version 4.11.0 or later, for use with this driver.

Fixes

This product addresses a PSOD in ESXi6.5 when running FCoE continuous reboot.

Enhancements

This product now remove supports Synergy and Blade Server.

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 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp039896.compsig; cp039896.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 Online Firmware Upgrade Utility for VMware*, version 4.11.0 or later, for use with this driver.

Fixes

This product addresses a PSOD in ESXi6.7 when running FCoE continuous reboot.

Enhancements

This product now remove supports Synergy and Blade Server.

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 Open-iSCSI Driver for Red Hat Enterprise Linux 7 Update 6
Version: 2.0-873.113-1 (D) **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.rhel7u6-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.rhel7u6-1.x86_64.rpm; README

Enhancements

This product now remove supports Synergy and Blade Server.

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 Open-iSCSI Driver for Red Hat Enterprise Linux 7 Update 7
Version: 2.0-873.113-1 **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.rhel7u7-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.rhel7u7-1.x86_64.rpm; README

Enhancements

This product now supports Red Hat Linux 7 Update 7.

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 Open-iSCSI Driver for Red Hat Enterprise Linux 8 Update 0
Version: 2.0-873.113-1 **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.rhel8u0-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.rhel8u0-1.x86_64.rpm; README

Enhancements

Initial release.

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 Open-iSCSI Driver for SUSE Linux Enterprise Server 12 SP3
Version: 2.0-873.113-1 (D) **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.sles12sp3-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.sles12sp3-1.x86_64.rpm; README

Enhancements

This product now remove supports Synergy and Blade Server.

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 Open-iSCSI Driver for SUSE Linux Enterprise Server 12 SP4
Version: 2.0-873.113-1 (D) **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.sles12sp4-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.sles12sp4-1.x86_64.rpm; README

Enhancements

This product now remove supports Synergy and Blade Server.

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 Open-iSCSI Driver for SUSE Linux Enterprise Server 15 SP0
Version: 2.0-873.113-1 (D) **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.sles15sp0-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.sles15sp0-1.x86_64.rpm; README

Enhancements

This product now remove supports Synergy and Blade Server.

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

Version: 2.0-873.113-1 **(Optional)**
Filename: qlgc-open-iscsi-2.0_873.113.sles15sp1-1.x86_64.compsig; qlgc-open-iscsi-2.0_873.113.sles15sp1-1.x86_64.rpm; README

Enhancements

Initial release.

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 iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 6
Version: 2.11.5.13-3 (B) **(Optional)**
Filename: iscsiuio-2.11.5.13-3.rhel7u6.x86_64.compsig; iscsiuio-2.11.5.13-3.rhel7u6.x86_64.rpm; README

Fixes

This product addresses an iSCSI discovery failure with VLAN.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 7
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio-2.11.5.13-3.rhel7u7.x86_64.compsig; iscsiuio-2.11.5.13-3.rhel7u7.x86_64.rpm

Enhancements

This product now supports Red Hat Linux 7 Update 7.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for Red Hat Enterprise Linux 8 Update 0
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio-2.11.5.13-3.rhel8u0.x86_64.compsig; iscsiuio-2.11.5.13-3.rhel8u0.x86_64.rpm

Enhancements

Initial release.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter

- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 12 SP3 x86_64
Version: 2.11.5.13-3 (B) **(Optional)**
Filename: iscsiuio-2.11.5.13-3.sles12sp3.x86_64.compsig; iscsiuio-2.11.5.13-3.sles12sp3.x86_64.rpm; README

Fixes

This product addresses an iSCSI discovery failure with VLAN.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 12 SP4
Version: 2.11.5.13-3 (B) **(Optional)**
Filename: iscsiuio-2.11.5.13-3.sles12sp4.x86_64.compsig; iscsiuio-2.11.5.13-3.sles12sp4.x86_64.rpm; README

Fixes

This product addresses an iSCSI discovery failure with VLAN.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 15 SP0
Version: 2.11.5.13-3 (B) **(Optional)**
Filename: iscsiuio-2.11.5.13-3.sles15sp0.x86_64.compsig; iscsiuio-2.11.5.13-3.sles15sp0.x86_64.rpm; README

Fixes

This product addresses an iSCSI discovery failure with VLAN.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter

- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 15 SP1
Version: 2.11.5.13-3 **(Optional)**
Filename: iscsiuio-2.11.5.13-3.sles15sp1.x86_64.compsig; iscsiuio-2.11.5.13-3.sles15sp1.x86_64.rpm

Enhancements

Initial release.

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
- ○ HP Ethernet 10Gb 2-port 530SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 530T Adapter
- ○ HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- ○ HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5
Version: 2019.12.20 **(Optional)**
Filename: cp040826.compsig; cp040826.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 1.26.0 or later, for use with this driver.

Fixes

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off.
This product addresses a PSOD seen with FCoE.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Dual Port Converged Network Adapter

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HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7
Version: 2019.12.20 **(Optional)**
Filename: cp040827.compsig; cp040827.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 1.26.0 or later, for use with this driver.

Fixes

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off.
This product addresses a PSOD seen with FCoE.

Enhancements

This product now remove supports Synergy and Blade Server.

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

- o HP Ethernet 10Gb 2-port 533FLR-T Adapter
- o HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- o HP StoreFabric CN1100R Dual Port Converged Network Adapter
- o HPE StoreFabric CN1100R-T Dual Port Converged Network Adapter

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HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 7.14.63-1 **(Optional)**
Filename: kmod-netxtreme2-7.14.63-1.rhel7u6.x86_64.compsig; kmod-netxtreme2-7.14.63-1.rhel7u6.x86_64.rpm; kmod-netxtreme2-7.14.63-1.rhel7u7.x86_64.compsig; kmod-netxtreme2-7.14.63-1.rhel7u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.26.0 or later, for use with these drivers.

Fixes

This product fixes an issue where the adapter link down due to pause flood detection by switch.
This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux Server 7 update 7.

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
- o HP Ethernet 10Gb 2-port 533FLR-T Adapter
- o 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 Red Hat Enterprise Linux 8
Version: 7.14.63-1 **(Optional)**
Filename: kmod-netxtreme2-7.14.63-1.rhel8u0.x86_64.compsig; kmod-netxtreme2-7.14.63-1.rhel8u0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.26.0 or later, for use with these drivers.

Enhancements

Initial release.

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
- o HP Ethernet 10Gb 2-port 533FLR-T Adapter
- o 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 SUSE Linux Enterprise Server 12 x86_64
Version: 7.14.63-1 **(Optional)**
Filename: netxtreme2-kmp-default-7.14.63_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; netxtreme2-kmp-default-7.14.63_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; netxtreme2-kmp-default-7.14.63_k4.4.73_5-1.sles12sp3.x86_64.compsig; netxtreme2-kmp-default-7.14.63_k4.4.73_5-1.sles12sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.26.0 or later, for use with these drivers.

Fixes

This product fixes an issue where the adapter link down due to pause flood detection by switch.
This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

This product now remove supports Synergy and Blade Server.

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
- o HP Ethernet 10Gb 2-port 533FLR-T Adapter

- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- 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: 7.14.63-1 **(Optional)**
Filename: netxtreme2-kmp-default-7.14.63_k4.12.14_195-1.sles15sp1.x86_64.compsig; netxtreme2-kmp-default-7.14.63_k4.12.14_195-1.sles15sp1.x86_64.rpm; netxtreme2-kmp-default-7.14.63_k4.12.14_23-1.sles15sp0.x86_64.compsig; netxtreme2-kmp-default-7.14.63_k4.12.14_23-1.sles15sp0.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.26.0 or later, for use with these drivers.

Fixes

This product fixes an issue where the adapter link down due to pause flood detection by switch.
This product fixes an issue where ping on VLAN stops after Virtual Function Tx offloads are turned off/on.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports SUSE Linux Enterprise Server 15 SP1.

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
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions
Version: 7.13.171.0 **(Optional)**
Filename: cp040875.compsig; cp040875.exe

Important Note!

HP recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with these drivers.

Fixes

This product addresses an Adapter Link Down error that ocurrs due to the detection of a pause flood by the switch.
This product addresses Assert failures seen when powering on SR-IOV-enabled Virtual Machines with Virtual Functions from a single OneView function.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This driver supports 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
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

Intel i350 Driver for Windows Server 2016
Version: 12.15.184.7 **(Optional)**
Filename: cp041189.compsig; cp041189.exe

Important Note!

HPE recommends the firmware provided in *Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following HPE Intel Powerville network adapters:

- HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter
- Intel(R) I350 Gigabit Network Connection

Intel i350 Driver for Windows Server 2019
Version: 12.18.9.1 **(Optional)**
Filename: cp041190.compsig; cp041190.exe

Important Note!

HPE recommends the firmware provided in *Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter
- ○ Intel(R) I350 Gigabit Network Connection

Marvell FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions
Version: 8.42.10.0 **(Optional)**
Filename: cp041118.compsig; cp041118.exe

Important Note!

HPE recommends the firmware provided in *Marvell FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.2.0.0 or later, for use with these drivers.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 QL41232HLCU Adapter
- ○ HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter
- ○ HPE Ethernet 10Gb 2-port BaseT QL41132HLRJ Adapter
- ○ HPE Ethernet 10Gb 2-port BaseT QL41132HQRJ OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter

Mellanox CX4LX and CX5 Driver for Windows Server 2016
Version: 2.30.21713.0 **(Optional)**
Filename: cp041202.compsig; cp041202.exe

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter
- ○ HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter

Mellanox CX4LX and CX5 Driver for Windows Server 2019
Version: 2.30.21713.0 **(Optional)**
Filename: cp041203.compsig; cp041203.exe

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- ○ HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter
- ○ HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter

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nmlx4_en Driver Component for VMware 6.5
Version: 2019.06.14 **(Recommended)**
Filename: cp040179.compsig; cp040179.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

Fixes

No Fixes were included in version 3.16.11.10.

Enhancements

Changes and New Features in version 3.16.11.10:

- ○ 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

---

nmlx5_en Driver Component for VMware 6.5
Version: 2019.06.19 **(Recommended)**
Filename: cp040234.zip; cp040234_part1.compsig; cp040234_part2.compsig

Important Note!

Known Issues in version 4.16.14.2:

- ○ ECN tunable parameter initialAlphaValue for the Reaction Point protocol cannot be modified.
- ○ ECN statistic counters accumulatorsPeriod and ecnMarkedRoce-Packets display wrong values and cannot be cleared.
- ○ The hardware can offload only up to 256 Bytes of headers.
- ○ The "esxcli network sriovnic vf stats" command is not supported.
- ○ Traffic cannot be sent between PV and SR-IOV VF connected to different ports on the same HCA.
- ○ Setting the "Allow Guest MTU Change" option in vSphere Client is currently not functional. Although guest MTU changes in SR-IOV are allowed, they do not affect the port's MTU and the guest's MTU remains the same as the PF MTU.
- ○ Geneve options length support is limited to 56 Bytes. Received packets with options length bigger than 56 Bytes are dropped.
- ○ Interaction with ConnectX-4/ConnectX-4 Lx older firmware versions might result in the following internal firmware errors:
- ○ Device health compromised
- ○ synd 0x1: firmware internal error
- ○ extSync 0x94ee
- ○ The 'esxcli mellanox uplink link info -u <vmnic_name>' command reports the 'Auto negotiation' capability always as 'true'.
- ○ Wake-on-LAN does not notify when invalid parameters are provided.
- ○ Nested ESXi might not function properly.
- ○ Device RSS fails to hash traffic to sufficient RX rings with Broadcast traffic.
- ○ In stress condition 'Watchdog' may appear leading to link going up and down.
- ○ VGT traffic over VXLAN interfaces is currently not supported.
- ○ SMP MADs (ibnetdiscover, sminfo, iblinkinfo, smpdump, ibqueryerr, ibdiagnet and smpquery) are not supported on the VFs.
- ○ Although the max_vfs module parameter range is "0-128", due to firmware limitations, the following are the supported VFs per single port:
  - ■ ConnectX-4: up to 127
  - ■ ConnectX-5: up to 63

For further information on the release notes for ESXi 6.5 Driver Version 4.16.14.2 follow the below link:https://www.mellanox.com/page/products_dyn?product_family=29&mtag=vmware_driver

Fixes

The following issues have been fixed in version in 4.16.14.2:

- ○ Fixed an issue that prevented ESXi from being discovered via the CDP(Cisco Discovery Protocol) protocol on ConnectX-4 Lx adapter cards.

Enhancements

Changes and New Features in smart component version 2019.06.19:

- ○ Added support for the following adapters:
  - ■ HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter (HPE Part Number: P13188-B21)
  - ■ HPE Ethernet 10/25Gb 2-port 642SFP28 OCP3 Adapter (HPE Part Number: P10112-B21)
  - ■ HPE Ethernet 10Gb 2-port 548SFP+ OCP3 Adapter (HPE Part Number: P11341-B21)

New features and changes in version 4.16.14.2:

○ Removed a VF(Virtual Fuction) driver limitation. Now the driver can support the maximum number of VFs supported by the firmware.

Supported Devices and Features

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022
868779-B21	HPE Synergy 6410C 25/50Gb Ethernet Adapter	HPE0000000006
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	HPE0000000014

nmlx5_en Driver Component for VMware 6.7
Version: 2019.06.19 **(Recommended)**
Filename: cp040235.compsig; cp040235.zip

Important Note!

Known Issues in version 4.17.15.16:

○ ECN tunable parameter initialAlphaValue for the Reaction Point protocol cannot be modified.
○ ECN statistic counters accumulatorsPeriod and ecnMarkedRoce-Packets display wrong values and cannot be cleared.
○ The maximum value of RSS must be lower than the number of CPU cores.
○ The hardware can offload only up to 256B of headers.
○ The "esxcli network sriovnic vf stats" command is not supported. When running this command on a vmknic, a failure message is displayed.
○ There is no traffic between PV and SR-IOV VF connected to different ports on the same HCA.
○ Setting the "Allow Guest MTU Change" option in vSphere Client is currently not functional. Although guest MTU changes in SR-IOV are allowed, they do not affect the port's MTU and the guest's MTU remains the same as the PF MTU.
○ When a guest is assigned an IB PCI passthru device or an IB VF, VMware Tools networking information for the guest may be incorrect. This affects how the guest networking information, such as interfaces and their IPs, is displayed in vCenter.
○ Operations on vmnics which are in passthru mode are not supported.
○ The 'esxcli mellanox uplink link info -u <vmnic_name>' command reports the 'Auto negotiation' capability always as 'true'.
○ SMP MADs (ibnetdiscover, sminfo, iblinkinfo, smpdump, ibqueryerr, ibdiagnet and smpquery) are not supported on the VFs.
○ IPv6 as inner packet is not supported.
○ Firmware VF configuration must be N+1 (while N is the required VF number). For example: If your configuration requires 10 VFs, the firmware must be set to support 16 VFs (ESXi Limitation).
○ Wake-on-LAN does not notify when invalid parameters are provided.
○ Nested ESXi might not function properly.
○ Device RSS fails to hash traffic to sufficient RX rings with Broadcast traffic.
○ In stress condition 'Watchdog' may appear, leading to uplink going up and down.
○ Reloading the driver when the SR-IOV VFs are ON, will result in Purple Screen of Death (PSOD).
○ A PSOD may occur during vMotion over ENS(Enhanced Network stack) VMK.
○ VGT traffic over VXLAN interfaces is currently not supported.
○ VMs with SR-IOV cannot be powered on when running low on available vectors.
○ During ENS uplink detachment from the ENS DVS, the below error message regarding the queue still being allocated or that the requested queue is not in use may appear. *"Driver covers for OS issue and the messages are for information only."*
○ Although the max_vfs module parameter range is "0-128", due to firmware limitations, the following are the supported VFs per single port devices:
  ■ ConnectX-4: up to 127
  ■ ConnectX-5: up to 63

For further information on the release notes for ESXi 6.7 Driver Version 4.17.15.16 follow the below link:
https://www.mellanox.com/page/products_dyn?product_family=29&mtag=vmware_driver

Fixes

The following issues have been fixed in version in 4.17.15.16:

○ Fixed an issue that prevented ESXi from being discovered via the CDP (Cisco Discovery Protocol) protocol on ConnectX-4 Lx adapter cards.

Enhancements

Changes and New Features in smart component version 2019.06.19:

○ Added support for the following adapters:
  ■ HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter (HPE Part Number: P13188-B21)
  ■ HPE Ethernet 10/25Gb 2-port 642SFP28 OCP3 Adapter (HPE Part Number: P10112-B21)
  ■ HPE Ethernet 10Gb 2-port 548SFP+ OCP3 Adapter (HPE Part Number: P11341-B21)

New features and changes in version 4.17.15.16:

○ Enhanced Network Stack (ENS)

Supported Devices and Features

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

868779-B21	HPE Synergy 6410C 25/50Gb Ethernet Adapter	HPE0000000006
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	HPE0000000014

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

Driver - Storage
HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019
Version: 106.12.4.0 **(Recommended)**
Filename: cp036435.compsig; cp036435.exe

Enhancements

Added support for AMD.

Driver - Storage Controller
HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 1.2.10-025 **(Recommended)**
Filename: kmod-smartpqi-1.2.10-025.rhel7u6.x86_64.compsig; kmod-smartpqi-1.2.10-025.rhel7u6.x86_64.rpm; kmod-smartpqi-1.2.10-025.rhel7u7.x86_64.compsig; kmod-smartpqi-1.2.10-025.rhel7u7.x86_64.rpm

Fixes

Controller could stop responding while processing PQI reset during a power cycle due to all pending IO's not completed at the time of the power cycle.

HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 8 (64-bit)
Version: 1.2.10-025 **(Recommended)**
Filename: kmod-smartpqi-1.2.10-025.rhel8u0.x86_64.compsig; kmod-smartpqi-1.2.10-025.rhel8u0.x86_64.rpm

Fixes

Controller could stop responding while processing PQI reset during a power cycle due to all pending IO's not completed at the time of the power cycle.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux8 (64-bit) supported by this binary rpm are:
-default- Red Hat Enterprise Linux 8 Update 0 (64-bit).

HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for SUSE LINUX Enterprise Server 12 (64-bit)
Version: 1.2.10-025 **(Recommended)**
Filename: smartpqi-kmp-default-1.2.10-025.sles12sp3.x86_64.compsig; smartpqi-kmp-default-1.2.10-025.sles12sp3.x86_64.rpm; smartpqi-kmp-default-1.2.10-025.sles12sp4.x86_64.compsig; smartpqi-kmp-default-1.2.10-025.sles12sp4.x86_64.rpm

Important Note!

-

Fixes

Controller could stop responding while processing PQI reset during a power cycle due to all pending IO's not completed at the time of the power cycle.

Supported Devices and Features

SUPPORTED KERNELS:
4.12.14-94.41.1 - SUSE LINUX Enterprise Server 12 (64-bit) SP4 plus future errata.

HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for SUSE LINUX Enterprise Server 15 (64-bit)
Version: 1.2.10-025 **(Recommended)**
Filename: smartpqi-kmp-default-1.2.10-025.sles15sp0.x86_64.compsig; smartpqi-kmp-default-1.2.10-025.sles15sp0.x86_64.rpm; smartpqi-kmp-default-1.2.10-025.sles15sp1.x86_64.compsig; smartpqi-kmp-default-1.2.10-025.sles15sp1.x86_64.rpm

Fixes

Controller could stop responding while processing PQI reset during a power cycle due to all pending IO's not completed at the time of the power cycle.

Supported Devices and Features

The kernels of SUSE LINUX Enterprise Server 15 (64-bit) supported by this driver diskette are:
-default - SUSE LINUX Enterprise Server 15 (64-bit) and future errata kernels

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HPE ProLiant Gen10 Smart Array Controller Driver for VMware ESXi 6.5 (Bundle file)
Version: 1.0.4.3008 **(Recommended)**
Filename: VMW-ESX-6.5.0-smartpqi-1.0.4.3008-offline_bundle-14862448.zip

Enhancements

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware ESXi 6.7 (Bundle file)
Version: 1.0.4.3008 **(Recommended)**
Filename: VMW-ESX-6.7.0-smartpqi-1.0.4.3008-offline_bundle-14862538.zip

Enhancements

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).
Version: 2019.12.01 **(Recommended)**
Filename: cp040982.compsig; cp040982.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.hp.com webpages, plus an HPE specific CPXXXX.xml file.

Enhancements

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).
Version: 2019.12.01 **(Recommended)**
Filename: cp040981.compsig; cp040981.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.hp.com webpages, plus an HPE specific CPXXXX.xml file.

Enhancements

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019
Version: 106.166.0.1022 **(Recommended)**
Filename: cp041257.compsig; cp041257.exe

Fixes

o When executing a "PCS-E2Launch" the system cause stop responding due to the internal controller command accessing the cmdinfo SRB.

HPE Smart Array P824i-p MR 64-bit controller driver for Microsoft Windows 2012 R2 edition.
Version: 6.714.18.0 **(Recommended)**
Filename: cp034410.compsig; cp034410.exe

Enhancements

o Added support for the Apollo 4510 system

HPE Smart Array P824i-p MR 64-bit controller driver for Microsoft Windows 2016 edition.
Version: 6.714.18.0 **(Recommended)**
Filename: cp034411.compsig; cp034411.exe

Enhancements

o Added support for the Apollo 4510 system

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.5
Version: 7.706.08.00-1 **(Recommended)**
Filename: VMW-ESX-6.5.0-lsi_mr3-7.706.08.00-offline_bundle-8547861.zip

Enhancements

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.5 (Driver Component)
Version: 2018.06.04 **(Recommended)**
Filename: cp034922.compsig; cp034922.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.

Enhancements

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.7
Version: 7.706.08.00-1 **(Optional)**
Filename: VMW-ESX-6.7.0-lsi_mr3-7.706.08.00-offline_bundle-11327181.zip

Enhancements

○ Added VMware vSphere 6.7 OS support

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.7 (Driver Component)
Version: 2018.02.12 **(Optional)**
Filename: cp035605.compsig; cp035605.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.

Enhancements

○ Added VMware vSphere 6.7 OS support

HPE Smart Array P824i-p MR controller Driver for 64-bit Red Hat Enterprise Linux 7
Version: 07.706.05.00-14 **(Recommended)**
Filename: kmod-megaraid_sas-07.706.05.00-14.rhel7u5.x86_64.compsig; kmod-megaraid_sas-07.706.05.00-14.rhel7u5.x86_64.rpm; kmod-megaraid_sas-07.706.05.00-14.rhel7u6.x86_64.compsig; kmod-megaraid_sas-07.706.05.00-14.rhel7u6.x86_64.rpm

Enhancements

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

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.

HPE Smart Array P824i-p MR controller Driver for 64-bit SUSE LINUX Enterprise Server 12
Version: 07.706.05.00-14 **(Recommended)**
Filename: lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles12sp3.x86_64.compsig; lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles12sp3.x86_64.rpm; lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles12sp4.x86_64.compsig; lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles12sp4.x86_64.rpm

Enhancements

RC4 drop for snap4

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 Smart Array P824i-p MR controller Driver for 64-bit SUSE LINUX Enterprise Server 15
Version: 07.706.05.00-14 **(Recommended)**
Filename: lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles15sp0.x86_64.compsig; lsi-megaraid_sas-kmp-default-07.706.05.00-14.sles15sp0.x86_64.rpm

Enhancements

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

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.

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012R2 and Windows 2016
Version: 12.4.243.4 **(Recommended)**
Filename: cp039579.compsig; cp039579.exe

Important Note!

> Release Notes:
> [HPE StoreFabric Emulex Adapters Release Notes](#)
>
> Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.
>
> It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.
>
> To obtain the guide:
>
> 1. Go to http://www.hpe.com/support/manuals
> 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.
>
> This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.
>
> Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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 12.4.243.4
>
> 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:
>
> 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**:
>
> - HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
> - HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
> - HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
> - HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
>
> **LPe16000 (16Gb) FC**:
>
> - HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
> - HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
> - HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
> - HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
> - HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
> - HP Fibre Channel 16Gb LPe1605 Mezz
>
> **LPe31000/32000 (16Gb/32Gb) FC**:
>
> - HPE StoreFabric SN1200E 16Gb 2P FC HBA
> - HPE StoreFabric SN1200E 16Gb 1P FC HBA
> - HPE StoreFabric SN1600E 32Gb 2p FC HBA
> - HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019
Version: 12.4.243.4 **(Recommended)**
Filename: cp039578.compsig; cp039578.exe

Important Note!

> Release Notes:

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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 12.4.243.4

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:

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:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 R2
Version: 9.3.3.20 (b) **(Recommended)**
Filename: cp039716.compsig; cp039716.exe

Important Note!

Release Notes:
[HPE StoreFabric 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/

Fixed the following:

- System take long time to boot and driver enable
- Virtual Machine missing path to Logical Units (LUNs)
- Port logout incorrect vp index used
- Blue Screen of Death (BSOD) after hpqlafwupdate completes update
- Initiator does not send Non Volatile Memory Express Process Login (NVMe PRLI) when the Target registers both Small Computer System Interface Fibre Channel Protocol (SCSI FCP) and Non Volatile Memory Express Process (NVMe) to the Fabric

Enhancements

Updated to version 9.3.3.20

Added support for the following:

- Non Volatile Memory Express (NVMe) is not enabled by default
- Determine Peripheral Component Interconnect (PCI) function number from Peripheral Component Interconnect (PCI) Interrrupt pin
- Added simplified fabric discovery code

Supported Devices and Features

This driver supports 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
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016
Version: 9.3.3.20 (b) **(Recommended)**
Filename: cp039717.compsig; cp039717.exe

Important Note!

Release Notes:
HPE StoreFabric 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:

- System take long time to boot and driver enable
- Virtual Machine missing path to Logical Units (LUNs)
- Port logout incorrect vp index used
- On Windows 2016 Server observed Blue Screen of Death (BSOD) while doing firmware flashing using QLogic Converge Console Graphical User Interface (QCC_GUI)
- Blue Screen of Death (BSOD) after hpqlafwupdate completes update
- Initiator does not send Non Volatile Memory Express Process Login (NVMe PRLI) when the Target registers both Small Computer System Interface Fibre Channel Protocol (SCSI FCP) and Non Volatile Memory Express Process (NVMe) to the Fabric

Enhancements

Updated to version 9.3.3.20

Added support the following:

- Non Volatile Memory Express (NVMe) is not enabled by default
- Determine Peripheral Component Interconnect (PCI) function number from Peripheral Component Interconnect (PCI) Interrrupt pin
- Added simplified fabric discovery code

Supported Devices and Features

This driver supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019
Version: 9.3.3.20 (b) **(Recommended)**
Filename: cp039718.compsig; cp039718.exe

Important Note!

Release Notes:
HPE StoreFabric 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:

- ○ System take long time to boot and driver enable
- ○ Virtual Machine missing path to Logical Units (LUNs)
- ○ Port logout incorrect vp index used
- ○ Blue Screen of Death (BSOD) after hpqlafwupdate completes update
- ○ Initiator does not send Non Volatile Memory Express Process Login (NVMe PRLI) when the Target registers both Small Computer System Interface Fibre Channel Protocol (SCSI FCP) and Non Volatile Memory Express Process (NVMe) to the Fabric

Enhancements

Updated to version 9.3.3.20

Added support for the following:

- ○ Non Volatile Memory Express (NVMe) is not enabled by default
- ○ Determine Peripheral Component Interconnect (PCI) function number from Peripheral Component Interconnect (PCI) Interrrupt pin
- ○ Added simplified fabric discovery code

Supported Devices and Features

This driver supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

    ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
    ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

    ○ HPE SN1610Q 32Gb 2P FC HBA
    ○ HPE SN1610Q 32Gb 1P FC HBA

HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016
Version: 12.0.1192.0 **(Recommended)**
Filename: cp035755.compsig; cp035755.exe

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Added support for following:

    ○ Disabled non universal Fibre Channel over Ethernet (FCOE) driver support as we move everything to Universal drivers

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:

    ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
    ○ HP FlexFabric 20Gb 2-port 650FLB Adapter
    ○ HP FlexFabric 20Gb 2-port 650M Adapter
    ○ HPE StoreFabric CN1200E-T Adapter

HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver for Windows 2019
Version: 12.0.1192.0 (b) **(Recommended)**
Filename: cp037436.compsig; cp037436.exe

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

Added support for following:

○ Added support for Windows Server 2019.
○ Disabled non universal Fibre Channel over Ethernet (FCOE) driver support as we move everything to Universal drivers

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:

○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
○ HP FlexFabric 20Gb 2-port 650FLB Adapter
○ HP FlexFabric 20Gb 2-port 650M Adapter
○ HPE StoreFabric CN1200E-T Adapter

Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 10.01.00.52.07.6-k1 (b) **(Recommended)**
Filename: kmod-qlgc-qla2xxx-10.01.00.52.07.6_k1-1.rhel7u7.x86_64.compsig; kmod-qlgc-qla2xxx-10.01.00.52.07.6_k1-1.rhel7u7.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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:

○ Flash read
○ Read Diagnostic Parameters (RDP) respond data format
○ Cleanup trace buffer initialization
○ Unintended wait
○ Incomplete login in point-to-point mode
○ Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Initial driver for RedHat Enterprise Linux Server 7 update 7 version 10.01.00.52.07.6-k1

Added support for the following:

○ Add more Firmware debug information
○ Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough

○ Improved secure flash support messages

Supported Devices and Features

This driver supports 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
○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

○ HPE SN1610Q 32Gb 2P FC HBA
○ HPE SN1610Q 32Gb 1P FC HBA

Red Hat Enterprise Linux 7 Server FCoE Driver Kit for HPE Emulex(BRCM) Converged Network Adapters(CNAs) and mezzanine Converged Network Adapters(CNAs)
Version: 12.0.1216.0 **(Recommended)**
Filename: kmod-brcmfcoe-12.0.1216.1-1.rhel7u5.x86_64.compsig; kmod-brcmfcoe-12.0.1216.1-1.rhel7u5.x86_64.rpm; kmod-brcmfcoe-12.0.1216.1-1.rhel7u6.x86_64.compsig; kmod-brcmfcoe-12.0.1216.1-1.rhel7u6.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Fixes

Fixed the following:

○ Brcmfcoe incorrectly blacklists lpfc driver when FibreChannel boards are installed.

Enhancements

Added support for following:

- ○ RedHat Enterprise Linux 7 update 6 (RHEL 7.6)
- ○ Repotline changes to legacy Operating System (OS) SUSE Linux Enterprise Server (SLES) and Red Hat distros.

Updated to Driver version 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: kmod-elx-lpfc-12.4.270.3-1.rhel7u7.x86_64.compsig; kmod-elx-lpfc-12.4.270.3-1.rhel7u7.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

- ○ Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

Red Hat Enterprise Linux 7 Update 6 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: kmod-elx-lpfc-12.4.270.3-1.rhel7u6.x86_64.compsig; kmod-elx-lpfc-12.4.270.3-1.rhel7u6.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

○ Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

Red Hat Enterprise Linux 7 Update 6 Server Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 10.01.00.52.07.6-k1 **(Recommended)**
Filename: kmod-qlgc-qla2xxx-10.01.00.52.07.6_k1-1.rhel7u6.x86_64.compsig; kmod-qlgc-qla2xxx-10.01.00.52.07.6_k1-1.rhel7u6.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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:

- Flash read
- Read Diagnostic Parameters (RDP) respond data format
- Cleanup trace buffer initialization
- Unintended wait
- Incomplete login in point-to-point mode
- Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Updated driver version to 10.01.00.52.07.6-k1

Added support for the following:

- Add more Firmware debug information
- Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
- Improved secure flash support messages

Supported Devices and Features

This driver supports 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
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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Red Hat Enterprise Linux 8 Server FC Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 10.01.00.52.08.0-k1 (b) **(Recommended)**
Filename: kmod-qlgc-qla2xxx-10.01.00.52.08.0_k1-1.rhel8u0.x86_64.compsig; kmod-qlgc-qla2xxx-10.01.00.52.08.0_k1-1.rhel8u0.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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:

○ Flash read
○ Read Diagnostic Parameters (RDP) respond data format
○ Cleanup trace buffer initialization
○ Unintended wait
○ Incomplete login in point-to-point mode
○ Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Initial driver for RedHat Enterprise Linux Server 8 version 10.01.00.52.08.0-k1

Added support for the following:

○ Add more Firmware debug information
○ Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
○ Improved secure flash support messages

Supported Devices and Features

This driver supports 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
○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

○ HPE SN1610Q 32Gb 2P FC HBA
○ HPE SN1610Q 32Gb 1P FC HBA

Red Hat Enterprise Linux 8 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: kmod-elx-lpfc-12.4.270.3-1.rhel8u0.x86_64.compsig; kmod-elx-lpfc-12.4.270.3-1.rhel8u0.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

o Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

SUSE Linux Enterprise Server 12 FC Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 10.01.00.52.12.4-k1 (b) **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-10.01.00.52.12.4_k1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; qlgc-qla2xxx-kmp-default-10.01.00.52.12.4_k1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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 Flash read
o Read Diagnostic Parameters (RDP) respond data format
o Cleanup trace buffer initialization

- Unintended wait
- Incomplete login in point-to-point mode
- Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Updated driver for:

SuSE Linux Enterprise Server 12 service pack 4 (SLES12 sp4) version 10.01.00.52.12.4-k1

Added support for the following:

- Add more Firmware debug information
- Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
- Improved secure flash support messages

Supported Devices and Features

This driver supports 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
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

SUSE Linux Enterprise Server 12 FCoE Driver Kit for HPE Emulex(BRCM) Converged Network Adapters(CNAs) and mezzanine Converged Network Adapters(CNAs)
Version: 12.0.1216.0 **(Recommended)**
Filename: brcmfcoe-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; brcmfcoe-kmp-default-12.0.1216.1_k4.12.14_94.41-1.sles12sp4.x86_64.rpm; brcmfcoe-kmp-default-12.0.1216.1_k4.4.73_5-1.sles12sp3.x86_64.compsig; brcmfcoe-kmp-default-12.0.1216.1_k4.4.73_5-1.sles12sp3.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Fixes

Fixed the following:

- ○ Brcmfcoe installer script does not install driver on SUSE Linux Enterprise Server 12 Service Pack 3(SLES 12 SP3) with Message "running kernel not supported".
- ○ Brcmfcoe incorrectly blacklists lpfc driver when FibreChannel boards are installed.

