Post-Production Service Pack for ProLiant version G7 Component

BIOS - System ROM	**[Top](#)**

Online ROM Flash Component for Linux - HP ProLiant BL2x220c G7 (I29) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-i29-2015.08.16-1.1.i386.rpm

Important Note!

 Important Notes:

 None

 Deliverable Name:

 HP ProLiant BL2x220c G7 System ROM - I29

 Release Version:

 08/16/2015

 Last Recommended or Critical Revision:

 08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant BL460c G7 (I27) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-i27-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL460c G7 System ROM - I27

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant BL465c G7 (A19) Servers
Version: 2014.02.02 (C) **(Optional)**
Filename: RPMS/i386/hp-firmware-system-a19-2014.02.02-3.i386.rpm

Important Note!

Important Notes:

Ver. 2014.02.02 (C) contains a documentation update only and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with

Revision C if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Deliverable Name:

HP ProLiant BL465c G7 System ROM - A19

Release Date:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Fixes

Important Notes:

Ver. 2014.02.02 (C) contains a documentation update only and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision C if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Firmware Dependencies:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant BL490c G7 (I28) Servers

Version: 2015.08.16 **(Recommended)**

Filename: RPMS/i386/hp-firmware-system-i28-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL490c G7 System ROM - I28

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant BL680c G7/BL620c G7 (I25) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-i25-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL680c G7/BL620c G7 System ROM - I25

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant BL685c G7 (A20) Servers
Version: 2016.03.07 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-a20-2016.03.07-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL685c G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.
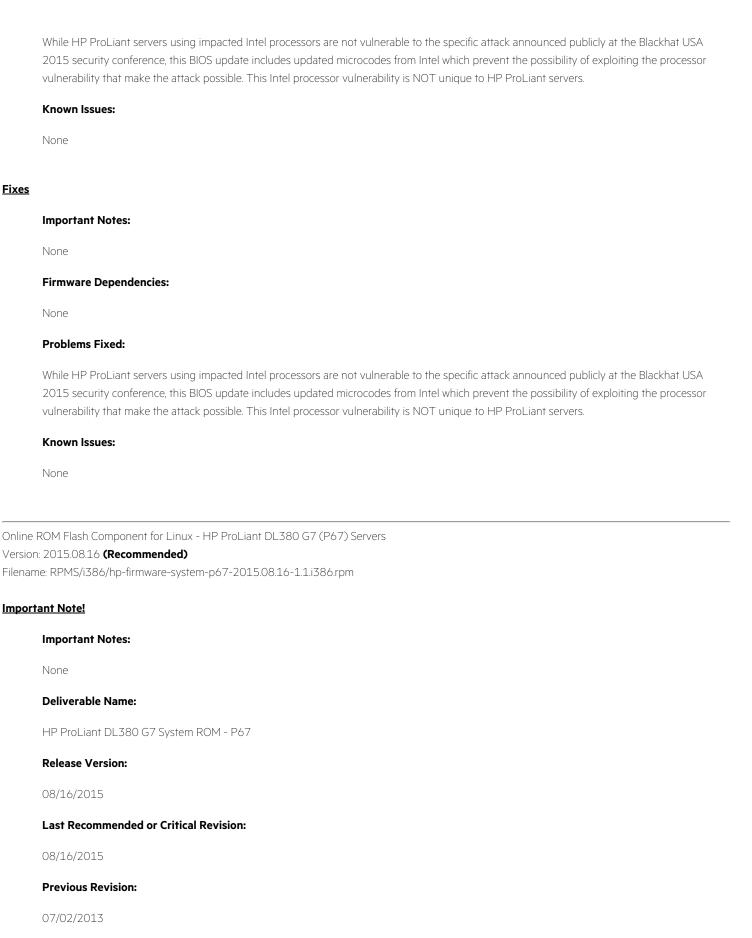
Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL360 G7 (P68) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-p68-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL360 G7 System ROM - P68

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL380 G7 (P67) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-p67-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL380 G7 System ROM - P67

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL385 G7 (A18) Servers
Version: 2014.02.02 (B) **(Optional)**
Filename: RPMS/i386/hp-firmware-system-a18-2014.02.02-2.1.i386.rpm

Important Note!

Important Notes:

Ver. 2014.02.02 (B) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Deliverable Name:

HP ProLiant DL385 G7 System ROM - A18

Release Version:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

Ver. 2014.02.02 (B) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Firmware Dependencies:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL580 G7 (P65) Servers
Version: 2015.08.16 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-p65-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL580 G7 System ROM - P65

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

10/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL585 G7 (A16) Servers
Version: 2016.03.07 **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-a16-2016.03.07-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL585 G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant DL980 G7 (P66) Servers

Version: 2015.08.16 **(Recommended)**

Filename: RPMS/i386/hp-firmware-system-p66-2015.08.16-1.1.i386.rpm

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL980 G7 System ROM - P66

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

08/15/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant ML110 G7/DL120 G7 (J01) Servers
Version: 2013.07.01 (B) **(Critical)**
Filename: RPMS/i386/hp-firmware-system-j01-2013.07.01-2.1.i386.rpm

Important Note!

Important Notes:

Ver. 2013.07.01 (B) contains updates to the component packaging and is functionally equivalent to ver. 2013.07.01. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2013.07.01.

Deliverable Name:

HP ProLiant ML110 G7 and DL120 G7 System ROM - J01

Release Version:

07/01/2013

Last Recommended or Critical Revision:

07/01/2013

Previous Revision:

12/04/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed a processor issue under which a rare and complex sequence of internal processor microarchitecture events that occur in specific operating environments could cause a server system to experience unexpected page faults, general protection faults, or machine check exceptions or other unpredictable system behavior. While all processors supported by this server have this issue, to be affected by this issue the server must be operating in a virtualized environment, have Intel Hyperthreading enabled, have a hypervisor that enables Intel VT FlexPriority and Extended Page Tables, and have a guest OS utilizing 32-bit PAE Paging Mode. This issue is not unique to HP ProLiant servers and could impact any system utilizing affected processors operating with the conditions listed above. This revision of the System ROM contains an updated version of Intel's microcode that addresses this issue. Due to the potential severity of the issue addressed in this revision of the System ROM, this System ROM upgrade is considered a critical fix.

Known Issues:

None

Prerequisites

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

Fixes

Important Notes:

Ver. 2013.07.01 (B) contains updates to the component packaging and is functionally equivalent to ver. 2013.07.01. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2013.07.01.

Firmware Dependencies:

None

Problems Fixed:

Addressed a processor issue under which a rare and complex sequence of internal processor microarchitecture events that occur in specific operating environments could cause a server system to experience unexpected page faults, general protection faults, or machine check exceptions or other unpredictable system behavior. While all processors supported by this server have this issue, to be affected by this issue the server must be operating in a virtualized environment, have Intel Hyperthreading enabled, have a hypervisor that enables Intel VT FlexPriority and Extended Page Tables, and have a guest OS utilizing 32-bit PAE Paging Mode. This issue is not unique to HP ProLiant servers and could impact any system utilizing affected processors operating with the conditions listed above. This revision of the System ROM contains an updated version of Intel's microcode that addresses this issue. Due to the potential severity of the issue addressed in this revision of the System ROM, this System ROM upgrade is considered a critical fix.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant SL335s G7 (A24) Servers
Version: 2012.12.08 (C) **(Recommended)**
Filename: RPMS/i386/hp-firmware-system-a24-2012.12.08-3.i386.rpm

Important Note!

Important Notes:

Ver. 2012.12.08 (C) contains a documentation update only and is functionally equivalent to ver. 2012.12.08. It is not necessary to upgrade with Revision C if a previous component Revision was used to upgrade the system ROM to version 2012.12.08.

Deliverable Name:

HP ProLiant SL335s G7 System ROM - A24

Release Date:

12/08/2012

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

09/01/2012

Firmware Dependencies:

None

Enhancements/New Features:

Optimized the memory settings to improve the reliability of the memory system.

Added the latest product names of optional expansion cards and updated language translations (for non-English modes) in the ROM-Based Setup Utility (RBSU).

Problems Fixed:

Resolved an issue that could result in a server reset or the inability to boot. Servers should be updated to this revision of the system ROM to minimize the potential for a system reset or the inability to boot.

Resolved an issue where industry standard tools, operating systems, and HP utilities may report less Level 3 (L3) cache than expected.

Resolved a rare issue where the system and IML may indicate an uncorrectable reset when upgrading to the 09/01/2012 system ROM.

Known Issues:

None

Fixes

Important Notes:

Ver. 2012.12.08 (C) contains a documentation update only and is functionally equivalent to ver. 2012.12.08. It is not necessary to upgrade with Revision C if a previous component Revision was used to upgrade the system ROM to version 2012.12.08.

Firmware Dependencies:

None

Problems Fixed:

Resolved an issue that could result in a server reset or the inability to boot. Servers should be updated to this revision of the system ROM to minimize the potential for a system reset or the inability to boot.

Resolved an issue where industry standard tools, operating systems, and HP utilities may report less Level 3 (L3) cache than expected.

Resolved a rare issue where the system and IML may indicate an uncorrectable reset when upgrading to the 09/01/2012 system ROM.

Known Issues:

None

Enhancements

Optimized the memory settings to improve the reliability of the memory system.

Added the latest product names of optional expansion cards and updated language translations (for non-English modes) in the ROM-Based Setup Utility (RBSU).

Online ROM Flash Component for Linux - HP ProLiant SL390s G7 (P69) Servers

Version: 2015.08.16 **(Recommended)**

Filename: RPMS/i386/hp-firmware-system-p69-2015.08.16-1.1.i386.rpm

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

Important Notes:

None

Deliverable Name:

HP ProLiant SL390s G7 System ROM - P69

Release Date:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

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

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Linux - HP ProLiant SL4545 G7 (A31) Servers
Version: 2013.11.02 (B) **(Optional)**
Filename: RPMS/i386/hp-firmware-system-a31-2013.11.02-2.1.i386.rpm

Important Note!

Important Notes:

Ver. 2013.11.02 (B) contains updates to the component packaging and is functionally equivalent to ver. 2013.11.02. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2013.11.02.

Deliverable Name:

HP ProLiant SL4545 G7 System ROM - A31

Release Version:

11/02/2013

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

06/05/2013

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Problems Fixed:

None

Known Issues:

None

Prerequisites

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

Enhancements

Important Notes:

Ver. 2013.11.02 (B) contains updates to the component packaging and is functionally equivalent to ver. 2013.11.02. It is not necessary to upgrade with Revision B if a previous component Revision was used to upgrade the system ROM to version 2013.11.02.

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant BL460c G7 (I27) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028127.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL460c G7 System ROM - I27

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant BL465c G7 (A19) Servers
Version: 2014.02.02 (C) **(Optional)**
Filename: CP026050.zip

Important Note!