Enhancements

Added support for following:

- ○ SUSE Linux Enterprise Server 12 Service Pack 4 (SLES 12 SP4)
- ○ Repotline changes to legacy Operating System (OS) SUSE Linux Enterprise Server (SLES) and Red Hat distros.

Updated to Driver version 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- ■ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ■ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ■ HP FlexFabric 20Gb 2-port 650M Adapter
- ■ HPE StoreFabric CN1200E-T Adapter

SUSE Linux Enterprise Server 12 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: elx-lpfc-kmp-default-12.4.270.3_k4.12.14_94.41-1.sles12sp4.x86_64.compsig; elx-lpfc-kmp-default-12.4.270.3_k4.12.14_94.41-1.sles12sp4.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

      ○ Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

    This component is supported on following Emulex Fibre Channel Host Bus adapters:

    8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

    LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

    LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

SUSE Linux Enterprise Server 12 Service Pack 3 FC Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 8.08.00.08.12.3-k12 **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-8.08.00.08.12.3_k12_k4.4.73_5-1.sles12sp3.x86_64.compsig; qlgc-qla2xxx-kmp-default-8.08.00.08.12.3_k12_k4.4.73_5-1.sles12sp3.x86_64.rpm

Important Note!

    Release Notes:

    HPE StoreFabric QLogic Adapters Release Notes

    Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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:

      ○ Flash read
      ○ Read Diagnostic Parameters (RDP) respond data format
      ○ Cleanup trace buffer initialization
      ○ Unintended wait
      ○ Incomplete login in point-to-point mode
      ○ Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

    Updated Driver for:

    SuSE Linux Enterprise Server 12 service pack 3 (SLES12 sp3) version 8.08.00.08.12.3-k12

    Added support for the following:

      ○ Add more Firmware debug information
      ○ Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
      ○ Improved secure flash support messages

Supported Devices and Features

    This driver supports 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
      ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
      ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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SUSE Linux Enterprise Server 12 Service Pack 3 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: elx-lpfc-kmp-default-12.4.270.3_k4.4.126_94.22-1.sles12sp3.x86_64.compsig; elx-lpfc-kmp-default-12.4.270.3_k4.4.126_94.22-1.sles12sp3.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

For Emulex Fibre Channel Driver installation on SuSE Linux Enterprise Server 12 service pack 3 requires user to install latest Errata Kernel available, otherwise the driver may not complete the installation and throw dependency messages

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

For Emulex Fibre Channel Driver installation on SuSE Linux Enterprise Server 12 service pack 3 requires user to install latest Errata Kernel available, otherwise the driver may not complete the installation and throw dependency messages

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

- ○ Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- ■ HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- ■ HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- ■ HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- ■ HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

SUSE Linux Enterprise Server 15 FC Driver Kit for HPE QLogic Host Bus Adapters and mezzanine Host Bus Adapters
Version: 10.01.00.52.15.1-k1 (b) **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-10.01.00.52.15.1_k1_k4.12.14_195-1.sles15sp1.x86_64.compsig; qlgc-qla2xxx-kmp-default-10.01.00.52.15.1_k1_k4.12.14_195-1.sles15sp1.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

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:

- Flash read
- Read Diagnostic Parameters (RDP) respond data format
- Cleanup trace buffer initialization
- Unintended wait
- Incomplete login in point-to-point mode
- Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Initial Driver of SuSE Linux Entherprise Server 15 Service Pack 1 version 10.01.00.52.15.1-k1

Added support for the following:

- Add more Firmware debug information
- Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
- Improved secure flash support messages

Supported Devices and Features

This driver supports 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
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

SUSE Linux Enterprise Server 15 FCoE Driver Kit for HPE Emulex(BRCM) Converged Network Adapters(CNAs) and mezzanine Converged Network Adapters(CNAs)
Version: 12.0.1216.0 **(Recommended)**
Filename: brcmfcoe-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.compsig; brcmfcoe-kmp-default-12.0.1216.1_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Fixes

Fixed the following:

o Brcmfcoe incorrectly blacklists lpfc driver when FibreChannel boards are installed.

Enhancements

Added support for following:

o SUSE Linux Enterprise Server 15 Service Pack 0 (SLES 15 SP0)
o Repotline changes to legacy Operating System (OS) SUSE Linux Enterprise Server (SLES) and Red Hat distros.

Updated to Driver version 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

SUSE Linux Enterprise Server 15 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: elx-lpfc-kmp-default-12.4.270.3_k4.12.14_195-1.sles15sp1.x86_64.compsig; elx-lpfc-kmp-default-12.4.270.3_k4.12.14_195-1.sles15sp1.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

o   Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

SUSE Linux Enterprise Server 15 Service Pack 0 Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters
Version: 12.4.270.3 **(Recommended)**
Filename: elx-lpfc-kmp-default-12.4.270.3_k4.12.14_23-1.sles15sp0.x86_64.compsig; elx-lpfc-kmp-default-12.4.270.3_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

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Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to driver version 12.4.270.3

Added support to the following:

o Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

SUSE Linux Enterprise Server 15 Service Pack 0 Fibre Channel Driver Kit Host Bus Adapters for HPE QLogic and mezzanine Host Bus Adapters
Version: 10.01.00.52.15.0-k1 **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-10.01.00.52.15.0_k1_k4.12.14_23-1.sles15sp0.x86_64.compsig; qlgc-qla2xxx-kmp-default-10.01.00.52.15.0_k1_k4.12.14_23-1.sles15sp0.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixed the following:

- ○ Flash read
- ○ Read Diagnostic Parameters (RDP) respond data format
- ○ Cleanup trace buffer initialization
- ○ Unintended wait
- ○ Incomplete login in point-to-point mode
- ○ Restore World Wide Port Name (WWPN) of Physical Port for fabric configuration only for loop down

Enhancements

Updated Driver for:

SuSE Linux Enterprise Server 15 Service Pack 0 version 10.01.00.52.15.0-k1

Added support for the following:

- ○ Add more Firmware debug information
- ○ Add error handling for Port Login (PLOGI) Extended Link Service (ELS) passthrough
- ○ Improved secure flash support messages

Supported Devices and Features

This driver supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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Driver - System   **Top**
HPE Non-Volatile Memory Drivers for Microsoft Windows Server 2012 R2 and 2016
Version: 3.0.1.2 **(Recommended)**
Filename: cp038534.compsig; cp038534.exe

Important Note!

This Smart Component version 3.0.1.2 contains the HPE NVM Bus Driver HpeNvmBus.sys version 3.0.1.2 and the HPE NVM Disk Driver HpeNvmDisk0101 version 3.0.1.0.

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 HPE Persistent Memory devices (featuring Intel Optane DC Persistent Memory), on WS2012R2 and WS2016.
- ○ 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:

- ○ https://www.hpe.com/us/en/servers/persistent-memory.html
- ○ https://persistentmemory.hpe.com/windows/nvdimm

Driver - System Management   **Top**
iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2
Version: 4.6.0.0 **(Optional)**
Filename: cp040015.compsig; cp040015.exe

Important Note!

Installing the iLO 5 Channel Interface Driver, version 4.1.0.0 or earlier, will overwrite this driver. To avoid the overwrite, use version 4.1.0.0(B) or later of the iLO 5 Channel Interface Driver.

Enhancements

Add support for iLO 5 version 2.x firmware.

iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019
Version: 4.6.0.0 **(Optional)**
Filename: cp040016.compsig; cp040016.exe

Important Note!

   Installing the iLO 5 Channel Interface Driver, version 4.1.0.0 or earlier, will overwrite this driver. To avoid the overwrite, use version 4.1.0.0(B) or later of the iLO 5 Channel Interface Driver.

Enhancements

   o Add support for iLO 5 version 2.x firmware.
   o Add support for HPE ProLiant Gen10 Plus servers.

---

iLO 5 Channel Interface Driver for Windows Server 2012 R2
Version: 4.3.0.0 **(Optional)**
Filename: cp034070.compsig; cp034070.exe

Enhancements

   o Enabled message-signaled interrupts to avoid interrupt sharing with the Universal Serial Bus controller in iLO 5.
   o Added support for the HPE ProLiant DL325 Gen10.

---

iLO 5 Channel Interface Driver for Windows Server 2012 R2
Version: 4.6.0.0 **(Optional)**
Filename: cp040013.compsig; cp040013.exe

Enhancements

   Add support for iLO 5 version 2.x firmware.

---

iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019
Version: 4.3.0.0 (B) **(Optional)**
Filename: cp035112.compsig; cp035112.exe

Enhancements

   o Added support for Windows Server 2019
   o Added support for the HPE ProLiant XL270d Gen10 and the HPE ProLiant XL420 Gen10

---

iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019
Version: 4.6.0.0 **(Optional)**
Filename: cp040014.compsig; cp040014.exe

Enhancements

   o Add support for iLO 5 version 2.x firmware.
   o Add support for HPE ProLiant Gen10 Plus servers.

---

iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019
Version: 4.6.0.0 (B) **(Optional)**
Filename: cp041582.compsig; cp041582.exe

Enhancements

   TBD

Driver - Video
Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2
Version: 9.15.1.224 (B) **(Optional)**
Filename: cp040214.compsig; cp040214.exe

Enhancements

   Add support for iLO 5 version 2.x firmware.

Matrox G200eH3 Video Controller Driver for Windows Server 2016 and Server 2019
Version: 9.15.1.224 (B) **(Optional)**
Filename: cp040215.compsig; cp040215.exe

Enhancements

   o Add support for iLO 5 version 2.x firmware.
   o Add support for HPE ProLiant Gen10 Plus servers.

Firmware - Blade Infrastructure
HPE BladeSystem c-Class Virtual Connect Firmware, Ethernet plus 8Gb 20-port and 8/16Gb 24-port FC Edition Component for Windows
Version: 4.80 **(Recommended)**
Filename: cp039109.exe

Prerequisites

The 4.80 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 4.80 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 4.80 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

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HPE BladeSystem c-Class Virtual Connect Firmware, Ethernet plus 8Gb 20-port and 8/16Gb 24-port FC Edition Component for Linux
Version: 4.80 **(Recommended)**
Filename: RPMS/x86_64/firmware-vceth-4.80-1.1.x86_64.rpm

Prerequisites

The 4.80 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 4.80 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 4.80 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

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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

o Added support for SUSE Linux Enterprise Server 15 OS

Online HPE 6Gb SAS BL Switch Firmware Smart Component for Windows (x86/x64)
Version: 4.3.6.0 (C) **(Optional)**
Filename: cp038273.exe

Enhancements

o Improved integration with Smart Update Manager

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Linux
Version: 4.95 **(Recommended)**
Filename: RPMS/x86_64/firmware-oa-4.95-1.1.x86_64.rpm

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.
- **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.
- **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.
- **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 SNMP queries to Onboard Administrator OIDs were not successfully completed when VLAN is configured for Blades and Interconnects.
- Addressed an issue in the Device and Rack Summary GUI page to eliminate the duplicate display of FLB and Mezz adapters information.
- Addressed an issue where Interconnects were not receiving IP address from EBIPA (or) external DHCP server.
- Addressed an issue where Blade Location information was not displayed correctly in SHOW SERVER STATUS ALL CLI command.
- Addressed an issue where DNS record update was getting delayed in DNS server when a user configured a domain name in Onboard Administrator.

Security

- None

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.

Enhancements

Onboard Administrator 4.95 provides support for the following enhancements:

Hardware additions

- o None

Features**: additions and changes**

General

- o AlertMail feature now supports two priorities that a user can select for the AlertMail messages..
- o Enclosure Firmware Management (EFM) feature is optimized to speed up the EFM update operation.
- o The SSL certificate of Onboard Administrator now supports Fully Qualified Domain Name (FQDN) in **Common Name (CN) field and IP address in SAN field.**
- o Common Access Card (CAC) Authentication feature is enhanced to support a configurable timeout for the SSL session.

Security

- o Onboard Administrator supports two new TLS_DHE_RSA ciphers
- o FIPS TOP-SECRET mode ciphers are now supported in FIPS **ON** and **OFF** modes.
- o CLI commands SHOW SSH CIPHER, ENABLE SSH CIPHER and DISABLE SSH CIPHER are added to Show, Enable and Disable SSH ciphers in FIPS ON and OFF modes.

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Windows
Version: 4.95 **(Recommended)**
Filename: cp039066.exe

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:
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- 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.
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- 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.

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Enhancements

Onboard Administrator 4.95 provides support for the following enhancements:

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General

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- ○ Enclosure Firmware Management (EFM) feature is optimized to speed up the EFM update operation.
- ○ The SSL certificate of Onboard Administrator now supports Fully Qualified Domain Name (FQDN) in **Common Name** (CN) field and IP address in **SAN** field.
- ○ Common Access Card (CAC) Authentication feature is enhanced to support a configurable timeout for the SSL session.

Security

- ○ Onboard Administrator supports two new TLS_DHE_RSA ciphers.
- ○ FIPS TOP-SECRET mode ciphers are now supported in FIPS **ON** and **OFF** modes.
- ○ CLI commands SHOW SSH CIPHER, ENABLE SSH CIPHER and DISABLE SSH CIPHER are added to Show, Enable and Disable SSH ciphers in FIPS ON and OFF modes.

Firmware - Lights-Out Management
Online ROM Flash Component for Linux - HPE Integrated Lights-Out 5
Version: 2.10 **(Recommended)**
Filename: RPMS/x86_64/firmware-ilo5-2.10-1.1.x86_64.rpm; RPMS/x86_64/firmware-ilo5-2.10-1.1.x86_64_part1.compsig; RPMS/x86_64/firmware-ilo5-2.10-1.1.x86_64_part2.compsig

Important Note!

IPv6 network communications - Dedicated network connection only
    Supported Networking Features
        IPv6 Static Address Assignment
        IPv6 SLAAC Address Assignment
        IPv6 Static Route Assignment
        IPv6 Static Default Gateway Entry
        DHCPv6 Stateful Address Assignment
        DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
        Integrated Remote Console
        OA Single Sign-On
        HP-SIM Single Sign-On
        Web Server
        SSH Server
        SNTP Client
        DDNS Client
        RIBCL over IPv6
        SNMP
        AlertMail
        Remote Syslog
        WinDBG Support
        HPONCFG/HPLOMIG over an IPv6 connection
        Scriptable Virtual Media
        CLI/RIBCL Key Import over IPv6
        Authentication using LDAP and Kerberos over IPv6
        iLO Federation
    Networking Features not supported by IPv6 in this release
        IPv6 Over Shared Network Port Connections
        IPMI
        NETBIOS-WINS
        Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities
for best performance:

- ○ RESTful Interface Tool (iLOREST) 3.0
- ○ HPQLOCFG v5.2
- ○ Lights-Out XML Scripting Sample bundle 5.20.0 or later
- ○ HPONCFG Windows 5.3.0
- ○ HPONCFG Linux 5.3.0 or later
- ○ LOCFG v5.20.0 or later
- ○ HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- ○ The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
- ○ System GPUs might be listed without GPU version information.
- ○ Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
- ○ If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
- ○ Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

- ○   For information about the latest security bulletins and vulnerabilities addressed in this version, see the following website: https://support.hpe.com/hpesc/public/home.

Security best practices:

- ○   For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

- Added a security log that lists security events recorded by the iLO firmware.
- Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
- Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
- Embedded remote support over IPv6.
- New alert for recovery events.
- SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
- Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
- Ability to import and export drive bay mapping information.
- Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
- Performance data logging in a new Active Health System record.
- Increased the certificate size limit from 4096 to 8096.
- When iLO is set to the factory default settings, Virtual NIC is enabled by default.
- The following System Diagnostics features are supported on Gen10 Plus servers:
  - Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
  - Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
  - Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
  - Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
- Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Online ROM Flash Component for Linux - HPE Integrated Lights-Out 5
Version: 1.40 (a) **(Recommended)**
Filename: RPMS/x86_64/firmware-ilo5-1.40-1.1.x86_64.compsig; RPMS/x86_64/firmware-ilo5-1.40-1.1.x86_64.rpm

Important Note!

IPv6 network communications - Dedicated network connection only
    Supported Networking Features
            IPv6 Static Address Assignment
            IPv6 SLAAC Address Assignment
            IPv6 Static Route Assignment
            IPv6 Static Default Gateway Entry
            DHCPv6 Stateful Address Assignment
            DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
            Integrated Remote Console
            OA Single Sign-On
            HP-SIM Single Sign-On
            Web Server
            SSH Server
            SNTP Client
            DDNS Client
            RIBCL over IPv6
            SNMP
            AlertMail
            Remote Syslog
            WinDBG Support
            HPONCFG/HPLOMIG over an IPv6 connection
            Scriptable Virtual Media
            CLI/RIBCL Key Import over IPv6
            Authentication using LDAP and Kerberos over IPv6
            iLO Federation
    Networking Features not supported by IPv6 in this release
            IPv6 Over Shared Network Port Connections
            IPMI
            NETBIOS-WINS
            Enterprise Secure Key Manager (ESKM) Support
            Embedded Remote Support (ERS)

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities
for best performance:

- RESTful Interface Tool (iLOREST) 2.3
- HPQLOCFG v5.2
- Lights-Out XML Scripting Sample bundle 5.10.0
- HPONCFG Windows 5.3.0
- HPONCFG Linux 5.4.0
- LOCFG v5.10.0
- HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO
HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- User interface fixes and improvements.
- The text "R&D Server" is incorrectly displayed in the iLO web interface navigation pane.
- Fixed an issue where power supply status changes may be delayed.
- Device Inventory could display a parse error under Internet Explorer 11 when certain PCI Cards are installed.
- Improved shared network port out-of-band LOM resuscitation to reduce the scope and the frequency of system power-on/power-off during systems shutdown/reboot.
- iLO communication issues in certain configurations where a server is set to Auto-Power-On after an AC power cycle.

SECURITY FIXES:

    o HPESBHF03907

For the latest security bulletins and vulnerabilities, please visit:
https://support.hpe.com/hpesc/public/home Security best practices:

Please refer to the HPE Integrated Lights-Out 5 Security Technology Brief for the latest on security best practices at:
http://www.hpe.com/support/ilo5-security-en

Enhancements

    o Ability to edit Maintenance Windows in Firmware & OS Software section
    o Added Password Complexity feature to Security > Access Settings
    o Enable/disable for overlay video showing Server Health Summary
    o Downgrade Policy - Specifies how iLO handles requests to downgrade any of the firmware types that you can update through iLO.
    o Virtual NIC functionality (disabled by default)
    o Enabled One-button Secure Erase via Intelligent Provisioning
    o LDAP/Directory settings configurable via Redfish
    o Security Dashboard - displays the status of important security features, the Overall Security Status for the system, and the current configuration for the Security State and Server Configuration Lock features.
    o Support for Gemalto SafeNet and SafeNet AT key managers
    o InfoSight Optimized AHS Download
    o Show NVMe wear level
    o Workload performance advisor: provides server tuning recommendations to improve server performance

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Online ROM Flash Component for Linux - HPE Integrated Lights-Out 5
Version: 2.10 **(Optional)**
Filename: RPMS/x86_64/firmware-ilo5-sha512-2.10-1.1.x86_64.rpm; RPMS/x86_64/firmware-ilo5-sha512-2.10-1.1.x86_64_part1.compsig; RPMS/x86_64/firmware-ilo5-sha512-2.10-1.1.x86_64_part2.compsig

Important Note!

IPv6 network communications - Dedicated network connection only
    Supported Networking Features
        IPv6 Static Address Assignment
        IPv6 SLAAC Address Assignment
        IPv6 Static Route Assignment
        IPv6 Static Default Gateway Entry
        DHCPv6 Stateful Address Assignment
        DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
        Integrated Remote Console
        OA Single Sign-On
        HP-SIM Single Sign-On
        Web Server
        SSH Server
        SNTP Client
        DDNS Client
        RIBCL over IPv6
        SNMP
        AlertMail
        Remote Syslog
        WinDBG Support
        HPONCFG/HPLOMIG over an IPv6 connection
        Scriptable Virtual Media
        CLI/RIBCL Key Import over IPv6
        Authentication using LDAP and Kerberos over IPv6
        iLO Federation
    Networking Features not supported by IPv6 in this release
        IPv6 Over Shared Network Port Connections
        IPMI
        NETBIOS-WINS
        Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities for best performance:

    o RESTful Interface Tool (iLOREST) 3.0
    o HPQLOCFG v5.2
    o Lights-Out XML Scripting Sample bundle 5.20.0 or later
    o HPONCFG Windows 5.3.0
    o HPONCFG Linux 5.3.0 or later
    o LOCFG v5.20.0 or later
    o HPLOMIG 5.2.0

 NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

    o The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
    o System GPUs might be listed without GPU version information.
    o Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
    o If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
    o Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

Security best practices:

○ For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

○ Added a security log that lists security events recorded by the iLO firmware.
○ Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
○ Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
○ Embedded remote support over IPv6.
○ New alert for recovery events.
○ SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
○ Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
○ Ability to import and export drive bay mapping information.
○ Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
○ Performance data logging in a new Active Health System record.
○ Increased the certificate size limit from 4096 to 8096.
○ When iLO is set to the factory default settings, Virtual NIC is enabled by default.
○ The following System Diagnostics features are supported on Gen10 Plus servers:
   ■ Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
   ■ Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
   ■ Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
   ■ Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
○ Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Online ROM Flash Component for Windows x64 - HPE Integrated Lights-Out 5
Version: 2.10 **(Recommended)**
Filename: cp038706.exe; cp038706_part1.compsig; cp038706_part2.compsig

Important Note!

IPv6 network communications - Dedicated network connection only
    Supported Networking Features
        IPv6 Static Address Assignment
        IPv6 SLAAC Address Assignment
        IPv6 Static Route Assignment
        IPv6 Static Default Gateway Entry
        DHCPv6 Stateful Address Assignment
        DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
        Integrated Remote Console
        OA Single Sign-On
        HP-SIM Single Sign-On
        Web Server
        SSH Server
        SNTP Client
        DDNS Client
        RIBCL over IPv6
        SNMP
        AlertMail
        Remote Syslog
        WinDBG Support
        HPONCFG/HPLOMIG over an IPv6 connection
        Scriptable Virtual Media
        CLI/RIBCL Key Import over IPv6
        Authentication using LDAP and Kerberos over IPv6
        iLO Federation
    Networking Features not supported by IPv6 in this release
        IPv6 Over Shared Network Port Connections
        IPMI
        NETBIOS-WINS
        Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities for best performance:

○ RESTful Interface Tool (iLOREST) 3.0
○ HPQLOCFG v5.2
○ Lights-Out XML Scripting Sample bundle 5.20.0 or later
○ HPONCFG Windows 5.3.0
○ HPONCFG Linux 5.3.0 or later
○ LOCFG v5.20.0 or later
○ HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
- System GPUs might be listed without GPU version information.
- Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
- If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
- Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

- For information about the latest security bulletins and vulnerabilities addressed in this version, see the following website: https://support.hpe.com/hpesc/public/home.

Security best practices:

- For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

- Added a security log that lists security events recorded by the iLO firmware.
- Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
- Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
- Embedded remote support over IPv6.
- New alert for recovery events.
- SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
- Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
- Ability to import and export drive bay mapping information.
- Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
- Performance data logging in a new Active Health System record.
- Increased the certificate size limit from 4096 to 8096.
- When iLO is set to the factory default settings, Virtual NIC is enabled by default.
- The following System Diagnostics features are supported on Gen10 Plus servers:
  - Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
  - Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
  - Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
  - Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
- Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Online ROM Flash Component for Windows x64 - HPE Integrated Lights-Out 5
Version: 1.40 (a) **(Recommended)**
Filename: cp038901.compsig; cp038901.exe

Important Note!

IPv6 network communications - Dedicated network connection only
  Supported Networking Features
        IPv6 Static Address Assignment
        IPv6 SLAAC Address Assignment
        IPv6 Static Route Assignment
        IPv6 Static Default Gateway Entry
        DHCPv6 Stateful Address Assignment
        DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
        Integrated Remote Console
        OA Single Sign-On
        HP-SIM Single Sign-On
        Web Server
        SSH Server
        SNTP Client
        DDNS Client
        RIBCL over IPv6
        SNMP
        AlertMail
        Remote Syslog
        WinDBG Support
        HPONCFG/HPLOMIG over an IPv6 connection
        Scriptable Virtual Media
        CLI/RIBCL Key Import over IPv6
        Authentication using LDAP and Kerberos over IPv6
        iLO Federation
  Networking Features not supported by IPv6 in this release
        IPv6 Over Shared Network Port Connections
        IPMI
        NETBIOS-WINS
        Enterprise Secure Key Manager (ESKM) Support
        Embedded Remote Support (ERS)

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities
for best performance:

- RESTful Interface Tool (iLOREST) 2.3
- HPQLOCFG v5.2
- Lights-Out XML Scripting Sample bundle 5.10.0

- HPONCFG Windows 5.3.0
- HPONCFG Linux 5.4.0
- LOCFG v5.10.0
- HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO
HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- User interface fixes and improvements.
- The text "R&D Server" is incorrectly displayed in the iLO web interface navigation pane.
- Fixed an issue where power supply status changes may be delayed.
- Device Inventory could display a parse error under Internet Explorer 11 when certain PCI Cards are installed.
- Improved shared network port out-of-band LOM resuscitation to reduce the scope and the frequency of system power-on/power-off during systems shutdown/reboot.
- iLO communication issues in certain configurations where a server is set to Auto-Power-On after an AC power cycle.

SECURITY FIXES:

- HPESBHF03907

For the latest security bulletins and vulnerabilities, please visit:
https://support.hpe.com/hpesc/public/home Security best practices:

Please refer to the HPE Integrated Lights-Out 5 Security Technology Brief for the latest on security best practices at:
http://www.hpe.com/support/ilo5-security-en

Enhancements

- Ability to edit Maintenance Windows in Firmware & OS Software section
- Added Password Complexity feature to Security > Access Settings
- Enable/disable for overlay video showing Server Health Summary
- Downgrade Policy - Specifies how iLO handles requests to downgrade any of the firmware types that you can update through iLO.
- Virtual NIC functionality (disabled by default)
- Enabled One-button Secure Erase via Intelligent Provisioning
- LDAP/Directory settings configurable via Redfish
- Security Dashboard - displays the status of important security features, the Overall Security Status for the system, and the current configuration for the Security State and Server Configuration Lock features.
- Support for Gemalto SafeNet and SafeNet AT key managers
- InfoSight Optimized AHS Download
- Show NVMe wear level
- Workload performance advisor: provides server tuning recommendations to improve server performance

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Online ROM Flash Component for Windows x64 - HPE Integrated Lights-Out 5
Version: 2.10 **(Optional)**
Filename: cp041711.exe; cp041711_part1.compsig; cp041711_part2.compsig

Important Note!

IPv6 network communications - Dedicated network connection only
   Supported Networking Features
      IPv6 Static Address Assignment
      IPv6 SLAAC Address Assignment
      IPv6 Static Route Assignment
      IPv6 Static Default Gateway Entry
      DHCPv6 Stateful Address Assignment
      DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
      Integrated Remote Console
      OA Single Sign-On
      HP-SIM Single Sign-On
      Web Server
      SSH Server
      SNTP Client
      DDNS Client
      RIBCL over IPv6
      SNMP
      AlertMail
      Remote Syslog
      WinDBG Support
      HPONCFG/HPLOMIG over an IPv6 connection
      Scriptable Virtual Media
      CLI/RIBCL Key Import over IPv6
      Authentication using LDAP and Kerberos over IPv6
      iLO Federation
   Networking Features not supported by IPv6 in this release
      IPv6 Over Shared Network Port Connections
      IPMI
      NETBIOS-WINS
      Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities for best performance:

- RESTful Interface Tool (iLOREST) 3.0
- HPQLOCFG v5.2

○ Lights-Out XML Scripting Sample bundle 5.20.0 or later
○ HPONCFG Windows 5.3.0
○ HPONCFG Linux 5.3.0 or later
○ LOCFG v5.20.0 or later
○ HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

○ The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
○ System GPUs might be listed without GPU version information.
○ Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
○ If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
○ Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

○ For information about the latest security bulletins and vulnerabilities addressed in this version, see the following website: https://support.hpe.com/hpesc/public/home.

Security best practices:

○ For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

○ Added a security log that lists security events recorded by the iLO firmware.
○ Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
○ Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
○ Embedded remote support over IPv6.
○ New alert for recovery events.
○ SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
○ Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
○ Ability to import and export drive bay mapping information.
○ Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
○ Performance data logging in a new Active Health System record.
○ Increased the certificate size limit from 4096 to 8096.
○ When iLO is set to the factory default settings, Virtual NIC is enabled by default.
○ The following System Diagnostics features are supported on Gen10 Plus servers:
  ■ Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
  ■ Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
  ■ Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
  ■ Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
○ Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Online ROM Flash Firmware Package - HPE Integrated Lights-Out 5
Version: 2.10 **(Recommended)**
Filename: ilo5_210.fwpkg

Important Note!

IPv6 network communications - Dedicated network connection only
  Supported Networking Features
    IPv6 Static Address Assignment
    IPv6 SLAAC Address Assignment
    IPv6 Static Route Assignment
    IPv6 Static Default Gateway Entry
    DHCPv6 Stateful Address Assignment
    DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
    Integrated Remote Console
    OA Single Sign-On
    HP-SIM Single Sign-On
    Web Server
    SSH Server
    SNTP Client
    DDNS Client
    RIBCL over IPv6
    SNMP
    AlertMail
    Remote Syslog
    WinDBG Support
    HPONCFG/HPLOMIG over an IPv6 connection
    Scriptable Virtual Media
    CLI/RIBCL Key Import over IPv6
    Authentication using LDAP and Kerberos over IPv6
    iLO Federation
  Networking Features not supported by IPv6 in this release
    IPv6 Over Shared Network Port Connections
    IPMI
    NETBIOS-WINS

Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities
for best performance:

- RESTful Interface Tool (iLOREST) 3.0
- HPQLOCFG v5.2
- Lights-Out XML Scripting Sample bundle 5.20.0 or later
- HPONCFG Windows 5.3.0
- HPONCFG Linux 5.3.0 or later
- LOCFG v5.20.0 or later
- HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
- System GPUs might be listed without GPU version information.
- Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
- If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
- Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

- For information about the latest security bulletins and vulnerabilities addressed in this version, see the following website: https://support.hpe.com/hpesc/public/home.

Security best practices:

- For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

- Added a security log that lists security events recorded by the iLO firmware.
- Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
- Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
- Embedded remote support over IPv6.
- New alert for recovery events.
- SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
- Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
- Ability to import and export drive bay mapping information.
- Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
- Performance data logging in a new Active Health System record.
- Increased the certificate size limit from 4096 to 8096.
- When iLO is set to the factory default settings, Virtual NIC is enabled by default.
- The following System Diagnostics features are supported on Gen10 Plus servers:
  - Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
  - Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
  - Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
  - Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
- Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Online ROM Flash Firmware Package - HPE Integrated Lights-Out 5
Version: 1.40 (a) **(Recommended)**
Filename: ilo5_140.fwpkg

Important Note!

IPv6 network communications - Dedicated network connection only
Supported Networking Features
      IPv6 Static Address Assignment
      IPv6 SLAAC Address Assignment
      IPv6 Static Route Assignment
      IPv6 Static Default Gateway Entry
      DHCPv6 Stateful Address Assignment
      DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
      Integrated Remote Console
      OA Single Sign-On
      HP-SIM Single Sign-On
      Web Server
      SSH Server
      SNTP Client
      DDNS Client
      RIBCL over IPv6
      SNMP
      AlertMail
      Remote Syslog
      WinDBG Support

HPONCFG/HPLOMIG over an IPv6 connection
Scriptable Virtual Media
CLI/RIBCL Key Import over IPv6
Authentication using LDAP and Kerberos over IPv6
iLO Federation
Networking Features not supported by IPv6 in this release
IPv6 Over Shared Network Port Connections
IPMI
NETBIOS-WINS
Enterprise Secure Key Manager (ESKM) Support
Embedded Remote Support (ERS)

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities
for best performance:

o RESTful Interface Tool (iLOREST) 2.3
o HPQLOCFG v5.2
o Lights-Out XML Scripting Sample bundle 5.10.0
o HPONCFG Windows 5.3.0
o HPONCFG Linux 5.4.0
o LOCFG v5.10.0
o HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO
HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

o User interface fixes and improvements.
o The text "R&D Server" is incorrectly displayed in the iLO web interface navigation pane.
o Fixed an issue where power supply status changes may be delayed.
o Device Inventory could display a parse error under Internet Explorer 11 when certain PCI Cards are installed.
o Improved shared network port out-of-band LOM resuscitation to reduce the scope and the frequency of system power-on/power-off during systems
   shutdown/reboot.
o iLO communication issues in certain configurations where a server is set to Auto-Power-On after an AC power cycle.

SECURITY FIXES:

o HPESBHF03907

For the latest security bulletins and vulnerabilities, please visit:
https://support.hpe.com/hpesc/public/home Security best practices:

Please refer to the HPE Integrated Lights-Out 5 Security Technology Brief for the latest on security best practices at:
http://www.hpe.com/support/ilo5-security-en

Enhancements

o Ability to edit Maintenance Windows in Firmware & OS Software section
o Added Password Complexity feature to Security > Access Settings
o Enable/disable for overlay video showing Server Health Summary
o Downgrade Policy - Specifies how iLO handles requests to downgrade any of the firmware types that you can update through iLO.
o Virtual NIC functionality (disabled by default)
o Enabled One-button Secure Erase via Intelligent Provisioning
o LDAP/Directory settings configurable via Redfish
o Security Dashboard - displays the status of important security features, the Overall Security Status for the system, and the current configuration for the
   Security State and Server Configuration Lock features.
o Support for Gemalto SafeNet and SafeNet AT key managers
o InfoSight Optimized AHS Download
o Show NVMe wear level
o Workload performance advisor: provides server tuning recommendations to improve server performance

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Online ROM Flash Firmware Package - HPE Integrated Lights-Out 5
Version: 2.10 **(Optional)**
Filename: ilo5_210_SHA512.fwpkg

Important Note!