Important Notes:

Ver. 2014.02.02 (C) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision C if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Deliverable Name:

HP ProLiant BL465c G7 System ROM - A19

Release Date:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Fixes

Important Notes:

Ver. 2014.02.02 (C) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision C if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

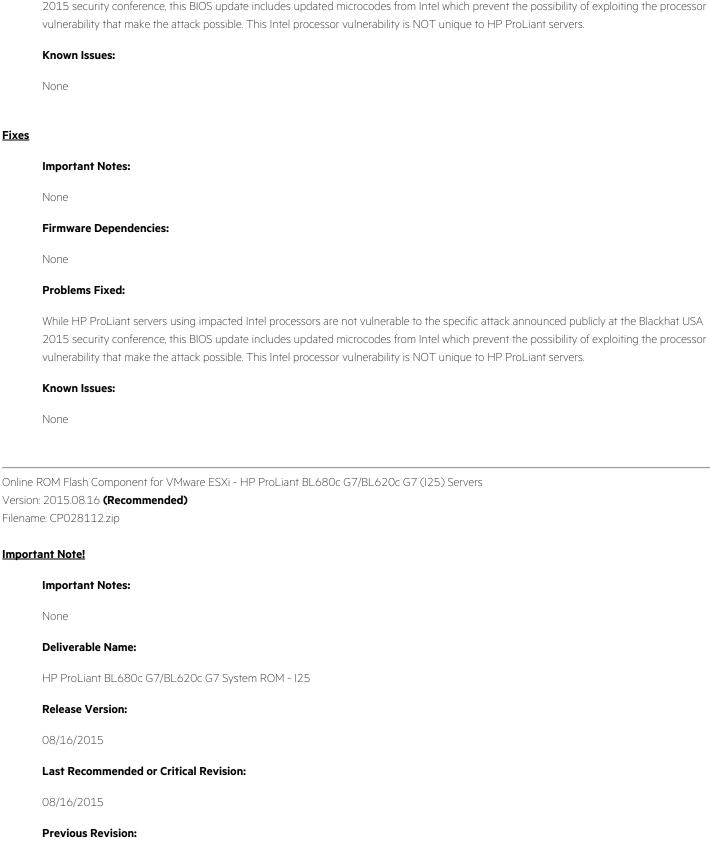**Firmware Dependencies:**

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant BL490c G7 (I28) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028138.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL490c G7 System ROM - I28

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant BL680c G7/BL620c G7 (I25) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028112.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL680c G7/BL620c G7 System ROM - I25

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant BL685c G7 (A20) Servers
Version: 2016.03.07 **(Recommended)**
Filename: CP029832.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL685c G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL360 G7 (P68) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028091.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL360 G7 System ROM - P68

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL380 G7 (P67) Servers
Version: 2015.08.16 **(Recommended)**

Filename: CP028142.zip

<u>Important Note!</u>

Important Notes:

None

Deliverable Name:

HP ProLiant DL380 G7 System ROM - P67

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

<u>Fixes</u>

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL385 G7 (A18) Servers
Version: 2014.02.02 (E) **(Optional)**
Filename: CP026045.zip

Important Note!

Important Notes:

Ver. 2014.02.02 (E) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision E if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Deliverable Name:

HP ProLiant DL385 G7 System ROM - A18

Release Date:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Fixes

Important Notes:

Ver. 2014.02.02 (E) contains updates to the component packaging and is functionally equivalent to ver. 2014.02.02. It is not necessary to upgrade with Revision E if a previous component Revision was used to upgrade the system ROM to version 2014.02.02.

Firmware Dependencies:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL580 G7 (P65) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028087.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL580 G7 System ROM - P65

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

10/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL585 G7 (A16) Servers
Version: 2016.03.07 **(Recommended)**
Filename: CP029828.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL585 G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant DL980 G7 (P66) Servers
Version: 2015.08.16 **(Recommended)**
Filename: CP028148.zip

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL980 G7 System ROM - P66

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

08/15/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for VMware ESXi - HP ProLiant SL4545 G7 (A31) Servers
Version: 2013.11.02 (B) **(Optional)**
Filename: CP024186.scexe

Important Note!

Important Notes:

Version 2013.11.02 (B) contains an update to the flash driver and replaces version 2013.11.02. The actual firmware contained within version 2013.11.02 (B) did not change as compared to version 2013.11.02 and therefore it is not necessary to upgrade if version 2013.11.02 has already been installed.

Deliverable Name:

HP ProLiant SL4545 G7 System ROM - A31

Release Date:

11/02/2013

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

06/05/2013

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Problems Fixed:

None

Known Issues:

None

Enhancements

Important Notes:

Version 2013.11.02 (B) contains an update to the flash driver and replaces version 2013.11.02. The actual firmware contained within version 2013.11.02 (B) did not change as compared to version 2013.11.02 and therefore it is not necessary to upgrade if version 2013.11.02 has already been installed.

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL2x220c G7 (I29) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028113.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL2x220c G7 System ROM - I29

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL460c G7 (I27) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028124.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL460c G7 System ROM - I27

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL465c G7 (A19) Servers
Version: 2014.02.02 (B) **(Optional)**
Filename: cp023998.exe

Important Note!

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Deliverable Name:

HP ProLiant BL465c G7 System ROM - A19

Release Date:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Fixes

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Firmware Dependencies:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL490c G7 (I28) Servers

Version: 2015.08.16 **(Recommended)**

Filename: cp028135.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL490c G7 System ROM - I28

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL680c G7/BL620c G7 (I25) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028109.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL680c G7/BL620c G7 System ROM - I25

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant BL685c G7 (A20) Servers
Version: 2016.03.07 **(Recommended)**
Filename: cp029829.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant BL685c G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.
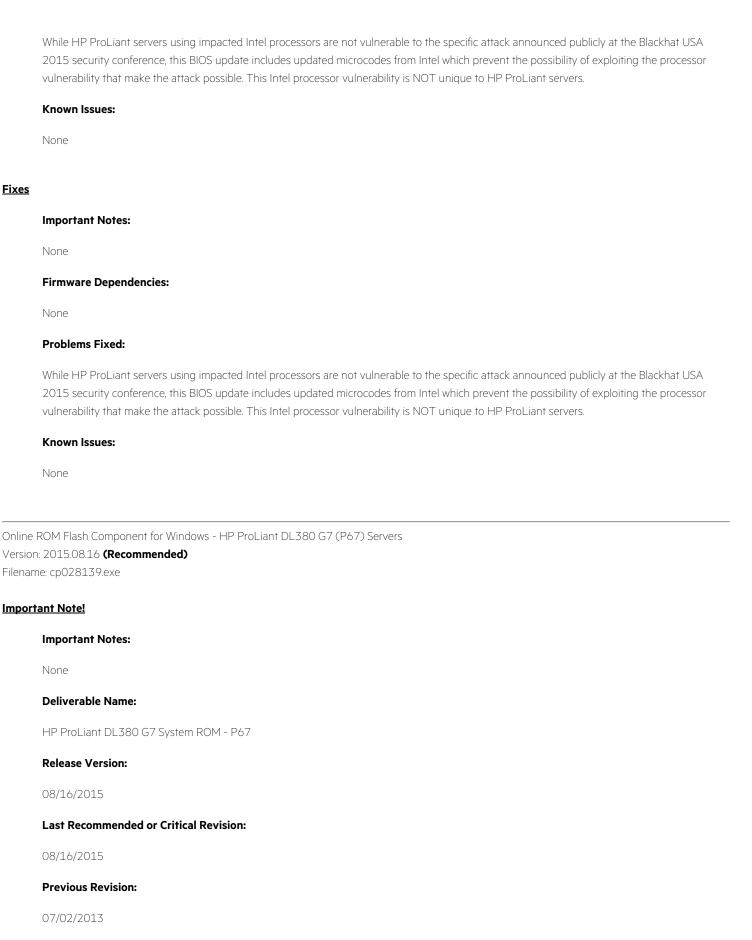
Known Issues:

None

Fixes

> **Important Notes:**
>
> None
>
> **Firmware Dependencies:**
>
> None
>
> **Problems Fixed:**
>
> Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.
>
> **Known Issues:**
>
> None

Online ROM Flash Component for Windows - HP ProLiant DL360 G7 (P68) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028088.exe

Important Note!

> **Important Notes:**
>
> None
>
> **Deliverable Name:**
>
> HP ProLiant DL360 G7 System ROM - P68
>
> **Release Version:**
>
> 08/16/2015
>
> **Last Recommended or Critical Revision:**
>
> 08/16/2015
>
> **Previous Revision:**
>
> 07/02/2013
>
> **Firmware Dependencies:**
>
> None
>
> **Enhancements/New Features:**
>
> None
>
> **Problems Fixed:**

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant DL380 G7 (P67) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028139.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL380 G7 System ROM - P67

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant DL385 G7 (A18) Servers
Version: 2014.02.02 (B) **(Optional)**
Filename: cp023997.exe

Important Note!

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Deliverable Name:

HP ProLiant DL385 G7 System ROM - A18

Release Date:

02/02/2014

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

12/08/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Fixes

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Firmware Dependencies:

None

Problems Fixed:

Resolved a very rare condition where the system could become unresponsive or unexpectedly reset when running with AMD Opteron 6100 or 6200 processors.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant DL580 G7 (P65) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028084.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL580 G7 System ROM - P65

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

10/01/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant DL585 G7 (A16) Servers
Version: 2016.03.07 **(Recommended)**
Filename: cp029825.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant DL585 G7 System ROM

Release Version:

03/07/2016

Last Recommended or Critical Revision:

03/07/2016

Previous Revision:

09/03/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue with AMD Opteron 6300 series processors in which the processor may experience unpredictable system behavior in virtualized environments due to an issue with the revision of the AMD microcode included in the 09/03/2014 revision of the System ROM. Only the 09/03/2014 revision of the System ROM is impacted by this issue. This revision of the System ROM contains an updated version of AMD's microcode that addresses this issue. This issue is NOT unique to HPE ProLiant servers and could impact any system utilizing affected processors with the affected AMD microcode. Due to the potential severity of the issue addressed in this revision of the System ROM, it is highly recommended that the System ROM be upgraded for impacted systems.

Known Issues:

None

Version: 2015.08.16 **(Recommended)**

Filename: cp028145.exe

<u>Important Note!</u>

Important Notes:

None

Deliverable Name:

HP ProLiant DL980 G7 System ROM - P66

Release Version:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

08/15/2014

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

<u>Fixes</u>

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant ML110 G7/DL120 G7 (J01) Servers

Version: 2013.07.01 (B) **(Critical)**

Filename: cp024022.exe

Important Note!

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Deliverable Name:

HP ProLiant ML110 G7 and DL120 G7 System ROM - J01

Release Date:

07/01/2013

Last Recommended or Critical Revision:

07/01/2013

Previous Revision:

12/04/2012

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

Addressed a processor issue under which a rare and complex sequence of internal processor microarchitecture events that occur in specific operating environments could cause a server system to experience unexpected page faults, general protection faults, or machine check exceptions or other unpredictable system behavior. While all processors supported by this server have this issue, to be affected by this issue the server must be operating in a virtualized environment, have Intel Hyperthreading enabled, have a hypervisor that enables Intel VT FlexPriority and Extended Page Tables, and have a guest OS utilizing 32-bit PAE Paging Mode. This issue is not unique to HP ProLiant servers and could impact any system utilizing affected processors operating with the conditions listed above. This revision of the System ROM contains an updated version of Intel's microcode that addresses this issue. Due to the potential severity of the issue addressed in this revision of the System ROM, this System ROM upgrade is considered a critical fix.

Known Issues:

None

Fixes

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Firmware Dependencies:

None

Problems Fixed:

Addressed a processor issue under which a rare and complex sequence of internal processor microarchitecture events that occur in specific operating environments could cause a server system to experience unexpected page faults, general protection faults, or machine check exceptions or other unpredictable system behavior. While all processors supported by this server have this issue, to be affected by this issue the server must be operating in a virtualized environment, have Intel Hyperthreading enabled, have a hypervisor that enables Intel VT FlexPriority and Extended Page Tables, and have a guest OS utilizing 32-bit PAE Paging Mode. This issue is not unique to HP ProLiant servers and could impact any system utilizing affected processors operating with the conditions listed above. This revision of the System ROM contains an updated version of Intel's microcode that addresses this issue. Due to the potential severity of the issue addressed in this revision of the System ROM, this System ROM upgrade is considered a critical fix.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant SL335s G7 (A24) Servers
Version: 2012.12.08 (B) **(Recommended)**
Filename: cp024000.exe

Important Note!

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Deliverable Name:

HP ProLiant SL335s G7 System ROM - A24

Release Date:

12/08/2012

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

09/01/2012

Firmware Dependencies:

None

Enhancements/New Features:

Optimized the memory settings to improve the reliability of the memory system.

Added the latest product names of optional expansion cards and updated language translations (for non-English modes) in the ROM-Based Setup Utility (RBSU).

Problems Fixed:

Resolved an issue that could result in a server reset or the inability to boot. Servers should be updated to this revision of the system ROM to minimize the potential for a system reset or the inability to boot.

Resolved an issue where industry standard tools, operating systems, and HP utilities may report less Level 3 (L3) cache than expected.

Resolved a rare issue where the system and IML may indicate an uncorrectable reset when upgrading to the 09/01/2012 system ROM.

Known Issues:

None

Fixes

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Firmware Dependencies:

None

Problems Fixed:

Resolved an issue that could result in a server reset or the inability to boot. Servers should be updated to this revision of the system ROM to minimize the potential for a system reset or the inability to boot.