IPv6 network communications - Dedicated network connection only
Supported Networking Features
IPv6 Static Address Assignment
IPv6 SLAAC Address Assignment
IPv6 Static Route Assignment
IPv6 Static Default Gateway Entry
DHCPv6 Stateful Address Assignment
DHCPv6 Stateless DNS, Domain Name, and NTP Configuration
Integrated Remote Console
OA Single Sign-On
HP-SIM Single Sign-On
Web Server
SSH Server
SNTP Client
DDNS Client
RIBCL over IPv6
SNMP
AlertMail

Remote Syslog
WinDBG Support
HPONCFG/HPLOMIG over an IPv6 connection
Scriptable Virtual Media
CLI/RIBCL Key Import over IPv6
Authentication using LDAP and Kerberos over IPv6
iLO Federation
Networking Features not supported by IPv6 in this release
IPv6 Over Shared Network Port Connections
IPMI
NETBIOS-WINS
Enterprise Secure Key Manager (ESKM) Support

Prerequisites

Hewlett Packard Enterprise recommends the following or greater versions of iLO utilities for best performance:

- ○ RESTful Interface Tool (iLOREST) 3.0
- ○ HPQLOCFG v5.2
- ○ Lights-Out XML Scripting Sample bundle 5.20.0 or later
- ○ HPONCFG Windows 5.3.0
- ○ HPONCFG Linux 5.3.0 or later
- ○ LOCFG v5.20.0 or later
- ○ HPLOMIG 5.2.0

NOTE: Updated utilities and system libraries are required to support the iLO HighSecurity, FIPS, and CNSA security states.

Fixes

The following issues are resolved in this version:

- ○ The iLO clock incorrectly changes when iLO is reset due to a configuration change, firmware update, or a cause other than system power loss.
- ○ System GPUs might be listed without GPU version information.
- ○ Incorrect power consumption information is displayed in RIBCL output and the Active Health System Log.
- ○ If the domain name system is unavailable, an HPE ProLiant Gen10 Server might stop responding for up to three minutes during startup.
- ○ Fixed an issue where the iLO 5 webserver may becoming unresponsive when applying OV profile with certain models of NVME drives present.

Security Fixes:

- ○ For information about the latest security bulletins and vulnerabilities addressed in this version, see the following website: https://support.hpe.com/hpesc/public/home.

Security best practices:

- ○ For the latest information about security best practices, see the HPE Integrated Lights-Out Security Technology Brief at the following website: http://www.hpe.com/support/ilo-docs.

Enhancements

This version adds support for the following features and enhancements:

- ○ Added a security log that lists security events recorded by the iLO firmware.
- ○ Enhanced Secure Start verification of CPLD on Gen10 Plus servers.
- ○ Updated menu path and feature names for the Performance Management features. The features that were accessed through the Intelligent System Tuning menu can now be accessed through the Performance menu.
- ○ Embedded remote support over IPv6.
- ○ New alert for recovery events.
- ○ SUM/SUT support on servers using the High Security, FIPS, or CNSA security states.
- ○ Support for staging firmware to update direct-attached hard drives through the UEFI System Utilities.
- ○ Ability to import and export drive bay mapping information.
- ○ Daily firmware flash limit, to protect iLO, ROM, and CPLD from repeated flashing attacks.
- ○ Performance data logging in a new Active Health System record.
- ○ Increased the certificate size limit from 4096 to 8096.
- ○ When iLO is set to the factory default settings, Virtual NIC is enabled by default.
- ○ The following System Diagnostics features are supported on Gen10 Plus servers:
  - ■ Booting to safe mode—Allows you to boot the server with a safe minimum configuration.
  - ■ Booting to intelligent diagnostics mode—Allows the system to automatically diagnose a boot failure during POST.
  - ■ Restoring the default manufacturing settings—Resets all BIOS configuration settings to their default manufacturing values. This process deletes all UEFI nonvolatile variables, such as boot configuration, Secure Boot security keys (if Secure Boot is enabled), and configured date and time settings.
  - ■ Restoring the default system settings—Resets all BIOS configuration settings to their default values and restarts the server. This option preserves some UEFI settings.
- ○ Modified text of iLO time zone selections to match system ROM time zone selections. For backward compatibility, either previous time zone selection text or the new text can be used in APIs to set the time zone.

Firmware - Network
HPE Blade Intel Online Firmware Upgrade Utility for Linux
Version: 1.0.14 **(Optional)**
Filename: firmware-nic-intel-bl-1.0.14-1.1.x86_64.compsig; firmware-nic-intel-bl-1.0.14-1.1.x86_64.rpm

Important Note!

HPE recommends the *HPE Blade Intel ixgbe Drivers for Linux*, versions 5.6.4 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.

Fixes

This product addresses an issue where the "Firmware Image Properties," "Device Level Configuration," and "Link Speed Status" options in NIC HII menu disappear when F7 is pressed.

Enhancements

Initial release.

This product now supports the following operatings systems:

- ○ Red Hat Enterprise Linux 7 Update 7
- ○ Red Hat Enterprise Linux 8 Update 0
- ○ SUSE Linux Enterprise Server 15 SP1

Supported Devices and Features

This package supports the following network adapters:

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

HPE Blade Intel Online Firmware Upgrade Utility for VMware
Version: 1.0.7 **(Optional)**
Filename: CP040426.compsig; CP040426.zip

Important Note!

HPE recommends the *HPE Blade Intel ixgben Drivers for VMware*, versions 2019.12.20, 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 "Firmware Image Properties," "Device Level Configuration," and "Link Speed Status" options in NIC HII menu disappear when F7 is pressed.

Enhancements

Initial release.

Supported Devices and Features

This package supports the following network adapters:

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

HPE Blade Intel Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 1.0.0.5 **(Optional)**
Filename: cp040422.compsig; cp040422.exe

Important Note!

HPE recommends one of the following drivers, as appropriate for your system, for use with this firmware:

- ○ *HPE Blade Intel ixn Driver for Windows Server 2012 R2*, version 3.14.132.0 or later
- ○ *HPE Blade Intel ixn Driver for Windows Server 2016*, version 4.1.131.0 or later
- ○ *HPE Blade Intel ixn Driver for Windows Server 2019*, version 4.1.143.0 or later

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 "Firmware Image Properties," "Device Level Configuration," and "Link Speed Status" options in NIC HII menu disappear when F7 is pressed.

Enhancements

Initial release.

Supported Devices and Features

This package supports the following network adapters:

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

HPE Blade QLogic NX2 Online Firmware Upgrade Utility for Linux

Version: 1.0.9 **(Optional)**
Filename: firmware-nic-qlogic-nx2-bl-1.0.9-1.1.x86_64.compsig; firmware-nic-qlogic-nx2-bl-1.0.9-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for Linux*, versions 7.14.63-1 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 incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

This product addresses an issue where the F1 help messages "Number of VFs per PF" and "Legacy Boot Protocol" option display incorrectly in Japanese and Simplified Chinese languages.

Enhancements

Initial release.

This product now supports the following operatings systems:

- ○ Red Hat Enterprise Linux 7 Update 7
- ○ Red Hat Enterprise Linux 8 Update 0
- ○ SUSE Linux Enterprise Server 15 SP1

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE FlexFabric 10Gb 2-port 534M Adapter
- ○ 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 Online Firmware Upgrade Utility for VMware
Version: 1.0.8 **(Optional)**
Filename: CP039870.compsig; CP039870.zip

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for VMware*, versions 2019.12.20 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 incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

This product addresses an issue where the F1 help messages "Number of VFs per PF" and "Legacy Boot Protocol" option display incorrectly in Japanese and Simplified Chinese languages.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE FlexFabric 10Gb 2-port 534M Adapter
- ○ 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 Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 1.0.0.9 **(Optional)**
Filename: cp039871.compsig; cp039871.exe

Important Note!

HPE recommends *HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for Windows Server x64 Editions*, version 7.13.171.0 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 incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

This product addresses an issue where the F1 help messages "Number of VFs per PF" and "Legacy Boot Protocol" option display incorrectly in Japanese and Simplified Chinese languages.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

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

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64
Version: 1.7.6 **(Optional)**
Filename: firmware-nic-bcm-nxe-1.7.6-1.1.x86_64.compsig; firmware-nic-bcm-nxe-1.7.6-1.1.x86_64.rpm

Important Note!

HPE recommends the *HPE Broadcom NetXtreme-E Drivers for Linux*, versions 1.9.2-214.0.182.0(B) or later, for use with this firmware.

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.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware
Version: 5.9.5 **(Optional)**
Filename: CP040816.compsig; CP040816.zip

Important Note!

HPE recommends *HPE Broadcom NetXtreme-E Drivers for VMware*, versions 2019.08.02 or later, for use with this firmware.

This software package contains NVM Image version 214.0.224000 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	214.0.224.0	214.0.223.0	214.0.218.0	214.0.207.0	214.0.218.0	214.0.182.0
HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter						
HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter						

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

This product now remove supports Synergy and Blade Server.

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

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp040817.compsig; cp040817.exe

Important Note!

HPE recommends *HPE Broadcom NetXtreme-E Driver for Windows*, versions 214.0.177.0 (B) 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 remove supports Synergy and Blade Server.

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

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64
Version: 2.24.2 **(Optional)**
Filename: firmware-nic-broadcom-2.24.2-1.1.x86_64.compsig; firmware-nic-broadcom-2.24.2-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.138a or later, for use with this firmware.

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.

Enhancements

This product now remove supports Synergy and Blade Server.

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)
    ○ HPE Ethernet 1Gb 4-port 331FLR Adapter
    ○ HPE Ethernet 1Gb 4-port 331T Adapter
    ○ HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
    ○ HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware
Version: 1.25.2 **(Optional)**
Filename: CP040813.compsig; CP040813.zip

Important Note!

HPE recommends *HP Broadcom tg3 Ethernet Drivers for VMware*, versions 2015.10.01, for use with this firmware.

This software package contains combo image v20.14.57 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	20.14.0	1.5.01	20.14.19	214.0.166.0
HPE Ethernet 1Gb 4-port 331i Adapter (22BE) HPE Ethernet 1Gb 4-port 331FLR Adapter HPE Ethernet 1Gb 4-port 331T Adapter	1.46	20.14.0	1.5.01	20.14.19	214.0.166.0
HPE Ethernet 1Gb 2-port 332i Adapter (22E8) HPE Ethernet 1Gb 2-port 332T Adapter	1.40	20.14.0	1.5.01	20.14.19	214.0.166.0

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

This product now remove supports Synergy and Blade Server.

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)
- HPE Ethernet 1Gb 4-port 331FLR Adapter
- HPE Ethernet 1Gb 4-port 331T Adapter
- HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp040814.compsig; cp040814.exe

Important Note!

HPE recommends *HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions*, version 214.0.0.0(C) 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 remove supports Synergy and Blade Server.

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)
- HPE Ethernet 1Gb 4-port 331FLR Adapter
- HPE Ethernet 1Gb 4-port 331T Adapter
- HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- HPE Ethernet 1Gb 2-port 332T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for Linux (x64)
Version: 2019.03.01 **(Recommended)**
Filename: RPMS/x86_64/firmware-cna-emulex-2019.03.01-1.19.x86_64.compsig; RPMS/x86_64/firmware-cna-emulex-2019.03.01-1.19.x86_64.rpm

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapters Release Notes](#)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.

<u>**Fixes**</u>

Fixed the following:

- ○ Fixed unexpected behavior in Active Health System (AHS) logs show World Wide Node Name (wwnn) & World Wide Port Name (wwpn) in reverse order.
- ○ Fixed unexpected behavior with HP FlexFabric 20Gb 2-port 650FLB Adapter, HP FlexFabric 20Gb 2-port 650M Adapter cards does not complete to boot to Linux SUSE Linux Enterprise Server 12 Service Pack 3(SLES12 SP3) Operating System (OS) when both adapter are enabled for Fibre Channel over Ethernet (FCoE) boot.
- ○ Microsoft Windows Server 2012 R2 Hyper-V Storage Area Network (SAN) Disconnect.
- ○ Link lost with firmware version 11.2.1263.19
- ○ "FW not responding" message seen on card when creating Virtual Function (VF) in loop for HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter [NIC+ iSCSI] in Gen10 server.
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter - Loss of access to storage after Virtual Connect (VC) login redistribution
- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter does not complete to boot in Legacy Mode on Gen 9 Server
- ○ Emulex Peripheral Component Interconnect (PCI) slot Network Interface Connector (NIC) reported as device path instead of product name
- ○ Unable to disable shared memory feature in Human Interface Infrastructure (HII) menu
- ○ 650M Adapter has some info in Chinese and Japanese show garbled code under Human Interface Infrastructure (HII) Form

<u>**Enhancements**</u>

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

Firmware

Contains:
CNA (XE100 series) firmware 12.0.1216.0

<u>**Supported Devices and Features**</u>

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ○ HP FlexFabric 20Gb 2-port 650M Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.5
Version: 2019.03.01 **(Recommended)**
Filename: CP035746.compsig; CP035746.zip

<u>**Important Note!**</u>

Release Notes:

[HPE StoreFabric Emulex Adapter Release Notes](#)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

<u>**Prerequisites**</u>

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:

- ○ Fixed unexpected behavior in Active Health System (AHS) logs show World Wide Node Name (wwnn) & World Wide Port Name (wwpn) in reverse order.
- ○ Microsoft Windows Server 2012 R2 Hyper-V Storage Area Network (SAN) Disconnect.
- ○ Link lost with firmware version 11.2.1263.19
- ○ "FW not responding" message seen on card when creating Virtual Function (VF) in loop for HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter [NIC+ iSCSI] in Gen10 server.
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter - Loss of access to storage after Virtual Connect (VC) login redistribution
- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter does not complete to boot in Legacy Mode on Gen 9 Server
- ○ Emulex Peripheral Component Interconnect (PCI) slot Network Interface Connector (NIC) reported as device path instead of product name

○ Unable to disable shared memory feature in Human Interface Infrastructure (HII) menu
○ 650M Adapter has some info in Chinese and Japanese show garbled code under Human Interface Infrastructure (HII) Form

Enhancements

Updated CNA (XE100 series) firmware

Firmware

Contains:

CNA (XE100 series) firmware 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
○ HP FlexFabric 20Gb 2-port 650FLB Adapter
○ HP FlexFabric 20Gb 2-port 650M Adapter
○ HPE StoreFabric CN1200E-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7
Version: 2019.03.01 **(Recommended)**
Filename: CP035747.compsig; CP035747.zip

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapter Release Notes](#)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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:

○ Fixed unexpected behavior in Active Health System (AHS) logs show World Wide Node Name (wwnn) & World Wide Port Name (wwpn) in reverse order.
○ Microsoft Windows Server 2012 R2 Hyper-V Storage Area Network (SAN) Disconnect.
○ Link lost with firmware version 11.2.1263.19
○ "FW not responding" message seen on card when creating Virtual Function (VF) in loop for HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter [NIC+ iSCSI] in Gen10 server.
○ HP FlexFabric 20Gb 2-port 650FLB Adapter - Loss of access to storage after Virtual Connect (VC) login redistribution
○ HP StoreFabric CN1200E Dual Port Converged Network Adapter does not complete to boot in Legacy Mode on Gen 9 Server
○ Emulex Peripheral Component Interconnect (PCI) slot Network Interface Connector (NIC) reported as device path instead of product name
○ Unable to disable shared memory feature in Human Interface Infrastructure (HII) menu
○ 650M Adapter has some info in Chinese and Japanese show garbled code under Human Interface Infrastructure (HII) Form

Enhancements

Updated CNA (XE100 series) firmware

Firmware

Contains:

CNA (XE100 series) firmware 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ○ HP FlexFabric 20Gb 2-port 650M Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for Windows (x64)
Version: 2019.03.01 **(Recommended)**
Filename: cp035749.compsig; cp035749.exe

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.

Fixes

Fixed the following:

- ○ Fixed unexpected behavior in Active Health System (AHS) logs show World Wide Node Name (wwnn) & World Wide Port Name (wwpn) in reverse order.
- ○ Microsoft Windows Server 2012 R2 Hyper-V Storage Area Network (SAN) Disconnect.
- ○ Link lost with firmware version 11.2.1263.19
- ○ "FW not responding" message seen on card when creating Virtual Function (VF) in loop for HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter [NIC+ iSCSI] in Gen10 server.
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter - Loss of access to storage after Virtual Connect (VC) login redistribution
- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter does not complete to boot in Legacy Mode on Gen 9 Server
- ○ Emulex Peripheral Component Interconnect (PCI) slot Network Interface Connector (NIC) reported as device path instead of product name
- ○ Unable to disable shared memory feature in Human Interface Infrastructure (HII) menu
- ○ 650M Adapter has some info in Chinese and Japanese show garbled code under Human Interface Infrastructure (HII) Form

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

Contains:
CNA (XE100 series) firmware 12.0.1216.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- ○ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ○ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ○ HP FlexFabric 20Gb 2-port 650M Adapter
- ○ HPE StoreFabric CN1200E-T Adapter

HPE Intel Online Firmware Upgrade Utility for Linux x86_64
Version: 1.19.11 **(Optional)**
Filename: firmware-nic-intel-1.19.11-1.1.x86_64.compsig; firmware-nic-intel-1.19.11-1.1.x86_64.rpm

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- ○ HPE Intel igb Drivers for Linux, versions 6.2.1 or later
- ○ HPE Intel ixgbe Drivers for Linux , versions 5.6.4 or later
- ○ HPE Intel i40e Drivers for Linux, versions 2.10.19.30 or later

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 LLDP are disabled.
This product addresses an issue where "Firmware Image Properties", "Device Level Configuration", and "Link Speed Status" options in NIC HII menu will disappear when F7 is pressed.
This product addresses an issue where Firmware upgrade fail in SLES15 with secureboot enabled.
This product addresses an issue where POST when ESC Is Pressed to Enter The BIOS Setup Utility with HP Ethernet 1Gb 4-port 366FLR Adapter.
This product addresses an issue where there is no VLAN function under Legacy mode.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux 8.

Supported Devices and Features

This package supports the following network adapters:

- ○ HP Ethernet 1Gb 4-port 366T Adapter
- ○ HP Ethernet 1Gb 4-port 366FLR Adapter
- ○ HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- ○ HP Ethernet 1Gb 2-port 361T Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562T Adapter
- ○ HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- ○ HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- ○ HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- ○ HPE Ethernet 10Gb 2-port 568i Adapter
- ○ HPE Ethernet 1Gb 4-port 369i Adapter
- ○ HPE Ethernet 1Gb 4-port 366i Communication Board
- ○ HPE Ethernet 1Gb 2-port 368i Adapter
- ○ HP Ethernet 1Gb 2-port 363i Adapter
- ○ HP Ethernet 1Gb 4-port 366i Adapter
- ○ HP Ethernet 1Gb 2-port 361i Adapter
- ○ HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel Online Firmware Upgrade Utility for VMware
Version: 3.12.12 **(Optional)**
Filename: CP040151.compsig; CP040151.zip

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- ○ *HPE Intel igbn Drivers for VMware*, versions 2019.12.20
- ○ *HPE Intel ixgben Drivers for VMware*, versions 2019.12.20
- ○ *HPE Intel i40en Drivers for VMware*, versions 2019.12.20

This software package contains the following firmware versions for the below listed supported network adapters:

NIC	EEPROM/NVM Version	OROM Version	Single NVM Version
HP Ethernet 1Gb 2-port 361i Adapter	8000106F	1.2529.0	N/A
HP Ethernet 1Gb 2-port 361T Adapter	80000F91	1.2529.0	N/A
HP Ethernet 1Gb 2-port 363i Adapter	80000D00	1.2529.0	N/A
HPE Ethernet 1Gb 4-port 366i Communication Board	80000EBF	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366i Adapter	8000105E	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366FLR Adapter	80001060	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366T Adapter	8000105F	1.2529.0	N/A
HPE Ethernet 1Gb 2-port 368i Adapter	80001DEA	1.2529.0	N/A
HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 1Gb 4-port 369i Adapter	80001DEC	1.2529.0	N/A
HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	80000838	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 560SFP+ Adapter	80000835	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568i Adapter	80001DEE	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 563i Adapter	800035C0	1.1375.0	N/A
HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	8000641A	1.2529.0	10.51.5
HPE Ethernet 10Gb 2-port 562FLR-T Adapter	80000F56	1.2529.0	10.51.3

HPE Ethernet 10Gb 2-port 562SFP+ Adapter	80006424	1.2529.0	10.51.5
HPE Ethernet 10Gb 2-port 562T Adapter	80000F55	1.2529.0	10.51.3

The combo image v1.2529.0 includes: Boot Agent: 1GbE - v1.5.88, 10GbE - v2.4.34, 40GbE - v1.1.10 & UEFI Drivers: 1GbE - v9.0.03, 10GbE - v7.4.06, 40GbE - v3.9.11

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.

Fixes

This product addresses an issue where LLDP are disabled.
This product addresses an issue where "Firmware Image Properties", "Device Level Configuration", and "Link Speed Status" options in NIC HII menu will disappear when F7 is pressed.
This product addresses an issue where POST when ESC Is Pressed to Enter The BIOS Setup Utility with HP Ethernet 1Gb 4-port 366FLR Adapter.
This product addresses an issue where there is no VLAN function under Legacy mode.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HPE Ethernet 1Gb 2-port 368i Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 2-port 361i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp040152.compsig; cp040152.exe

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 LLDP are disabled.
This product addresses an issue where "Firmware Image Properties", "Device Level Configuration", and "Link Speed Status" options in NIC HII menu will disappear when F7 is pressed.
This product addresses an issue where POST when ESC Is Pressed to Enter The BIOS Setup Utility with HP Ethernet 1Gb 4-port 366FLR Adapter.
This product addresses an issue where there is no VLAN function under Legacy mode.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter

- o   HPE Ethernet 1Gb 4-port 366i Communication Board
- o   HPE Ethernet 1Gb 2-port 368i Adapter
- o   HP Ethernet 1Gb 2-port 363i Adapter
- o   HP Ethernet 1Gb 4-port 366i Adapter
- o   HP Ethernet 1Gb 2-port 361i Adapter
- o   HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64
Version: 1.8.12 **(Optional)**
Filename: firmware-nic-qlogic-flq-1.8.12-1.1.x86_64.compsig; firmware-nic-qlogic-flq-1.8.12-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE QLogic FastLinQ 10/25/50GbE Drivers for Linux,* versions 8.42.8.0-1 or later, for use with the firmware in this product.

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 2nd port reports "function type: disabled" with HPE Ethernet 10Gb 2-port 524SFP+ Adapter.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports Red Hat Enterprise Linux 8.

Supported Devices and Features

This product supports the following network adapters:

- o   HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- o   HPE Ethernet 10Gb 2-port 521T Adapter
- o   HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- o   HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- o   HPE StoreFabric CN1300R Converged Network Adapter
- o   HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware
Version: 4.11.9 **(Optional)**
Filename: CP039777.compsig; CP039777.zip

Important Note!

HPE recommends *HPE QLogic FastLinQ 10/25/50GbE Multifunction Drivers for VMware*, versions 2019.12.20 or later, for use with this firmware.

This software package contains combo image v8.50.22. This combo image includes: Boot Code (MFW): 8.50.9.0, UEFI: 4.1.9.2 and PXE: 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 an issue where 2nd port reports "function type: disabled" with HPE Ethernet 10Gb 2-port 524SFP+ Adapter.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- o   HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- o   HPE Ethernet 10Gb 2-port 521T Adapter
- o   HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- o   HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- o   HPE StoreFabric CN1300R Converged Network Adapter
- o   HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp039779.compsig; cp039779.exe

Important Note!

HPE recommends *HPE QLogic FastLinQ 10/25/50GbE Driver for Windows Server x64 Editions*, versions 8.42.10.0 or later, for use with the firmware in this product.

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 it failed to boot into iSCSI Boot LUN when Windows OS installed.
This product addresses an issue where 2nd port reports "function type: disabled" with HPE Ethernet 10Gb 2-port 524SFP+ Adapter.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 521T Adapter
- o HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- o HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- o HPE StoreFabric CN1300R Converged Network Adapter
- o HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64
Version: 2.26.7 **(Optional)**
Filename: firmware-nic-qlogic-nx2-2.26.7-1.1.x86_64.compsig; firmware-nic-qlogic-nx2-2.26.7-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE QLogic NX2 10/20GbE Multifunction Drivers for Linux*, versions 7.14.63-1 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 incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

Enhancements

This product now remove supports Synergy and Blade Server.

This product now supports the following operatings systems:

- o Red Hat Enterprise Linux 7 Update 7
- o Red Hat Enterprise Linux 8 Update 0
- o SUSE Linux Enterprise Server 15 SP1

Supported Devices and Features

This product supports the following network adapters:

- o HP Ethernet 10Gb 2-port 530SFP+ Adapter
- o HP Ethernet 10Gb 2-port 530T Adapter
- o HP Ethernet 10Gb 2-port 533FLR-T Adapter
- o 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 Online Firmware Upgrade Utility for VMware
Version: 1.26.4 **(Optional)**
Filename: CP039778.compsig; CP039778.zip

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for VMware, versions 2019.12.20 or later, for use with this firmware.

This software package contains combo image v7.18.23 with the following firmware versions:

NIC	Boot Code Version	PXE Version	UEFI Version	iSCSI Version	FCoE Version	CCM Version	L2 Version
HP Ethernet 10Gb 2-port 530SFP+ Adapter HP Ethernet 10Gb 2-port 530T Adapter	7.15.77	7.14.13	8.4.2	n/a	n/a	7.14.4	7.12.25
HP Ethernet 10Gb 2-port 533FLR-T Adapter HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter HPE FlexFabric 10Gb 4-port 536FLR-T Adapter HP StoreFabric CN1100R Dual Port Converged Network Adapter HPE StoreFabric CN1100R-T Converged Network Adapter	7.15.77	7.14.13	8.4.2	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 an incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports 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
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HP 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: 5.2.0.0 **(Optional)**
Filename: cp039780.compsig; cp039780.exe

Important Note!

HPE recommends *HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server x64 Editions*, version 7.13.171.0 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 incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

Enhancements

This product now remove supports Synergy and Blade Server.

Supported Devices and Features

This product supports 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
- ○ HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- ○ HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- ○ HP StoreFabric CN1100R Dual Port Converged Network Adapter
- ○ HPE StoreFabric CN1100R-T Converged Network Adapter

Intel Online Firmware Upgrade Utility for Linux x86_64
Version: 1.19.10 **(Optional)**
Filename: firmware-nic-is-intel-1.19.10-1.1.x86_64.compsig; firmware-nic-is-intel-1.19.10-1.1.x86_64.rpm

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- ○ Intel igb Drivers for Linux , versions 6.2.0 or later

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

Initial release.

Supported Devices and Features

This package supports the following network adapters:

- ○ Intel(R) I350 Gigabit Backplane Connection
- ○ Intel(R) I350 Gigabit Network Connection
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter

Intel Online Firmware Upgrade Utility for VMware
Version: 3.12.10 **(Optional)**
Filename: CP041196.compsig; CP041196.zip

Important Note!

This software package contains the following firmware versions for the below listed supported network adapters:

NIC	EEPROM/NVM Version	OROM Version
HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter	80001099	1.2529.0
HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter	80001097	1.2529.0
Intel(R) I350 Gigabit Backplane Connection	8000108E	1.2529.0
Intel(R) I350 Gigabit Network Connection	8000108F	1.2529.0

The combo image v1.2529.0 includes: Boot Agent: 1GbE - v1.5.88 & UEFI Drivers: 1GbE - v9.0.03.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

Initial release.

Supported Devices and Features

This package supports the following network adapters:

- ○ Intel(R) I350 Gigabit Backplane Connection
- ○ Intel(R) I350 Gigabit Network Connection
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapte

Intel Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp041197.compsig; cp041197.exe

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

Initial release.

Supported Devices and Features

This package supports the following network adapters:

- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- ○ HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter
- ○ Intel(R) I350 Gigabit Backplane Connection
- ○ Intel(R) I350 Gigabit Network Connection

Marvell FastLinQ Online Firmware Upgrade Utility for Linux x86_64
Version: 1.8.13 **(Optional)**
Filename: firmware-nic-is-marvell-flq-1.8.13-1.1.x86_64.compsig; firmware-nic-is-marvell-flq-1.8.13-1.1.x86_64.rpm

Important Note!

HPE recommends *Marvell FastLinQ 10/25/50GbE Drivers for Linux,* versions 8.42.8.0-1 or later, for use with the firmware in this product.

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.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- ○ HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
- ○ HPE Ethernet 10/25Gb 2-port SFP28 QL41232HLCU Adapter
- ○ HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter
- ○ HPE Ethernet 10Gb 2-port BaseT QL41132HLRJ Adapter
- ○ HPE Ethernet 10Gb 2-port BaseT QL41132HQRJ OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter
- ○ HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter

Marvell FastLinQ Online Firmware Upgrade Utility for VMware
Version: 4.11.14 **(Optional)**
Filename: CP041147.compsig; CP041147.zip

Important Note!

This software package contains combo image v8.50.78. This combo image includes: Boot Code (MFW): 8.50.9.0 and UEFI: 6.1.6.9.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

   o HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
   o HPE Ethernet 10/25Gb 2-port SFP28 QL41232HLCU Adapter
   o HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter
   o HPE Ethernet 10Gb 2-port BaseT QL41132HLRJ Adapter
   o HPE Ethernet 10Gb 2-port BaseT QL41132HQRJ OCP3 Adapter
   o HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter
   o HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter

Marvell FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 5.2.0.0 **(Optional)**
Filename: cp041148.compsig; cp041148.exe

Important Note!

HPE recommends *Marvell FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions 8.42.10.0* or later, for use with the firmware in this product.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

   o HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
   o HPE Ethernet 10/25Gb 2-port SFP28 QL41232HLCU Adapter
   o HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter
   o HPE Ethernet 10Gb 2-port BaseT QL41132HLRJ Adapter
   o HPE Ethernet 10Gb 2-port BaseT QL41132HQRJ OCP3 Adapter
   o HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter
   o HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Ethernet 10Gb 2-port 548SFP+ Adapter
Version: 1.0.1 **(Recommended)**
Filename: CP040053.compsig; CP040053.zip

Important Note!

Known Issues in firmware 14.26.XXXX :

   o Hardware arbitration is currently disabled in Open Compute Project (OCP)3.0 cards. It will be supported on future releases for the same hardware.
   o Secure state is not updated after firmware burning due to the following behavior.
   o By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning. **Workaround:** Set the reset level to 3 explicitly in mlxfwreset.
   o Since Packet Pacing enforce max_tc value is "1", features that require multiple Traffic Class (TC)s will not be active when this mode is available.

Fixes

Fixes in version 14.26.XXXX :

   o Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
   o Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.
   o The total firmware reset time is increased by 1 second.

Enhancements

Firmware for the following device is updated to 14.26.1040 :

P11338-B21 (HPE Ethernet 10Gb 2-port 548SFP+ Adapter)

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P11338-B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HPE0000000038

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters
Version: 1.0.6 **(Recommended)**
Filename: CP040048.compsig; CP040048.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.

The latest version of Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only Mezzanine adapters 1.0.0 supported on HPE Synergy Servers is available on HPE support center, https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_955f15089f6940debbd06394c9

Known Issues for FW version 2.42.5044 :

○ When using the QSFP module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
○ 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 LES will not be active while the ETH link is in an idle mode.
○ In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
○ Downgrade to previous GA requires server reboot.Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. 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 lattervalue should be used.
○ 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
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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.
○ Cable Info MAD reports a wrong cable info when usingthe 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.
○ Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
○ RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
○ RM#VPD read-only fields are writable.
○ Increasing SymbolErrorCounter When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
○ RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.
○ Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
○ RDP over IPv6 is currently not functional.
○ 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 mlx-4_en_get_drvinfo() that is called from asynchronous event handler.
○ 832298:When running ibdump, loopback traffic is mirroring into the kernel driver.
○ AHS reports wrong MTU size
○ RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer

Known Issues for FW version 14.26.1040 :

○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ Secure state is not updated after firmware burning due to the following behavior.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues for FW version 16.26.1040 :

○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ The sw_reset option is not supported when ATS is enabled.
○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
○ DC LAG can function only in case there is a single PF per port without any active VFs.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size.

Fixes

Fixes submitted in 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.

Fixes submitted in version 14.26.1040:

- A function was misbehaving when a PCIe TLP was set with a poisoned indication.
- The "destroy mkey " command was getting stuck when rebooting the hypervisor.
- The total firmware reset time is increased by 1 second.

Fixes submitted in version 16.26.1040:

- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Unexpected queue pairs transitioned to error in lossy tests.
- Limited the maximum amount of dumps created on a PF.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- Large number of packets dropped when running Jumbo frames with TTL rewrite.
- Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
- Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- The nack counters constantly reported as "0".
- In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

779799-B21 (HP Ethernet 10G 2-port 546FLR-SFP+ Adapter)
779793-B21 (HP Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.26.1040:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.26.1040 :
817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.26.1040 :

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif.
- The ICMD Query Caps indicate support and expose the list of the supported counters.
- Enabled a new feature User Context Object (DEVX) which is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
- Support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- Reliability improvements and security hardening enhancements were done.

New features and changes in version 16.26.1040 :

- Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the VPD on the VF.
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - Creating software managed steering tables in eSwitch/FDB.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HP Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HP 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	HPE0000000014

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.5
Version: 1.0.5 **(Recommended)**
Filename: CP039801.compsig; CP039801.zip

Important Note!

Known Issues in firmware 12.26.1040:

- Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
- Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

- ○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- ○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
  Workaround: Use SX_RDMA with Dual Port GVMI instead.
- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ The sw_reset option is not supported when ATS is enabled.
- ○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.
  The features that may be affected by this and not work properly are:
    - ■ Host chaining
    - ■ Mirroring in FDB
    - ■ TTL modify in FDB
    - ■ VGT+
- ○ DC LAG can function only in case there is a single PF per port without any active VFs.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- ○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
  Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
- ○ CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

- ○ IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
- ○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- ○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

- ○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- ○ Unexpected queue pairs transitioned to error in lossy tests.
- ○ Limited the maximum amount of dumps created on a PF.
- ○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- ○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- ○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
- ○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
- ○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- ○ The nack counters constantly reported as "0".
- ○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)
825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

Firmware for the following devices are updated to 16.26.1040:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)
872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

- ○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- ○ User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
  The following functionalities are still managed by the Kernel:
    - ■ Resource cleaning
    - ■ UCTX stamping
    - ■ Blocking the physical address and IRQ from these UCTX
- ○ Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- ○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- ○ This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

- ○ Added support for the following features:
    - ■ Address Translation Service (ATS) support for MKEY and UMEM.
    - ■ Exposing the Vital Product Data (VPD) on Virtual Function (VF).
    - ■ Hairpin Drop Counter.
    - ■ Hairpin and TM RNDV QPs to work with DevX.
    - ■ Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 6.5
Version: 1.0.4 **(Recommended)**
Filename: CP040821.compsig; CP040821.zip

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5052:

○ When using the 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 LES will not be active while the ETH link is in an idle mode
○ 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 cards 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: Use the GUID value returned by the fabric/driver utilities (not 0xffffff).
○ 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.
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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
○ DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3.
  Workaround: Upgrade to MLNX_OFED-2.1-x.x.x. or later.
○ VPD read-only fields are writable.
  Workaround: Do not write to read- only fields if you wish to preserve them.
○ When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ 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.
○ 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:
    ■ Unplug the cable from the switch
    ■ Restart driver
    ■ Change the protocol via the appropriate tools.
○ 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.
○ 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 (Single Root I/O Virtualization) setup, using mlxconfig when the PF (Physical Function) is passed through to a VM (Virtual Machine) requires a reboot of the Hypervisor.
○ 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).
○ MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.