Resolved an issue where industry standard tools, operating systems, and HP utilities may report less Level 3 (L3) cache than expected.

Resolved a rare issue where the system and IML may indicate an uncorrectable reset when upgrading to the 09/01/2012 system ROM.

Known Issues:

None

Enhancements

Optimized the memory settings to improve the reliability of the memory system.

Added the latest product names of optional expansion cards and updated language translations (for non-English modes) in the ROM-Based Setup Utility (RBSU).

Online ROM Flash Component for Windows - HP ProLiant SL390s G7 (P69) Servers
Version: 2015.08.16 **(Recommended)**
Filename: cp028116.exe

Important Note!

Important Notes:

None

Deliverable Name:

HP ProLiant SL390s G7 System ROM - P69

Release Date:

08/16/2015

Last Recommended or Critical Revision:

08/16/2015

Previous Revision:

07/02/2013

Firmware Dependencies:

None

Enhancements/New Features:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Fixes

Important Notes:

None

Firmware Dependencies:

None

Problems Fixed:

While HP ProLiant servers using impacted Intel processors are not vulnerable to the specific attack announced publicly at the Blackhat USA 2015 security conference, this BIOS update includes updated microcodes from Intel which prevent the possibility of exploiting the processor vulnerability that make the attack possible. This Intel processor vulnerability is NOT unique to HP ProLiant servers.

Known Issues:

None

Online ROM Flash Component for Windows - HP ProLiant SL4545 G7 (A31) Servers
Version: 2013.11.02 (B) **(Optional)**
Filename: cp024001.exe

Important Note!

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Deliverable Name:

HP ProLiant SL4545 G7 System ROM - A31

Release Date:

11/02/2013

Last Recommended or Critical Revision:

12/08/2012

Previous Revision:

06/05/2013

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Problems Fixed:

None

Known Issues:

None

<u>Enhancements</u>

Important Notes:

Component packaging has been updated; no impact to product's functionality.

Firmware Dependencies:

None

Enhancements/New Features:

Added the latest product names of optional expansion cards in the ROM-Based Setup Utility (RBSU).

Known Issues:

None

Driver - Network	

HP Broadcom 1Gb Multifunction Drivers for Windows Server 2008
Version: 7.8.50.0 (D) **(Optional)**
Filename: cp023429.exe

Important Note!

HP recommends the firmware provided in *HP Broadcom Online Firmware Upgrade Utility for Windows Server 2008,* version 4.0.1.11 or later for use with these drivers.

Fixes

These drivers address an issue that prevents the iSCSI driver from being installed when booting from a storage area network (SAN).

These drivers correct the "SpeedDuplex" advanced property options for several devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC373F PCI Express Multifunction Gigabit Server Adapter
- HP NC373T PCI Express Multifunction Gigabit Server Adapter
- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC382m Dual Port 1GbE Multifunction BL-c Adapter
- HP NC382T PCI Express Dual Port Gigabit Server Adapter

HP Broadcom 1Gb Multifunction Drivers for Windows Server x64 Editions
Version: 7.8.50.0 (E) **(Optional)**
Filename: cp023430.exe

Important Note!

HP recommends the firmware provided in *HP Broadcom Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.1.11 or later for use with these drivers.

Fixes

These drivers address an issue that prevents the iSCSI driver from being installed when booting from a storage area network (SAN).

These drivers correct the "SpeedDuplex" advanced property options for several devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC373F PCI Express Multifunction Gigabit Server Adapter
- HP NC373T PCI Express Multifunction Gigabit Server Adapter
- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC382m Dual Port 1GbE Multifunction BL-c Adapter
- HP NC382T PCI Express Dual Port Gigabit Server Adapter

HP Broadcom tg3 Ethernet Drivers for VMware vSphere 5.5

Version: 2015.10.01 **(Optional)**
Filename: cp026888.zip

Important Note!

HP recommends the firmware provided in *HP Broadcom NX1 Online Firmware Upgrade Utility for VMware*, version 1.8.6, for use with this driver.

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

Fixes

TBD

Enhancements

This driver now supports the HP Ethernet 1Gb 2-port 332i Adapter (22E8).

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331i Adapter
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

HP Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0
Version: 2015.10.01 **(Optional)**
Filename: cp026889.zip

Important Note!

HP recommends the firmware provided in *HP Broadcom NX1 Online Firmware Upgrade Utility for VMware*, version 1.8.6, for use with this driver.

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

Enhancements

This driver now supports the HP Ethernet 1Gb 2-port 332i Adapter (22E8).

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331i Adapter

- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

HP Intel E1R Driver for Windows Server 2008
Version: 12.7.29.0 (C) **(Optional)**
Filename: cp019461.exe

Fixes

This driver addresses an issue where a "link down" message is recorded in the Windows system event log during every system boot regardless of the actual state of the link.

Enhancements

This driver now supports the following network adapters:
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

Supported Devices and Features

This driver supports the following HP Intel E1R network adapters:
- HP NC365T PCI Express Quad Port Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- Hp Ethernet 1Gb 2-port 367i Adapter

HP Intel E1R Driver for Windows Server 2008 x64 Editions
Version: 12.7.29.0 (C) **(Optional)**
Filename: cp019462.exe

Fixes

This driver addresses an issue where a "link down" message is recorded in the Windows system event log during every system boot regardless of the actual state of the link.

Enhancements

This driver now supports the following network adapters:
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

Supported Devices and Features

This driver supports the following HP Intel E1R network adapters:
- HP NC365T PCI Express Quad Port Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 2-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- Hp Ethernet 1Gb 2-port 367i Adapter

HP Intel ixn/ixt Drivers for Windows Server 2008
Version: 3.5.22.0 (D) **(Optional)**
Filename: cp019449.exe

Fixes

This driver addresses an issue where a "link down" message is recorded in the Windows system event log during every system boot regardless of the actual state of the link.

Enhancements

This component now supports the HP Ethernet 10Gb 2-port 562i Adapter.

Supported Devices and Features

This component supports the following HP Intel ixn 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

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HP Intel ixn/ixt Drivers for Windows Server 2008 x64 Editions
Version: 3.5.22.0 (D) **(Optional)**
Filename: cp019450.exe

Fixes

This driver addresses an issue where a "link down" message is recorded in the Windows system event log during every system boot regardless of the actual state of the link.

Enhancements

This component now supports the HP Ethernet 10Gb 2-port 562i Adapter.

Supported Devices and Features

This component supports the following HP Intel ixn network adapters:
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HP Mellanox CX3 Driver for Windows Server 2008 R2
Version: 4.95.10777.0 **(Optional)**
Filename: cp026814.exe

Fixes

This driver corrects an issue which results in a Windows Stop Error (BSOD) after a receive buffer size change in Virtual Machine Queue (VMQ) mode.

This driver corrects an issue with the Powershell setting of RDMA over Converged Ethernet (RoCE) mode when the machine has more than one Mellanox device installed.

This driver corrects an issue with the reporting of Network Virtualization using Generic Routing Encapsulation (NVGRE) capabilities to the operating system.

Enhancements

Explicit Congestion Notification (ECN) is now configurable via PowerShell.

This driver supports a new mode that ignores Frame Check Sequence (FCS) warnings and allows the Ethernet packets to be received by the NIC.

Supported Devices and Features

This driver supports the following HP Mellanox CX3 network adapters:

- HP Ethernet 10G 2-port 546FLR-SFP+ Adapter
- HP Ethernet 10G 2-port 546SFP+ Adapter
- HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter
- HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter
- HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter
- HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter
- HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter
- HP InfiniBand QDR/EN 10Gb Dual Port 544FLR-QSFP Adapter
- HP InfiniBand FDR/EN 10/40Gb Dual Port 544QSFP Adapter
- HP InfiniBand FDR/EN 10/40Gb Dual Port 544FLR-QSFP Adapter

- HP InfiniBand FDR/EN 10/40Gb Dual Port 544M Adapter
- HP InfiniBand QDR/EN 10Gb Dual Port 544M Adapter
- HP Infiniband QDR/Ethernet 10Gb 2P 544i Adapter

HP NC-Series Intel E1E Driver for Windows Server 2008
Version: 9.15.17.0 **(Optional)**
Filename: cp017186.exe

Fixes

This driver addresses an issue where checksum offload computations were performed even when checksum offload was disabled.

Supported Devices and Features

This driver supports the following HP NC-Series Intel network adapters:

- HP NC110T PCI Express Single Port Gigabit Server Adapter
- HP NC360m Dual Port Gigabit Ethernet BL-c Adapter
- HP NC360T PCI Express Dual Port Gigabit Server Adapter
- HP NC364m Quad Port Gigabit Ethernet BL-c Adapter
- HP NC364T PCI Express Quad Port Gigabit Server Adapter

HP NC-Series Intel E1E Driver for Windows Server 2008 R2
Version: 9.15.17.0 (B) **(Optional)**
Filename: cp018229.exe

Enhancements

This driver now supports Windows Server 2012.

Supported Devices and Features

This driver supports the following HP NC-Series Intel network adapters:

- HP NC110T PCI Express Single Port Gigabit Server Adapter
- HP NC360m Dual Port Gigabit Ethernet BL-c Adapter
- HP NC360T PCI Express Dual Port Gigabit Server Adapter
- HP NC364m Quad Port Gigabit Ethernet BL-c Adapter
- HP NC364T PCI Express Quad Port Gigabit Server Adapter

HP NC-Series Intel E1E Driver for Windows Server 2008 x64 Editions
Version: 9.15.17.0 **(Optional)**
Filename: cp017187.exe

Fixes

This driver addresses an issue where checksum offload computations were performed even when checksum offload was disabled.

Supported Devices and Features

This driver supports the following HP NC-Series Intel network adapters:

- HP NC110T PCI Express Single Port Gigabit Server Adapter
- HP NC360m Dual Port Gigabit Ethernet BL-c Adapter
- HP NC360T PCI Express Dual Port Gigabit Server Adapter
- HP NC364m Quad Port Gigabit Ethernet BL-c Adapter
- HP NC364T PCI Express Quad Port Gigabit Server Adapter

HP NC-Series Intel E1Q Driver for Windows Server 2008
Version: 12.7.29.0 (B) **(Optional)**
Filename: cp021179.exe

Fixes

This component addresses an issue which can result in installed adapters remaining in a disabled state when they should be enabled after installation is complete.

Supported Devices and Features

This driver supports the following HP NC-Series Intel E1Q network adapters:
- HP NC112T PCI Express Gigabit Server Adapter
- HP NC112i 1-port Ethernet Server Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter

HP NC-Series Intel E1Q Driver for Windows Server 2008 R2
Version: 12.7.27.0 (B) **(Optional)**
Filename: cp021181.exe

Fixes

This component addresses an issue which can result in installed adapters remaining in a disabled state when they should be enabled after installation is complete.

Supported Devices and Features

This driver supports the following HP NC-Series Intel E1Q network adapters:
- HP NC112T PCI Express Gigabit Server Adapter
- HP NC112i 1-port Ethernet Server Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter

HP NC-Series Intel E1Q Driver for Windows Server 2008 x64 Editions
Version: 12.7.29.0 (B) **(Optional)**
Filename: cp021180.exe

Fixes

This component addresses an issue which can result in installed adapters remaining in a disabled state when they should be enabled after

installation is complete.

<u>**Supported Devices and Features**</u>

This driver supports the following HP NC-Series Intel E1Q network adapters:
- HP NC112T PCI Express Gigabit Server Adapter
- HP NC112i 1-port Ethernet Server Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter

HP NC-Series Intel E1Q Driver for Windows Server 2012
Version: 12.7.27.0 (B) **(Optional)**
Filename: cp021182.exe

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

This component addresses an issue which can result in installed adapters remaining in a disabled state when they should be enabled after installation is complete.