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.
○ ibdump could not capture all MADs packets.
○ 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 2.42.5052:

○ Fixed Uncorrectable Machine Check Exception issue. The internal resources for handling packets were not allowed to be flushed when the driver was

brought down and occasionally caused Red Screen of Death (RSOD). The fix was applied to the ROM code only and has only external timing influences upon the driver's teardown.

<u>Enhancements</u>

Firmware for the following devices are updated to 2.42.5000:
764282-B21
764286-B21

Firmware for the following devices are updated to 2.42.5052:
764283-B21
764284-B21
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.
- ○ Improved the debug ability for command timeout cases.

<u>Supported Devices and Features</u>

Supported Devices:

HP Part Number	Device Name	PSID
764282-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023

Online Firmware Upgrade Utility (ESXi 6.5) for Mellanox Open Ethernet cards
Version: 1.0.0 **(Recommended)**
Filename: CP041643.compsig; CP041643.zip

<u>Important Note!</u>

Known Issues in firmware 14.26.1040 and 14.26.2000:

- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040 and 16.26.2000 :

- ○ Creating an NVMoF offloaded target while running the LFWP flow may cause the device to become unstable.
- ○ sw_reset action fails in case it is initiated during live-patch flow.
- ○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- ○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ The sw_reset option is not supported when ATS is enabled
- ○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- ○ DC LAG can function only in case there is a single PF per port without any active VFs.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- ○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maaximum supported size (maximum PF_BAR2_SIZE is 4).
- ○ CWDM4 AOM cable is currently not supported

<u>Fixes</u>

Fixes in version 14.26.2000 :

o Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.

Fixes in version 14.26.1040 :

o Fixed an issue that caused a function to misbehave when a PCIe Traffic Light Protocol(TLP) was set with a poisoned indication.
o Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.

Fixes in version 16.26.2000 :

o Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
o Fixed an issue that slowed the firmware flows when executing many destroy XRQ commands on an XRQ that supported DC transport service.
o Fixed an issue that caused performance degradation when working in dual-port devices under bidirectional traffic stress.

Fixes in version 16.26.1040 :

o On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
o Fixed an issue that resulted in unexpected queue pairs transitioned to error in lossy tests.
o Limited the maximum amount of dumps created on a Physical Function(PF).
o Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
o Fixed a stability issue in RoCE retransmissions under stress affecting Zero-Touch-RoCE.
o Fixed an issue that caused a function to misbehave when a PCIe TLP was set with a poisoned indication.
o Fixed an issue that caused large number of packet to drop when running Jumbo frames with Time to live (TTL) rewrite
o Limited the number of the elements in the QoS tree 2K. Creating more than 250 Vport_tc for every TC was not allowed
o Fixed the query QP flow. Instead of always taking port 1, FW will now reply the proper port, 1 or 2, for the dual port RDMA over Converged Ethernet(RoCE) net device.
o Fixed an issue that caused the nack counters to constantly be reported as "0".
o In a rare scenario when the driver was executing the "2err" command and th Queue pair(QP) was in SQ drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error CQEs on all the WQEs.

Enhancements

Firmware for the following devices is updated to 14.26.1040 :

P21930-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter)

Firmware for the following devices is updated to 14.26.2000 :

P11341-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter)

Firmware for the following devices is updated to 16.26.1040:

P13188-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter)
P21927-B21 (HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter)

Firmware for the following devices is updated to 16.26.2000:

P10112-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

o Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
o Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
o Added Address Translation Service (ATS) support for MKEY and UMEM VPD Added support for exposing the VPD on the VF.
o Added support for the following
   ▪ Reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
   ▪ Hairpin Drop Counter.
   ▪ Hairpin and TM RNDV QPs to work with DevX.
   ▪ creating software managed steering tables in eSwitch/FD

New features and changes in version 14.26.2000 and 16.26.2000 :

o Live Firmware Patch (LFWP) allows applying of critical hot fixes without interrupting data traffic and without any user application interruptions

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238
P13188-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter	MT_0000000416
P10112-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter	MT_0000000241
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Ethernet 10Gb 2-port 548SFP+ Adapter
Version: 1.0.1 **(Recommended)**
Filename: CP040054.compsig; CP040054.zip

Important Note!

Known Issues in firmware 14.26.XXXX :

o Hardware arbitration is currently disabled in Open Compute Project (OCP)3.0 cards. It will be supported on future releases for the same hardware.

- ○ Secure state is not updated after firmware burning due to the following behavior.
- ○ By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning. **Workaround:** Set the reset level to 3 explicitly in mlxfwreset.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple Traffic Class (TC)s will not be active when this mode is available.

Fixes

Fixes in version 14.26.XXXX :

- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- ○ Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.
- ○ The total firmware reset time is increased by 1 second.

Enhancements

Firmware for the following device is updated to 14.26.1040:

P11338-B21 (HPE Ethernet 10Gb 2-port 548SFP+ Adapter)

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P11338-B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HPE0000000038

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters
Version: 1.0.2 **(Recommended)**
Filename: CP040049.compsig; CP040049.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.

The latest version of Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only Mezzanine adapters 1.0.0 supported on HPE Synergy Servers is available on HPE support center, https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_b5a6ed2c31e14450a58981fa02

Known Issues for FW version 2.42.5044 :

- ○ When using the QSFP module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
- ○ 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 LES will not be active while the ETH link is in an idle mode.
- ○ In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
- ○ Downgrade to previous GA requires server reboot.Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. 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 lattervalue should be used.
- ○ 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
- ○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
- ○ 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.
- ○ MFT tools 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.
- ○ Cable Info MAD reports a wrong cable info when usingthe 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.
- ○ Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
- ○ RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
- ○ RM#VPD read-only fields are writable.
- ○ Increasing SymbolErrorCounter When working in 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.
- ○ CQ and EQ cannot be configured to different stride sizes.
- ○ ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
- ○ RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.
- ○ Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
- ○ RDP over IPv6 is currently not functional.
- ○ 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 mlx-4_en_get_drvinfo() that is called from asynchronous event handler.
- ○ 832298:When running ibdump, loopback traffic is mirroring into the kernel driver.
- ○ AHS reports wrong MTU size
- ○ RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer

Known Issues for FW version 14.26.1040 :

- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ Secure state is not updated after firmware burning due to the following behavior.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues for FW version 16.26.1040 :

- Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw_reset option is not supported when ATS is enabled.
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- DC LAG can function only in case there is a single PF per port without any active VFs.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size.

Fixes

Fixes submitted in 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.

Fixes submitted in version 14.26.1040:

- A function was misbehaving when a PCIe TLP was set with a poisoned indication.
- The "destroy mkey " command was getting stuck when rebooting the hypervisor.
- The total firmware reset time is increased by 1 second.

Fixes submitted in version 16.26.1040:

- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Unexpected queue pairs transitioned to error in lossy tests.
- Limited the maximum amount of dumps created on a PF.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- Large number of packets dropped when running Jumbo frames with TTL rewrite.
- Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
- Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- The nack counters constantly reported as "0".
- In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

779799-B21 (HP Ethernet 10G 2-port 546FLR-SFP+ Adapter)
779793-B21 (HP Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.26.1040:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.26.1040 :
817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.26.1040 :

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif.
- The ICMD Query Caps indicate support and expose the list of the supported counters.
- Enabled a new feature User Context Object (DEVX) which is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
- Support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- Reliability improvements and security hardening enhancements were done.

New features and changes in version 16.26.1040 :

- Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the VPD on the VF.
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - Creating software managed steering tables in eSwitch/FDB.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HP Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HP 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	HPE0000000014

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.7
Version: 1.0.1 **(Recommended)**
Filename: CP039802.compsig; CP039802.zip

Important Note!

Known Issues in firmware 12.26.1040:

- ○ Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

- ○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- ○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
  Workaround: Use SX_RDMA with Dual Port GVMI instead.
- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ The sw_reset option is not supported when ATS is enabled.
- ○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.
  The features that may be affected by this and not work properly are:
    - Host chaining
    - Mirroring in FDB
    - TTL modify in FDB
    - VGT+
- ○ DC LAG can function only in case there is a single PF per port without any active VFs.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- ○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
  Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
- ○ CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

- ○ IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
- ○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- ○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

- ○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- ○ Unexpected queue pairs transitioned to error in lossy tests.
- ○ Limited the maximum amount of dumps created on a PF.
- ○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- ○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- ○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
- ○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
- ○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- ○ The nack counters constantly reported as "0".
- ○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)
825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

Firmware for the following devices are updated to 16.26.1040:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)
872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

- ○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- ○ User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
  The following functionalities are still managed by the Kernel:
    - Resource cleaning
    - UCTX stamping
    - Blocking the physical address and IRQ from these UCTX
- ○ Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- ○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- ○ This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

○ Added support for the following features:
  ▪ Address Translation Service (ATS) support for MKEY and UMEM.
  ▪ Exposing the Vital Product Data (VPD) on Virtual Function (VF).
  ▪ Hairpin Drop Counter.
  ▪ Hairpin and TM RNDV QPs to work with DevX.
  ▪ Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 6.7
Version: 1.0.2 **(Recommended)**
Filename: CP040823.compsig; CP040823.zip

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5052:

○ When using the 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 LES will not be active while the ETH link is in an idle mode
○ 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 cards 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: Use the GUID value returned by the fabric/driver utilities (not 0xffffff).
○ 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.
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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
○ DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3.
  Workaround: Upgrade to MLNX_OFED-2.1-x.x.x. or later.
○ VPD read-only fields are writable.
  Workaround: Do not write to read- only fields if you wish to preserve them.
○ When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ 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.
○ 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:
    ▪ Unplug the cable from the switch
    ▪ Restart driver
    ▪ Change the protocol via the appropriate tools.
○ 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.
○ 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 (Single Root I/O Virtualization) setup, using mlxconfig when the PF (Physical Function) is passed through to a VM (Virtual Machine) requires a reboot of the Hypervisor.
○ 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).
○ MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.

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.
- ibdump could not capture all MADs packets.
- 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 2.42.5052:

- Fixed Uncorrectable Machine Check Exception issue. The internal resources for handling packets were not allowed to be flushed when the driver was brought down and occasionally caused Red Screen of Death (RSOD). The fix was applied to the ROM code only and has only external timing influences upon the driver's teardown.

Enhancements

Firmware for the following devices are updated to 2.42.5000:
764282-B21
764286-B21

Firmware for the following devices are updated to 2.42.5052:
764283-B21
764284-B21
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.
- Improved the debug ability for command timeout cases

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
764282-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023

Online Firmware Upgrade Utility (ESXi 6.7) for Mellanox Open Ethernet cards
Version: 1.0.0 **(Recommended)**
Filename: CP041640.compsig; CP041640.zip

Important Note!

Known Issues in firmware 14.26.1040 and 14.26.2000:

- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040 and 16.26.2000 :

- o Creating an NVMoF offloaded target while running the LFWP flow may cause the device to become unstable.
- o sw_reset action fails in case it is initiated during live-patch flow.
- o Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- o SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
- o Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- o The sw_reset option is not supported when ATS is enabled
- o When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- o DC LAG can function only in case there is a single PF per port without any active VFs.
- o Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- o Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maaximum supported size (maximum PF_BAR2_SIZE is 4).
- o CWDM4 AOM cable is currently not supported

Fixes

Fixes in version 14.26.2000 :

- o Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.

Fixes in version 14.26.1040 :

- o Fixed an issue that caused a function to misbehave when a PCIe Traffic Light Protocol(TLP) was set with a poisoned indication.
- o Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.

Fixes in version 16.26.2000 :

- o Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
- o Fixed an issue that slowed the firmware flows when executing many destroy XRQ commands on an XRQ that supported DC transport service.
- o Fixed an issue that caused performance degradation when working in dual-port devices under bidirectional traffic stress.

Fixes in version 16.26.1040 :

- o On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- o Fixed an issue that resulted in unexpected queue pairs transitioned to error in lossy tests.
- o Limited the maximum amount of dumps created on a Physical Function(PF).
- o Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- o Fixed a stability issue in RoCE retransmissions under stress affecting Zero-Touch-RoCE.
- o Fixed an issue that caused a function to misbehave when a PCIe TLP was set with a poisoned indication.
- o Fixed an issue that caused large number of packet to drop when running Jumbo frames with Time to live (TTL) rewrite
- o Limited the number of the elements in the QoS tree 2K. Creating more than 250 Vport_tc for every TC was not allowed
- o Fixed the query QP flow. Instead of always taking port 1, FW will now reply the proper port, 1 or 2, for the dual port RDMA over Converged Ethernet(RoCE) net device.
- o Fixed an issue that caused the nack counters to constantly be reported as "0".
- o In a rare scenario when the driver was executing the "2err" command and th Queue pair(QP) was in SQ drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error CQEs on all the WQEs.

Enhancements

Firmware for the following devices is updated to 14.26.1040 :

P21930-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter)

Firmware for the following devices is updated to 14.26.2000 :

P11341-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter)

Firmware for the following devices is updated to 16.26.1040:

P13188-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter)
P21927-B21 (HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter)

Firmware for the following devices is updated to 16.26.2000:

P10112-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- o Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- o Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- o Added Address Translation Service (ATS) support for MKEY and UMEM VPD Added support for exposing the VPD on the VF.
- o Added support for the following
    - ▪ Reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
    - ▪ Hairpin Drop Counter.
    - ▪ Hairpin and TM RNDV QPs to work with DevX.
    - ▪ creating software managed steering tables in eSwitch/FD

New features and changes in version 14.26.2000 and 16.26.2000 :

- o Live Firmware Patch (LFWP) allows applying of critical hot fixes without interrupting data traffic and without any user application interruptions

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238
P13188-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter	MT_0000000416
P10112-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter	MT_0000000241
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417

Online Firmware Upgrade Utility (Linux x86_64) for HPE Ethernet 10Gb 2-port 548SFP+ Adapter
Version: 1.0.1 **(Recommended)**
Filename: firmware-nic-mellanox-nic-mft-1.0.1-1.1.x86_64.compsig; firmware-nic-mellanox-nic-mft-1.0.1-1.1.x86_64.rpm

Important Note!

Known Issues in firmware 14.26.XXXX :

○ Hardware arbitration is currently disabled in Open Compute Project (OCP) 3.0 cards. It will be supported on future releases for the same hardware.
○ Secure state is not updated after firmware burning due to the following behavior.
○ By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning. **Workaround:** Set the reset level to 3 explicitly in mlxfwreset.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple Traffic Class (TC)s will not be active when this mode is available.

Fixes

Fixes in version 14.26.XXXX :

○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
○ Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.
○ The total firmware reset time is increased by 1 second.

Enhancements

Firmware for the following device is updated to 14.26.1040:

P11338-B21 (HPE Ethernet 10Gb 2-port 548SFP+ Adapter)

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P11338-B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HPE0000000038

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 Ethernet only adapters
Version: 1.0.11 **(Recommended)**
Filename: firmware-nic-mellanox-ethernet-only-1.0.11-1.1.x86_64.compsig; firmware-nic-mellanox-ethernet-only-1.0.11-1.1.x86_64.rpm

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.

The latest version of Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only Mezzanine adapters 1.0.0 supported on HPE Synergy Servers is available on HPE support center, https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_cb8abbcad5a34fd583b6cb32eb

Known Issues for FW version 2.42.5044 :

○ When using the QSFP module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
○ 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 LES will not be active while the ETH link is in an idle mode.
○ In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
○ Downgrade to previous GA requires server reboot.Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. 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 lattervalue should be used.
○ 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
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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.
○ Cable Info MAD reports a wrong cable info when usingthe 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.
○ Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
○ RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
○ RM#VPD read-only fields are writable.
○ Increasing SymbolErrorCounter When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
○ RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.
○ Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
○ RDP over IPv6 is currently not functional.
○ 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 mlx-4_en_get_drvinfo() that is called from asynchronous event handler.
○ 832298:When running ibdump, loopback traffic is mirroring into the kernel driver.
○ AHS reports wrong MTU size
○ RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer

Known Issues for FW version 14.26.1040 :

○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ Secure state is not updated after firmware burning due to the following behavior.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues for FW version 16.26.1040 :

○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ The sw_reset option is not supported when ATS is enabled.
○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
○ DC LAG can function only in case there is a single PF per port without any active VFs.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size.

Fixes

Fixes submitted in 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.

Fixes submitted in version 14.26.1040:

○ A function was misbehaving when a PCIe TLP was set with a poisoned indication.
○ The "destroy mkey " command was getting stuck when rebooting the hypervisor.
○ The total firmware reset time is increased by 1 second.

Fixes submitted in version 16.26.1040:

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a PF.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.

Note: Creating more than 250 Vport_tc for every TC is not allowed.
- ○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- ○ The nack counters constantly reported as "0".
- ○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

779799-B21 (HP Ethernet 10G 2-port 546FLR-SFP+ Adapter)
779793-B21 (HP Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.26.1040:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.26.1040 :
817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.26.1040 :

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- ○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif.
- ○ The ICMD Query Caps indicate support and expose the list of the supported counters.
- ○ Enabled a new feature User Context Object (DEVX) which is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
- ○ Support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- ○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- ○ Reliability improvements and security hardening enhancements were done.

New features and changes in version 16.26.1040 :

- ○ Added support for the following features:
  - ■ Address Translation Service (ATS) support for MKEY and UMEM.
  - ■ Exposing the VPD on the VF.
  - ■ Hairpin Drop Counter.
  - ■ Hairpin and TM RNDV QPs to work with DevX.
  - ■ Creating software managed steering tables in eSwitch/FDB.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HP Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HP 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	HPE0000000014

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox IB only ConnectX4 and ConnectX5 devices on Linux x86_64 platform
Version: 1.0.4 **(Recommended)**
Filename: firmware-nic-mellanox-ib-cx4-cx5-1.0.4-1.1.x86_64.compsig; firmware-nic-mellanox-ib-cx4-cx5-1.0.4-1.1.x86_64.rpm

Important Note!

Known Issues in firmware 12.26.1040:

- ○ Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

- ○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- ○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
  Workaround: Use SX_RDMA with Dual Port GVMI instead.
- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ The sw_reset option is not supported when ATS is enabled.
- ○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.
  The features that may be affected by this and not work properly are:
  - ■ Host chaining
  - ■ Mirroring in FDB
  - ■ TTL modify in FDB
  - ■ VGT+
- ○ DC LAG can function only in case there is a single PF per port without any active VFs.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- ○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
  Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).

○ CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

○ IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a PF.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
○ The nack counters constantly reported as "0".
○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

843400-B21 (HPE Apollo A10 InfiniBand EDR (100Gb) 2-port Adapter)

Firmware for the following devices are updated to 16.26.1040:

872723-B21 (HPE Apollo InfiniBand EDR 100Gb 2-port 841z Mezzanine Adapter)
872725-B21 (HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
○ User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
  The following functionalities are still managed by the Kernel:
  ■ Resource cleaning
  ■ UCTX stamping
  ■ Blocking the physical address and IRQ from these UCTX
○ Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
○ This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

○ Added support for the following features:
  ■ Address Translation Service (ATS) support for MKEY and UMEM.
  ■ Exposing the Vital Product Data (VPD) on Virtual Function (VF).
  ■ Hairpin Drop Counter.
  ■ Hairpin and TM RNDV QPs to work with DevX.
  ■ Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

Supported Devices:

HPE Part Number	Device Name	PSID
843400-B21	HPE Apollo A10 InfiniBand EDR (100Gb) 2-port Adapter	HPE2920111032
872723-B21	HPE Apollo InfiniBand EDR 100Gb 2-port 841z Mezzanine Adapter	HPE0000000017
872725-B21	HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter	HPE0000000008

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Linux x86_64 platform
Version: 1.0.7 **(Recommended)**
Filename: firmware-hca-mellanox-vpi-connectx4-1.0.7-1.1.x86_64.compsig; firmware-hca-mellanox-vpi-connectx4-1.0.7-1.1.x86_64.rpm

Important Note!

Known Issues in firmware 12.26.1040:

○ Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.

o Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

o Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
o SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
   Workaround: Use SX_RDMA with Dual Port GVMI instead.
o Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
o The sw_reset option is not supported when ATS is enabled.
o When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.
   The features that may be affected by this and not work properly are:
      ■ Host chaining
      ■ Mirroring in FDB
      ■ TTL modify in FDB
      ■ VGT+
o DC LAG can function only in case there is a single PF per port without any active VFs.
o Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
o Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
   Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
o CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

o IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
o On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
o Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
o Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

o On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
o Unexpected queue pairs transitioned to error in lossy tests.
o Limited the maximum amount of dumps created on a PF.
o Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
o Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
o Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
o Large number of packets dropped when running Jumbo frames with TTL rewrite.
o Limited the number of the elements in the Quality of Service (QoS) tree 2K.
   Note: Creating more than 250 Vport_tc for every TC is not allowed.
o Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
o The nack counters constantly reported as "0".
o In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)
825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

Firmware for the following devices are updated to 16.26.1040:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)
872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

o Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
o User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
   The following functionalities are still managed by the Kernel:
      ■ Resource cleaning
      ■ UCTX stamping
      ■ Blocking the physical address and IRQ from these UCTX
o Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
o Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
o This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

o Added support for the following features:
      ■ Address Translation Service (ATS) support for MKEY and UMEM.
      ■ Exposing the Vital Product Data (VPD) on Virtual Function (VF).
      ■ Hairpin Drop Counter.
      ■ Hairpin and TM RNDV QPs to work with DevX.
      ■ Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

HPE Part Number	Device Name	PSID

825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX6 devices on Linux x86_64 platform
Version: 1.0.1 **(Recommended)**
Filename: firmware-hca-mellanox-vpi-connectx6-mft-1.0.1-1.1.x86_64.compsig; firmware-hca-mellanox-vpi-connectx6-mft-1.0.1-1.1.x86_64.rpm

Important Note!

Firmware version 20.25.7020 supports only InfiniBand mode of Operation.

Fixes

Initial version

Enhancements

Firmware for the following devices are updated to 20.25.7020:

○ HPE InfiniBand HDR/Ethernet 200Gb 1-port 940QSFP56 x16 Adapter
○ HPE InfiniBand HDR100/Ethernet 100Gb 1-port 940QSFP56 x16 Adapter
○ HPE InfiniBand HDR100/Ethernet 100Gb 2-port 940QSFP56 x16 Adapter

Supported Devices and Features

HPE Part Number	Device Name	PSID
P06154-B21	HPE InfiniBand HDR/Ethernet 200Gb 1-port 940QSFP56 x16 Adapter	HPE0000000034
P06250-B21	HPE InfiniBand HDR100/Ethernet 100Gb 1-port 940QSFP56 x16 Adapter	HPE0000000035
P06251-B21	HPE InfiniBand HDR100/Ethernet 100Gb 2-port 940QSFP56 x16 Adapter	HPE0000000036

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Linux x86_64 platform
Version: 1.0.9 **(Recommended)**
Filename: CP040819.scexe; firmware-hca-mellanox-vpi-eth-ib-1.0.9-1.1.x86_64.compsig; firmware-hca-mellanox-vpi-eth-ib-1.0.9-1.1.x86_64.rpm

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5052:

○ When using the 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 LES will not be active while the ETH link is in an idle mode
○ 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 cards 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: Use the GUID value returned by the fabric/driver utilities (not 0xffffff).
○ 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.
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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
○ DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3.
   Workaround: Upgrade to MLNX_OFED-2.1-x.x.x. or later.
○ VPD read-only fields are writable.
   Workaround: Do not write to read- only fields if you wish to preserve them.
○ When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ 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.
○ 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:
      ■ Unplug the cable from the switch
      ■ Restart driver
      ■ Change the protocol via the appropriate tools.
○ RDP over IPv6 is currently not functional.
   Workaround: Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE).

- o Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule".
- o 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.
- o 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.
- o 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.
- o When running ibdump, loopback traffic is mirroring into the kernel driver.
- o Enabling/disabling cq_timestamp using mlxconfig is not supported.
- o 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.
- o In SR-IOV (Single Root I/O Virtualization) setup, using mlxconfig when the PF (Physical Function) is passed through to a VM (Virtual Machine) requires a reboot of the Hypervisor.
- o Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
- o Adapter card MCX349A-XCCN does not respond to ethtool "identify" command (ethtool -p/--identify).
- o MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.

Fixes

Fixes in version 2.42.5000:

- o PortRcvPkts counter was prevented from being cleared after resetting it.
- o 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.
- o 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.
- o 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.
- o 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.
- o Fixed a rare issue that cause the PCIe configuration cycle that arrived during the time of sw_reset to generate 2 completions.
- o 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 2.42.5052:

- o Fixed Uncorrectable Machine Check Exception issue. The internal resources for handling packets were not allowed to be flushed when the driver was brought down and occasionally caused Red Screen of Death (RSOD). The fix was applied to the ROM code only and has only external timing influences upon the driver's teardown.

Enhancements

Firmware for the following devices are updated to 2.42.5000:
764282-B21
764286-B21

Firmware for the following devices are updated to 2.42.5052:
764283-B21
764284-B21
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

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
764282-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017

764285-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023

Online Firmware Upgrade Utility (Linux x86_64) for Mellanox Open Ethernet cards
Version: 1.0.0 **(Recommended)**
Filename: firmware-nic-open-mellanox-eth-mft-1.0.0-1.1.x86_64.compsig; firmware-nic-open-mellanox-eth-mft-1.0.0-1.1.x86_64.rpm

Important Note!

Known Issues in firmware 14.26.1040 and 14.26.2000:

○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040 and 16.26.2000 :

○ Creating an NVMoF offloaded target while running the LFWP flow may cause the device to become unstable.
○ sw_reset action fails in case it is initiated during live-patch flow.
○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ The sw_reset option is not supported when ATS is enabled
○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
○ DC LAG can function only in case there is a single PF per port without any active VFs.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maaximum supported size (maximum PF_BAR2_SIZE is 4).
○ CWDM4 AOM cable is currently not supported

Fixes

Fixes in version 14.26.2000 :

○ Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.

Fixes in version 14.26.1040 :

○ Fixed an issue that caused a function to misbehave when a PCIe Traffic Light Protocol(TLP) was set with a poisoned indication.
○ Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.

Fixes in version 16.26.2000 :

○ Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
○ Fixed an issue that slowed the firmware flows when executing many destroy XRQ commands on an XRQ that supported DC transport service.
○ Fixed an issue that caused performance degradation when working in dual-port devices under bidirectional traffic stress.

Fixes in version 16.26.1040 :

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Fixed an issue that resulted in unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a Physical Function(PF).
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Fixed a stability issue in RoCE retransmissions under stress affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe TLP was set with a poisoned indication.
○ Fixed an issue that caused large number of packet to drop when running Jumbo frames with Time to live (TTL) rewrite
○ Limited the number of the elements in the QoS tree 2K. Creating more than 250 Vport_tc for every TC was not allowed
○ Fixed the query QP flow. Instead of always taking port 1, FW will now reply the proper port, 1 or 2, for the dual port RDMA over Converged Ethernet(RoCE) net device.
○ Fixed an issue that caused the nack counters to constantly be reported as "0".
○ In a rare scenario when the driver was executing the "2err" command and th Queue pair(QP) was in SQ drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error CQEs on all the WQEs.

Enhancements

Firmware for the following devices is updated to 14.26.1040 :

P21930-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter)

Firmware for the following devices is updated to 14.26.2000 :

P11341-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter)

Firmware for the following devices is updated to 16.26.1040:

P13188-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter)

P21927-B21 (HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter)

Firmware for the following devices is updated to 16.26.2000:

P10112-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- ○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- ○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- ○ Added Address Translation Service (ATS) support for MKEY and UMEM VPD Added support for exposing the VPD on the VF.
- ○ Added support for the following
    - ■ Reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
    - ■ Hairpin Drop Counter.
    - ■ Hairpin and TM RNDV QPs to work with DevX.
    - ■ creating software managed steering tables in eSwitch/FD

New features and changes in version 14.26.2000 and 16.26.2000 :

- ○ Live Firmware Patch (LFWP) allows applying of critical hot fixes without interrupting data traffic and without any user application interruptions

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238
P13188-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter	MT_0000000416
P10112-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter	MT_0000000241
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417

Online Firmware Upgrade Utility (Windows x64) for HPE Ethernet 10Gb 2-port 548SFP+ Adapter
Version: 1.0.0.1 **(Recommended)**
Filename: cp040055.compsig; cp040055.exe

Important Note!

Known Issues in firmware 14.26.XXXX :

- ○ Hardware arbitration is currently disabled in Open Compute Project (OCP)3.0 cards. It will be supported on future releases for the same hardware.
- ○ Secure state is not updated after firmware burning due to the following behavior.
- ○ By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning. **Workaround:** Set the reset level to 3 explicitly in mlxfwreset.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple Traffic Class (TC)s will not be active when this mode is available.

Fixes

Fixes in version 14.26.XXXX :

- ○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- ○ Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.
- ○ The total firmware reset time is increased by 1 second.

Enhancements

Firmware for the following device is updated to 14.26.1040 :

P11338-B21 (HPE Ethernet 10Gb 2-port 548SFP+ Adapter)

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P11338-B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HPE0000000038

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters
Version: 1.0.0.11 **(Recommended)**
Filename: cp040050.compsig; cp040050.exe

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.

The latest version of Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only Mezzanine adapters 1.0.0.0 supported on HPE Synergy Servers is available on HPE support center, https://support.hpe.com/hpsc/swd/public/detail?swItemId=MTX_8aecad7df99142abb36958c607

Known Issues for FW version 2.42.5044 :

- ○ When using the QSFP module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
- ○ 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 LES will not be active while the ETH link is in an idle mode.

○ In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
○ Downgrade to previous GA requires server reboot.Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. 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 lattervalue should be used.
○ 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
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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.
○ Cable Info MAD reports a wrong cable info when usingthe 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.
○ Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
○ RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
○ RM#VPD read-only fields are writable.
○ Increasing SymbolErrorCounter When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
○ RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.
○ Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
○ RDP over IPv6 is currently not functional.
○ 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 mlx-4_en_get_drvinfo() that is called from asynchronous event handler.
○ 832298:When running ibdump, loopback traffic is mirroring into the kernel driver.
○ AHS reports wrong MTU size
○ RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer

Known Issues for FW version 14.26.1040 :

○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ Secure state is not updated after firmware burning due to the following behavior.
○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues for FW version 16.26.1040 :

○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
○ The sw_reset option is not supported when ATS is enabled.
○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
○ DC LAG can function only in case there is a single PF per port without any active VFs.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size.

Fixes

Fixes submitted in 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.

Fixes submitted in version 14.26.1040:

○ A function was misbehaving when a PCIe TLP was set with a poisoned indication.
○ The "destroy mkey " command was getting stuck when rebooting the hypervisor.
○ The total firmware reset time is increased by 1 second.

Fixes submitted in version 16.26.1040:

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a PF.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.
   Note: Creating more than 250 Vport_tc for every TC is not allowed.
○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
○ The nack counters constantly reported as "0".
○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

779799-B21 (HP Ethernet 10G 2-port 546FLR-SFP+ Adapter)

779793-B21 (HP Ethernet 10G 2-port 546SFP+ Adapter)

Firmware for the following devices are updated to 14.26.1040:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.26.1040 :
817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

Firmware for the following device is updated to 16.26.1040 :

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif.
- The ICMD Query Caps indicate support and expose the list of the supported counters.
- Enabled a new feature User Context Object (DEVX) which is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
- Support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- Reliability improvements and security hardening enhancements were done.

New features and changes in version 16.26.1040 :

- Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the VPD on the VF.
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - Creating software managed steering tables in eSwitch/FDB.

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
779793-B21	HP Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HP 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	HPE0000000014

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox IB only ConnectX4 and ConnectX5 devices on Windows x86_64 platform
Version: 1.0.0.4 **(Recommended)**
Filename: cp039799.compsig; cp039799.exe

Important Note!

Known Issues in firmware 12.26.1040:

- Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
- Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

- Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
  Workaround: Use SX_RDMA with Dual Port GVMI instead.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw_reset option is not supported when ATS is enabled.
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.
  The features that may be affected by this and not work properly are:
  - Host chaining
  - Mirroring in FDB
  - TTL modify in FDB
  - VGT+
- DC LAG can function only in case there is a single PF per port without any active VFs.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
  Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
- CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

- IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Unexpected queue pairs transitioned to error in lossy tests.
- Limited the maximum amount of dumps created on a PF.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- Large number of packets dropped when running Jumbo frames with TTL rewrite.
- Limited the number of the elements in the Quality of Service (QoS) tree 2K.
  Note: Creating more than 250 Vport_tc for every TC is not allowed.
- Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- The nack counters constantly reported as "0".
- In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

843400-B21 (HPE Apollo A10 InfiniBand EDR (100Gb) 2-port Adapter)

Firmware for the following devices are updated to 16.26.1040:

872723-B21 (HPE Apollo InfiniBand EDR 100Gb 2-port 841z Mezzanine Adapter)
872725-B21 (HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
  The following functionalities are still managed by the Kernel:
  - Resource cleaning
  - UCTX stamping
  - Blocking the physical address and IRQ from these UCTX
- Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

- Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the Vital Product Data (VPD) on Virtual Function (VF).
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

Supported Devices:

HPE Part Number	Device Name	PSID
843400-B21	HPE Apollo A10 InfiniBand EDR (100Gb) 2-port Adapter	HPE2920111032
872723-B21	HPE Apollo InfiniBand EDR 100Gb 2-port 841z Mezzanine Adapter	HPE0000000017
872725-B21	HPE InfiniBand EDR 100Gb 1-port 841QSFP28 Adapter	HPE0000000008

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Windows x86_64 platform
Version: 1.0.0.6 **(Recommended)**
Filename: cp039803.compsig; cp039803.exe

Important Note!

Known Issues in firmware 12.26.1040:

- Secure state is not updated after firmware burning due to the following behavior.
  By default, mlxfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
  Workaround: Set the reset level to 3 explicitly in mlxfwreset.
- Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040:

- Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
  Workaround: Use SX_RDMA with Dual Port GVMI instead.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw_reset option is not supported when ATS is enabled.
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN.

The features that may be affected by this and not work properly are:
- Host chaining
- Mirroring in FDB
- TTL modify in FDB
- VGT+

○ DC LAG can function only in case there is a single PF per port without any active VFs.
○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maximum supported size (maximum PF_BAR2_SIZE is 4 for .
   Workaround: Configure within limits (NIC PF_BAR_SIZE <= 4).
○ CWDM4 AOM cable is currently not supported.

Fixes

Fixes submitted in version 12.26.1040:

○ IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

Fixes submitted in version 16.26.1040:

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a PF.
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
○ Large number of packets dropped when running Jumbo frames with TTL rewrite.
○ Limited the number of the elements in the Quality of Service (QoS) tree 2K.
   Note: Creating more than 250 Vport_tc for every TC is not allowed.
○ Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
○ The nack counters constantly reported as "0".
○ In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

Enhancements

Firmware for the following devices are updated to 12.26.1040:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)
825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

Firmware for the following devices are updated to 16.26.1040:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)
872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

Changes and New features in firmware version 12.26.1040 and 16.26.1040:

○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
○ User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
   The following functionalities are still managed by the Kernel:
   - Resource cleaning
   - UCTX stamping
   - Blocking the physical address and IRQ from these UCTX
○ Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
○ This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

Changes and New features in firmware version 16.26.1040:

○ Added support for the following features:
   - Address Translation Service (ATS) support for MKEY and UMEM.
   - Exposing the Vital Product Data (VPD) on Virtual Function (VF).
   - Hairpin Drop Counter.
   - Hairpin and TM RNDV QPs to work with DevX.
   - Creating software managed steering tables in eSwitch/Forwarding Table (FDB).

Supported Devices and Features

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Windows x86_64 platform
Version: 1.0.0.9 **(Recommended)**
Filename: cp040820.compsig; cp040820.exe

Important Note!

Known Issues in firmware 2.42.5000, 2.42.5052:

○ When using the 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 LES will not be active while the ETH link is in an idle mode
○ 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 cards 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: Use the GUID value returned by the fabric/driver utilities (not 0xffffff).
○ 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.
○ RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
○ 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.
○ MFT tools 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
○ DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3.
   Workaround: Upgrade to MLNX_OFED-2.1-x.x.x. or later.
○ VPD read-only fields are writable.
   Workaround: Do not write to read- only fields if you wish to preserve them.
○ When working in 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.
○ CQ and EQ cannot be configured to different stride sizes.
○ 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.
○ 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:
      ■ Unplug the cable from the switch
      ■ Restart driver
      ■ Change the protocol via the appropriate tools.
○ 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.
○ 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 (Single Root I/O Virtualization) setup, using mlxconfig when the PF (Physical Function) is passed through to a VM (Virtual Machine) requires a reboot of the Hypervisor.
○ 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).
○ MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.

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.
○ ibdump could not capture all MADs packets.
○ 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 2.42.5052:

○ Fixed Uncorrectable Machine Check Exception issue. The internal resources for handling packets were not allowed to be flushed when the driver was brought down and occasionally caused Red Screen of Death (RSOD). The fix was applied to the ROM code only and has only external timing influences upon the driver's teardown.

Enhancements

Firmware for the following devices are updated to 2.42.5000:
764282-B21

764286-B21

Firmware for the following devices are updated to 2.42.5052:
764283-B21
764284-B21
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.
- ○ Improved the debug ability for command timeout cases

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
764282-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023

Online Firmware Upgrade Utility (Windows x64) for Mellanox Open Ethernet cards
Version: 1.0.0.0 **(Recommended)**
Filename: cp041642.compsig; cp041642.exe

Important Note!

Known Issues in firmware 14.26.1040 and 14.26.2000:

- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ Since Packet Pacing enforce max_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

Known Issues in firmware 16.26.1040 and 16.26.2000 :

- ○ Creating an NVMoF offloaded target while running the LFWP flow may cause the device to become unstable.
- ○ sw_reset action fails in case it is initiated during live-patch flow.
- ○ Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- ○ SX_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX_RDMA table.
- ○ Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- ○ The sw_reset option is not supported when ATS is enabled
- ○ When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- ○ DC LAG can function only in case there is a single PF per port without any active VFs.
- ○ Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- ○ Firmware asserts may occur when setting the PF_BAR2_SIZE value higher than the maaximum supported size (maximum PF_BAR2_SIZE is 4).
- ○ CWDM4 AOM cable is currently not supported

Fixes

Fixes in version 14.26.2000 :

○ Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.

Fixes in version 14.26.1040 :

○ Fixed an issue that caused a function to misbehave when a PCIe Traffic Light Protocol(TLP) was set with a poisoned indication.
○ Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.

Fixes in version 16.26.2000 :

○ Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
○ Fixed an issue that slowed the firmware flows when executing many destroy XRQ commands on an XRQ that supported DC transport service.
○ Fixed an issue that caused performance degradation when working in dual-port devices under bidirectional traffic stress.

Fixes in version 16.26.1040 :

○ On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
○ Fixed an issue that resulted in unexpected queue pairs transitioned to error in lossy tests.
○ Limited the maximum amount of dumps created on a Physical Function(PF).
○ Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
○ Fixed a stability issue in RoCE retransmissions under stress affecting Zero-Touch-RoCE.
○ Fixed an issue that caused a function to misbehave when a PCIe TLP was set with a poisoned indication.
○ Fixed an issue that caused large number of packet to drop when running Jumbo frames with Time to live (TTL) rewrite
○ Limited the number of the elements in the QoS tree 2K. Creating more than 250 Vport_tc for every TC was not allowed
○ Fixed the query QP flow. Instead of always taking port 1, FW will now reply the proper port, 1 or 2, for the dual port RDMA over Converged Ethernet(RoCE) net device.
○ Fixed an issue that caused the nack counters to constantly be reported as "0".
○ In a rare scenario when the driver was executing the "2err" command and th Queue pair(QP) was in SQ drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error CQEs on all the WQEs.

Enhancements

Firmware for the following devices is updated to 14.26.1040 :

P21930-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter)

Firmware for the following devices is updated to 14.26.2000 :

P11341-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter)

Firmware for the following devices is updated to 16.26.1040:

P13188-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter)
P21927-B21 (HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter)

Firmware for the following devices is updated to 16.26.2000:

P10112-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter)

New features and changes in version 14.26.1040 and 16.26.1040 :

○ Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
○ Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
○ Added Address Translation Service (ATS) support for MKEY and UMEM VPD Added support for exposing the VPD on the VF.
○ Added support for the following
  ■ Reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
  ■ Hairpin Drop Counter.
  ■ Hairpin and TM RNDV QPs to work with DevX.
  ■ creating software managed steering tables in eSwitch/FD

New features and changes in version 14.26.2000 and 16.26.2000 :

○ Live Firmware Patch (LFWP) allows applying of critical hot fixes without interrupting data traffic and without any user application interruptions

Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238
P13188-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter	MT_0000000416
P10112-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter	MT_0000000241
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417

Firmware - NVDIMM
Firmware Package - 16GB NVDIMM-N DDR4-2666
Version: 1.04 (A) **(Recommended)**
Filename: nvdimm-16gb_1.04.fwpkg

Fixes

Initial relaese.

Enhancements

Initial release.

Firmware package for HPE Persistent Memory featuring Intel Optane DC Persistent Memory on HPE Gen10 Servers
Version: 01.02.00.5375 **(Recommended)**
Filename: dcpmm_01.02.00.5375.fwpkg

Enhancements

Initial release of Firmware for HPE Persistent Memory for Gen10 Servers.

Online Flash Component for Linux - 16GB NVDIMM-N DDR4-2666
Version: 1.04 (A) **(Optional)**
Filename: RPMS/x86_64/firmware-nvdimm-16gb-1.04-1.1.x86_64.compsig; RPMS/x86_64/firmware-nvdimm-16gb-1.04-1.1.x86_64.rpm

Fixes

Initial release.

Enhancements

Initial release.

Online Flash Component for Linux - HPE Persistent Memory featuring Intel Optane DC Persistent Memory on HPE Gen10 Servers
Version: 1.2.0.5375 **(Recommended)**
Filename: RPMS/x86_64/firmware-dcpmm-1.2.0.5375-1.1.x86_64.compsig; RPMS/x86_64/firmware-dcpmm-1.2.0.5375-1.1.x86_64.rpm

Prerequisites

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

Enhancements

Initial release of Firmware for HPE Persistent Memory for Gen10 Servers.

Online Flash Component for Windows x64 - 16GB NVDIMM-N DDR4-2666
Version: 1.04 (A) **(Optional)**
Filename: cp037531.compsig; cp037531.exe

Fixes

Initial relaese.

Enhancements

Initial release.

Online Flash Component for Windows x64 - HPE Persistent Memory featuring Intel Optane DC Persistent Memory on HPE Gen10 Servers
Version: 1.2.0.5375 **(Recommended)**
Filename: cp039525.compsig; cp039525.exe

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Initial release of Firmware for HPE Persistent Memory for Gen10 Servers.

Firmware - PCIe NVMe Storage Disk
Online NVMe SDD Flash Component for VMware ESXi - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives
Version: HPS1 **(Recommended)**
Filename: CP040212.compsig; CP040212.zip

Fixes

o Fix Increase the host PCIe completion time larger than default 50mS

Online NVMe SSD Flash Component for Linux (x64) - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN and VK001920KWDUH Drives
Version: HPK4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b45e49679c-HPK4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b45e49679c-HPK4-3.1.x86_64.rpm

Fixes

o Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Enhancements

○ Added support for RHEL8.

Online NVMe SSD Flash Component for Linux (x64) - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ, MO2000KEFHR, MT0800KEXUU and MT1600KEXUV Drives
Version: HPK4 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-2a5b65f157-HPK4-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-2a5b65f157-HPK4-4.1.x86_64.rpm

Enhancements

○ Added support for SLES15SP1.

Online NVMe SSD Flash Component for Linux (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives
Version: HPK1 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-1656c1b14a-HPK1-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1656c1b14a-HPK1-4.1.x86_64.rpm

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 SLES15SP1

Online NVMe SSD Flash Component for Linux (x64) - VS000480KWDUP, VS000960KWDUQ, MS000400KWDUR, and MS000800KWDUT Drives
Version: HPK4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-95a2e5abcb-HPK4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-95a2e5abcb-HPK4-3.1.x86_64.rpm

Fixes

○ Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Enhancements

○ Added support for RHEL8.

Online NVMe SSD Flash Component for Linux (x64) - ET000750KWJTF, EO000750KWTXC and EO000375KWJUC Drives
Version: HPK2 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-c4355d15c4-HPK2-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-c4355d15c4-HPK2-4.1.x86_64.rpm

Fixes

○ Resolves an issue where the drive may fail to be recognized after a warm reboot.
○ Corrects a potential data integrity issue during unaligned data transfers.
○ Fixes an issue where the drive may become disabled during improper access of error registers.
○ Once HPK2 is downloaded, the drive cannot be changed back to HPK0 firmware.

Enhancements

○ Added support for SLES15SP1.

Online NVMe SSD Flash Component for Linux (x64) - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB and LT2000KEXVC Drives
Version: HPK4 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-d64642c780-HPK4-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d64642c780-HPK4-4.1.x86_64.rpm

Enhancements

○ Added support for SLES15SP1.

Online NVMe SSD Flash Component for Linux (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives
Version: HPS1 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8e8ddc5265-HPS1-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8e8ddc5265-HPS1-3.1.x86_64.rpm

Enhancements

○ Added support for SLES15SP1.

Online NVMe SSD Flash Component for Linux (x64) - VO0400KEFJB, VO1200KEFJC and VO2000KEFJD Drives
Version: HPK4 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-9a826ccd8a-HPK4-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9a826ccd8a-HPK4-4.1.x86_64.rpm

Enhancements

○ Added support for SLES12SP1

Online NVMe SSD Flash Component for VMware ESXi - ET000750KWJTF, EO000750KWTXC and EO000375KWJUC Drives
Version: HPK2 **(Critical)**
Filename: CP040193.compsig; CP040193.zip

Fixes

- ○ Resolves an issue where the drive may fail to be recognized after a warm reboot.
- ○ Corrects a potential data integrity issue during unaligned data transfers.
- ○ Fixes an issue where the drive may become disabled during improper access of error registers.
- ○ Once HPK2 is downloaded, the drive cannot be changed back to HPK0 firmware.

Online NVMe SSD Flash Component for VMware ESXi - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN, and VK001920KWDUH Drives
Version: HPK4 **(Recommended)**
Filename: CP040919.compsig; CP040919.zip

Fixes

- ○ Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Online NVMe SSD Flash Component for VMware ESXi - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ, MO2000KEFHR, MT0800KEXUU, and MT1600KEXUV Drives
Version: HPK4 **(Recommended)**
Filename: CP040195.compsig; CP040195.zip

Fixes

- ○ Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- ○ Resolves an issue with a possible bus hang during a system reboot.
- ○ Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes.

Online NVMe SSD Flash Component for VMware ESXi - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives
Version: HPK1 **(Critical)**
Filename: CP040192.compsig; CP040192.zip

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.

Online NVMe SSD Flash Component for VMware ESXi - VS000480KWDUP, VS000960KWDUQ, MS000400KWDUR, and MS000800KWDUT Drives
Version: HPK4 **(Recommended)**
Filename: CP040921.compsig; CP040921.zip

Fixes

- ○ Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Online NVMe SSD Flash Component for VMware ESXi - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB, and LT2000KEXVC Drives
Version: HPK4 **(Recommended)**
Filename: CP036934.compsig; CP036934.zip

Fixes

- ○ Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- ○ Resolves an issue with a possible bus hang during a system reboot.
- ○ Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes.

Online NVMe SSD Flash Component for VMware ESXi - VO0400KEFJB, VO1200KEFJC, and VO2000KEFJD Drives
Version: HPK4 **(Recommended)**
Filename: CP040194.compsig; CP040194.zip

Fixes

- ○ Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- ○ Resolves an issue with a possible bus hang during a system reboot.
- ○ Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes

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Online NVMe SSD Flash Component for Windows (x64) - ET000750KWJTF, EO000750KWTXC and EO000375KWJUC Drives
Version: HPK2 **(Critical)**
Filename: cp039036.compsig; cp039036.exe; cp039036.md5

Fixes

- ○ Resolves an issue where the drive may fail to be recognized after a warm reboot.
- ○ Corrects a potential data integrity issue during unaligned data transfers.
- ○ Fixes an issue where the drive may become disabled during improper access of error registers.
- ○ Once HPK2 is downloaded, the drive cannot be changed back to HPK0 firmware.

Online NVMe SSD Flash Component for Windows (x64) - MK000400KWDUK, VK000480KWDUE, MK000800KWDUL, VK000960KWDUF, MK001600KWDUN, and VK001920KWDUH Drives
Version: HPK4 **(Recommended)**
Filename: cp038857.compsig; cp038857.exe; cp038857.md5

Fixes

- ○ Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Online NVMe SSD Flash Component for Windows (x64) - MO0400KEFHN, MO0800KEFHP, MO1600KEFHQ, MO2000KEFHR, MT0800KEXUU, and MT1600KEXUV Drives
Version: HPK4 **(Recommended)**
Filename: cp038873.compsig; cp038873.exe; cp038873.md5

Fixes

- Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- Resolves an issue with a possible bus hang during a system reboot.
- Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes.

Online NVMe SSD Flash Component for Windows (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives
Version: HPS1 **(Recommended)**
Filename: cp039546.compsig; cp039546.exe; cp039546.md5

Fixes

- Fix Increase the host PCIe completion time larger than default 50mS.

Online NVMe SSD Flash Component for Windows (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives
Version: HPK1 **(Recommended)**
Filename: cp038859.compsig; cp038859.exe; cp038859.md5

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.

Online NVMe SSD Flash Component for Windows (x64) - VS000480KWDUP, VS000960KWDUQ, MS000400KWDUR, and MS000800KWDUT Drives
Version: HPK4 **(Recommended)**
Filename: cp040923.compsig; cp040923.exe; cp040923.md5

Fixes

- Fixed timing issue to pass VMWare VSAN certification. Downgrading to any previous version of firmware is not allowed.

Online NVMe SSD Flash Component for Windows (x64) - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB, and LT2000KEXVC Drives
Version: HPK4 **(Recommended)**
Filename: cp040243.compsig; cp040243.exe; cp040243.md5

Fixes

- Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- Resolves an issue with a possible bus hang during a system reboot.
- Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes.

Online NVMe SSD Flash Component for Windows (x64) - VO0400KEFJB, VO1200KEFJC, and VO2000KEFJD Drives
Version: HPK4 **(Recommended)**
Filename: cp040244.compsig; cp040244.exe; cp040244.md5

Fixes

- Fixes a potential latency issue caused by an incorrect pre-fetch algorithm.
- Resolves an issue with a possible bus hang during a system reboot.
- Once HPK4 is downloaded, the drive firmware cannot be changed back to an earlier firmware version (eg, HPK3 or HPK2) due to security changes.

Firmware - Power Management
Online ROM Flash for Linux - Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers
Version: 1.0.7 **(Optional)**
Filename: RPMS/x86_64/firmware-powerpic-gen10-1.0.7-1.1.x86_64.compsig; RPMS/x86_64/firmware-powerpic-gen10-1.0.7-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers

Release Version:

1.0.7

Last Recommended or Critical Revision:

1.0.4

Previous Revision:

1.0.4

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Problems Fixed:

None

Known Issues:

None

Prerequisites

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

Integrated Lights-Out 5 (iLO 5) Firmware version 1.15 and System ROM version 1.20 or later

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Known Issues:

None

Online ROM Flash for Windows x64 - Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers
Version: 1.0.7 **(Optional)**
Filename: cp040538.compsig; cp040538.exe

Important Note!

Important Notes:

None

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers

Release Version:

1.0.7

Last Recommended or Critical Revision:

1.0.4

Previous Revision:

1.0.4

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Problems Fixed:

None

Known Issues:

None

<u>**Prerequisites**</u>

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Integrated Lights-Out 5 (iLO 5) Firmware version 1.15 and System ROM version 1.20 or later.

<u>**Enhancements**</u>

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Known Issues:

None

ROM Flash Firmware Package - Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers
Version: 1.0.7 **(Optional)**
Filename: PICGen10_1.0.7s.fwpkg

<u>**Important Note!**</u>

Important Notes:

None

Deliverable Name:

Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers

Release Version:

1.0.7

Last Recommended or Critical Revision:

1.0.4

Previous Revision:

1.0.4

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Problems Fixed:

None

Known Issues:

None

<u>**Enhancements**</u>

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for AMD EPYC 7002 Generation Processors. ROM version 2.00 or later is required to enable the support. This version of firmware does not include any changes for platforms with Intel Processors or AMD EPYC 7001 Generation Processors.

Known Issues:

None

Firmware - SAS Storage Disk
REMOVED Online HDD/SDD Flash Component for Linux (x64) - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives
Version: HPD3 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-1e51a57347-HPD3-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1e51a57347-HPD3-2.1.x86_64.rpm

Important Note!

    o 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 Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
    o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

REMOVED - Version HPD3 is NO LONGER AVAILABLE for download. Replacement version HPD8 is available from the Revision History tab on this web page. Version HPD8 will be available soon in Service Pack for ProLiant. 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. This component provides and installs updated version of firmware for the following drive models: VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV.

Replacement version HPD8 resolves the following issues:

    o 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.
    o In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.

REMOVED Online HDD/SDD Flash Component for VMware ESXi - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP041504.compsig; CP041504.zip

Important Note!

    o 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.
    o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
    o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

REMOVED - Version HPD3 is NO LONGER AVAILABLE for download. Replacement version HPD8 is available from the Revision History tab on this web page. Version HPD8 will be available soon in Service Pack for ProLiant. 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. This component provides and installs updated version of firmware for the following drive models: VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV.

Replacement version HPD8 resolves the following issues:

    o 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.
    o In addition, SSDs which were put into service at the same time will likely fail nearly simultaneously.

REMOVED Online HDD/SDD Flash Component for Windows (x64) - VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp041505.compsig; cp041505.exe; cp041505.md5

Important Note!

    o 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 Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
    o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

REMOVED - Version HPD3 is NO LONGER AVAILABLE for download. Replacement version HPD8 is available from the Revision History tab on this web page. Version HPD8 will be available soon in Service Pack for ProLiant. 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. This component provides and installs updated version of firmware for the following drive models: VK000960JWSSQ, VK001920JWSSR, VK003840JWSST, VK007680JWSSU and VO015300JWSSV.

Replacement version HPD8 resolves the following issues:

- ○ 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.

Online HDD/SDD Flash Component for Linux (x64) - EG000300JWBHR Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-2e4c61fc63-HPD4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-2e4c61fc63-HPD4-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG000300JWFVB Drives
Version: HPD2 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-c5cd837c29-HPD2-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-c5cd837c29-HPD2-4.1.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

- ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-aa9e289524-HPD4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-aa9e289524-HPD4-3.1.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

Online HDD/SDD Flash Component for Linux (x64) - EG000600JWFUV and EG001200JWFVA Drives
Version: HPD3 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-f0c91d2fe3-HPD3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-f0c91d2fe3-HPD3-4.1.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

- ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG000600JWJNP and EG001200JWJNQ Drives
Version: HPD2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-bdfb8e99d9-HPD2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-bdfb8e99d9-HPD2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD7 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-7505dfb5ae-HPD7-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7505dfb5ae-HPD7-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives
Version: HPD2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-5dcf26fa42-HPD2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-5dcf26fa42-HPD2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB002000JWFVN and MB004000JWFVP Drives
Version: HPD2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-d7af557f47-HPD2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d7af557f47-HPD2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB004000JWFVK and MB006000JWFVL Drives
Version: HPD2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-f6d00bd17e-HPD2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-f6d00bd17e-HPD2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000JVYZD and MB4000JVYZC Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-e800e8d3b9-HPD4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-e800e8d3b9-HPD4-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD8 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b04257b77b-HPD8-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b04257b77b-HPD8-4.1.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.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, EO000400JWUGC, EO000800JWUGD and EO001600JWUGE Drives
Version: HPD1 (C) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ef93133161-HPD1-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ef93133161-HPD1-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VO000960JWTBK, VO001920JWTBL, VO003840JWTBN, VO007680JWTBP, MO000400JWTBQ, MO000800JWTBR, MO001600JWTBT, MO003200JWTBU, MO006400JWTCD, EO000400JWTBV, EO000800JWTCA, EO001600JWTCB Drives
Version: HPD7 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-9ad359dac1-HPD7-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9ad359dac1-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 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 RHEL8

Online HDD/SDD Flash Component for Linux (x64) - EG000300JWSJP, EG000600JWJNH and EG001200JWJNK Drive
Version: HPD2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-24fe569b72-HPD2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-24fe569b72-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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG001800JWFVC Drives
Version: HPD3 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-693b9a2853-HPD3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-693b9a2853-HPD3-4.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG001800JWJNL and EG002400JWJNN Drive
Version: HPD2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-852266afdf-HPD2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-852266afdf-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

  ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL, and EG0900FCSPN Drives
Version: HPD2 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-7c1a1734f9-HPD2-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7c1a1734f9-HPD2-5.1.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

  ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD5 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-31f91b8622-HPD5-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-31f91b8622-HPD5-6.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD6 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ac3fda26eb-HPD6-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ac3fda26eb-HPD6-6.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG1800JEHMD Drive
Version: HPD6 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8a2c06af48-HPD6-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8a2c06af48-HPD6-6.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG1800JEMDB Drives
Version: HPD5 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0a38b25661-HPD5-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0a38b25661-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 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EG1800JFHMH Drives
Version: HPD7 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-7fc5497116-HPD7-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7fc5497116-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 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives
Version: HPD5 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-3d97759111-HPD5-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3d97759111-HPD5-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH000600JWCPF and EH000900JWCPH Drives
Version: HPD7 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-a05f29cef3-HPD7-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-a05f29cef3-HPD7-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH000900JWHPK and EH000600JWHPH Drives
Version: HPD3 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-c7df7ceedb-HPD3-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-c7df7ceedb-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH000900JWHPP, EH000600JWHPN and EH000300JWHPL Drives
Version: HPD3 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8d68452816-HPD3-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8d68452816-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives
Version: HPD5 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-1cbab97ff0-HPD5-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1cbab97ff0-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 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD6 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b9340d29be-HPD6-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b9340d29be-HPD6-6.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH0300JEDHC, EH0450JEDHD and EH0600JEDHE Drives
Version: HPD4 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8c4a212ff9-HPD4-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8c4a212ff9-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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - EH0600JDYTN Drive
Version: HPD7 (E) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-f3faa195ff-HPD7-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-f3faa195ff-HPD7-5.1.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..

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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB004000JWKGU Drive
Version: HPD1 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-2c27a7a9a4-HPD1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-2c27a7a9a4-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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB006000JWKGN Drive
Version: HPD1 (B) **(Recommended)**

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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB008000JWJRQ and MB006000JWJRP Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-faf39e0ff7-HPD4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-faf39e0ff7-HPD4-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB008000JWRTD Drive
Version: HPD1 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8b26d1ef02-HPD1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8b26d1ef02-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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB010000JWAYK and MB008000JWAYH Drives
Version: HPD5 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-6ec35faf90-HPD5-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6ec35faf90-HPD5-4.1.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

- This code corrects a potential data integrity issue related to unaligned write commands.This issue was only found in supplier ongoing lab testing.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB012000JWDFD Drives
Version: HPD2 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-aaf1014ede-HPD2-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-aaf1014ede-HPD2-4.1.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

- Corrects a potential data integrity issue during unaligned write commands, only found in supplier ongoing lab testing.Includes additional fixes to improve error handling and reliability.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB014000JWRTH, MB012000JWRTF and MB010000JWRTE Drives
Version: HPD2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-10385ef3e6-HPD2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-10385ef3e6-HPD2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB014000JWUDB Drive
Version: HPD2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-cfd7436fcc-HPD2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-cfd7436fcc-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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives
Version: HPD3 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b85516c7d2-HPD3-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b85516c7d2-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD4 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-46fc43ab26-HPD4-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-46fc43ab26-HPD4-5.1.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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB2000JFEML and MB4000JFEMN Drives
Version: HPD6 (E) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-624b75c7e2-HPD6-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-624b75c7e2-HPD6-5.1.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..

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 includes emergency power off improvements.

Enhancements

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB2000JFEPA and MB4000JFEPB Drives
Version: HPD5 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-326de7c0f2-HPD5-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-326de7c0f2-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 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB4000JEFNC and MB6000JEFND Drives
Version: HPD9 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-af802bb412-HPD9-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-af802bb412-HPD9-5.1.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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB4000JEQNL and MB6000JEQNN Drives
Version: HPDB (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-2cfaac41db-HPDB-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-2cfaac41db-HPDB-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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB4000JEXYA and MB6000JEXYB Drives
Version: HPD9 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0f923833e9-HPD9-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0f923833e9-HPD9-3.1.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 SLES15.

Online HDD/SDD Flash Component for Linux (x64) - MB6000JEQUV and MB8000JEQVA Drives
Version: HPDB (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-df22f7effd-HPDB-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-df22f7effd-HPDB-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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000JVYYV Drives
Version: HPD2 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0595c2a887-HPD2-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0595c2a887-HPD2-5.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB8000JFECQ Drives
Version: HPD7 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-252770cdda-HPD7-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-252770cdda-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 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MM1000JFJTH Drives
Version: HPD3 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-fa46c607d6-HPD3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-fa46c607d6-HPD3-4.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives
Version: HPD5 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b8a60fbe9a-HPD5-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b8a60fbe9a-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.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD3 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-71af849f3b-HPD3-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-71af849f3b-HPD3-5.1.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.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD8 **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-edf6dcd906-HPD8-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-edf6dcd906-HPD8-1.1.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

- 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

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Online HDD/SDD Flash Component for Linux (x64) - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD8 **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-8ed8893abd-HPD8-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-8ed8893abd-HPD8-1.1.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.

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

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Online HDD/SDD Flash Component for Linux (x64) - VO1920JEUQQ Drives
Version: HPD3 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-5d9e841607-HPD3-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-5d9e841607-HPD3-5.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for VMware ESXi - EG000300JWBHR Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP040530.compsig; CP040530.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG000300JWFVB Drives
Version: HPD2 (D) **(Recommended)**
Filename: CP040631.compsig; CP040631.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP040661.compsig; CP040661.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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG000600JWFUV and EG001200JWFVA Drives
Version: HPD3 (D) **(Optional)**
Filename: CP040635.compsig; CP040635.zip

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG000600JWJNP and EG001200JWJNQ Drives
Version: HPD2 (B) **(Recommended)**
Filename: CP040653.compsig; CP040653.zip

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP040666.compsig; CP040666.zip

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD7 (B) **(Recommended)**
Filename: CP040504.compsig; CP040504.zip

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH000900JWHPK and EH000600JWHPH Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP040684.compsig; CP040684.zip

Important Note!

o 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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH000900JWHPP, EH000600JWHPN and EH000300JWHPL Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP040681.compsig; CP040681.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH0600JDYTN Drive
Version: HPD7 (D) **(Critical)**
Filename: CP040688.compsig; CP040688.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..

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 VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives
Version: HPD2 (B) **(Recommended)**
Filename: CP040645.compsig; CP040645.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB002000JWFVN and MB004000JWFVP Drives
Version: HPD2 (B) **(Recommended)**
Filename: CP040683.compsig; CP040683.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB004000JWFVK and MB006000JWFVL Drives

Filename: CP040686.compsig; CP040686.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB012000JWDFD Drives
Version: HPD2 (C) **(Critical)**
Filename: CP040682.compsig; CP040682.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..

Fixes

- Corrects a potential data integrity issue during unaligned write commands, found in supplier ongoing lab testing. Includes additional fixes to improve error handling and reliability.

Enhancements

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB2000JFEML and MB4000JFEMN Drives
Version: HPD6 (E) **(Critical)**
Filename: CP040640.compsig; CP040640.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..

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 includes emergency power off improvements.

Enhancements

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB4000JEQNL and MB6000JEQNN Drives
Version: HPDB (E) **(Recommended)**
Filename: CP039424.compsig; CP039424.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB6000JEQUV and MB8000JEQVA Drives
Version: HPDB (E) **(Recommended)**
Filename: CP040519.compsig; CP040519.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB6000JVYZD and MB4000JVYZC Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP040636.compsig; CP040636.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD8 (D) **(Optional)**
Filename: CP038874.compsig; CP038874.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MM1000JFJTH Drives
Version: HPD3 (D) **(Optional)**
Filename: CP040517.compsig; CP040517.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, EO000400JWUGC, EO000800JWUGD and EO001600JWUGE Drives
Version: HPD1 (B) **(Optional)**
Filename: CP040692.compsig; CP040692.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - VO000960JWTBK, VO001920JWTBL, VO003840JWTBN, VO007680JWTBP, MO000400JWTBQ, MO000800JWTBR, MO001600JWTBT, MO003200JWTBU, MO006400JWTCD, EO000400JWTBV, EO000800JWTCA, EO001600JWTCB Drives
Version: HPD7 (B) **(Recommended)**
Filename: CP040758.compsig; CP040758.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..

Fixes

- Improved perfromance during a raid 5 drive rebuild.

Enhancements

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG000300JWSJP, EG000600JWJNH and EG001200JWJNK Drive
Version: HPD2 (B) **(Recommended)**
Filename: CP041563.compsig; CP041563.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - EG001800JWFVC Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP040556.compsig; CP040556.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG001800JWJNL and EG002400JWJNN Drive
Version: HPD2 (B) **(Recommended)**
Filename: CP041560.compsig; CP041560.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL, and EG0900FCSPN Drives
Version: HPD2 (E) **(Recommended)**
Filename: CP040531.compsig; CP040531.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD5 (F) **(Recommended)**
Filename: CP040614.compsig; CP040614.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD6 (E) **(Recommended)**
Filename: CP039426.compsig; CP039426.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG1800JEHMD Drive
Version: HPD6 (F) **(Recommended)**
Filename: CP040624.compsig; CP040624.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG1800JEMDB Drives
Version: HPD5 (E) **(Recommended)**
Filename: CP040573.compsig; CP040573.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EG1800JFHMH Drives
Version: HPD7 (D) **(Recommended)**
Filename: CP040626.compsig; CP040626.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives
Version: HPD5 (B) **(Recommended)**
Filename: CP040541.compsig; CP040541.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH000600JWCPF and EH000900JWCPH Drives
Version: HPD7 (B) **(Recommended)**
Filename: CP040536.compsig; CP040536.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives
Version: HPD5 (E) **(Recommended)**
Filename: CP039429.compsig; CP039429.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD6 (F) **(Recommended)**
Filename: CP040625.compsig; CP040625.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives
Version: HPD4 (F) **(Recommended)**
Filename: CP039423.compsig; CP039423.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB004000JWKGU Drive
Version: HPD1 (B) **(Recommended)**
Filename: CP041492.compsig; CP041492.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB006000JWKGN Drive
Version: HPD1 (B) **(Recommended)**
Filename: CP041489.compsig; CP041489.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB008000JWJRQ and MB006000JWJRP Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP040693.compsig; CP040693.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB008000JWRTD Drive
Version: HPD1 (B) **(Recommended)**
Filename: CP041478.compsig; CP041478.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB010000JWAYK and MB008000JWAYH Drives
Version: HPD5 (C) **(Critical)**
Filename: CP040637.compsig; CP040637.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..