<u>**Supported Devices and Features**</u>

This driver supports the following HP NC-Series Intel E1Q network adapters:
- HP NC112T PCI Express Gigabit Server Adapter
- HP NC112i 1-port Ethernet Server Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter

HP Network Configuration Utility for Windows Server 2008
Version: 10.90.0.0 (B) **(Optional)**
Filename: cp023337.exe

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

Attention Gen9 customers: This utility does not support Gen9 ProLiant platform NICs. See Customer Notice *HP Network Configuration Utility (NCU) - HP NCU Does Not Support Ethernet / FlexFabric Adapters designed for HP ProLiant Gen9 Servers* for more information: http://h20564.www2.hp.com/portal/site/hpsc/public/kb/docDisplay/?docId=c04539182.

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

This component addresses an issue which results in extremely long installation times on systems with a large number of virtual miniports.

HP QLogic nx_nic Drivers for SUSE Linux Enterprise Server 11 i586
Version: 4.0.596.1-5 **(Optional)**
Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_3.0.76_0.11-2.sles11sp3.i586.rpm; hpqlgc-nx_nic-kmp-pae-4.0.596.1_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-nx_nic-kmp-pae-4.0.596.1_3.0.76_0.11-2.sles11sp3.i586.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_3.0.76_0.11-2.sles11sp3.i586.rpm; README

Important Note!

> HP recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86*, version 5.6.10, for use with these drivers.

Enhancements

> This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

> This software supports the following network adapters:
>
> - HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic nx_nic Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 4.0.596.1-5 **(Optional)**

Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_3.0.76_0.11-2.sles11sp3.x86_64.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_3.0.76_0.11-2.sles11sp3.x86_64.rpm; README

Important Note!

> HP recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86_84*, version 5.6.10, for use with these drivers.

Enhancements

> This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

> This software supports the following network adapters:
>
> - HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3 Drivers for VMware vSphere 5.5

Version: 2015.10.01 **(Optional)**

Filename: cp026078.zip

Important Note!

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

Fixes

> This driver corrects a Page Fault that occurs when the driver loads the NIC's firmware.

Supported Devices and Features

These drivers support the following QLogic P3 network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3 Drivers for VMware vSphere 6.0
Version: 2015.10.01 **(Optional)**
Filename: cp027056.zip

Important Note!

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

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following QLogic P3 network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3P Drivers for VMware vSphere 6.0
Version: 2015.10.01 **(Optional)**
Filename: cp027058.zip

Important Note!

HP recommends the firmware provided in HP QLogic P3P Online Firmware Upgrade Utility for VMware, version 2.5.5, for use with this driver.

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

Enhancements

Initial release.

Supported Devices and Features

These drivers support the following HP P3P network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HP QLogic P3P iSCSI Driver for Windows Server 2008

Version: 2.1.6.10 **(Optional)**
Filename: cp021538.exe

Important Note!

HP recommends the firmware provided in the *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server 2008,* version 4.0.0.19 or later for use with this driver.

Fixes

This driver corrects an issue which can result in an adapter reset when enabling or disabling a Virtual Local Area Network (VLAN).

This driver corrects an issue which can result in an adapter reset while assigning a static IP address.

Supported Devices and Features

This driver supports the following HP P3P network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP QLogic P3P iSCSI Driver for Windows Server 2008 x64 Editions
Version: 2.1.6.10 **(Optional)**
Filename: cp021539.exe

Important Note!

HP recommends the firmware provided in the *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.0.19 or later for use with this driver.

Fixes

This driver corrects an issue which can result in an adapter reset when enabling or disabling a Virtual Local Area Network (VLAN).

This driver corrects an issue which can result in an adapter reset while assigning a static IP address.

Supported Devices and Features

This driver supports the following HP P3P network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP QLogic P3P iSCSI Driver for Windows Server 2012 and Windows Server 2012 R2
Version: 2.1.6.10 **(Optional)**
Filename: cp021540.exe

Important Note!

HP recommends the firmware provided in the *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions,* version

4.0.0.19 or later for use with this driver.

Fixes

This driver corrects an issue which can result in an adapter reset when enabling or disabling a Virtual Local Area Network (VLAN).

This driver corrects an issue which can result in an adapter reset while assigning a static IP address.

Supported Devices and Features

This driver supports the following HP P3P network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HPE Broadcom 1Gb Driver for Windows Server 2008
Version: 17.4.0.0 **(Optional)**
Filename: cp029526.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server 2008,* version 5.0.0.22 or later, for use with this driver.

Fixes

This driver addresses an issue where the driver causes a Windows Stop Error (BSOD) with code 0000001E.

Supported Devices and Features

This driver supports the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom 1Gb Driver for Windows Server x64 Editions
Version: 17.4.0.0 (B) **(Optional)**
Filename: cp030252.exe

Important Note!

HPE recommends the firmware provided in *HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.24 or later, for use with this driver.

Fixes

This driver addresses a Windows Stop Error (BSOD) with stop code:0x7F.

Enhancements

This product now supports Windows Server 2016.

Supported Devices and Features

This driver supports the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 i686

Version: 3.137o-5 **(Optional)**

Filename: kmod-tg3-3.137o-1.rhel6u7.i686.rpm; kmod-tg3-3.137o-5.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86,* version 2.17.5 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 3.137o-5 **(Optional)**

Filename: kmod-tg3-3.137o-1.rhel6u7.x86_64.rpm; kmod-tg3-3.137o-5.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64,* version 2.17.5 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- HP Ethernet 1Gb 2-port 332T Adapter

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

Version: 3.137o-1 **(Optional)**

Filename: kmod-tg3-3.137o-1.rhel7u1.x86_64.rpm; kmod-tg3-3.137o-1.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.17.6 or later, for use with these drivers.

Fixes

This product addresses an issue where driver syslog entries show the module name "pcieport" instead of "tg3."

This product addresses an issue where TCP Segmentation Offloading (TSO) and checksum offloading are not performed correctly when the frame has been VLAN encapsulated.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter

- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- 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 11 i586

Version: 3.137o-1 **(Optional)**

Filename: README; tg3-kmp-default-3.137o_3.0.101_63-1.sles11sp4.i586.rpm; tg3-kmp-default-3.137o_3.0.76_0.11-1.sles11sp3.i586.rpm; tg3-kmp-pae-3.137o_3.0.101_63-1.sles11sp4.i586.rpm; tg3-kmp-pae-3.137o_3.0.76_0.11-1.sles11sp3.i586.rpm; tg3-kmp-xen-3.137o_3.0.101_63-1.sles11sp4.i586.rpm; tg3-kmp-xen-3.137o_3.0.76_0.11-1.sles11sp3.i586.rpm

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86,* version 2.17.6 or later, for use with these drivers.

Fixes

This product addresses an issue where driver syslog entries show the module name "pcieport" instead of "tg3."

This product addresses an issue where TCP Segmentation Offloading (TSO) and checksum offloading are not performed correctly when the frame has been VLAN encapsulated.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom tg3 Ethernet Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 3.137o-1 **(Optional)**

Filename: README; tg3-kmp-default-3.137o_3.0.101_63-1.sles11sp4.x86_64.rpm; tg3-kmp-default-3.137o_3.0.76_0.11-1.sles11sp3.x86_64.rpm; tg3-kmp-xen-3.137o_3.0.101_63-1.sles11sp4.x86_64.rpm; tg3-kmp-xen-3.137o_3.0.76_0.11-1.sles11sp3.x86_64.rpm

Important Note!

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.17.6 or later, for use with these drivers.

Fixes

This product addresses an issue where driver syslog entries show the module name "pcieport" instead of "tg3."

This product addresses an issue where TCP Segmentation Offloading (TSO) and checksum offloading are not performed correctly when the frame has been VLAN encapsulated.

<u>Supported Devices and Features</u>

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- 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: 3.137o-1 **(Optional)**

Filename: README; tg3-kmp-default-3.137o_k3.12.28_4-1.sles12sp0.x86_64.rpm; tg3-kmp-default-3.137o_k3.12.49_11-1.sles12sp1.x86_64.rpm; tg3-kmp-xen-3.137o_k3.12.28_4-1.sles12sp0.x86_64.rpm; tg3-kmp-xen-3.137o_k3.12.49_11-1.sles12sp1.x86_64.rpm

<u>Important Note!</u>

HPE recommends the firmware provided in *HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64,* version 2.17.6 or later, for use with these drivers.

<u>Fixes</u>

This product addresses an issue where driver syslog entries show the module name "pcieport" instead of "tg3."

This product addresses an issue where TCP Segmentation Offloading (TSO) and checksum offloading are not performed correctly when the frame has been VLAN encapsulated.

<u>Supported Devices and Features</u>

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- HP Ethernet 1Gb 4-port 331i-SPI Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2008

Version: 11.1.145.30 (B) **(Optional)**

Filename: cp032093.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x86),* version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2008 R2
Version: 11.1.145.30 (B) **(Optional)**
Filename: cp032105.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64),* version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter

HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2008 x64 Editions
Version: 11.1.145.30 (B) **(Optional)**
Filename: cp032094.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2012
Version: 11.1.145.30 (B) **(Optional)**
Filename: cp032106.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- 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: 10.7.110.16 **(Optional)**
Filename: cp027194.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Online Flash for Emulex Fibre Channel Host Bus Adapters - Windows 2008/2012/2012 R2 x64*, version 2016.02.01, for use with this driver.

Fixes

This driver addresses an issue that results in Event ID 67 appearing in the Windows System Event Log in systems with an HP FlexFabric 20Gb 2-port 650FLB Adapter installed.

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T Adapter

Supported Devices and Features

This driver supports the following network adapters:

- HP NC551i Dual Port FlexFabric 10Gb Network Adapter
- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter

- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Driver for Windows Server 2016
Version: 11.1.196.4 (B) **(Optional)**
Filename: cp032095.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for Windows Server 2016 (x64),* version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP CN1100E Dual Port Converged Network Adapter
- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Drivers for Red Hat Enterprise Linux 6 i686
Version: 11.1.183.21-1 **(Optional)**
Filename: kmod-be2net-11.1.145.27-1.rhel6u7.i686.rpm; kmod-be2net-11.1.183.21-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x86),* version 2016.08.02 or later for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE Drivers for Red Hat Enterprise Linux 6 x86_64
Version: 11.1.183.21-1 **(Optional)**
Filename: kmod-be2net-11.1.145.27-1.rhel6u7.x86_64.rpm; kmod-be2net-11.1.183.21-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64),* version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 11.1.145.27-1 **(Optional)**
Filename: kmod-be2net-11.1.145.27-1.rhel7u1.x86_64.rpm; kmod-be2net-11.1.145.27-1.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE Drivers for SUSE Linux Enterprise Server 11 i586
Version: 11.1.145.27-1 **(Optional)**
Filename: be2net-kmp-default-11.1.145.27_3.0.101_63-1.sles11sp4.i386.rpm; be2net-kmp-default-11.1.145.27_3.0.76_0.11-1.sles11sp3.i386.rpm; be2net-kmp-pae-11.1.145.27_3.0.101_63-1.sles11sp4.i386.rpm; be2net-kmp-pae-11.1.145.27_3.0.76_0.11-1.sles11sp3.i386.rpm; be2net-kmp-xen-11.1.145.27_3.0.101_63-1.sles11sp4.i386.rpm; be2net-kmp-xen-11.1.145.27_3.0.76_0.11-1.sles11sp3.i386.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x86)*, version 2016.08.02 or later for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 11.1.145.27-1 **(Optional)**

Filename: be2net-kmp-default-11.1.145.27_3.0.101_63-1.sles11sp4.x86_64.rpm; be2net-kmp-default-11.1.145.27_3.0.76_0.11-
1.sles11sp3.x86_64.rpm; be2net-kmp-xen-11.1.145.27_3.0.101_63-1.sles11sp4.x86_64.rpm; be2net-kmp-xen-11.1.145.27_3.0.76_0.11-
1.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for
use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

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

Version: 11.1.145.27-1 **(Optional)**

Filename: be2net-kmp-default-11.1.145.27_k3.12.28_4-1.sles12sp0.x86_64.rpm; be2net-kmp-default-11.1.145.27_k3.12.49_11-
1.sles12sp1.x86_64.rpm; be2net-kmp-xen-11.1.145.27_k3.12.28_4-1.sles12sp0.x86_64.rpm; be2net-kmp-xen-11.1.145.27_k3.12.49_11-
1.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for
use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2008
Version: 11.1.185.0 (B) **(Optional)**
Filename: cp032096.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x86)*, version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2008 R2
Version: 11.1.185.0 (B) **(Optional)**
Filename: cp032098.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2008 x64 Editions
Version: 11.1.185.0 (B) **(Optional)**
Filename: cp032097.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01 or later for use with this driver.

Fixes

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter

HPE Emulex 10/20 GbE iSCSI Driver for Windows Server 2012
Version: 11.1.185.0 (B) **(Optional)**
Filename: cp032099.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01

or later for use with this driver.

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

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

<u>**Supported Devices and Features**</u>

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- 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: 11.1.185.0 (B) **(Optional)**
Filename: cp032100.exe

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

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)*, version 2016.10.01 or later for use with this driver.

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

This component no longer recognizes the HP NC551i Dual Port FlexFabric 10Gb Adapter, which is now consistent with the driver that the component contains.

<u>**Supported Devices and Features**</u>

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- 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: 11.1.185.0 **(Optional)**

Filename: cp029151.exe

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters for Windows Server 2016 (x64)*, version 2016.10.01 or later for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This driver supports the following network adapters:

- HP CN1100E Dual Port Converged Network Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for Red Hat Enterprise Linux 6 i686

Version: 11.1.183.21-1 **(Optional)**

Filename: kmod-be2iscsi-11.1.145.26-1.rhel6u7.i686.rpm; kmod-be2iscsi-11.1.183.21-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x86)*, version 2016.08.02 or later for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

This driver supports the following network adapters:

HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter

- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 11.1.183.21-1 **(Optional)**

Filename: kmod-be2iscsi-11.1.145.26-1.rhel6u7.x86_64.rpm; kmod-be2iscsi-11.1.183.21-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

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

Version: 11.1.145.26-1 **(Optional)**

Filename: kmod-be2iscsi-11.1.145.26-1.rhel7u1.x86_64.rpm; kmod-be2iscsi-11.1.145.26-1.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for SUSE Linux Enterprise Server 11 i586

Version: 11.1.145.26-1 **(Optional)**

Filename: be2iscsi-kmp-default-11.1.145.26_3.0.101_63-1.sles11sp4.i386.rpm; be2iscsi-kmp-default-11.1.145.26_3.0.76_0.11-1.sles11sp3.i386.rpm; be2iscsi-kmp-pae-11.1.145.26_3.0.101_63-1.sles11sp4.i386.rpm; be2iscsi-kmp-pae-11.1.145.26_3.0.76_0.11-1.sles11sp3.i386.rpm; be2iscsi-kmp-xen-11.1.145.26_3.0.101_63-1.sles11sp4.i386.rpm; be2iscsi-kmp-xen-11.1.145.26_3.0.76_0.11-1.sles11sp3.i386.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x86)*, version 2016.08.02 or later for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 11.1.145.26-1 **(Optional)**

Filename: be2iscsi-kmp-default-11.1.145.26_3.0.101_63-1.sles11sp4.x86_64.rpm; be2iscsi-kmp-default-11.1.145.26_3.0.76_0.11-1.sles11sp3.x86_64.rpm; be2iscsi-kmp-xen-11.1.145.26_3.0.101_63-1.sles11sp4.x86_64.rpm; be2iscsi-kmp-xen-11.1.145.26_3.0.76_0.11-1.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 11.1.145.26-1 **(Optional)**
Filename: be2iscsi-kmp-default-11.1.145.26_k3.12.28_4-1.sles12sp0.x86_64.rpm; be2iscsi-kmp-default-11.1.145.26_k3.12.49_11-
1.sles12sp1.x86_64.rpm; be2iscsi-kmp-xen-11.1.145.26_k3.12.28_4-1.sles12sp0.x86_64.rpm; be2iscsi-kmp-xen-11.1.145.26_k3.12.49_11-
1.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)*, version 2016.08.02 for use with these drivers.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for VMware vSphere 5.5
Version: 2016.10.07 **(Optional)**
Filename: cp029504.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 Firmware Flash for Emulex Fibre Channel Host Bus and Converged Network Adapters for VMware vSphere 5.5 and 6.0,* version 2016.10.01 or later, for use with this driver.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20 GbE iSCSI Drivers for VMware vSphere 6.0
Version: 2016.10.07 **(Optional)**
Filename: cp029505.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 Firmware Flash for Emulex Fibre Channel Host Bus and Converged Network Adapters for VMware vSphere 5.5 and 6.0,* version 2016.10.01 or later, for use with this driver.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10GbE Drivers for VMware vSphere 5.5
Version: 2016.10.07 **(Optional)**
Filename: cp029507.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 Firmware Flash for Emulex Fibre Channel Host Bus and Converged Network Adapters for VMware vSphere 5.5 and 6.0*, version 2016.10.01 or later, for use with this driver.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10GbE Drivers for VMware vSphere 6.0
Version: 2016.10.07 **(Optional)**
Filename: cp029508.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 Firmware Flash for Emulex Fibre Channel Host Bus and Converged Network Adapters for VMware vSphere 5.5 and 6.0*, version 2016.10.01 or later, for use with this driver.

Fixes

This driver provides a recovery mechanism that addresses unhandled exceptions on the supported devices.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Intel e1000e Drivers for Red Hat Enterprise Linux 6 i686

Version: 3.3.4-1 **(Optional)**

Filename: kmod-hp-e1000e-3.2.7.2-12.rhel6u7.i686.rpm; kmod-hp-e1000e-3.3.4-1.rhel6u8.i686.rpm; README

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel e1000e Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 3.3.4-1 **(Optional)**

Filename: kmod-hp-e1000e-3.2.7.2-12.rhel6u7.x86_64.rpm; kmod-hp-e1000e-3.3.4-1.rhel6u8.x86_64.rpm; README

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel e1000e Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 3.2.7.2-12 **(Optional)**
Filename: kmod-hp-e1000e-3.2.7.2-12.rhel7u1.x86_64.rpm; kmod-hp-e1000e-3.2.7.2-12.rhel7u2.x86_64.rpm; README

Fixes

The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel e1000e Drivers for SUSE Linux Enterprise Server 11 i586
Version: 3.2.7.2-12 **(Optional)**
Filename: hp-e1000e-kmp-default-3.2.7.2_3.0.101_63-12.sles11sp4.i586.rpm; hp-e1000e-kmp-default-3.2.7.2_3.0.76_0.11-12.sles11sp3.i586.rpm; hp-e1000e-kmp-pae-3.2.7.2_3.0.101_63-12.sles11sp4.i586.rpm; hp-e1000e-kmp-pae-3.2.7.2_3.0.76_0.11-12.sles11sp3.i586.rpm; hp-e1000e-kmp-xen-3.2.7.2_3.0.101_63-12.sles11sp4.i586.rpm; hp-e1000e-kmp-xen-3.2.7.2_3.0.76_0.11-12.sles11sp3.i586.rpm; README

Fixes

The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel e1000e Drivers for SUSE Linux Enterprise Server 11 x86_64
Version: 3.2.7.2-12 **(Optional)**
Filename: hp-e1000e-kmp-default-3.2.7.2_3.0.101_63-12.sles11sp4.x86_64.rpm; hp-e1000e-kmp-default-3.2.7.2_3.0.76_0.11-12.sles11sp3.x86_64.rpm; hp-e1000e-kmp-xen-3.2.7.2_3.0.101_63-12.sles11sp4.x86_64.rpm; hp-e1000e-kmp-xen-3.2.7.2_3.0.76_0.11-12.sles11sp3.x86_64.rpm; README

Fixes

The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel e1000e Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 3.2.7.2-12 **(Optional)**

Filename: hp-e1000e-kmp-default-3.2.7.2_k3.12.28_4-12.sles12sp0.x86_64.rpm; hp-e1000e-kmp-default-3.2.7.2_k3.12.49_11-12.sles12sp1.x86_64.rpm; hp-e1000e-kmp-xen-3.2.7.2_k3.12.28_4-12.sles12sp0.x86_64.rpm; hp-e1000e-kmp-xen-3.2.7.2_k3.12.49_11-12.sles12sp1.x86_64.rpm; README

Fixes

The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC112i 1-port Ethernet Server Adapter

HPE Intel E1R Driver for Windows Server 2008 R2

Version: 12.14.7.0 **(Optional)**

Filename: cp027785.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.0.0.7, for use with this driver.

Fixes

This driver addresses an issue where Virtual Machine Queue (VMQ) feature was incorrectly disabled.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

- HP NC365T PCI Express Quad Port Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel E1R Driver for Windows Server 2012
Version: 12.14.8.0 **(Optional)**
Filename: cp028837.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Fixes

This driver addresses an issue that results in the failure of a Powershell command that contains an adapter name.

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 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel E1R Driver for Windows Server 2012 R2
Version: 12.14.8.0 **(Optional)**
Filename: cp028838.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Fixes

This driver addresses an issue that results in the failure of a Powershell command that contains an adapter name.

Enhancements

This product now supports the HPE Ethernet 1Gb 4-port 366i Communication Board.

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 361FLB Adapter

- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel E1R Driver for Windows Server 2016
Version: 12.15.184.0 **(Optional)**
Filename: cp029676.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.0.0.25 or later, for use with this driver.

Enhancements

Initial release.

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 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 1.3.46-13 **(Optional)**
Filename: kmod-hp-i40e-1.3.46-13.rhel7u1.x86_64.rpm; kmod-hp-i40e-1.3.46-13.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Enhancements

This product now supports the HPE Ethernet 10Gb 2-port 563i Adapter.

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 Ethernet 10Gb 2-port 563i Adapter

HPE Intel i40e Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 1.3.46-13 **(Optional)**

Filename: hp-i40e-kmp-default-1.3.46_3.0.101_63-13.sles11sp4.x86_64.rpm; hp-i40e-kmp-default-1.3.46_3.0.76_0.11-13.sles11sp3.x86_64.rpm; hp-i40e-kmp-xen-1.3.46_3.0.101_63-13.sles11sp4.x86_64.rpm; hp-i40e-kmp-xen-1.3.46_3.0.76_0.11-13.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Enhancements

This product now supports the HPE Ethernet 10Gb 2-port 563i Adapter.

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 Ethernet 10Gb 2-port 563i Adapter

HPE Intel i40e Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 1.3.46-13 **(Optional)**

Filename: hp-i40e-kmp-default-1.3.46_k3.12.28_4-13.sles12sp0.x86_64.rpm; hp-i40e-kmp-default-1.3.46_k3.12.49_11-13.sles12sp1.x86_64.rpm; hp-i40e-kmp-xen-1.3.46_k3.12.28_4-13.sles12sp0.x86_64.rpm; hp-i40e-kmp-xen-1.3.46_k3.12.49_11-13.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Enhancements

This product now supports the HPE Ethernet 10Gb 2-port 563i Adapter.

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 Ethernet 10Gb 2-port 563i Adapter

HPE Intel i40e Drivers for VMware vSphere 5.5/6.0
Version: 2016.03.29 **(Optional)**
Filename: cp027503.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 3.0.8, for use with this driver.

Fixes

This driver addresses a purple diagnostic screen (PSOD) that occurs due to a Tx hang.

This driver addresses an issue where the device flow control behavior does not match the hardware Flow Control setting.

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 2008 R2
Version: 1.2.130.0 (C) **(Optional)**
Filename: cp029054.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.0.0.25 or later, for use with this driver.

Fixes

This product addresses an issue where a shared network port that is ILO enabled loses connectivity while booting with a mounted image.

This product addresses an issue where a yellow bang appears when the user chooses to create a virtual machine using an existing virtual hard disk.

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 2012
Version: 1.2.133.0 (B) **(Optional)**
Filename: cp029055.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Fixes

This product addresses an issue where a shared network port that is ILO enabled loses connectivity while booting with a mounted image.

This product addresses an issue where a yellow bang appears when the user chooses to create a virtual machine using an existing virtual hard disk.

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 2012 R2
Version: 1.2.133.0 (C) **(Optional)**
Filename: cp029056.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Fixes

This product addresses an issue where a shared network port that is ILO enabled loses connectivity while booting with a mounted image.

This product addresses an issue where a yellow bang appears when the user chooses to create a virtual machine using an existing virtual hard disk.