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

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB014000JWUDB Drive
Version: HPD2 (B) **(Recommended)**
Filename: CP041510.compsig; CP041510.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

- Added support for VMware 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP040660.compsig; CP040660.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD4 (E) **(Recommended)**
Filename: CP040513.compsig; CP040513.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB2000JFEPA and MB4000JFEPB Drives
Version: HPD5 (E) **(Recommended)**
Filename: CP040514.compsig; CP040514.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB4000JEFNC and MB6000JEFND Drives
Version: HPD9 (E) **(Recommended)**
Filename: CP039427.compsig; CP039427.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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB4000JEXYA and MB6000JEXYB Drives
Version: HPD9 (B) **(Recommended)**
Filename: CP040533.compsig; CP040533.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB6000JVYYV Drives
Version: HPD2 (E) **(Recommended)**
Filename: CP040534.compsig; CP040534.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB8000JFECQ Drives
Version: HPD7 (D) **(Recommended)**
Filename: CP040532.compsig; CP040532.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives
Version: HPD5 (B) **(Recommended)**
Filename: CP041422.compsig; CP041422.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD3 (E) **(Recommended)**
Filename: CP039420.compsig; CP039420.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 ESXI 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD8 **(Critical)**
Filename: CP042215.compsig; CP042215.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.

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

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Online HDD/SDD Flash Component for VMware ESXi - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD8 **(Critical)**
Filename: CP042219.compsig; CP042219.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.

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

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Online HDD/SDD Flash Component for VMware ESXi - VO1920JEUQQ Drives
Version: HPD3 (E) **(Recommended)**
Filename: CP040555.compsig; CP040555.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi -MB014000JWRTH, MB012000JWRTF and MB010000JWRTE Drives
Version: HPD2 (B) **(Recommended)**
Filename: CP041451.compsig; CP041451.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 6.7 U3.

Online HDD/SDD Flash Component for Windows (x64) - EG000300JWBHR Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp040419.compsig; cp040419.exe; cp040419.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 Windows Server 2019.

Version: HPD2 (C) **(Optional)**
Filename: cp040455.compsig; cp040455.exe; cp040455.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG000300JWSJP, EG000600JWJNH and EG001200JWJNK Drive
Version: HPD2 (B) **(Recommended)**
Filename: cp041565.compsig; cp041565.exe; cp041565.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp040475.compsig; cp040475.exe; cp040475.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG000600JWFUV and EG001200JWFVA Drives
Version: HPD3 (C) **(Optional)**
Filename: cp040454.compsig; cp040454.exe; cp040454.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG000600JWJNP and EG001200JWJNQ Drives
Version: HPD2 (B) **(Recommended)**
Filename: cp040453.compsig; cp040453.exe; cp040453.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG001800JWFVC Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp040433.compsig; cp040433.exe; cp040433.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG001800JWJNL and EG002400JWJNN Drive
Version: HPD2 (B) **(Recommended)**
Filename: cp041562.compsig; cp041562.exe; cp041562.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp040474.compsig; cp040474.exe; cp040474.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 Windows server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG0300FCSPH, EG0450FCSPK, EG0600FCSPL, and EG0900FCSPN Drives
Version: HPD2 (D) **(Recommended)**
Filename: cp040420.compsig; cp040420.exe; cp040420.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD5 (E) **(Recommended)**
Filename: cp040434.compsig; cp040434.exe; cp040434.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD6 (D) **(Recommended)**
Filename: cp040396.compsig; cp040396.exe; cp040396.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.
o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD7 (B) **(Recommended)**
Filename: cp040401.compsig; cp040401.exe; cp040401.md5

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG1800JEHMD Drive
Version: HPD6 (E) **(Recommended)**
Filename: cp040442.compsig; cp040442.exe; cp040442.md5

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG1800JEMDB Drives
Version: HPD5 (D) **(Recommended)**
Filename: cp040571.compsig; cp040571.exe; cp040571.md5

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EG1800JFHMH Drives
Version: HPD7 (D) **(Recommended)**
Filename: cp040444.compsig; cp040444.exe; cp040444.md5

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives
Version: HPD5 (B) **(Recommended)**
Filename: cp040427.compsig; cp040427.exe; cp040427.md5

Important Note!

o 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.
o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

○ Added support for Windows server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH000600JWCPF and EH000900JWCPH Drives
Version: HPD7 (B) **(Recommended)**
Filename: cp040425.compsig; cp040425.exe; cp040425.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH000900JWHPK and EH000600JWHPH Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp040466.compsig; cp040466.exe; cp040466.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH000900JWHPP, EH000600JWHPN and EH000300JWHPL Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp040460.compsig; cp040460.exe; cp040460.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives
Version: HPD5 (D) **(Recommended)**
Filename: cp040399.compsig; cp040399.exe; cp040399.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD6 (E) **(Recommended)**
Filename: cp040443.compsig; cp040443.exe; cp040443.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives
Version: HPD4 (F) **(Recommended)**
Filename: cp040389.compsig; cp040389.exe; cp040389.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EH0600JDYTN Drive
Version: HPD7 (C) **(Critical)**
Filename: cp040468.compsig; cp040468.exe; cp040468.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

- 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives
Version: HPD2 (B) **(Recommended)**
Filename: cp040450.compsig; cp040450.exe; cp040450.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB002000JWFVN and MB004000JWFVP Drives
Version: HPD2 (B) **(Recommended)**
Filename: cp040467.compsig; cp040467.exe; cp040467.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB004000JWFVK and MB006000JWFVL Drives
Version: HPD2 (B) **(Recommended)**
Filename: cp040458.compsig; cp040458.exe; cp040458.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB004000JWKGU Drive

Filename: cp041490.compsig; cp041490.exe; cp041490.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB006000JWKGN Drive
Version: HPD1 (B) **(Recommended)**
Filename: cp041487.compsig; cp041487.exe; cp041487.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB008000JWJRQ and MB006000JWJRP Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp040480.compsig; cp040480.exe; cp040480.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB008000JWRTD Drive
Version: HPD1 (B) **(Recommended)**
Filename: cp041480.compsig; cp041480.exe; cp041480.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB010000JWAYK and MB008000JWAYH Drives
Version: HPD5 (C) **(Critical)**
Filename: cp040445.compsig; cp040445.exe; cp040445.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

- ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB012000JWDFD Drives
Version: HPD2 (C) **(Critical)**
Filename: cp040456.compsig; cp040456.exe; cp040456.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 during unaligned write commands, found in supplier ongoing lab testing.Includes additional fixes to improve error handling and reliability.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB014000JWRTH, MB012000JWRTF and MB010000JWRTE Drives
Version: HPD2 (B) **(Recommended)**
Filename: cp041450.compsig; cp041450.exe; cp041450.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB014000JWUDB Drive
Version: HPD2 (B) **(Recommended)**
Filename: cp041519.compsig; cp041519.exe; cp041519.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp040473.compsig; cp040473.exe; cp040473.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD4 (D) **(Recommended)**
Filename: cp040405.compsig; cp040405.exe; cp040405.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB2000JFEML and MB4000JFEMN Drives
Version: HPD6 (D) **(Critical)**
Filename: cp040446.compsig; cp040446.exe; cp040446.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 includes emergency power off improvements.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB2000JFEPA and MB4000JFEPB Drives
Version: HPD5 (D) **(Recommended)**
Filename: cp040408.compsig; cp040408.exe; cp040408.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB4000JEFNC and MB6000JEFND Drives
Version: HPD9 (D) **(Recommended)**
Filename: cp040398.compsig; cp040398.exe; cp040398.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB4000JEQNL and MB6000JEQNN Drives
Version: HPDB (D) **(Recommended)**
Filename: cp040390.compsig; cp040390.exe; cp040390.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB4000JEXYA and MB6000JEXYB Drives
Version: HPD9 (B) **(Recommended)**
Filename: cp040423.compsig; cp040423.exe; cp040423.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000JEQUV and MB8000JEQVA Drives
Version: HPDB (D) **(Recommended)**
Filename: cp040414.compsig; cp040414.exe; cp040414.md5

Enhancements

   ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000JVYYV Drives
Version: HPD2 (D) **(Recommended)**
Filename: cp040424.compsig; cp040424.exe; cp040424.md5

Enhancements

   ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000JVYZD and MB4000JVYZC Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp040449.compsig; cp040449.exe; cp040449.md5

Enhancements

   ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB8000JFECQ Drives
Version: HPD7 (C) **(Recommended)**
Filename: cp040421.compsig; cp040421.exe; cp040421.md5

Enhancements

   ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD8 (C) **(Optional)**
Filename: cp040392.compsig; cp040392.exe; cp040392.md5

Enhancements

   ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MM1000JFJTH Drives
Version: HPD3 (C) **(Optional)**
Filename: cp040411.compsig; cp040411.exe; cp040411.md5

environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MO000400JWFWN, MO000800JWFWP, MO001600JWFWQ, MO003200JWFWR, MO000960JWFWT, MO001920JWFWU and MO003840JWFWV Drives
Version: HPD5 (B) **(Recommended)**
Filename: cp041424.compsig; cp041424.exe; cp041424.md5

Important Note!

- o 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 Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MO000400JWUFT, MO000800JWUFU, MO001600JWUFV, MO003200JWUGA, MO006400JWUGB, EO000400JWUGC, EO000800JWUGD and EO001600JWUGE Drives
Version: HPD1 (B) **(Optional)**
Filename: cp040481.compsig; cp040481.exe; cp040481.md5

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD3 (D) **(Recommended)**
Filename: cp040175.compsig; cp040175.exe; cp040175.md5

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- o 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 Windows 2019.

Online HDD/SDD Flash Component for Windows (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD8 **(Critical)**
Filename: cp042216.compsig; cp042216.exe; cp042216.md5

Important Note!

- o 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 Online drive firmware update available for Smart Array Controllers configured in systems running supported 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 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.
- o 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

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Online HDD/SDD Flash Component for Windows (x64) - VO000960JWTBK, VO001920JWTBL, VO003840JWTBN, VO007680JWTBP, MO000400JWTBQ, MO000800JWTBR, MO001600JWTBT, MO003200JWTBU, MO006400JWTCD, EO000400JWTBV, EO000800JWTCA, EO001600JWTCB Drives
Version: HPD7 (B) **(Recommended)**
Filename: cp040759.compsig; cp040759.exe; cp040759.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

- Improved perfromance during a raid 5 drive rebuild.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD8 **(Critical)**
Filename: cp042221.compsig; cp042221.exe; cp042221.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.

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

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Online HDD/SDD Flash Component for Windows (x64) - VO1920JEUQQ Drives
Version: HPD3 (D) **(Recommended)**
Filename: cp040431.compsig; cp040431.exe; cp040431.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 Windows Server 2019.

Online HDD/SSD Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b1c9eaf74c-HPD4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b1c9eaf74c-HPD4-3.1.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 RHEL8.

Firmware - SATA Storage Disk
Online HDD/SDD Flash Component for ESXi - MB001000GWCBC and MB002000GWCBD Drives
Version: HPG6 (B) **(Recommended)**
Filename: CP040784.compsig; CP040784.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..

Fixes

- This firmware includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

Enhancements

○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB001000GWFWK and MB002000GWFWL Drives
Version: HPG6 (B) **(Recommended)**
Filename: CP040785.compsig; CP040785.zip

<u>Important Note!</u>

○ 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..

<u>Fixes</u>

○ This firmware includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

Online HDD/SDD Flash Component for ESXi - MB001000GWJAN, MB002000GWFWA, MB004000GWFWB Drives
Version: HPG1 (B) **(Recommended)**
Filename: CP040691.compsig; CP040691.zip

<u>Important Note!</u>

○ 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..

<u>Enhancements</u>

○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB014000GWRTN, MB012000GWRTL and MB010000GWRTK Drives
Version: HPG2 (B) **(Recommended)**
Filename: CP041453.compsig; CP041453.zip

<u>Important Note!</u>

○ 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.

<u>Enhancements</u>

○ Added support for VMware 6.7 U3.

Online HDD/SDD Flash Component for ESXi - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 (G) **(Recommended)**
Filename: CP040506.compsig; CP040506.zip

<u>Important Note!</u>

○ 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..

<u>Enhancements</u>

○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG6 (E) **(Recommended)**
Filename: CP039421.compsig; CP039421.zip

<u>Important Note!</u>

○ 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..

<u>Enhancements</u>

○ Added support for ESXi 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB6000GEBTP Drives
Version: HPG4 (E) **(Recommended)**
Filename: CP040543.compsig; CP040543.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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB6000GEXXV Drives
Version: HPG2 (G) **(Recommended)**
Filename: CP040515.compsig; CP040515.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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB6000GVYZB and MB4000GVYZA Drives
Version: HPG4 (B) **(Recommended)**
Filename: CP040687.compsig; CP040687.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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - MB8000GFECR Drives
Version: HPG6 (B) **(Recommended)**
Filename: CP040516.compsig; CP040516.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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - VK000150GWCNN, VK000240GWCNP, VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives
Version: HPG1 (B) **(Recommended)**
Filename: CP040670.compsig; CP040670.zip

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.
○ 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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPQ Drives
Version: HPG5 (B) **(Critical)**
Filename: CP040689.compsig; CP040689.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..

Fixes

- ○ 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.
- ○ 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

- ○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for ESXi - VK000240GWSRQ, VK000480GWSRR, VK000960GWSRT, VK001920GWSRU, VK003840GWSRV Drives
Version: HPG2 (B) **(Recommended)**
Filename: CP041313.compsig; CP041313.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 6.7 U3.

Online HDD/SDD Flash Component for ESXi - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK, MK001920GWTTL and MK003840GWTTN Drives
Version: HPG3 (B) **(Recommended)**
Filename: CP040790.compsig; CP040790.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..

Fixes

- ○ Corrects a potential unresponsiveness during a Secure Erase operation, and fixes an incorrect error reporting issue during certain SATA protocol transfers.

Enhancements

- ○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for ESXi - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL, and VK3840GFDKN Drives
Version: HPG1 (F) **(Recommended)**
Filename: CP040518.compsig; CP040518.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 6.7 U2.

Online HDD/SDD Flash Component for ESXi - VK0240GEPQN, VK0480GEPQP, and VK0960GEPQQ Drives
Version: HPG1 (F) **(Recommended)**
Filename: CP040528.compsig; CP040528.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 6.7 U2.

Online HDD/SDD Flash Component for Linux (x64) - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives
Version: HPG3 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-5bf9355926-HPG3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-5bf9355926-HPG3-4.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives
Version: HPG6 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-68b12e54d2-HPG6-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-68b12e54d2-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB001000GWFWK and MB002000GWFWL Drives
Version: HPG6 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-bfc4af697b-HPG6-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-bfc4af697b-HPG6-2.1.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

- This firmware includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB Drives
Version: HPG1 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-d39e7a7e75-HPG1-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d39e7a7e75-HPG1-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives
Version: HPG3 (E) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0b575b5895-HPG3-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0b575b5895-HPG3-5.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB004000GWKGV Drive
Version: HPG1 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ca21e169e2-HPG1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ca21e169e2-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB006000GWBXQ and MB008000GWBYL Drives
Version: HPG8 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-a1fd19f9ca-HPG8-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-a1fd19f9ca-HPG8-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB006000GWKGR Drive
Version: HPG1 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-7f2a26e6d0-HPG1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7f2a26e6d0-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB008000GWRTC Drive
Version: HPG1 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-82894b9e0a-HPG1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-82894b9e0a-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB010000GWAYN and MB008000GWAYL Drives
Version: HPG5 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-cc819d4bff-HPG5-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-cc819d4bff-HPG5-4.1.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

○ This code corrects a potential data integrity issue related to unaligned write commands.This issue was only found in supplier ongoing lab testing.

Enhancements

○ Added support for RHEL8

Online HDD/SDD Flash Component for Linux (x64) - MB012000GWDFE Drives
Version: HPG2 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-059b8654a6-HPG2-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-059b8654a6-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 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 during unaligned write commands, only found in supplier ongoing lab testing.Includes additional fixes to improve error handling and reliability.

Enhancements

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB014000GWRTN, MB012000GWRTL and MB010000GWRTK Drives
Version: HPG2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-6b7ce3da0e-HPG2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6b7ce3da0e-HPG2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB014000GWUDA Drive
Version: HPG2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-41cdb1c9da-HPG2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-41cdb1c9da-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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-3ab4c70e64-HPG4-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3ab4c70e64-HPG4-7.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives
Version: HPG4 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0a7010918e-HPG4-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0a7010918e-HPG4-7.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-2e70ce7412-HPG4-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-2e70ce7412-HPG4-7.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB2000GFEMH and MB4000GFEMK Drives
Version: HPG6 (F) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-70e3962f98-HPG6-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-70e3962f98-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..

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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG6 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-40277d55d3-HPG6-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-40277d55d3-HPG6-7.1.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.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB4000GEQNH and MB6000GEQNK Drives
Version: HPGB (F) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-bfc95f0628-HPGB-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-bfc95f0628-HPGB-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.

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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000GEBTP Drives
Version: HPG4 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-3243fce9a0-HPG4-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3243fce9a0-HPG4-6.1.x86_64.rpm

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000GEQUT and MB8000GEQUU Drives
Version: HPGB (F) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-1d7f19120b-HPGB-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1d7f19120b-HPGB-6.1.x86_64.rpm

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

- o 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000GEXXV Drives
Version: HPG2 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-a629fcea59-HPG2-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-a629fcea59-HPG2-7.1.x86_64.rpm

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000GVYYU Drives
Version: HPG2 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-bdc37cb37f-HPG2-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-bdc37cb37f-HPG2-6.1.x86_64.rpm

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB6000GVYZB and MB4000GVYZA Drives
Version: HPG4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-0a7d4aa47f-HPG4-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-0a7d4aa47f-HPG4-3.1.x86_64.rpm

Important Note!

- o 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.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- o 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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MB8000GEECR Drives

Version: HPG6 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-6d922fc9a8-HPG6-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6d922fc9a8-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA and MK001920GWCFB Drives
Version: HPG3 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-7677644a25-HPG3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-7677644a25-HPG3-4.1.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

- ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MK003840GWHTE Drives
Version: HPG6 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ac20a1e1c6-HPG6-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ac20a1e1c6-HPG6-2.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MK0960GECQK Drives
Version: HPG3 (H) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-3e34285be7-HPG3-8.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3e34285be7-HPG3-8.1.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

- ○ Firmware fixes intermittent data corruption issue associated with unaligned sequential write operations.

Enhancements

- ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG8 (E) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ec908c3650-HPG8-5.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ec908c3650-HPG8-5.1.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

- ○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MM1000GFJTE Drives
Version: HPG5 (C) **(Optional)**

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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives
Version: HPGE (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-9196d4f720-HPGE-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9196d4f720-HPGE-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000150GWCNN, VK000240GWCNP, VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives
Version: HPG1 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-6e3845def5-HPG1-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-6e3845def5-HPG1-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000240GWCFD, VK000480GWCFE, VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives.
Version: HPG3 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-f42438de3d-HPG3-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-f42438de3d-HPG3-4.1.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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives
Version: HPGE (B) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-3db7640485-HPGE-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-3db7640485-HPGE-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPQ Drives
Version: HPG5 (C) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-aef2a690c9-HPG5-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-aef2a690c9-HPG5-3.1.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..

Fixes

○ 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.
○ 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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000240GWSRQ, VK000480GWSRR, VK000960GWSRT, VK001920GWSRU and VK003840GWSRV Drives
Version: HPG2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-db687966b4-HPG2-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-db687966b4-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

○ Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK, MK001920GWTTL and MK003840GWTTN Drives
Version: HPG3 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-c566d63ca0-HPG3-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-c566d63ca0-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH, MK001920GWUGK Drives
Version: HPG2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-9e87eecb3f-HPG2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-9e87eecb3f-HPG2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC and VK003840GWTHD Drives
Version: HPG1 (B) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-hdd-492a9952f6-HPG1-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-492a9952f6-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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK003840GWSXL Drive
Version: HPG2 (C) **(Recommended)**

Filename: rpm/RPMS/x86_64/firmware-hdd-d1cf327bc4-HPG2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d1cf327bc4-HPG2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK007680GWSXN Drive
Version: HPG2 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b460823f70-HPG2-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b460823f70-HPG2-3.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK0080GEYJN, VK0120GEYJP, VK0240GEYJQ, VK0480GEYJR, VK0800GEYJT, VK1600GEYJU, LK0200GEYMR, LK0480GFJSK, LK0800GEYMU, LK1600GEYMV, MK0200GEYKC, MK0400GEYKD, MK0800GEYKE and MK1200GEYK Drives
Version: HPG5 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-ee2b63de1d-HPG5-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-ee2b63de1d-HPG5-2.1.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 RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL, and VK3840GFDKN Drives
Version: HPG1 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-a2d4b5c742-HPG1-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-a2d4b5c742-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..

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VK0240GEPQN, VK0480GEPQP, and VK0960GEPQQ Drives
Version: HPG1 (F) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-1a516522d1-HPG1-6.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-1a516522d1-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

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - VR000150GWEPP and VR000480GWEPR Drives
Version: HPG1 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/firmware-hdd-b7eb905efe-HPG1-4.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-b7eb905efe-HPG1-4.1.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

- Fixes an issue which caused the drive to become non-functional.
- Fixes VPD Log D0h reported drive Sanitize times.
- Adds support for Security Log Page BBh.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - XP0032GEFEN, XP0032GDZME, XP0064GEFEP, and XP0064GDZMF Drives
Version: HPS8 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-f286f98973-HPS8-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-f286f98973-HPS8-7.1.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..

Prerequisites

Drive models XP0032GEFEN, XP0032GDZME, XP0064GDZMF, and XP0064GEFEP must have firmware version HPS5 installed prior to updating to firmware version HPS8.

Enhancements

- Added support for RHEL8.

Online HDD/SDD Flash Component for Linux (x64) - XP0120GFJSL and XP0240GFJSN Drives
Version: HPS4 (G) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-hdd-d355375539-HPS4-7.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-hdd-d355375539-HPS4-7.1.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 RHEL8.

Online HDD/SDD Flash Component for VMware ESXi - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives
Version: HPG3 (C) **(Recommended)**
Filename: CP040680.compsig; CP040680.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives
Version: HPG3 (D) **(Optional)**
Filename: CP040652.compsig; CP040652.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB004000GWKGV Drive
Version: HPG1 (B) **(Recommended)**
Filename: CP041493.compsig; CP041493.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB006000GWBXQ and MB008000GWBYL Drives
Version: HPG8 (B) **(Recommended)**
Filename: CP040789.compsig; CP040789.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..

Fixes

○ Eliminates a potential hang on 4TB under certain pattern-dependent read conditions.
○ Eliminates the possibility of a weak read signal under a sequenced combination of read/write conditions.
○ Provides reliability enhancements involving head fly height dynamics.
○ Enables download Mode 0Eh activation by Mode 0Fh.

Enhancements

○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB006000GWKGR Drive
Version: HPG1 (B) **(Recommended)**
Filename: CP041520.compsig; CP041520.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB008000GWRTC Drive
Version: HPG1 (B) **(Recommended)**
Filename: CP041481.compsig; CP041481.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB010000GWAYN and MB008000GWAYL Drives
Version: HPG5 (C) **(Critical)**
Filename: CP040638.compsig; CP040638.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.

o   Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

o   This code corrects a potential data integrity issue related to unaligned write commands. This issue was only found in supplier ongoing lab testing.

Enhancements

▪ Added support for HPE Smart Array P824i-p MR Gen10 Controller.
▪ Added support for VMware 6.7 Update1.

Online HDD/SDD Flash Component for VMware ESXi - MB012000GWDFE Drives
Version: HPG2 (C) **(Critical)**
Filename: CP040685.compsig; CP040685.zip

Important Note!

o   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 firmware flashing is supported.
o   Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o   Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Fixes

o   Corrects a potential data integrity issue during unaligned write commands, found in supplier ongoing lab testing.   Includes additional fixes to improve error handling and reliability.

Enhancements

o   Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB014000GWUDA Drive
Version: HPG2 (B) **(Recommended)**
Filename: CP041507.compsig; CP041507.zip

Important Note!

o   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.
o   Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o   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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives
Version: HPG4 (E) **(Recommended)**
Filename: CP040554.compsig; CP040554.zip

Important Note!

o   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.
o   Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o   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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 (G) **(Recommended)**
Filename: CP040507.compsig; CP040507.zip

Important Note!

o   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.
o   Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
o   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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB2000GFEMH and MB4000GFEMK Drives

Filename: CP040642.compsig; CP040642.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..

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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB4000GEQNH and MB6000GEQNK Drives
Version: HPGB (E) **(Critical)**
Filename: CP039425.compsig; CP039425.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..

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 ESXi 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MB6000GEQUT and MB8000GEQUU Drives
Version: HPGB (E) **(Critical)**
Filename: CP040632.compsig; CP040632.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..

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.
- Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA and MK001920GWCFB Drives
Version: HPG3 (C) **(Recommended)**
Filename: CP040679.compsig; CP040679.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 6.7 U2.

Version: HPG6 (B) **(Recommended)**
Filename: CP041321.compsig; CP041321.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - MK0960GECQK Drives
Version: HPG3 (H) **(Critical)**
Filename: CP039422.compsig; CP039422.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..,

Fixes

- ○ Firmware fixes intermittent data corruption issue associated with unaligned sequential write operations.

Enhancements

- ○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG8 (D) **(Recommended)**
Filename: CP040658.compsig; CP040658.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MM1000GFJTE Drives
Version: HPG5 (B) **(Optional)**
Filename: CP040659.compsig; CP040659.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives
Version: HPGE (B) **(Recommended)**
Filename: CP041315.compsig; CP041315.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - VK000240GWCFD, VK000480GWCFE, VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives.
Version: HPG3 (C) **(Recommended)**
Filename: CP040671.compsig; CP040671.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 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives
Version: HPGE (B) **(Optional)**
Filename: CP041318.compsig; CP041318.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH, MK001920GWUGK Drives
Version: HPG2 (B) **(Recommended)**
Filename: CP040788.compsig; CP040788.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

Fixes

○ Fix to issue in bootloader download during power loss.
○ Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
○ Improvements to error exception.
○ Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

Enhancements

○ Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC and VK003840GWTHD Drives
Version: HPG1 (B) **(Optional)**
Filename: CP041496.compsig; CP041496.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 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - VK003840GWSXL Drive
Version: HPG2 (B) **(Recommended)**
Filename: CP040786.compsig; CP040786.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..

<u>Fixes</u>

- Fix to issue in bootloader download during power loss.
- Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
- Improvements to error exception.
- Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

<u>Enhancements</u>

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - VK007680GWSXN Drive
Version: HPG2 (B) **(Recommended)**
Filename: CP040787.compsig; CP040787.zip

<u>Important Note!</u>

- 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..

<u>Fixes</u>

- Fix to issue in bootloader download during power loss.
- Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
- Improvements to error exception.
- Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

<u>Enhancements</u>

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - VK0080GEYJN, VK0120GEYJP, VK0240GEYJQ, VK0480GEYJR, VK0800GEYJT, VK1600GEYJU, LK0200GEYMR, LK0480GFJSK, LK0800GEYMU, LK1600GEYMV, MK0200GEYKC, MK0400GEYKD, MK0800GEYKE and MK1200GEYKF Drives
Version: HPG5 (B) **(Recommended)**
Filename: CP041559.compsig; CP041559.zip

<u>Important Note!</u>

- 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..

<u>Enhancements</u>

- Added support for VMware 6.7 U3.

Online HDD/SDD Flash Component for VMware ESXi - VR000150GWEPP and VR000480GWEPR Drives
Version: HPG1 (C) **(Critical)**
Filename: CP040667.compsig; CP040667.zip

<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.
- 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 timing issue which can cause the drive to become non-functional.
- Fixes VPD Log D0h reported drive Sanitize times.
- Adds support for Security Log Page BBh.

<u>Enhancements</u>

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - XP0032GEFEN, XP0032GDZME, XP0064GEFEP, and XP0064GDZMF Drives
Version: HPS8 (F) **(Recommended)**
Filename: CP040503.compsig; CP040503.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..

Prerequisites

Drive models XP0032GEFEN, XP0032GDZME, XP0064GDZMF, and XP0064GEFEP must have firmware version HPS6 installed prior to updating to firmware version HPS8.

Enhancements

- Added support for VMware 6.7 U2.

Online HDD/SDD Flash Component for VMware ESXi - XP0120GFJSL and XP0240GFJSN Drives
Version: HPS4 (F) **(Recommended)**
Filename: CP040520.compsig; CP040520.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 6.7 U2.

Online HDD/SDD Flash Component for Windows (x64) - VK0080GEYJN, VK0120GEYJP, VK0240GEYJQ, VK0480GEYJR, VK0800GEYJT, VK1600GEYJU, LK0200GEYMR, LK0480GFJSK, LK0800GEYMU, LK1600GEYMV, MK0200GEYKC, MK0400GEYKD, MK0800GEYKE and MK1200GEYKF Drives
Version: HPG5 (B) **(Recommended)**
Filename: cp041557.compsig; cp041557.exe; cp041557.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - XP0032GEFEN, XP0032GDZME, XP0064GEFEP, and XP0064GDZMF Drives
Version: HPS8 (E) **(Recommended)**
Filename: cp040400.compsig; cp040400.exe; cp040400.md5

Important Note!

- 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..

Prerequisites

Drive models XP0032GEFEN, XP0032GDZME, XP0064GDZMF, and XP0064GEFEP must have firmware version HPS6 installed prior to updating to firmware version HPS8.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - EK000200GWEPD, EK000400GWEPE, EK000800GWEPF and EK001600GWEPH Drives
Version: HPG3 (C) **(Recommended)**
Filename: cp040489.compsig; cp040489.exe; cp040489.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives
Version: HPG6 (B) **(Recommended)**
Filename: cp040791.compsig; cp040791.exe; cp040791.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 includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB001000GWFWK and MB002000GWFWL Drives
Version: HPG6 (B) **(Recommended)**
Filename: cp040792.compsig; cp040792.exe; cp040792.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 includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB Drives
Version: HPG1 (B) **(Recommended)**
Filename: cp040483.compsig; cp040483.exe; cp040483.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives
Version: HPG3 (D) **(Optional)**
Filename: cp040452.compsig; cp040452.exe; cp040452.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB004000GWKGV Drive
Version: HPG1 (B) **(Recommended)**
Filename: cp041495.compsig; cp041495.exe; cp041495.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB006000GWBXQ and MB008000GWBYL Drives
Version: HPG8 (B) **(Recommended)**
Filename: cp040796.compsig; cp040796.exe; cp040796.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

- ○ Eliminates a potential hang on 4TB under certain pattern-dependent read conditions
- ○ Eliminates the possibility of a weak read signal under a sequenced combination of read/write conditions
- ○ Provides reliability enhancements involving head fly height dynamics
- ○ Enables download Mode 0Eh activation by Mode 0Fh

Enhancements

- ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB006000GWKGR Drive
Version: HPG1 (B) **(Recommended)**
Filename: cp041522.compsig; cp041522.exe; cp041522.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB008000GWRTC Drive
Version: HPG1 (B) **(Recommended)**
Filename: cp041486.compsig; cp041486.exe; cp041486.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB010000GWAYN and MB008000GWAYL Drives
Version: HPG5 (C) **(Critical)**
Filename: cp040448.compsig; cp040448.exe; cp040448.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

- ○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB012000GWDFE Drives
Version: HPG3 (C) **(Critical)**

Filename: cp040457.compsig; cp040457.exe; cp040457.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 during unaligned write commands, found in supplier ongoing lab testing.Includes additional fixes to improve error handling and reliability.

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB014000GWRTN, MB012000GWRTL and MB010000GWRTK Drives
Version: HPG2 (B) **(Recommended)**
Filename: cp041454.compsig; cp041454.exe; cp041454.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.
○ Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB014000GWUDA Drive
Version: HPG2 (B) **(Recommended)**
Filename: cp041509.compsig; cp041509.exe; cp041509.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 (F) **(Recommended)**
Filename: cp040403.compsig; cp040403.exe; cp040403.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives
Version: HPG4 (F) **(Recommended)**
Filename: cp040430.compsig; cp040430.exe; cp040430.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 (F) **(Recommended)**

Filename: cp040404.compsig; cp040404.exe; cp040404.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB2000GFEMH and MB4000GFEMK Drives
Version: HPG6 (E) **(Critical)**
Filename: cp040447.compsig; cp040447.exe; cp040447.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG6 (F) **(Recommended)**
Filename: cp040387.compsig; cp040387.exe; cp040387.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB4000GEQNH and MB6000GEQNK Drives
Version: HPGB (E) **(Critical)**
Filename: cp040391.compsig; cp040391.exe; cp040391.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000GEBTP Drives
Version: HPG4 (E) **(Recommended)**
Filename: cp040428.compsig; cp040428.exe; cp040428.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000GEQUT and MB8000GEQUU Drives
Version: HPGB (E) **(Critical)**
Filename: cp040451.compsig; cp040451.exe; cp040451.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.
○ Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000GEXXV Drives
Version: HPG2 (F) **(Recommended)**
Filename: cp040409.compsig; cp040409.exe; cp040409.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000GVYYU Drives
Version: HPG2 (E) **(Recommended)**
Filename: cp040485.compsig; cp040485.exe; cp040485.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB6000GVYZB and MB4000GVYZA Drives
Version: HPG4 (B) **(Recommended)**
Filename: cp040459.compsig; cp040459.exe; cp040459.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MB8000GFECR Drives
Version: HPG6 (B) **(Recommended)**
Filename: cp040410.compsig; cp040410.exe; cp040410.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MK000240GWCEU, MK000480GWCEV, MK000960GWCFA and MK001920GWCFB Drives
Version: HPG3 (C) **(Recommended)**
Filename: cp040484.compsig; cp040484.exe; cp040484.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

- Error Recovery Optimization Enhancements

Online HDD/SDD Flash Component for Windows (x64) - MK003840GWHTE Drives
Version: HPG6 (B) **(Recommended)**
Filename: cp041323.compsig; cp041323.exe; cp041323.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MK0960GECQK Drives
Version: HPG3 (H) **(Critical)**
Filename: cp040388.compsig; cp040388.exe; cp040388.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

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG8 (D) **(Recommended)**
Filename: cp040397.compsig; cp040397.exe; cp040397.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MM1000GFJTE Drives
Version: HPG5 (B) **(Optional)**
Filename: cp040472.compsig; cp040472.exe; cp040472.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives
Version: HPGE (B) **(Recommended)**
Filename: cp041317.compsig; cp041317.exe; cp041317.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000150GWCNN, VK000240GWCNP, VK000480GWCNQ, VK000960GWCNR and VK001600GWCNT Drives
Version: HPG1 (B) **(Recommended)**
Filename: cp040476.compsig; cp040476.exe; cp040476.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000240GWCFD, VK000480GWCFE, VK000960GWCFF, VK001920GWCFH and VK003840GWCFK Drives
Version: HPG3 (C) **(Recommended)**
Filename: cp040477.compsig; cp040477.exe; cp040477.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives
Version: HPGE (B) **(Optional)**
Filename: cp041320.compsig; cp041320.exe; cp041320.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPQ Drives
Version: HPG5 (B) **(Critical)**
Filename: cp040469.compsig; cp040469.exe; cp040469.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 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.
○ 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

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Online HDD/SDD Flash Component for Windows (x64) - VK000240GWSRQ, VK000480GWSRR, VK000960GWSRT, VK001920GWSRU and VK003840GWSRV Drives
Version: HPG2 (B) **(Recommended)**
Filename: cp041312.compsig; cp041312.exe; cp041312.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 Windows 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000240GWTSV, VK000480GWTTA, VK000960GWTTB, VK001920GWTTC, VK003840GWTTD, MK000480GWTTH, MK000960GWTTK, MK001920GWTTL and MK003840GWTTN Drives
Version: HPG3 (B) **(Recommended)**
Filename: cp040797.compsig; cp040797.exe; cp040797.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 unresponsiveness during a Secure Erase operation, and fixes an incorrect error reporting issue during certain SATA protocol transfers.