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 i40evf Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 1.3.33.2-12 **(Optional)**
Filename: kmod-hp-i40evf-1.3.33.2-12.rhel7u1.x86_64.rpm; kmod-hp-i40evf-1.3.33.2-12.rhel7u2.x86_64.rpm; README

Important Note!

> HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

> The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

> This product supports the following HPE network adapters:
>
> - HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
> - HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40evf Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 1.3.33.2-12 **(Optional)**

Filename: hp-i40evf-kmp-default-1.3.33.2_3.0.101_63-12.sles11sp4.x86_64.rpm; hp-i40evf-kmp-default-1.3.33.2_3.0.76_0.11-12.sles11sp3.x86_64.rpm; hp-i40evf-kmp-xen-1.3.33.2_3.0.101_63-12.sles11sp4.x86_64.rpm; hp-i40evf-kmp-xen-1.3.33.2_3.0.76_0.11-12.sles11sp3.x86_64.rpm; README

Important Note!

> HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

> The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

> This product supports the following HPE network adapters:
>
> - HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
> - HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40evf Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 1.3.33.2-12 **(Optional)**

Filename: hp-i40evf-kmp-default-1.3.33.2_k3.12.28_4-12.sles12sp0.x86_64.rpm; hp-i40evf-kmp-default-1.3.33.2_k3.12.49_11-12.sles12sp1.x86_64.rpm; hp-i40evf-kmp-xen-1.3.33.2_k3.12.28_4-12.sles12sp0.x86_64.rpm; hp-i40evf-kmp-xen-1.3.33.2_k3.12.49_11-12.sles12sp1.x86_64.rpm; README

Important Note!

> HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

The RPM header for this product now shows the correct source RPM URL.

Supported Devices and Features

This product supports the following HPE network adapters:

- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 6 i686

Version: 5.3.5.3-1 (B) **(Optional)**

Filename: kmod-hp-igb-5.3.5.3-1.rhel6u7.i686.rpm; kmod-hp-igb-5.3.5.3-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the offload property cannot be disabled.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 5.3.5.3-1 (B) **(Optional)**

Filename: kmod-hp-igb-5.3.5.3-1.rhel6u7.x86_64.rpm; kmod-hp-igb-5.3.5.3-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the offload property cannot be disabled.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now supports the HPE Ethernet 1Gb 4-port 366i Communication Board.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 5.3.5.3-1 **(Optional)**
Filename: kmod-hp-igb-5.3.5.3-1.rhel7u1.x86_64.rpm; kmod-hp-igb-5.3.5.3-1.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the offload property cannot be disabled.

Enhancements

This product now supports the HPE Ethernet 1Gb 4-port 366i Communication Board.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 11 i586

Version: 5.3.5.3-1 **(Optional)**

Filename: hp-igb-kmp-default-5.3.5.3_3.0.101_63-1.sles11sp4.i586.rpm; hp-igb-kmp-default-5.3.5.3_3.0.76_0.11-1.sles11sp3.i586.rpm; hp-igb-kmp-pae-5.3.5.3_3.0.101_63-1.sles11sp4.i586.rpm; hp-igb-kmp-pae-5.3.5.3_3.0.76_0.11-1.sles11sp3.i586.rpm; hp-igb-kmp-xen-5.3.5.3_3.0.101_63-1.sles11sp4.i586.rpm; hp-igb-kmp-xen-5.3.5.3_3.0.76_0.11-1.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the offload property cannot be disabled.

Supported Devices and Features

These drivers support the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 5.3.5.3-1 **(Optional)**

Filename: hp-igb-kmp-default-5.3.5.3_3.0.101_63-1.sles11sp4.x86_64.rpm; hp-igb-kmp-default-5.3.5.3_3.0.76_0.11-1.sles11sp3.x86_64.rpm; hp-igb-kmp-xen-5.3.5.3_3.0.101_63-1.sles11sp4.x86_64.rpm; hp-igb-kmp-xen-5.3.5.3_3.0.76_0.11-1.sles11sp3.x86_64.rpm; README

Important Note!

> HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

> This product addresses an issue where the offload property cannot be disabled.

Supported Devices and Features

> These drivers support the following Intel network adapters:

> - HP Ethernet 1Gb 2-port 361i Adapter
> - HP Ethernet 1Gb 2-port 361FLB Adapter
> - HP Ethernet 1Gb 2-port 361T Adapter
> - HP NC362i Integrated Dual Port Gigabit Server Adapter
> - HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
> - HP Ethernet 1Gb 2-port 363i Adapter
> - HP Ethernet 1Gb 1-port 364i Adapter
> - HP NC365T 4-port Ethernet Server Adapter
> - HP Ethernet 1Gb 4-port 366FLR Adapter
> - HP Ethernet 1Gb 4-port 366i Adapter
> - HP Ethernet 1Gb 4-port 366M Adapter
> - HP Ethernet 1Gb 4-port 366T Adapter
> - HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 5.3.5.3-1 **(Optional)**

Filename: hp-igb-kmp-default-5.3.5.3_k3.12.28_4-1.sles12sp0.x86_64.rpm; hp-igb-kmp-default-5.3.5.3_k3.12.49_11-1.sles12sp1.x86_64.rpm; hp-igb-kmp-xen-5.3.5.3_k3.12.28_4-1.sles12sp0.x86_64.rpm; hp-igb-kmp-xen-5.3.5.3_k3.12.49_11-1.sles12sp1.x86_64.rpm; README

Important Note!

> HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

> This product addresses an issue where the offload property cannot be disabled.

Supported Devices and Features

> These drivers support the following Intel network adapters:

> - HP Ethernet 1Gb 2-port 361i Adapter
> - HP Ethernet 1Gb 2-port 361FLB Adapter
> - HP Ethernet 1Gb 2-port 361T Adapter

- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel igb Drivers for VMware vSphere 5.5/6.0
Version: 2016.10.07 **(Optional)**
Filename: cp029473.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 3.1.9 or later, for use with this driver.

Fixes

This product resolves an issue where an excessive number of error messages is logged.

Enhancements

This product now supports the HPE Ethernet 1Gb 4-port 366i Communication Board.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP NC362i Integrated Dual Port Gigabit Server Adapter
- HP NC362i Integrated Dual Port BL-c Gigabit Server Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP NC365T 4-port Ethernet Server 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 i686

Version: 4.4.6-1 **(Optional)**

Filename: kmod-hp-ixgbe-4.3.13-2.rhel6u7.i686.rpm; kmod-hp-ixgbe-4.4.6-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 4.4.6-1 **(Optional)**

Filename: kmod-hp-ixgbe-4.3.13-2.rhel6u7.x86_64.rpm; kmod-hp-ixgbe-4.4.6-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 4.3.13-2 **(Optional)**

Filename: kmod-hp-ixgbe-4.3.13-2.rhel7u1.x86_64.rpm; kmod-hp-ixgbe-4.3.13-2.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 11 i586

Version: 4.3.13-2 **(Optional)**

Filename: hp-ixgbe-kmp-default-4.3.13_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbe-kmp-default-4.3.13_3.0.76_0.11-2.sles11sp3.i586.rpm; hp-ixgbe-kmp-pae-4.3.13_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbe-kmp-pae-4.3.13_3.0.76_0.11-2.sles11sp3.i586.rpm; hp-ixgbe-kmp-xen-4.3.13_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbe-kmp-xen-4.3.13_3.0.76_0.11-2.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 4.3.13-2 **(Optional)**

Filename: hp-ixgbe-kmp-default-4.3.13_3.0.101_63-2.sles11sp4.x86_64.rpm; hp-ixgbe-kmp-default-4.3.13_3.0.76_0.11-2.sles11sp3.x86_64.rpm; hp-ixgbe-kmp-xen-4.3.13_3.0.101_63-2.sles11sp4.x86_64.rpm; hp-ixgbe-kmp-xen-4.3.13_3.0.76_0.11-2.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 4.3.13-2 **(Optional)**

Filename: hp-ixgbe-kmp-default-4.3.13_k3.12.28_4-2.sles12sp0.x86_64.rpm; hp-ixgbe-kmp-default-4.3.13_k3.12.49_11-2.sles12sp1.x86_64.rpm; hp-ixgbe-kmp-xen-4.3.13_k3.12.28_4-2.sles12sp0.x86_64.rpm; hp-ixgbe-kmp-xen-4.3.13_k3.12.49_11-2.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbe Drivers for VMware vSphere 6.0

Version: 2016.10.07 **(Optional)**

Filename: cp029476.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 3.1.9 or later, for use with this driver.

Fixes

This product resolves an issue where an excessive number of error messages is logged.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 i686

Version: 3.2.2-1 **(Optional)**

Filename: kmod-hp-ixgbevf-3.1.2-2.rhel6u7.i686.rpm; kmod-hp-ixgbevf-3.2.2-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 3.2.2-1 **(Optional)**

Filename: kmod-hp-ixgbevf-3.1.2-2.rhel6u7.x86_64.rpm; kmod-hp-ixgbevf-3.2.2-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 3.1.2-2 **(Optional)**
Filename: kmod-hp-ixgbevf-3.1.2-2.rhel7u1.x86_64.rpm; kmod-hp-ixgbevf-3.1.2-2.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 11 i586
Version: 3.1.2-2 **(Optional)**

Filename: hp-ixgbevf-kmp-default-3.1.2_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbevf-kmp-default-3.1.2_3.0.76_0.11-2.sles11sp3.i586.rpm; hp-ixgbevf-kmp-pae-3.1.2_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbevf-kmp-pae-3.1.2_3.0.76_0.11-2.sles11sp3.i586.rpm; hp-ixgbevf-kmp-xen-3.1.2_3.0.101_63-2.sles11sp4.i586.rpm; hp-ixgbevf-kmp-xen-3.1.2_3.0.76_0.11-2.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86*, version 1.11.11 or later, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 11 x86_64
Version: 3.1.2-2 **(Optional)**
Filename: hp-ixgbevf-kmp-default-3.1.2_3.0.101_63-2.sles11sp4.x86_64.rpm; hp-ixgbevf-kmp-default-3.1.2_3.0.76_0.11-2.sles11sp3.x86_64.rpm; hp-ixgbevf-kmp-xen-3.1.2_3.0.101_63-2.sles11sp4.x86_64.rpm; hp-ixgbevf-kmp-xen-3.1.2_3.0.76_0.11-2.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixgbevf Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 3.1.2-2 **(Optional)**

Filename: hp-ixgbevf-kmp-default-3.1.2_k3.12.28_4-2.sles12sp0.x86_64.rpm; hp-ixgbevf-kmp-default-3.1.2_k3.12.49_11-2.sles12sp1.x86_64.rpm; hp-ixgbevf-kmp-xen-3.1.2_k3.12.28_4-2.sles12sp0.x86_64.rpm; hp-ixgbevf-kmp-xen-3.1.2_k3.12.49_11-2.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Linux x86_64*, version 1.11.11, for use with these drivers.

Fixes

This product addresses an issue where the first virtual function (VF) receives a copy of physical function's (PF) traffic.

Enhancements

This product now provides multicast promiscuous mode support for trusted virtual functions.

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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixn/ixt Drivers for Windows Server 2008 R2

Version: 3.9.58.9101 (C) **(Optional)**

Filename: cp029058.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 5.0.0.25 or later, for use with this driver.

Fixes

This product corrects an issue which results in the component selecting an incorrect driver for installation.

The *NumaNodeID keyword has been changed to type "dword"(as per Microsoft documentation) to correctly support more than 8 NUMA nodes.

Supported Devices and Features

This component supports the following HP Intel ixn 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

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixn/ixt Drivers for Windows Server 2012
Version: 3.9.58.9101 (C) **(Optional)**
Filename: cp029059.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Fixes

This product corrects an issue which results in the component selecting an incorrect driver for installation.

The *NumaNodeID keyword has been changed to type "dword"(as per Microsoft documentation) to correctly support more than 8 NUMA nodes.

Supported Devices and Features

This component supports the following HP Intel ixn network adapters:
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixn/ixt Drivers for Windows Server 2012 R2
Version: 3.9.58.9101 (C) **(Optional)**
Filename: cp029060.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later,

for use with this driver.

Fixes

This product corrects an issue which results in the component selecting an incorrect driver for installation.