Online HDD/SDD Flash Component for Windows (x64) - VK000480GWSXF, VK000960GWSXH, VK001920GWSXK, MK000480GWUGF, MK000960GWUGH, MK001920GWUGK Drives
Version: HPG2 (B) **(Recommended)**
Filename: cp040795.compsig; cp040795.exe; cp040795.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

○ Fix to issue in bootloader download during power loss.
○ Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
○ Improvements to error exception.
○ Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

Enhancements

○ Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK000480GWTHA, VK000960GWTHB, VK001920GWTHC and VK003840GWTHD Drives
Version: HPG1 (B) **(Optional)**
Filename: cp041498.compsig; cp041498.exe; cp041498.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK003840GWSXL Drive
Version: HPG2 (B) **(Recommended)**
Filename: cp040793.compsig; cp040793.exe; cp040793.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

- Fix to issue in bootloader download during power loss.
- Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
- Improvements to error exception.
- Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK007680GWSXN Drive
Version: HPG2 (B) **(Recommended)**
Filename: cp040794.compsig; cp040794.exe; cp040794.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

- Fix to issue in bootloader download during power loss.
- Change IDF Word 106 report 4K TU for 4/8TB drives to align with Microsoft SQL requirement.
- Improvements to error exception.
- Improvements to Secure lock fix during multi-thread read tests with high freq. power cycling.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK0120GFDKE, VK0240GFDKF, VK0480GFDKH, VK0960GFDKK, VK1920GFDKL, and VK3840GFDKN Drives
Version: HPG1 (E) **(Recommended)**
Filename: cp040412.compsig; cp040412.exe; cp040412.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VK0240GEPQN, VK0480GEPQP, and VK0960GEPQQ Drives
Version: HPG1 (E) **(Recommended)**
Filename: cp040417.compsig; cp040417.exe; cp040417.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 Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - VR000150GWEPP and VR000480GWEPR Drives
Version: HPG1 (C) **(Critical)**
Filename: cp040478.compsig; cp040478.exe; cp040478.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 a timing issue which can cause the drive to become non-functional.
- Fixes VPD Log D0h reported drive Sanitize times.
- Adds support for Security Log Page BBh.

Enhancements

- Added support for Windows Server 2019.

Online HDD/SDD Flash Component for Windows (x64) - XP0120GFJSL and XP0240GFJSN Drives
Version: HPS4 (E) **(Recommended)**
Filename: cp040415.compsig; cp040415.exe; cp040415.md5

Important Note!

- 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..

Enhancements

- Added support for Windows Server 2019.

Online HDD/SSD Flash Component for VMware ESXi - MB6000GVYYU Drives
Version: HPG2 (E) **(Recommended)**
Filename: CP040549.compsig; CP040549.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 6.7 U2.

Firmware - Storage Controller
HPE D6020 12Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)
Version: 2.74 (D) **(Recommended)**
Filename: CP041168.md5; RPMS/x86_64/firmware-d6020-2.74-4.1.x86_64.compsig; RPMS/x86_64/firmware-d6020-2.74-4.1.x86_64.rpm

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Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D6020(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D6020.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D6020.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fixes were incorporated in this version:

- Temperature sensors logic inside gSEP model and SES database
- When an IOM is pulled the surviving IOM reports false critical temperatures

Please refer to the [Release Notes](#) for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Enhancements

The following enhancement has been added in this version:

- Added support of Rhel 8

Supported Devices and Features

The D6020 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- HP Smart Array P841 Controller
- HP Smart Array P441 Controller
- HP Smart HBA H241
- HP Smart Array P741m Controller
- HPE Smart Array P408e-p Controller
- HPE Smart Array E208e-p Controller
- HPE Smart Array P408e-m Controller

HPE D6020 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)
Version: 2.74 (D) **(Recommended)**
Filename: CP041167.compsig; CP041167.md5; CP041167.zip

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D6020(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D6020.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D6020.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fixes were incorporated in this version:

- Temperature sensors logic inside gSEP model and SES database
- When an IOM is pulled the surviving IOM reports false critical temperatures

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D6020 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- HP Smart Array P841 Controller
- HP Smart Array P441 Controller
- HP Smart HBA H241
- HP Smart Array P741m Controller
- HPE Smart Array P408e-p Controller
- HPE Smart Array E208e-p Controller
- HPE Smart Array P408e-m Controller

HPE D6020 12Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)
Version: 2.74 (D) **(Recommended)**
Filename: cp041169.compsig; cp041169.exe

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D6020(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D6020.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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D6020.log and flash summary is logged to %systemdrive%\CPQSYSTEM\Log\cpqsetup.log.

Fixes

The following fixes were incorporated in this version:

- Temperature sensors logic inside gSEP model and SES database
- When an IOM is pulled the surviving IOM reports false critical temperatures

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

The D6020 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- ○ HP Smart Array P841 Controller
- ○ HP Smart Array P441 Controller
- ○ HP Smart HBA H241
- ○ HP Smart Array P741m Controller
- ○ HPE Smart Array P408e-p Controller
- ○ HPE Smart Array E208e-p Controller
- ○ HPE Smart Array P408e-m Controller

HPE D8000 12Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)
Version: 0105 **(Recommended)**
Filename: CP041302.md5; RPMS/x86_64/firmware-d8000-0105-1.1.x86_64.compsig; RPMS/x86_64/firmware-d8000-0105-1.1.x86_64.rpm

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D8000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fixes were incorporated in this version:

- ○ SAS drive LED behavior was corrected to align with the Smart Array specification, specifically:
    - ■ The Activity LED of a sanitize erase drive now turns ON when connected.

    - ■ The Array present LED now turns ON for the SAS drive.

    - ■ The Activity LED now blinks on all drives during a SAS drive rebuild.

- ○ The Serial Output Buffer (SOB) has a fixed sized for stored entries. Now, when the buffer is full, the oldest entries are cleared or committed to persistent storage (if available). For this reason, subsequent requests to read the SOB only retrieves new entries that have been logged since the last successful request to read the SOB.

- ○ The drive activity LED has been changed to a function as described in the installation and maintenance guide.

- ○ The reboot flag was changed to issue a hard reset, which enables the service delivery subsystem (ZPSDS) information be shared across (expanded across) the internal expanders to all devices attached.

- ○ The drive activity LED on the SAS disk drives was changed to support the ACTIVE_LOW signal state. The ACTIVE_LOW signal state is the default operation state for most drives.

- ○ The SCSI WRITE BUFFER MODE was changed from activate to soft reset. This change improves the host ability to detect and report whether the enclosure is going to perform a disruptive or non-disruptive activation after a firmware upgrade.

- ○ With I/O module firmware v0105 and PQI firmware 2.02 , the slot power cycle issue has been resolved by changing the power cycle SES request to return a failure when a partner slot is not connected.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D8000 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- ○ HPE Smart Array P408e-p Controller
- ○ HPE Smart Array E208e-p Controller

HPE D8000 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)
Version: 0105 **(Recommended)**
Filename: CP041301.compsig; CP041301.md5; CP041301.zip

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D8000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fixes were incorporated in this version:

○ SAS drive LED behavior was corrected to align with the Smart Array specification, specifically:
  ■ The Activity LED of a sanitize erase drive now turns ON when connected.

  ■ The Array present LED now turns ON for the SAS drive.

  ■ The Activity LED now blinks on all drives during a SAS drive rebuild.

○ The Serial Output Buffer (SOB) has a fixed sized for stored entries. Now, when the buffer is full, the oldest entries are cleared or committed to persistent storage (if available). For this reason, subsequent requests to read the SOB only retrieves new entries that have been logged since the last successful request to read the SOB.

○ The drive activity LED has been changed to a function as described in the installation and maintenance guide.

○ The reboot flag was changed to issue a hard reset, which enables the service delivery subsystem (ZPSDS) information be shared across (expanded across) the internal expanders to all devices attached.

○ The drive activity LED on the SAS disk drives was changed to support the ACTIVE_LOW signal state. The ACTIVE_LOW signal state is the default operation state for most drives.

○ The SCSI WRITE BUFFER MODE was changed from activate to soft reset. This change improves the host ability to detect and report whether the enclosure is going to perform a disruptive or non-disruptive activation after a firmware upgrade.

○ With I/O module firmware v0105 and PQI firmware 2.02 , the slot power cycle issue has been resolved by changing the power cycle SES request to return a failure when a partner slot is not connected.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D8000 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

○ HPE Smart Array P408e-p Controller
○ HPE Smart Array E208e-p Controller

HPE D8000 12Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)
Version: 0105 **(Recommended)**
Filename: cp041303.compsig; cp041303.exe

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D8000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D8000.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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D8000.log and flash summary is logged to %systemdrive% \CPQSYSTEM\Log\cpqsetup.log.

Fixes

The following fixes were incorporated in this version:

○ SAS drive LED behavior was corrected to align with the Smart Array specification, specifically:
  ■ The Activity LED of a sanitize erase drive now turns ON when connected.

  ■ The Array present LED now turns ON for the SAS drive.

- The Activity LED now blinks on all drives during a SAS drive rebuild.

○ The Serial Output Buffer (SOB) has a fixed sized for stored entries. Now, when the buffer is full, the oldest entries are cleared or committed to persistent storage (if available). For this reason, subsequent requests to read the SOB only retrieves new entries that have been logged since the last successful request to read the SOB.

○ The drive activity LED has been changed to a function as described in the installation and maintenance guide.

○ The reboot flag was changed to issue a hard reset, which enables the service delivery subsystem (ZPSDS) information be shared across (expanded across) the internal expanders to all devices attached.

○ The drive activity LED on the SAS disk drives was changed to support the ACTIVE_LOW signal state. The ACTIVE_LOW signal state is the default operation state for most drives.

○ The SCSI WRITE BUFFER MODE was changed from activate to soft reset. This change improves the host ability to detect and report whether the enclosure is going to perform a disruptive or non-disruptive activation after a firmware upgrade.

○ With I/O module firmware v0105 and PQI firmware 2.02 , the slot power cycle issue has been resolved by changing the power cycle SES request to return a failure when a partner slot is not connected.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D8000 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

○ HPE Smart Array P408e-p Controller
○ HPE Smart Array E208e-p Controller

Online ROM Flash Component for ESXi (x86) - HPE Smart Array P824i-p MR Gen10
Version: 24.23.0-0042 **(Optional)**
Filename: CP036878.compsig; CP036878.zip

Enhancements

○ Added support for the Apollo 4510 system

Online ROM Flash Component for Linux (x64) – HPE Apollo 2000 Gen10 Backplane Expander Firmware
Version: 1.00 (B) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-smartarray-9f082dffb4-1.00-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-9f082dffb4-1.00-2.1.x86_64.rpm

Important Note!

Note: If version 1.00 was previously installed, then it is not necessary to upgrade to version 1.00 (B).

Enhancements

○ Added support for SUSE Linux Enterprise Server 15 OS

Online ROM Flash Component for Linux (x64) - HPE SAS Expander Firmware for HPE D2500sb Storage Blade
Version: 2.00 (B) **(Optional)**
Filename: rpm/RPMS/x86_64/firmware-smartarray-1d0696d939-2.00-2.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-1d0696d939-2.00-2.1.x86_64.rpm

Important Note!

Customers who already installed firmware version 2.00 do not need to update to 2.00 (B).

Enhancements

○ Added support for SUSE Linux Enterprise Server 15 OS

Online ROM Flash Component for Linux (x64) - HPE Smart Array P824i-p MR Gen10
Version: 24.23.0-0042 (A) **(Optional)**
Filename: CP040180.md5; CP040180.scexe; deb/firmware-cafee9b6e4_24.23.0.0042-1.1_amd64.deb; rpm/RPMS/x86_64/firmware-cafee9b6e4-24.23.0_0042-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-cafee9b6e4-24.23.0_0042-1.1.x86_64.rpm

Fixes

Fixes installation issues with Intelligent Provisioning and Service Pack for ProLiant Offline.

Online ROM Flash Component for VMware ESXi – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers
Version: 4.22 **(Recommended)**
Filename: CP040617.compsig; CP040617.zip

Important Note!

○ Power cycle / cold reboot is required if firmware is upgraded from version 1.31 or earlier.

Fixes

○ Fixes an issue where false Smart Carrier authenication errors may happen.

Version: 1.00 (C) **(Optional)**
Filename: CP037611.compsig; CP037611.zip

Important Note!

Customers who already installed firmware version 1.00 do not need to update to 1.00 (C).

Enhancements

○ Added support for VMware vSphere 6.7 OS

Online ROM Flash Component for VMware ESXi - HPE Apollo 45xx Gen10 Backplane Expander Firmware
Version: 1.56 (D) **(Recommended)**
Filename: CP038103.compsig; CP038103.zip

Enhancements

○ Added HPE Smart Array P824i-p controller support

Online ROM Flash Component for VMware ESXi - HPE SAS Expander Firmware for HPE D2500sb Storage Blade
Version: 2.00 (C) **(Optional)**
Filename: CP037690.compsig; CP037690.zip

Important Note!

Customers who already installed firmware version 2.00 do not need to update to 2.00 (C).

○ When using ESXi6.0 you must be at upgrade 3 or newer. The required SmartPQI driver is not present in earlier versions of the OS

Prerequisites

When using ESXi6.0 you must be at upgrade 3 or newer. The required SmartPQI driver is not present in earlier versions of the OS

Enhancements

○ Added support for VMware vSphere 6.7 OS

Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10
Version: 2.62 **(Recommended)**
Filename: CP039559.compsig; CP039559.zip

Fixes

○ While processing I/O's larger than the RAID volume stripe size, the controller could stop responding.
○ If an active IO module cable is unplugged and re-inserted multiple times, the first reset request is lost and subsequent reset requests are aligned in a queue until the original request is completed. However, the first request will never complete and will result in error message 24613 in the ahs logs.

Enhancements

○ Add UBM1 Support
○ Support for backup power source charge timeout values from UEFI
○ UBM2 backplane support
○ Drive hotplug support for UBM backplanes

Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers
Version: 4.22 **(Recommended)**
Filename: cp040619.compsig; cp040619.exe; cp040619.md5

Important Note!

○ Power cycle / cold reboot is required if firmware is upgraded from version 1.31 or earlier.

Fixes

○ Fixes an issue where false Smart Carrier authenication errors may happen.

Online ROM Flash Component for Windows (x64) - HPE Apollo 2000 Gen10 Backplane Expander Firmware
Version: 1.00 (B) **(Optional)**
Filename: cp037609.compsig; cp037609.exe; cp037609.md5

Important Note!

Note: If version 1.00 was previously installed, then it is not necessary to upgrade to version 1.00 (B).

Enhancements

○ Added support for Microsoft Windows Server 2019 OS

Online ROM Flash Component for Windows (x64) - HPE Apollo 45xx Gen10 Backplane Expander Firmware
Version: 1.56 (C) **(Recommended)**
Filename: cp037765.compsig; cp037765.exe; cp037765.md5

Enhancements

      ○ Added HPE Smart Array p824i-p controller support

Online ROM Flash Component for Windows (x64) - HPE SAS Expander Firmware for HPE D2500sb Storage Blade
Version: 2.00 (B) **(Optional)**
Filename: cp037679.compsig; cp037679.exe; cp037679.md5

Important Note!

     Customers who already installed firmware version 2.00 do not need to update to 2.00 (B).

Enhancements

      ○ Added support for Microsoft Windows Server 2019 OS

Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10
Version: 2.62 **(Recommended)**
Filename: cp039561.compsig; cp039561.exe; cp039561.md5

Fixes

      ○ While processing I/O's larger than the RAID volume stripe size, the controller could stop responding.
      ○ If an active IO module cable is unplugged and re-inserted multiple times, the first reset request is lost and subsequent reset requests are aligned in a queue until the original request is completed. However, the first request will never complete and will result in error message 24613 in the ahs logs.

Enhancements

      ○ Add UBM1 Support
      ○ Support for backup power source charge timeout values from UEFI
      ○ UBM2 backplane support
      ○ Drive hotplug support for UBM backplanes

Online ROM Flash Component for Windows (x64) - HPE Smart Array P824i-p MR Gen10
Version: 24.23.0-0042 (A) **(Recommended)**
Filename: cp040218.compsig; cp040218.exe; cp040218.md5

Fixes

      ○ Fixes Firmware downgrade issue

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: 4.22 **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-smartarray-2de15b6882-4.22-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-2de15b6882-4.22-1.1.x86_64.rpm

Important Note!

      ○ Power cycle / cold reboot is required if firmware is upgraded from version 1.31 or earlier.

Fixes

      ○ Fixes an issue where false Smart Carrier authenication errors may happen.

Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Apollo 45xx Gen10 Backplane Expander Firmware
Version: 1.56 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-smartarray-815b1ae26d-1.56-3.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-815b1ae26d-1.56-3.1.x86_64.rpm

Enhancements

      ○ Added HPE Smart Array P824i-p controller support

Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10
Version: 2.62 **(Recommended)**
Filename: rpm/RPMS/x86_64/firmware-smartarray-f7c07bdbbd-2.62-1.1.x86_64.compsig; rpm/RPMS/x86_64/firmware-smartarray-f7c07bdbbd-2.62-1.1.x86_64.rpm

Fixes

      ○ While processing I/O's larger than the RAID volume stripe size, the controller could stop responding.
      ○ If an active IO module cable is unplugged and re-inserted multiple times, the first reset request is lost and subsequent reset requests are aligned in a queue until the original request is completed. However, the first request will never complete and will result in error message 24613 in the ahs logs.

Enhancements

      ○ Add UBM1 Support
      ○ Support for backup power source charge timeout values from UEFI
      ○ UBM2 backplane support
      ○ Drive hotplug support for UBM backplanes

Firmware - Storage Fibre Channel
HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)

Filename: RPMS/x86_64/firmware-fc-emulex-2019.12.01-1.34.x86_64.compsig; RPMS/x86_64/firmware-fc-emulex-2019.12.01-1.34.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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 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.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FC Driver Kit, reboot, and then install the Enablement Kit.

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

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

For LPe 32000 Family:

o Enhanced the firmware to handle heavy VDM (vendor-defined message) load correctly without any unexpected behavior.
o Enhanced MCTP (Management Component Transport Protocol) error handling by adding code that will exit gracefully.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot
Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.4.270.5
16 Gb HBA/Mezz universal boot 12.4.270.3

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.40a6 (12.4.262.0 BIOS, 12.4.153.0 UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

■ HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
■ HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
■ HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
■ HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

■ 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5
Version: 2019.12.01 **(Recommended)**
Filename: CP039573.compsig; CP039573.zip

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

For LPe 32000 Family:

○ Enhanced the firmware to handle heavy VDM (vendor-defined message) load correctly without any unexpected behavior.
○ Enhanced MCTP (Management Component Transport Protocol) error handling by adding code that will exit gracefully.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot
Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.4.270.5
16 Gb HBA/Mezz universal boot 12.4.270.3

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.40a6 (12.4.262.0 BIOS, 12.4.153.0 UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7
Version: 2019.12.01 **(Recommended)**
Filename: CP039574.compsig; CP039574.zip

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

For LPe 32000 Family:

o Enhanced the firmware to handle heavy VDM (vendor-defined message) load correctly without any unexpected behavior.
o Enhanced MCTP (Management Component Transport Protocol) error handling by adding code that will exit gracefully.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot
Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.4.270.5
16 Gb HBA/Mezz universal boot 12.4.270.3

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.40a6 (12.4.262.0 BIOS, 12.4.153.0 UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- 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 StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012 R2/2016/2019 x64
Version: 2019.12.01 **(Recommended)**
Filename: cp039575.compsig; cp039575.exe

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

For LPe 32000 Family:

○ Enhanced the firmware to handle heavy VDM (vendor-defined message) load correctly without any unexpected behavior.
○ Enhanced MCTP (Management Component Transport Protocol) error handling by adding code that will exit gracefully.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot
Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.4.270.5
16 Gb HBA/Mezz universal boot 12.4.270.3

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.40a6 (12.4.262.0 BIOS, 12.4.153.0 UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter

- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)
Version: 2019.12.01 **(Recommended)**
Filename: RPMS/x86_64/firmware-fc-qlogic-2019.12.01-1.20.x86_64.compsig; RPMS/x86_64/firmware-fc-qlogic-2019.12.01-1.20.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapter Release Notes

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 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.

Fixes

Fixed the following:

Gen 4 Fibre Channel Host Bus Adapter:

Firmware:

- Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case
- Firmware system unexpected behavior that occurred in target mode during an Fibre Channel Protocol (FCP) exchange for a write Input Output (IO)
- Firmware system unexpected behavior or non-fatal unexpected behavior resulting from the aborted Direct Memory Access (DMA) of an FCP _RSP IU payload to the host.
- Eliminate stalls when transmitting response frame after data frames in certain cases.

BIOS:

- NONE

UEFI:

- NONE

Gen 5 Fibre Channel Host Bus Adapter:

Firmware:

- The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- NONE

UEFI:

- NONE

Gen 6 Fibre Channel Host Bus Adapter:

Firmware:

- The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- NONE

UEFI:

- Firmware Management Protocol *SetImage* unexpected behavior that caused QLogic Converge Console (QCC) Command Line Interface (CLI) to display the wrong Flash Image Version.

Enhancements

Gen 4 Fibre Channel Host Bus Adapter:

UEFI:

- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 5 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 6 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- Gen4 Fibre Channel Host Bus Adapter:
    - Package 3.81.05
    - Firmware 8.08.206
    - UEFI 7.00
    - BIOS 3.56
- Gen5 Fibre Channel Host Bus Adapter:
    - Package 6.02.01
    - Firmware 8.08.230
    - UEFI 7.02
    - BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
    - Package 1.73.07
    - Firmware 8.08.230
    - UEFI 7.02
    - BIOS 3.64
- Gen7 Fibre Channel Host Bus Adapter:
    - Package 02.02.15
    - Firmware 09.02.02
    - UEFI 7.08
    - BIOS 0.0

Supported Devices and Features

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

- o HPE 81Q PCIe Fibre Channel Host Bus Adapter
- o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- o HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- o HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- o HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- o HPE SN1610Q 32Gb 2P FC HBA
- o HPE SN1610Q 32Gb 1P FC HBA

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5
Version: 2019.12.01 **(Recommended)**
Filename: CP039707.compsig; CP039707.zip

Important Note!

HPE StoreFabric QLogic Adapter Release Notes

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/

Fixes

Fixed the following:

Gen 4 Fibre Channel Host Bus Adapter:

Firmware:

- o Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case
- o Firmware system unexpected behavior that occurred in target mode during an Fibre Channel Protocol (FCP) exchange for a write Input Output (IO)
- o Firmware system unexpected behavior or non-fatal unexpected behavior resulting from the aborted Direct Memory Access (DMA) of an FCP _RSP IU payload to the host.
- o Eliminate stalls when transmitting response frame after data frames in certain cases.

BIOS:

- o NONE

UEFI:

- o NONE

Gen 5 Fibre Channel Host Bus Adapter:

Firmware:

- o The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- o After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- o Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- o NONE

UEFI:

- o NONE

Gen 6 Fibre Channel Host Bus Adapter:

Firmware:

- o The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- o After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- o Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- o NONE

UEFI:

- o Firmware Management Protocol *SetImage* unexpected behavior that caused QLogic Converge Console (QCC) Command Line Interface (CLI) to display the wrong Flash Image Version.

Enhancements

Gen 4 Fibre Channel Host Bus Adapter:

UEFI:

- o Config Reset Protocol now checks the Level parameter.
- o Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- o Updated Legacy Human Information Infrastructure (HII) strings.
- o Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- o Driver Health Protocol now supports child handles.
- o Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- o Added UEFI 2.7 support

Gen 5 Fibre Channel Host Bus Adapter:

UEFI:

- o Removed Loaded Image Protocol check from Driver Binding Protocol.
- o Config Reset Protocol now checks the Level parameter.
- o Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- o Updated Legacy Human Information Infrastructure (HII) strings.
- o Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- o Driver Health Protocol now supports child handles.
- o Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- o Added UEFI 2.7 support

Gen 6 Fibre Channel Host Bus Adapter:

UEFI:

- o Removed Loaded Image Protocol check from Driver Binding Protocol.
- o Config Reset Protocol now checks the Level parameter.
- o Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- o Updated Legacy Human Information Infrastructure (HII) strings.
- o Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- o Driver Health Protocol now supports child handles.
- o Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- o Added UEFI 2.7 support

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- o Gen4 Fibre Channel Host Bus Adapter:
  - ■ Package 3.81.05
  - ■ Firmware 8.08.206
  - ■ UEFI 7.00
  - ■ BIOS 3.56
- o Gen5 Fibre Channel Host Bus Adapter:
  - ■ Package 6.02.01
  - ■ Firmware 8.08.230
  - ■ UEFI 7.02
  - ■ BIOS 3.43
- o Gen6 Fibre Channel Host Bus Adapter:
  - ■ Package 1.73.07
  - ■ Firmware 8.08.230
  - ■ UEFI 7.02
  - ■ BIOS 3.64
- o Gen7 Fibre Channel Host Bus Adapter:
  - ■ Package 02.02.15
  - ■ Firmware 09.02.02
  - ■ UEFI 7.08
  - ■ BIOS 0.0

Supported Devices and Features

This firmware supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7
Version: 2019.12.01 **(Recommended)**
Filename: CP039708.compsig; CP039708.zip

Important Note!

[HPE StoreFabric QLogic Adapter Release Notes](#)

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/

Fixes

Fixed the following:

Gen 4 Fibre Channel Host Bus Adapter:

Firmware:

- ○ Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case
- ○ Firmware system unexpected behavior that occurred in target mode during an Fibre Channel Protocol (FCP) exchange for a write Input Output (IO)
- ○ Firmware system unexpected behavior or non-fatal unexpected behavior resulting from the aborted Direct Memory Access (DMA) of an FCP _RSP IU payload to the host.
- ○ Eliminate stalls when transmitting response frame after data frames in certain cases.

BIOS:

- ○ NONE

UEFI:

- ○ NONE

Gen 5 Fibre Channel Host Bus Adapter:

Firmware:

- ○ The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- ○ After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- ○ Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- ○ NONE

UEFI:

- ○ NONE

Gen 6 Fibre Channel Host Bus Adapter:

Firmware:

- The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- NONE

UEFI:

- Firmware Management Protocol *SetImage* unexpected behavior that caused QLogic Converge Console (QCC) Command Line Interface (CLI) to display the wrong Flash Image Version.

Enhancements

Gen 4 Fibre Channel Host Bus Adapter:

UEFI:

- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 5 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 6 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- Gen4 Fibre Channel Host Bus Adapter:
  - Package 3.81.05
  - Firmware 8.08.206
  - UEFI 7.00
  - BIOS 3.56
- Gen5 Fibre Channel Host Bus Adapter:
  - Package 6.02.01
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
  - Package 1.73.07
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.64
- Gen7 Fibre Channel Host Bus Adapter:
  - Package 02.02.15
  - Firmware 09.02.02
  - UEFI 7.08
  - BIOS 0.0

Supported Devices and Features

This firmware supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012R2/2016/2019 (x86_64)
Version: 2019.12.01 **(Recommended)**
Filename: cp039710.compsig; cp039710.exe

Important Note!

Release Notes:
HPE StoreFabric 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/

The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at http://www.hpe.com/servers/spp/download.

Fixes

Fixed the following:

Gen 4 Fibre Channel Host Bus Adapter:

Firmware:

- ○ Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case
- ○ Firmware system unexpected behavior that occurred in target mode during an Fibre Channel Protocol (FCP) exchange for a write Input Output (IO)
- ○ Firmware system unexpected behavior or non-fatal unexpected behavior resulting from the aborted Direct Memory Access (DMA) of an FCP _RSP IU payload to the host.
- ○ Eliminate stalls when transmitting response frame after data frames in certain cases.

BIOS:

- ○ NONE

UEFI:

- ○ NONE

Gen 5 Fibre Channel Host Bus Adapter:

Firmware:

- ○ The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- ○ After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- ○ Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- ○ NONE

UEFI:

- ○ NONE

Gen 6 Fibre Channel Host Bus Adapter:

Firmware:

- The link did not come up with a certain 16G Small Form- factor Pluggable (SFP) model that required longer time to complete a write access than the firmware expected
- After the link was brought down over an electrical connection, the Loss of Sync counter of the *Link Error Status* Block was not incremented due to an unhandled transition in the FC_port state machine
- Unexpected behavior of an Initiator performance seen when certain targets return otherwise good FCP_RSP IUs, but containing a non-zero parameter field. This was caused by configuring the application-specific integrated circuit (ASIC) to treat this condition as a non-performance case

BIOS:

- NONE

UEFI:

- Firmware Management Protocol *SetImage* unexpected behavior that caused QLogic Converge Console (QCC) Command Line Interface (CLI) to display the wrong Flash Image Version.

Enhancements

Gen 4 Fibre Channel Host Bus Adapter:

UEFI:

- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 5 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
- Config Reset Protocol now restores adapter World Wide Port Name (WWPN) & World Wide Node Name (WWNN).
- Added UEFI 2.7 support

Gen 6 Fibre Channel Host Bus Adapter:

UEFI:

- Removed Loaded Image Protocol check from Driver Binding Protocol.
- Config Reset Protocol now checks the Level parameter.
- Changed Human Information Infrastructure (HII) Configuration Language name to x-UEFI-MARVELL.
- Updated Legacy Human Information Infrastructure (HII) strings.
- Updated Firmware Management Protocol Human Information Infrastructure (HII) strings.
- Driver Health Protocol now supports child handles.
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- Added UEFI 2.7 support

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

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  - Package 6.02.01
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
  - Package 1.73.07
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.64
- Gen7 Fibre Channel Host Bus Adapter:
  - Package 02.02.15
  - Firmware 09.02.02
  - UEFI 7.08
  - BIOS 0.0

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- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

Firmware - System
Firmware Package - Gen10 NVMe Backplane PIC Firmware
Version: 1.20 **(Optional)**
Filename: ISS_NVMe_BP_PIC_flashV1B20.fwpkg

Prerequisites

iLO 5 version 1.10 or later is required.

Enhancements

Initial release.

Online Flash Component for Linux - Gen10 NVMe Backplane PIC Firmware
Version: 1.20 (E) **(Optional)**
Filename: RPMS/x86_64/firmware-nvmebackplane-gen10-1.20-5.1.x86_64.compsig; RPMS/x86_64/firmware-nvmebackplane-gen10-1.20-5.1.x86_64.rpm

Important Note!

Note: If the target device was previously updated to firmware version 1.20, it is not necessary to apply firmware update 1.20(E).

Prerequisites

iLO 5 version 1.10 or later is required.

Enhancements

- ○ Added support for SUSE Linux Enterprise Server 15 OS

Online Flash Component for Windows x64 - Gen10 NVMe Backplane PIC Firmware
Version: 1.20 (D) **(Optional)**
Filename: cp037722.compsig; cp037722.exe

Important Note!

Note: If the target device was previously updated to firmware version 1.20, it is not necessary to apply firmware update 1.20(D).

Prerequisites

iLO 5 version 1.10 or later is required.

Enhancements

- ○ Added support for Microsoft Windows Server 2019 OS

Online ROM Flash Component for Windows x64 - Server Platform Services (SPS) Firmware for HPE Gen10 Servers
Version: 04.01.04.339 **(Recommended)**
Filename: cp040928.compsig; cp040928.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Server Platform Services (SPS) Firmware

Release Version:

04.01.04.339

Last Recommended or Critical Revision:

04.01.04.339

Previous Revision:

04.01.04.296

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Problems Fixed:

None

Known Issues:

None

Prerequisites

HPE Gen10 system ROM version 1.26 or later

HPE Gen10 Innovation Engine (IE) Firmware version 0.1.5.2 or later

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - Server Platform Services (SPS) Firmware for HPE ProLiant DL20/ML30 Gen10
Version: 05.01.03.078 **(Recommended)**
Filename: cp040641.compsig; cp040641.exe

Important Note!