The *NumaNodeID keyword has been changed to type "dword"(as per Microsoft documentation) to correctly support more than 8 NUMA nodes.

Supported Devices and Features

This component supports the following HP Intel ixn network adapters:
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel ixn/ixt Drivers for Windows Server 2016
Version: 4.0.217.0 **(Optional)**
Filename: cp029677.exe

Important Note!

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.25 or later, for use with this driver.

Enhancements

Initial release.

Supported Devices and Features

This component supports the following HP Intel ixn network adapters:
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter

This component supports the following HP Intel ixt network adapters:
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 6 (x86_64)
Version: 3.2 (A) **(Recommended)**

Filename: kmod-mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.rhel6u6.x86_64.rpm; mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.rhel6u6.x86_64.rpm

<u>Fixes</u>

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

<u>Enhancements</u>

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

<u>Supported Devices and Features</u>

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6U6 (x86_64) supported by this binary rpm are:
2.6.32-504.el6 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 7 (x86_64)
Version: 3.2 (A) **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.rhel6u7.x86_64.rpm; mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.rhel6u7.x86_64.rpm

<u>Fixes</u>

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

<u>Enhancements</u>

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6U6 (x86_64) supported by this binary rpm are:
2.6.32-573.el6 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 1 (x86_64)
Version: 3.2 (A) **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.rhel7u1.x86_64.rpm; mlnx-ofa_kernel-3.2-
OFED.3.2.2.0.0.1.g378ff02.5.rhel7u1.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 Update 1 (x86_64) supported by this binary rpm are:
3.10.0-229.el7 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 2 (x86_64)
Version: 3.2 (A) **(Recommended)**
Filename: kmod-mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.rhel7u2.x86_64.rpm; mlnx-ofa_kernel-3.2-
OFED.3.2.2.0.0.1.g378ff02.5.rhel7u2.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 Update 2 (x86_64) supported by this binary rpm are:
3.10.0-327.el7 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 11 SP3 AMD64/EM64T)
Version: 3.2 (A) **(Recommended)**
Filename: mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.sles11sp3.x86_64.rpm; mlnx-ofa_kernel-kmp-default-3.2_3.0.76_0.11-OFED.3.2.2.0.0.1.g378ff02.sles11sp3.x86_64.rpm; mlnx-ofa_kernel-kmp-xen-3.2_3.0.76_0.11-OFED.3.2.2.0.0.1.g378ff02.sles11sp3.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server SP3 (AMD64/EM64T) supported by this binary rpm are:

3.0.76-0.11-default - (AMD64/EM64T) and future update kernels.

3.0.76-0.11-xen - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 11 SP4 AMD64/EM64T)

Version: 3.2 (A) **(Recommended)**

Filename: mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.sles11sp4.x86_64.rpm; mlnx-ofa_kernel-kmp-default-3.2_3.0.101_63-OFED.3.2.2.0.0.1.g378ff02.sles11sp4.x86_64.rpm; mlnx-ofa_kernel-kmp-xen-3.2_3.0.101_63-OFED.3.2.2.0.0.1.g378ff02.sles11sp4.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server SP3 (AMD64/EM64T) supported by this binary rpm are:

3.0.101-63-default - (AMD64/EM64T) and future update kernels.

3.0.101-63-xen - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 12 (AMD64/EM64T)

Version: 3.2 (A) **(Recommended)**

Filename: mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.sles12sp0.x86_64.rpm; mlnx-ofa_kernel-kmp-default-3.2_k3.12.28_4-OFED.3.2.2.0.0.1.g378ff02.sles12sp0.x86_64.rpm; mlnx-ofa_kernel-kmp-xen-3.2_k3.12.28_4-OFED.3.2.2.0.0.1.g378ff02.sles12sp0.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.

The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 12 (AMD64/EM64T) supported by this binary rpm are:
3.12.28-4-default - (AMD64/EM64T) and future update kernels.
3.12.28-4-xen - (AMD64/EM64T) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for SUSE LINUX Enterprise Server 12 SP1 (AMD64/EM64T)
Version: 3.2 (A) **(Recommended)**
Filename: mlnx-ofa_kernel-3.2-OFED.3.2.2.0.0.1.g378ff02.5.sles12sp1.x86_64.rpm; mlnx-ofa_kernel-kmp-default-3.2_k3.12.49_11-OFED.3.2.2.0.0.1.g378ff02.sles12sp1.x86_64.rpm; mlnx-ofa_kernel-kmp-xen-3.2_k3.12.49_11-OFED.3.2.2.0.0.1.g378ff02.sles12sp1.x86_64.rpm

Fixes

Fixes in version 3.2 (A):

- The RoCE user-space library RPM "mlnx-ofa_kernel" failed to install when OS distribution RPMs in "infiniband support" group were already installed.
- The RoCE driver upgrade didnt work properly when a previous version of MLNX-EN driver was already installed. This resulted in Mellanox Ethernet ports not coming up.

Fixes in version 3.2:

- Set closest NUMA node as the default for Receive Side Scaling.
- ARP request packets destined for a proxy VXLAN interface were not handled correctly when GRO was enabled.

Enhancements

HPE Mellanox RoCE driver version 3.2 contains the following changes and new features:

- FCS scattering for Raw Packet Queue Pairs and Work Queues.
- Indication of L4 packet type on the receive side completions.
- Support CVLAN insertion for Work Queues

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 SP1 (AMD64/EM64T) supported by this binary rpm are:

3.12.49-11-default - (AMD64/EM64T) and future update kernels.

3.12.49-11-xen - (AMD64/EM64T) and future update kernels.

HPE Network Configuration Utility for Windows Server 2008 R2

Version: 11.50.0.0 **(Optional)**

Filename: cp028184.exe

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Network Configuration Utility for Windows Server 2008 x64 Editions

Version: 11.50.0.0 **(Optional)**

Filename: cp028183.exe

Enhancements

This product now supports the following network adapters:

- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for Red Hat Enterprise Linux 6 i686

Version: 5.04.01.12.00.00-3 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel6u6.i686.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel6u7.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86*, version 1.9.7, for use with these drivers.

Enhancements

A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

Supported Devices and Features

This software supports the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for Red Hat Enterprise Linux 6 x86_64
Version: 5.04.01.12.00.00-3 **(Optional)**
Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel6u6.x86_64.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel6u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7, for use with these drivers.

Enhancements

A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

Supported Devices and Features

This software supports the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 5.04.01.12.00.00-3 **(Optional)**
Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel7u1.x86_64.rpm; kmod-hpqlgc-qla4xxx-5.04.01.12.00.00_k0-3.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7, for use with these drivers.

Enhancements

A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

Supported Devices and Features

This software supports the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for SUSE Linux Enterprise Server 11 i586

Version: 5.04.01.12.00.00-5 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_3.0.76_0.11-5.sles11sp3.i586.rpm; hpqlgc-qla4xxx-kmp-pae-5.04.01.12.00.00_k0_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qla4xxx-kmp-pae-5.04.01.12.00.00_k0_3.0.76_0.11-5.sles11sp3.i586.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_3.0.76_0.11-5.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86*, version 1.9.7, for use with these drivers.

Enhancements

A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

Supported Devices and Features

This software supports the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 5.04.01.12.00.00-5 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_3.0.76_0.11-5.sles11sp3.x86_64.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_3.0.76_0.11-5.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7, for use with these drivers.

Enhancements

A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

Supported Devices and Features

This software supports the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic iSCSI Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 5.04.01.12.00.00-5 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_k3.12.28_4-5.sles12sp0.x86_64.rpm; hpqlgc-qla4xxx-kmp-default-5.04.01.12.00.00_k0_k3.12.49_11-5.sles12sp1.x86_64.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_k3.12.28_4-5.sles12sp0.x86_64.rpm; hpqlgc-qla4xxx-kmp-xen-5.04.01.12.00.00_k0_k3.12.49_11-5.sles12sp1.x86_64.rpm; README

<u>Important Note!</u>

> HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7, for use with these drivers.

<u>Enhancements</u>

> A signature has been added to the kernel module (qla4xxx.ko) contained in this product.

<u>Supported Devices and Features</u>

> This software supports the following network adapters:
>
> - HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
> - HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic nx_nic Drivers for Red Hat Enterprise Linux 6 i686
Version: 4.0.596.1-6 (B) **(Optional)**
Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-4.rhel6u6.i686.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-6.rhel6u7.i686.rpm; README

<u>Important Note!</u>

> HP recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86*, version 5.6.10, for use with these drivers.

<u>Enhancements</u>

> This product is now HPE signed.

<u>Supported Devices and Features</u>

> This software supports the following network adapters:
>
> - HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HPE QLogic nx_nic Drivers for Red Hat Enterprise Linux 6 x86_64
Version: 4.0.596.1-6 (B) **(Optional)**
Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-4.rhel6u6.x86_64.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-6.rhel6u7.x86_64.rpm; README

<u>Important Note!</u>

> HP recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86_84*, version 5.6.10, for use with these drivers.

Enhancements

This product is now HPE signed.

Supported Devices and Features

This software supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HPE QLogic nx_nic Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 4.0.596.1-2 (B) **(Optional)**

Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-2.rhel7u1.x86_64.rpm; kmod-hpqlgc-nx_nic-4.0.596.1-2.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86_84*, version 5.6.7, for use with these drivers.

Enhancements

This driver now supports Red Hat Enterprise Linux 7 Update 2.

Supported Devices and Features

This software supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HPE QLogic nx_nic Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 4.0.596.1-2 **(Optional)**

Filename: hp-nx_nic-docs-1.0.0-4.noarch.rpm; hp-nx_nic-tools-4.0.596.1-4.noarch.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_k3.12.28_4-4.sles12sp0.x86_64.rpm; hpqlgc-nx_nic-kmp-default-4.0.596.1_k3.12.49_11-2.sles12sp1.x86_64.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_k3.12.28_4-4.sles12sp0.x86_64.rpm; hpqlgc-nx_nic-kmp-xen-4.0.596.1_k3.12.49_11-2.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3 Online Firmware Upgrade Utility for Linux x86_84*, version 5.6.7, for use with these drivers.

Enhancements

This driver now supports SUSE Linux Enterprise Server 12 SP1.

Supported Devices and Features

This software supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 i686

Version: 7.14.07-1 **(Optional)**

Filename: kmod-netxtreme2-7.14.07-1.rhel6u7.i686.rpm; kmod-netxtreme2-7.14.07-1.rhel6u8.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86,* version 2.18.44 or later, for use with these drivers.

Fixes

This product corrects received cyclic redundancy check (RX CRC) errors that occur for 1Gb jumbo frames.

This product addresses an error that occurs when transmitting packets tagged with two VLANs.

This product addresses an issue where offloading is unexpectedly disabled when VXLAN is enabled for both IPv4 and IPv6.

This product addresses an issue where RSS for a VXLAN packet fails.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 7.14.07-1 **(Optional)**

Filename: kmod-netxtreme2-7.14.07-1.rhel6u7.x86_64.rpm; kmod-netxtreme2-7.14.07-1.rhel6u8.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64*, version 2.18.44 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 8.

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64
Version: 7.14.07-1 **(Optional)**
Filename: kmod-netxtreme2-7.14.07-1.rhel7u1.x86_64.rpm; kmod-netxtreme2-7.14.07-1.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64*, version 2.18.44 or later, for use with these drivers.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 11 i586
Version: 7.14.07-1 **(Optional)**
Filename: netxtreme2-kmp-default-7.14.07_3.0.101_63-1.sles11sp4.i586.rpm; netxtreme2-kmp-default-7.14.07_3.0.76_0.11-1.sles11sp3.i586.rpm; netxtreme2-kmp-pae-7.14.07_3.0.101_63-1.sles11sp4.i586.rpm; netxtreme2-kmp-pae-7.14.07_3.0.76_0.11-1.sles11sp3.i586.rpm; netxtreme2-kmp-xen-7.14.07_3.0.101_63-1.sles11sp4.i586.rpm; netxtreme2-kmp-xen-7.14.07_3.0.76_0.11-1.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86,* version 2.18.44 or later, for use with these drivers.

Fixes

This product corrects received cyclic redundancy check (RX CRC) errors that occur for 1Gb jumbo frames.

This product addresses an error that occurs when transmitting packets tagged with two VLANs.