Important Notes:

None

Deliverable Name:

Server Platform Services (SPS) Firmware for HPE ProLiant DL20/ML30 Gen10 Servers

Release Version:

05.01.03.078

Last Recommended or Critical Revision:

05.01.03.078

Previous Revision:

05.00.03.107

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash for Linux - HPE Gen10 Innovation Engine Firmware for HPE Gen10 Servers
Version: 0.2.1.2 (B) **(Optional)**
Filename: RPMS/x86_64/firmware-iegen10-0.2.1.2-2.1.x86_64.compsig; RPMS/x86_64/firmware-iegen10-0.2.1.2-2.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Innovation Engine (IE) Firmware

Release Version:

0.2.1.2

Last Recommended or Critical Revision:

0.1.5.2

Previous Revision:

0.2.0.11

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Problems Fixed:

None

Known Issues:

None

System ROM V1.26 or later

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

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Known Issues:

None

Online ROM Flash for Linux - Server Platform Services (SPS) Firmware for HPE Gen10 Servers
Version: 04.01.04.339 **(Recommended)**
Filename: RPMS/x86_64/firmware-spsgen10-04.01.04.339-1.1.x86_64.compsig; RPMS/x86_64/firmware-spsgen10-04.01.04.339-1.1.x86_64.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Server Platform Services (SPS) Firmware

Release Version:

04.01.04.339

Last Recommended or Critical Revision:

04.01.04.339

Previous Revision:

04.01.04.296

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Problems Fixed:

None

Known Issues:

None

Prerequisites

HPE Gen10 system ROM version 1.26 or later

HPE Gen10 Innovation Engine (IE) Firmware version 0.1.5.2 or later

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

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Known Issues:

None

Online ROM Flash for Linux - Server Platform Services (SPS) Firmware for HPE ProLiant DL20/ML30 Gen10
Version: 05.01.03.078 **(Recommended)**
Filename: RPMS/x86_64/firmware-dl20ml30gen10sps-05.01.03.078-1.1.x86_64.compsig; RPMS/x86_64/firmware-dl20ml30gen10sps-05.01.03.078-1.1.x86_64.rpm

<u>**Important Note!**</u>

Important Notes:

None

Deliverable Name:

Server Platform Services (SPS) Firmware for HPE ProLiant DL20/ML30 Gen10 Servers

Release Version:

05.01.03.078

Last Recommended or Critical Revision:

05.01.03.078

Previous Revision:

05.00.03.107

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

<u>**Prerequisites**</u>

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

<u>**Fixes**</u>

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash for Windows x64 - HPE Gen10 Innovation Engine Firmware for HPE Gen10 Servers
Version: 0.2.1.2 **(Optional)**
Filename: cp039812.compsig; cp039812.exe

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Innovation Engine (IE) Firmware

Release Version:

0.2.1.2

Last Recommended or Critical Revision:

0.1.5.2

Previous Revision:

0.2.0.11

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Problems Fixed:

None

Known Issues:

None

Prerequisites

System ROM V1.26 or later

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Known Issues:

None

ROM Flash Firmware Package - HPE Gen10 Innovation Engine Firmware for HPE Gen10 Servers
Version: 0.2.1.2 **(Optional)**
Filename: IEGen10_0.2.1.2.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Innovation Engine (IE) Firmware

Release Version:

0.2.1.2

Last Recommended or Critical Revision:

0.1.5.2

Previous Revision:

0.2.0.11

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Problems Fixed:

None

Known Issues:

None

Prerequisites

System ROM V1.26 or later

iLO 5 v1.20 or later

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

Added support for HPE Persistent Memory featuring Intel Optane DC Persistent Memory.

Known Issues:

None

ROM Flash Firmware Package - Server Platform Services (SPS) Firmware for HPE Gen10 Servers
Version: 05.01.03.078 **(Recommended)**
Filename: DL20ML30Gen10SPS_05.01.03.078.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

Server Platform Services (SPS) Firmware for HPE ProLiant DL20/ML30 Gen10 Servers

Release Version:

05.01.03.078

Last Recommended or Critical Revision:

05.01.03.078

Previous Revision:

05.00.03.107

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

Prerequisites

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

This revision of the Silicon Platform Services (SPS) Firmware provides mitigation to the latest CSME security vulnerabilities, also known as Local Escalation Privilege. This vulnerability is defined in CVE-2019-0089. This issue is not unique to HPE servers.

Known Issues:

None

ROM Flash Firmware Package - Server Platform Services (SPS) Firmware for HPE Gen10 Servers
Version: 04.01.04.339 **(Recommended)**
Filename: SPSGen10_04.01.04.339.fwpkg

Important Note!

Important Notes:

None

Deliverable Name:

HPE Gen10 Server Platform Services (SPS) Firmware

Release Version:

04.01.04.339

Last Recommended or Critical Revision:

04.01.04.339

Previous Revision:

04.01.04.296

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Problems Fixed:

None

Known Issues:

None

HPE Gen10 system ROM version 1.26 or later

HPE Gen10 Innovation Engine (IE) Firmware version 0.1.5.2 or later

The "iLO 5 Channel Interface Driver" (CHIF) for Windows which is available from Service Pack for ProLiant (SPP).

Enhancements

Important Notes:

None

Firmware Dependencies:

None

Enhancements/New Features:

This image contains the latest Intel Server Platform Services (SPS) Firmware which contains mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this SPS release: CVE-2019-11090 and CVE-2019-11109. These issues are not unique to HPE servers.

Known Issues:

None

Server Platform Services (SPS) Firmware for Intel C242 and C246 PCH based systems
Version: 05.01.03.078 **(Recommended)**
Filename: cp040639.compsig; cp040639.zip

Enhancements

See release doc

Firmware (Entitlement Required) - Storage Controller   **Top**
HPE D3600/D3700/D3610/D3710 12Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)
Version: 4.12 **(Recommended)**
Filename: CP036703.md5; RPMS/x86_64/firmware-d3000-4.12-1.1.x86_64.compsig; RPMS/x86_64/firmware-d3000-4.12-1.1.x86_64.rpm

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D3000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fix is incorporated in this version:

O The Enabled-ClusterS2D command now completes successfully when executed on a SATA drive within a D3610 disk enclosure.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D3600 / D3700 / D3610 / D3710 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

O HP Smart Array P841 Controller
O HP Smart Array P441 Controller
O HP Smart HBA H241
O HPE Smart Array P408e-p Controller
O HPE Smart Array E208e-p Controller
O HPE Smart Array P408e-m Controller
O HP Smart Array P741m Controller
O HPE Smart Array P416ie-m Controller

HPE D3600/D3700/D3610/D3710 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)
Version: 4.12 **(Recommended)**
Filename: CP036702.compsig; CP036702.md5; CP036702.zip

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D3000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /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: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /var/cpq/Component.log.

Fixes

The following fix is incorporated in this version:

o The Enabled-ClusterS2D command now completes successfully when executed on a SATA drive within a D3610 disk enclosure.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Enhancements

The following enhancement has been added in this version:

o Added support of VMware vsphere 6.7

Supported Devices and Features

The D3600 / D3700 / D3610 / D3710 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- o HP Smart Array P841 Controller
- o HP Smart Array P441 Controller
- o HP Smart HBA H241
- o HP Smart Array P741m Controller
- o HPE Smart Array P408e-p Controller
- o HPE Smart Array E208e-p Controller
- o HPE Smart Array P408e-m Controller
- o HPE Smart Array P416ie-m Controller

HPE D3600/D3700/D3610/D3710 12Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)
Version: 4.12 **(Recommended)**
Filename: cp036704.compsig; cp036704.exe

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D3000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D3000.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: All firmware flash progress messages are logged to %systemdrive%\CPQSYSTEM\Log\D3000.log and flash summary is logged to %systemdrive% \CPQSYSTEM\Log\cpqsetup.log.

Fixes

The following fix is incorporated in this version:

o The Enabled-ClusterS2D command now completes successfully when executed on a SATA drive within a D3610 disk enclosure.

Please refer to the Release Notes for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

Supported Devices and Features

The D3600 / D3700 / D3610 / D3710 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- ○ HP Smart Array P841 Controller
- ○ HP Smart Array P441 Controller
- ○ HP Smart HBA H241
- ○ HPE Smart Array P408e-p Controller
- ○ HPE Smart Array E208e-p Controller
- ○ HPE Smart Array P408e-m Controller
- ○ HP Smart Array P741m Controller
- ○ HPE Smart Array P416ie-m Controller

Software - Lights-Out Management
HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)
Version: 5.5.0-0 **(Recommended)**
Filename: hponcfg-5.5.0-0.x86_64.compsig; hponcfg-5.5.0-0.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

Updated the OpenSSL API calls to support Host's OpenSSL FIPS mode.

HP Lights-Out Online Configuration Utility for Windows x64 Editions
Version: 5.3.0.0 **(Optional)**
Filename: cp037416.compsig; cp037416.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.

Enhancements

Introduced support for CNSA security state from iLO5 v1.40 or later.

Software - Management
HPE Management Bundle Smart Component for ESXi 6.5
Version: 2019.12.01 **(Recommended)**
Filename: cp040137.compsig; cp040137.zip

Fixes

WBEM Providers

- ○ Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller
- ○ Fix memory leak issues causing ESXi host to become unresponsive or crash

Agentless Management Service

- ○ Fix buffer overrun when acquiring vib summary from ESXi host database
- ○ Fix cpqSePciSlotBoardName for empty slots with no CPU
- ○ Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
- ○ Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO
- ○ Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

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HPE Management Bundle Smart Component for ESXi 6.7
Version: 2019.12.01 **(Recommended)**
Filename: cp040138.compsig; cp040138.zip

Fixes

WBEM Providers

- ○ Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller

    ○ Fix memory leak issues causing ESXi host to become unresponsive or crash

Agentless Management Service

    ○ Fix buffer overrun when acquiring vib summary from ESXi host database
    ○ Fix cpqSePciSlotBoardName for empty slots with no CPU
    ○ Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
    ○ Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO
    ○ Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

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Software - Storage Controller
HPE MegaRAID Storage Administrator StorCLI for VMware6.5
Version: 2019.09.00 **(Optional)**
Filename: cp040118.compsig; cp040118.zip

Enhancements

Updated Product Name with the OS version.

HPE MegaRAID Storage Administrator StorCLI for VMware6.7
Version: 2019.09.00 **(Optional)**
Filename: cp040119.compsig; cp040119.zip

Enhancements

Updated Product Name with the OS version.

HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions
Version: 1.2.1.64 **(Recommended)**
Filename: cp037793.compsig; cp037793.exe

Enhancements

    ○ Improved integration with Smart Update Manager

Software - Storage Fibre Channel
Emulex Fibre Channel driver component for VMware vSphere 6.5
Version: 2019.12.01 **(Recommended)**
Filename: cp039582.compsig; cp039582.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.

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to Driver version 12.4.242.0

○ Reset the link of the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

Emulex Fibre Channel driver component for VMware vSphere 6.7
Version: 2019.12.01 **(Recommended)**
Filename: cp039583.compsig; cp039583.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.

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to Driver version 12.4.242.0

○ Reset the link or the adapter instead of doing an infinite PLOGI retry.

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

Emulex(BRCM) Fibre Channel over Ethernet driver for VMware vSphere 6.5
Version: 2019.03.01 **(Recommended)**
Filename: cp035742.compsig; cp035742.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.

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

IF the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command*:*

#esxcli software vib remove lpfc

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

IF the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command:

#esxcli software vib remove lpfc

Fixes

Fixed the following:

- ○ Added workaround to reduce the race probability in Input Output Device Management (IODM).
- ○ Fixed Purple Screen of Death (PSOD) Triggered by assert that when destroying a Slab and there was still one object not released.

Enhancements

Updated to Driver version 12.0.1211.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- ▪ HP StoreFabric CN1200E Dual Port Converged Network Adapter
- ▪ HP FlexFabric 20Gb 2-port 650FLB Adapter
- ▪ HP FlexFabric 20Gb 2-port 650M Adapter
- ▪ HPE StoreFabric CN1200E-T Adapter

Emulex(BRCM) Fibre Channel over Ethernet driver for VMware vSphere 6.7
Version: 2019.03.01 **(Recommended)**
Filename: cp035743.compsig; cp035743.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.

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

IF the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command:

#esxcli software vib remove lpfc

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

IF the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command:

#esxcli software vib remove lpfc

Fixes

Fixed the following:

- ○ Added workaround to reduce the race probability in Input Output Device Management (IODM).
- ○ VMWare vSphere 6.7 Update 1 becomes unresponsive to commands like "esxtop" and "esxcli storage core adapter list" after vmkfstool bus and target reset.

       ○ Fixed Purple Screen of Death (PSOD) Triggered by assert that when destroying a Slab and there was still one object not released.

Enhancements

Added support for VMWare vSphere 6.7 Update 1.

Updated to Driver version 12.0.1211.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

QLogic Fibre Channel driver component for VMware vSphere 6.5
Version: 2019.12.01 **(Recommended)**
Filename: cp039712.compsig; cp039712.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:

- Incorrect supported speed values were being reported in management app
- Purple Screen of Death (PSOD) observed during N_Port ID Virtualization (NPIV) failover
- Sending Small Computer System Interface (SCSI) pass thru commands to an N_Port ID Virtualization (NPIV) port was incomplete
- Driver vmkmgmt shows the VM Identifier (VMID) info under the N_Port ID Virtualization (NPIV) section, when N_Port ID Virtualization (NPIV) is not enabled
- Various unexpected behaviors with introduced Simplified Fabric Discovery support.
- ql2xt10difvendor was disabled and associated with ql2xenablesmartsan
- zdump does not get saved off on Boot From SAN (BFS) configuration
- *FDMI 2 RHBA* command was getting rejected by the switch

Enhancements

Driver version 2.1.94.0

Added support for the following;

- Simplified Fabric Discovery support
- Secure adapter and fw support displayed in vmkmgmt interface
- Correctly indicate default values for module parameter

Supported Devices and Features

This driver supports 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
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

QLogic Fibre Channel driver component for VMware vSphere 6.7
Version: 2019.12.01 **(Recommended)**
Filename: cp039713.compsig; cp039713.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:

- ○ Incorrect supported speed values were being reported in management app
- ○ Purple Screen of Death (PSOD) observed during N_Port ID Virtualization (NPIV) failover
- ○ Sending Small Computer System Interface (SCSI) pass thru commands to an N_Port ID Virtualization (NPIV) port was incomplete
- ○ Driver vmkmgmt shows the VM Identifier (VMID) info under the N_Port ID Virtualization (NPIV) section, when N_Port ID Virtualization (NPIV) is not enabled
- ○ Various unexpected behaviors with introduced Simplified Fabric Discovery support.
- ○ ql2xt10difvendor was disabled and associated with ql2xenablesmartsan
- ○ zdump does not get saved off on Boot From SAN (BFS) configuration
- ○ *FDMI 2 RHBA* command was getting rejected by the switch

Enhancements

Driver version 3.1.29.0

Added support for the following:

- ○ Simplified Fabric Discovery support
- ○ Secure adapter and fw support displayed in vmkmgmt interface
- ○ Correctly indicate default values for module parameter

Supported Devices and Features

This driver supports 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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

Software - Storage Fibre Channel HBA
Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)
Version: 4.1-1 (b) **(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

Fixes

Fiixed adpater_info code to display correct Vendor name instead of Unknown

Enhancements

This package supports only Red Hat Enterprise Linux (RHEL) Distros

Supported Devices and Features

Supports the following:

- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16GB FC HBA for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-port 8Gb Fibre Channel Host Bus Adapter
- HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4-port 16Gb Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric CN1200E 10Gb Converged Network Adapter

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -SuSE Linux Enterprise Server(SLES)
Version: 4.1-1 (b) **(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

Fixes

Fixed adpater_info code to display correct Vendor name instead of Unknown

Enhancements

This package supports only SuSE Linux Enterprise Server(SLES) Distros

Supported Devices and Features

Supports the following:

- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16GB FC HBA for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-port 8Gb Fibre Channel Host Bus Adapter
- HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4-port 16Gb Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter

○ HP StoreFabric CN1200E 10Gb Converged Network Adapter

HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server
Version: 12.4.256.0 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel7.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel7.x86_64.rpm

<u>Important Note!</u>

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

<u>Prerequisites</u>

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

<u>Enhancements</u>

Updated to version 12.4.256.0

<u>Supported Devices and Features</u>

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 8 Server
Version: 12.4.256.0 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel8.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel8.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to version 12.4.256.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 12
Version: 12.4.256.0 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles12sp3.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles12sp3.x86_64.rpm; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles12sp4.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles12sp4.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1.   Go to http://www.hpe.com/support/manuals
2.   Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to version 12.4.256.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 15
Version: 12.4.256.0 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles15sp0.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles15sp0.x86_64.rpm; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles15sp1.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.sles15sp1.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to version 12.4.256.0

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Smart SAN Enablement Kit for Linux
Version: 1.0.0.0-4 (e) **(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.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

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 Branded Emulex FC HBAs and mezz cards, version 11.1.183.21(minimum version supported) for RedHat 7, RedHat 8 and Novell 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 SLES15SP1

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:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems
Version: 1.0.0.1 (i) **(Recommended)**
Filename: cp039580.compsig; cp039580.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.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

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.

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver v11.1.145.16 cp030886.exe

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:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Red Hat Enterprise Linux 7 Server
Version: 12.0.1210.0 **(Recommended)**
Filename: HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.rhel7.x86_64.compsig; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.rhel7.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Added support for following:

o Updated the HP-CNA-FC-Emulex-Enablement-Kit RPM to provide libdfc.so.12() library.

Updated to version: 12.0.1210.0

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for SUSE Linux Enterprise Server 12
Version: 12.0.1210.0 **(Recommended)**
Filename: HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles12sp3.x86_64.compsig; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles12sp3.x86_64.rpm; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles12sp4.x86_64.compsig; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles12sp4.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Added support for following:

○ Updated the HP-CNA-FC-Emulex-Enablement-Kit RPM to provide libdfc.so.12() library.

Updated to version: 12.0.1210.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for SUSE Linux Enterprise Server 15
Version: 12.0.1210.0 **(Recommended)**
Filename: HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles15sp0.x86_64.compsig; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1210.0-1.sles15sp0.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

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.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Added support for following:

○ Updated the HP-CNA-FC-Emulex-Enablement-Kit RPM to provide libdfc.so.12() library.

Updated to version: 12.0.1210.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE QLogic Fibre Channel Enablement Kit for Linux
Version: 6.0.0.0-11 (b) **(Optional)**
Filename: HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-11.noarch.compsig; HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-11.noarch.rpm

Important Note!

Release Notes:
HPE StoreFabric 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:

○ Non Volatile Memory Express (NVME) targets not seen when Non Volatile Memory Express (NVME) Id and Subsys Id are different
○ Apps initialization delay seen with N_Port ID Virtualization (NPIV) ports
○ Apps issues seen with Non Volatile Memory Express (NVME) target in Red Hat Enterprise Linux (RHEL)
○ Apps issues seen with Non Volatile Memory Express (NVME) target in N_Port ID Virtualization (NPIV) configuration
○ BSG interface fails if /tmp is mounted with tmpfs on shared memory

Enhancements

Updated the kit to version 6.0.0.0-11

Added support for the following :

- ○ Red Hat Enterprise Linux 8 (RHEL 8) and SuSE Linux Enterprise Server 15 Service Pack 1 (SLES15SP1)
- ○ Allow SDGetActiveRegions Application Interface (API) for Gen 6 Fibre Channel Host Bus Adapters
- ○ Restrict application features for Non Volatile Memory Express (NVME) targets
- ○ Add Non Volatile Random Access Memory (NVRAM) parameter to select Fibre Channel Protocol (FCP) or Non Volatile Memory Express (NVME) targets

Supported Devices and Features

This version of the enablement kit supports the following devices:

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
- ○ HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- ○ HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- ○ HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- ○ HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

HPE QLogic Smart SAN enablement kit for Linux
Version: 3.3-3 (h) **(Optional)**
Filename: hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.compsig; hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm

Important Note!

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

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 6 Server (x86-64) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.06.0-k1

- Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs, version 8.07.00.42.07.0-k1

- SUSE Linux Enterprise Server 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.11.3-k

- SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs version 8.07.00.42.12.0-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

Added Support to RHEL8 and SLES15SP1

Updated to version 3.3-3

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

o HPE 81Q PCIe Fibre Channel Host Bus Adapter
o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
o HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
o HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

o HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

o HPE SN1610Q 32Gb 2P FC HBA
o HPE SN1610Q 32Gb 1P FC HBA

HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems
Version: 1.0.0.1 (i) **(Recommended)**
Filename: cp039719.compsig; cp039719.exe

<u>**Important Note!**</u>

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.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

<u>**Prerequisites**</u>

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.

o HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver v9.2.2.20, cp031252.exe
o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2 v9.2.2.20, cp031253.exe
o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2016 version 9.2.2.20, cp031251.exe
o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2019 version 9.2.9.22, cp037397.exe

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.

<u>**Enhancements**</u>

Updated to version 1.0.0.1

<u>**Supported Devices and Features**</u>

This enablement kit is supported on the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

o HPE 81Q PCIe Fibre Channel Host Bus Adapter
o HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
o HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

o HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
o HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
o HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

- ○ HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- ○ HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Gen 7 Fibre Channel Host Bus Adapter:

- ○ HPE SN1610Q 32Gb 2P FC HBA
- ○ HPE SN1610Q 32Gb 1P FC HBA

Software - System Management
Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server
Version: 2.1.0 **(Optional)**
Filename: amsd-2.1.0-1406.73.rhel7.x86_64.compsig; amsd-2.1.0-1406.73.rhel7.x86_64.rpm

Prerequisites

- ○ **amsd only supported on HPE Gen10 Servers.**

- ○ **amsd provides information to the iLO 5 service providing SNMP support.**

- ○ **Requirements:**

   - ▪ Minimum iLO 5 Firmware Version = 1.1

   - ▪ Minimum supported OS Versions = Red Hat Enterprise Linux 7.3 Errata 3.10.0.514.6.1

Fixes

Fixed the following items:

- ○ Addressed memory leaks
- ○ Corrected segfaults reported in ahslog
- ○ Improved synchronization between iLO and amsd

Enhancements

New features enabled with this release:

- ○ All storage sub-agents are now independent services
- ○ Added support for new network controllers

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 8 Server
Version: 2.1.0 **(Optional)**
Filename: amsd-2.1.0-1406.75.rhel8.x86_64.compsig; amsd-2.1.0-1406.75.rhel8.x86_64.rpm

Prerequisites

- ○ **amsd only supported on HPE Gen10 Servers.**

- ○ **amsd provides information to the iLO 5 service providing SNMP support.**

- ○ **Requirements:**

   - ▪ Minimum iLO 5 Firmware Version = 1.1

   - ▪ Minimum supported OS Versions = Red Hat Enterprise Linux 8

Fixes

Fixed the following items:

- ○ Addressed memory leaks
- ○ Corrected segfaults reported in ahslog
- ○ Improved synchronization between iLO and amsd

Enhancements

New features enabled with this release:

- ○ All storage sub-agents are now independent services
- ○ Added support for new network controllers

Agentless Management Service (iLO 5) for SUSE Linux Enterprise Server 12
Version: 2.1.0 **(Optional)**
Filename: amsd-2.1.0-1406.76.sles12.x86_64.compsig; amsd-2.1.0-1406.76.sles12.x86_64.rpm

Prerequisites

- ○ **amsd only supported on HPE Gen10 Servers.**

- ○ **amsd provides information to the iLO 5 service providing SNMP support.**

- ○ **Requirements:**

    - ■ Minimum iLO 5 Firmware Version = 1.1

    - ■ Minimum supported OS Versions = SUSE Linux Enterprise Server 12 SP2

Fixes

Fixed the following items:

- ○ Addressed memory leaks
- ○ Corrected segfaults reported in ahslog
- ○ Improved synchronization between iLO and amsd

Enhancements

New features enabled with this release:

- ○ All storage sub-agents are now independent services
- ○ Added support for new network controllers

Agentless Management Service (iLO 5) for SUSE Linux Enterprise Server 15
Version: 2.1.0 **(Optional)**
Filename: amsd-2.1.0-1406.78.sles15.x86_64.compsig; amsd-2.1.0-1406.78.sles15.x86_64.rpm

Prerequisites

- ○ **amsd only supported on HPE Gen10 Servers.**

- ○ **amsd provides information to the iLO 5 service providing SNMP support.**

- ○ **Requirements:**

    - ■ Minimum iLO 5 Firmware Version = 1.1

    - ■ Minimum supported OS Versions = SUSE Linux Enterprise Server 15

Fixes

Fixed the following items:

- ○ Addressed memory leaks
- ○ Corrected segfaults reported in ahslog
- ○ Improved synchronization between iLO and amsd

Enhancements

New features enabled with this release:

- ○ All storage sub-agents are now independent services
- ○ Added support for new network controllers

Agentless Management Service for Windows X64
Version: 2.10.0.0 **(Optional)**
Filename: cp040001.compsig; cp040001.exe

Important Note!

iLO Firmware Version:

- ○ This version of AMS has been tested with iLO 5 firmware version 2.10. It is recommended to install AMS 2.10 on systems with iLO 5 firmware 2.10 or newer.

About installation and enablement of SMA service:

- ○ During AMS installation in interactive mode, there is pop up message to selectively install SMA.
    - ■ If Yes is selected, SMA service will be installed and set to running state.
    - ■ If No is selected, SMA service will be installed but the service is not enabled.
- ○ During AMS installation in silent mode, SMA is installed but the service is not enabled.
- ○ To enable SMA service at a later time, go to the following folder: %ProgramFiles%\OEM\AMS\Service\ (Typically c:\Program Files\OEM\AMS\Service) and execute "EnableSma.bat /f"
- ○ IMPORTANT: The SNMP service community name and permission must also be setup. This is not done by "EnableSma.bat".
- ○ To disable SMA after it has been enabled, go to the following folder: %ProgramFiles%\OEM\AMS\Service\ (Typically c:\Program Files\OEM\AMS\Service) and execute "DisableSma.bat /f"
- ○ After installing Windows operating system, make sure all the latest Microsoft Updates are downloaded and installed (wuapp.exe can be launched to start the update process). If this is not done, a critical error may be reported in Windows Event Log, "The Agentless Management Service terminated unexpectedly.".

AMS Control Panel Applet:

- The AMS control panel applet UI is best displayed on the system when screen resolution is 1280 x 1024 pixels or higher and text size 100%.

- Test trap generated from AMS Control Panel Applet requires iLO5 firmware version 2.10 and newer.

- When in iLO5 high security mode (e.g. FIPS mode), MD5 authentication protocol will not be shown.

Prerequisites

The *Channel Interface Driver for Windows X64* must be installed prior to this component.

Microsoft SNMP Service must be enabled, if SMA (System Management Assistant) is enabled.

Fixes

- Fixed the unexpected SNMP Trap 11020 being generated even if there is no change in health status. The issue was caused by SNMP cpqHoMibHealthStatusArray OID value being OK (2) even if the corresponding hardware is not present. The default condition has been changed to Unknown (0).

Enhancements

- AMS generated events in Windows Event Log are now readable even if AMS is uninstalled
- Enhanced display of IML events in Windows System Log to separate event details from recommended action
- Added support for Smart Array P824i-p MR controller external box information in SNMP OIDs cpqSasPhyDrvSsBoxModel, cpqSasPhyDrvSsBoxFwRev, cpqSasPhyDrvSsBoxVendor and cpqSasPhyDrvSsBoxSerialNumber.
- Added support for 9 or more SATA drives in the server
- Support for new I/O cards

HPE Insight Management WBEM Providers for Windows Server x64 Editions
Version: 10.75.0.0 **(Optional)**
Filename: cp037689.exe

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 incorrect System Management Homepage red icon status of Smart Array controllers, if the controller has logical drive(s) created with HPE Smart Storage Administrator version later than 3.10.3.0.

HPE MegaRAID Storage Administrator (HPE MRSA) for Linux 64-bit
Version: 3.113.0.0 **(Optional)**
Filename: HPE_Linux_64_readme.txt; MRStorageAdministrator-003.113.000.000-00.x86_64.rpm; MRStorageAdministrator-003.113.000.000-00.x86_64_part1.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part2.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part3.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part4.compsig

Important Note!

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Prerequisites

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Enhancements

- Initial Release

HPE MegaRAID Storage Administrator (HPE MRSA) for Windows 64-bit
Version: 3.113.0.0 **(Optional)**
Filename: cp036916.exe; cp036916_part1.compsig; cp036916_part2.compsig; cp036916_part3.compsig; cp036916_part4.compsig

Enhancements

Initial Release

HPE MegaRAID Storage Administrator StorCLI for Linux 64-bit
Version: 1.25.12 **(Optional)**
Filename: LINUX_Readme.txt; storcli-1.25.12-1.noarch.compsig; storcli-1.25.12-1.noarch.rpm

Enhancements

o Added support for the Apollo 4510 system

HPE MegaRAID Storage Administrator StorCLI for VMware
Version: 1.25.12 **(Optional)**
Filename: vmware-esx-storcli-1.25.12.vib; VMWARE_MN_NDS_Readme.txt

Enhancements

o Added support for the Apollo 4510 system

HPE MegaRAID Storage Administrator StorCLI for VMware
Version: 1.25.12 **(Recommended)**
Filename: storcli-esxi6.5-bundle-1.25.12.zip

Enhancements

Initial release

HPE MegaRAID Storage Administrator StorCLI for VMware
Version: 1.25.12 **(Recommended)**
Filename: storcli-esxi6.7-bundle-1.25.12.zip

Enhancements

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit
Version: 1.25.12.0 **(Optional)**
Filename: cp036918.compsig; cp036918.exe

Enhancements

o Added support for the Apollo 4510 system

HPE Offline Bundle for ESXi 6.5
Version: 3.5.0 **(Recommended)**
Filename: esxi6.5uX-mgmt-bundle-3.5.0-12.zip

Fixes

WBEM Providers

o Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller
o Fix memory leak issues causing ESXi host to become unresponsive or crash

Agentless Management Service

o Fix buffer overrun when acquiring vib summary from ESXi host database
o Fix cpqSePciSlotBoardName for empty slots with no CPU
o Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
o Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO
o Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

Supported Devices and Features

VMware vSphere version support:

o VMware vSphere 6.5 U2
o VMware vSphere 6.5 U3

HPE Offline Bundle for ESXi 6.7
Version: 3.5.0 **(Recommended)**
Filename: esxi6.7uX-mgmt-bundle-3.5.0-12.zip

Fixes

WBEM Providers

o Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller
o Fix memory leak issues causing ESXi host to become unresponsive or crash

Agentless Management Service

o Fix buffer overrun when acquiring vib summary from ESXi host database
o Fix cpqSePciSlotBoardName for empty slots with no CPU
o Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
o Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO

o Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

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HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: ssacli-4.15-6.0.x86_64.compsig; ssacli-4.15-6.0.x86_64.rpm; ssacli-4.15-6.0.x86_64.txt

Important Note!

HPE SSACLI will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACUCLI scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Enhancements

o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator (HPE SSA) CLI for VMware 6.5
Version: 4.15.6.0 **(Optional)**
Filename: ssacli-4.15.6.0-6.5.0.vib

Enhancements

o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator (HPE SSA) CLI for VMware 6.7
Version: 4.15.6.0 **(Optional)**
Filename: ssacli-4.15.6.0-6.7.0.vib

Enhancements

o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator (HPE SSA) CLI for Windows 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: cp039746.compsig; cp039746.exe

Important Note!

HPE SSACLI will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACUCLI scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Enhancements

o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator (HPE SSA) for Linux 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: ssa-4.15-6.0.x86_64.compsig; ssa-4.15-6.0.x86_64.rpm

Important Note!

HPE SSA replaces the existing HP Array Configuration Utility, or ACU, with an updated design and will deliver new features and functionality for various Smart Storage initiatives as they come online. HPE Smart Array Advanced Pack 1.0 and 2.0 features are now part of the baseline features of HPE SSA, with the appropriate firmware.

HPE SSA will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACU scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Prerequisites

The HPE Smart Storage Administrator for Linux requires the HPE System Management Homepage software to be installed on the server. If the HPE System Management Homepage software is not already installed on your server, please download it from HPE.com and install it before installing the HPE Smart Storage Administrator for Linux.

IMPORTANT UPDATE: HPE SSA (GUI) for Linux can now be run without requiring the HPE System Management Homepage. HPE SSA now supports a Local Application Mode for Linux. The HPE System Management Homepage is still supported, but no longer required to run the HPE SSA GUI.

To invoke, enter the following at the command prompt:

ssa -local

The command will start HP SSA in a new Firefox browser window. When the browser window is closed, HP SSA will automatically stop. This is only valid for the loopback interface, and not visible to external network connections.

Enhancements

o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator (HPE SSA) for Windows 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: cp039745.compsig; cp039745.exe

HPE SSA replaces the existing HP Array Configuration Utility, or ACU, with an updated design and will deliver new features and functionality for various Smart Storage initiatives as they come online. HPE Smart Array Advanced Pack 1.0 and 2.0 features are now part of the baseline features of HPE SSA, with the appropriate firmware.

HPE SSA will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACU scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Enhancements

     o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: ssaducli-4.15-6.0.x86_64.compsig; ssaducli-4.15-6.0.x86_64.rpm; ssaducli-4.15-6.0.x86_64.txt

Important Note!

This stand alone version of the HPE Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use HPE Smart Storage Administrator (HPE SSA).

Enhancements

     o Added support to enable SmartCache on volumes greater than 256TB

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Windows 64-bit
Version: 4.15.6.0 **(Optional)**
Filename: cp039747.compsig; cp039747.exe

Important Note!

This stand alone version of the HPE Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use HPE Smart Storage Administrator (HPE SSA).

Enhancements

     o Added support to enable SmartCache on volumes greater than 256TB

HPE Utilities Offline Bundle for ESXi 6.5
Version: 3.5.0 **(Recommended)**
Filename: esxi6.5-util-bundle-3.5.0-31.zip; relnotes.txt

Important Note!

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.5 U3 which is located at [HPE Information Library.](#)

Enhancements

Updated the Smart Storage Administrator CLI (SSACLI)

HPE Utilities Offline Bundle for ESXi 6.7
Version: 3.5.0 **(Recommended)**
Filename: esxi6.7-util-bundle-3.5.0-23.zip; relnotes.txt

Important Note!

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.7 U3 which is located at [HPE Information Library.](#)

Enhancements

Updated the Smart Storage Administrator CLI (SSACLI)

Integrated Smart Update Tools for VMware ESXi 6.5
Version: 2.5.0.0 **(Recommended)**
Filename: sut-esxi6.5-offline-bundle-2.5.0.0-73.zip

Important Note!

Integrated Smart Update Tools for ESXi provides support for firmware and driver updates via iLO Repository

Fixes

See the [iSUT Release Notes](#) for information about the issues resolved in this release

Enhancements

Updated from 2.4.5

Integrated Smart Update Tools for VMware ESXi 6.7
Version: 2.5.0.0 **(Recommended)**
Filename: sut-esxi6.7-offline-bundle-2.5.0.0-75.zip

Important Note!

Integrated Smart Update Tools for ESXi provides support for firmware and driver updates via iLO Repository

Fixes

See the iSUT Release Notes for information about the issues resolved in this release

Enhancements

Updated from iSUT 2.4.5

NVMe Drive Eject NMI Fix for Intel Xeon Processor Scalable Family for Windows
Version: 1.1.0.0 (C) **(Optional)**
Filename: cp034635.compsig; cp034635.exe

Enhancements

○ Added support for Windows Server 2019
○ Added support for the HPE ProLiant XL270d Gen10 and the HPE ProLiant XL420 Gen10