This product addresses an issue where offloading is unexpectedly disabled when VXLAN is enabled for both IPv4 and IPv6.

This product addresses an issue where RSS for a VXLAN packet fails.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter

- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 11 x86_64

Version: 7.14.07-1 **(Optional)**

Filename: netxtreme2-kmp-default-7.14.07_3.0.101_63-1.sles11sp4.x86_64.rpm; netxtreme2-kmp-default-7.14.07_3.0.76_0.11-1.sles11sp3.x86_64.rpm; netxtreme2-kmp-xen-7.14.07_3.0.101_63-1.sles11sp4.x86_64.rpm; netxtreme2-kmp-xen-7.14.07_3.0.76_0.11-1.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.18.44 or later, for use with these drivers.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter

- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for SUSE Linux Enterprise Server 12 x86_64

Version: 7.14.07-1 **(Optional)**

Filename: netxtreme2-kmp-default-7.14.07_k3.12.28_4-1.sles12sp0.x86_64.rpm; netxtreme2-kmp-default-7.14.07_k3.12.49_11-1.sles12sp1.x86_64.rpm; netxtreme2-kmp-xen-7.14.07_k3.12.28_4-1.sles12sp0.x86_64.rpm; netxtreme2-kmp-xen-7.14.07_k3.12.49_11-1.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64,* version 2.18.44 or later, for use with these drivers.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for VMware vSphere 5.5

Version: 2016.10.07 **(Optional)**

Filename: cp028027.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 1.12.43 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP FlexFabric 20Gb 2-port 631M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Dual Port Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for VMware vSphere 6.0
Version: 2016.10.07 **(Optional)**
Filename: cp028028.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 1.12.43 or later, for use with this driver.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

These drivers support the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP FlexFabric 20Gb 2-port 631M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Dual Port Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server 2008
Version: 7.13.104.0 **(Optional)**
Filename: cp030841.exe

Important Note!

HPE recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server 2008*, version 5.0.0.24 or later, for use with these drivers.

Fixes

This product addresses an issue which results in a system crash when trying to power on virtual machines with the maximum number of VMQs configured.

This product addresses an issue which results in a system hang after configuration of VMQ adapters.

This product addresses an issue where a system crash occurs on a Virtual Machine after rebooting to recover a failing virtual function device.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- 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 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

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

Version: 7.13.104.0 **(Optional)**

Filename: cp030253.exe

Important Note!

HP recommends the firmware provided in *HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 5.0.0.24 or later, for use with these drivers.

Enhancements

This product now supports Windows Server 2016.

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

Supported Devices and Features

This driver supports the following network adapters:

- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter

HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 6 Update 7 i686
Version: 2.11.4.0-2 (B) **(Optional)**
Filename: iscsiuio-2.11.4.0-2.rhel6u7.i686.rpm

Enhancements

This product is now HPE signed.

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 6 Update 7 x86_64
Version: 2.11.4.0-2 (C) **(Optional)**
Filename: iscsiuio-2.11.4.0-2.rhel6u7.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter

HP Flex-10 10Gb 2-port 530FLB Adapter

- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 6 Update 8 i686

Version: 2.11.4.1-1 **(Optional)**

Filename: iscsiuio-2.11.4.1-1.rhel6u8.i686.rpm

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 6 Update 8 x86_64

Version: 2.11.4.1-1 (B) **(Optional)**

Filename: iscsiuio-2.11.4.1-1.rhel6u8.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 1 x86_64
Version: 2.11.4.0-2 (C) **(Optional)**
Filename: iscsiuio-2.11.4.0-2.rhel7u1.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter

- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for Red Hat Enterprise Linux 7 Update 2 x86_64

Version: 2.11.4.0-2 (C) **(Optional)**

Filename: iscsiuio-2.11.4.0-2.rhel7u2.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 11 SP3 i586

Version: 2.11.4.0-2 (B) **(Optional)**

Filename: iscsiuio-2.11.4.0-2.sles11sp3.i586.rpm

Enhancements

This product is now HPE signed.

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 11 SP3 x86_64

Version: 2.11.4.0-2 (C) **(Optional)**

Filename: iscsiuio-2.11.4.0-2.sles11sp3.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter

- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 11 SP4 i586
Version: 2.11.4.0-2 (B) **(Optional)**
Filename: iscsiuio-2.11.4.0-2.sles11sp4.i586.rpm

Enhancements

This product is now HPE signed.

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 11 SP4 x86_64
Version: 2.11.4.0-2 (C) **(Optional)**
Filename: iscsiuio-2.11.4.0-2.sles11sp4.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 12 SP1 x86_64

Version: 2.11.4.0-2 (C) **(Optional)**

Filename: iscsiuio-2.11.4.0-2.sles12sp1.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE StoreFabric CN1100R-T Converged Network Adapter

- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Linux iSCSI Offload IO Daemon for SUSE Linux Enterprise Server 12 x86_64

Version: 2.11.4.0-2 (C) **(Optional)**

Filename: iscsiuio-2.11.4.0-2.sles12sp0.x86_64.rpm

Enhancements

This product now supports the following network adapters:

- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

Supported Devices and Features

This product supports the following network adapters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP Flex-10 10Gb 2-port 530FLB Adapter
- HP Ethernet 10Gb 2-port 530FLR-SFP+ Adapter
- HP Flex-10 10Gb 2-port 530M Adapter
- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP NC532m Dual Port 10GbE Multifuntion BL-c Adapter
- HP FlexFabric 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLB Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 534M Adapter
- HP FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP FlexFabric 20Gb 2-port 630FLB Adapter
- HP FlexFabric 20Gb 2-port 630M Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic P3P iSCSI Drivers for VMware vSphere 5.5

Version: 2016.03.29 **(Optional)**

Filename: cp028004.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 QLogic P3P Online Firmware Upgrade Utility for VMware*, version 2.5.5, for use with this driver.

Fixes

This driver addresses a "Lost Heartbeat" purple diagnostic screen (PSOD) seen during the collection of a minidump.

Supported Devices and Features

These drivers support the following network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P iSCSI Drivers for VMware vSphere 6.0
Version: 2016.03.29 **(Optional)**
Filename: cp028005.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 QLogic P3P Online Firmware Upgrade Utility for VMware*, version 2.5.5, for use with this driver.

Fixes

This driver addresses a "Lost Heartbeat" purple diagnostic screen (PSOD) seen during the collection of a minidump.

Supported Devices and Features

These drivers support the following HP P3P network adapters:

- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P Multifunction Driver for Windows Server 2008
Version: 5.3.32.1130 **(Optional)**
Filename: cp028932.exe

Important Note!

HPE recommends the firmware provided in the following firmware products, as applicable, for use with this driver:

- *HP QLogic P3 Online Firmware Upgrade Utility for Windows Server 2008*, version 4.0.0.19 or later
- *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server 2008*, version 4.0.0.19(B) or later

Fixes

This product addresses an issue where the Virtual Memory Queue (VMQ) causes 100% CPU usage on a single core.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter
- HP NC523SFP 10Gb 2-port Flex-10 Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P Multifunction Driver for Windows Server 2008 R2
Version: 5.3.32.1130 **(Optional)**
Filename: cp028934.exe

Important Note!

HPE recommends the firmware provided in the following firmware products, as applicable, for use with this driver:

- *HP QLogic P3 Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.0.19 or later
- *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.0.19(C) or later

Fixes

This product addresses an issue where the Virtual Memory Queue (VMQ) causes 100% CPU usage on a single core.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter
- HP NC523SFP 10Gb 2-port Flex-10 Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P Multifunction Driver for Windows Server 2008 x64 Editions
Version: 5.3.32.1130 **(Optional)**
Filename: cp028933.exe

Important Note!

HPE recommends the firmware provided in the following firmware products, as applicable, for use with this driver:

- *HP QLogic P3 Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.0.19 or later
- *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions,* version 4.0.0.19(C) or later

Fixes

This product addresses an issue where the Virtual Memory Queue (VMQ) causes 100% CPU usage on a single core.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

- HP NC523SFP 10Gb 2-port Flex-10 Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P Multifunction Driver for Windows Server 2012
Version: 5.3.32.1130 **(Optional)**
Filename: cp028935.exe

Important Note!

HPE recommends the firmware provided in the following firmware products, as applicable, for use with this driver:

- *HP QLogic P3 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 4.0.0.19 or later
- *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 4.0.0.19(C) or later

Fixes

This product addresses an issue where the Virtual Memory Queue (VMQ) causes 100% CPU usage on a single core.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter
- HP NC523SFP 10Gb 2-port Flex-10 Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic P3P Multifunction Driver for Windows Server 2012 R2
Version: 5.3.32.1130 **(Optional)**
Filename: cp028936.exe

Important Note!

HPE recommends the firmware provided in the following firmware products, as applicable, for use with this driver:

- *HP QLogic P3 Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 4.0.0.19 or later
- *HP QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions*, version 4.0.0.19(C) or later

Fixes

This product addresses an issue where the Virtual Memory Queue (VMQ) causes 100% CPU usage on a single core.

Supported Devices and Features

This driver supports the following network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter
- HP NC523SFP 10Gb 2-port Flex-10 Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for Red Hat Enterprise Linux 6 i686

Version: 5.3.63-3 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel6u6.i686.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel6u7.i686.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 5.3.63-3 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel6u6.x86_64.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel6u7.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 5.3.63-3 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel7u1.x86_64.rpm; kmod-hpqlgc-qlcnic-5.3.63-3.rhel7u2.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for SUSE Linux Enterprise Server 11 i586

Version: 5.3.63-3 **(Optional)**

Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_3.0.76_0.11-5.sles11sp3.i586.rpm; hpqlgc-qlcnic-kmp-pae-5.3.63_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qlcnic-kmp-pae-5.3.63_3.0.76_0.11-5.sles11sp3.i586.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_3.0.101_63-5.sles11sp4.i586.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_3.0.76_0.11-5.sles11sp3.i586.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for SUSE Linux Enterprise Server 11 x86_64
Version: 5.3.63-3 **(Optional)**
Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_3.0.76_0.11-5.sles11sp3.x86_64.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_3.0.101_63-5.sles11sp4.x86_64.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_3.0.76_0.11-5.sles11sp3.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

HPE QLogic qlcnic Drivers for SUSE Linux Enterprise Server 12 x86_64
Version: 5.3.63-3 **(Optional)**
Filename: hp-qlgc-docs-1.1.1-1.noarch.rpm; hp-qlgc-utils-1.3.0-1.noarch.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_k3.12.28_4-5.sles12sp0.x86_64.rpm; hpqlgc-qlcnic-kmp-default-5.3.63_k3.12.49_11-5.sles12sp1.x86_64.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_k3.12.28_4-5.sles12sp0.x86_64.rpm; hpqlgc-qlcnic-kmp-xen-5.3.63_k3.12.49_11-5.sles12sp1.x86_64.rpm; README

Important Note!

HPE recommends the firmware provided in *HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64*, version 1.9.7 or later, for use with these drivers.

Fixes

This product addresses memory allocation failures seen while copying a firmware image.

This product addresses network connectivity issues seen when using a large number of multicast groups.

Enhancements

This product now provides support for an extended minidump feature.

Supported Devices and Features

These drivers support the following network adapters:

- HP NC523SFP 10Gb 2-port Flex-10 Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter

Mellanox InfiniBand and Ethernet Driver for SuSE Linux Enterprise Server 12

Version: 3.3-1.0.4.0 **(Recommended)**

Filename: MLNX_OFED_LINUX-3.3-1.0.4.0-sles12sp0-x86_64.tar.gz

Important Note!

If using secure boot mode operation, use signed Mellanox OFED driver which is distributed via the HP Software Delivery Repository: http://downloads.linux.hp.com/SDR/downloads/MLNX_OFED/

It is recommended to follow instructions from "Performance_Tuning_Guide_for_Mellanox_Network_Adapters.pdf" , if using MLNX_EN (Ethernet driver) from this OFED version.The performance tuning guide helps you to setup the parameters that improves the perfomance of Mellanox VPI cards in Ethernet mode. "Performance_Tuning_Guide_for_Mellanox_Network_Adapters.pdf" is bundled with the driver.

For a list of known issues with this release, refer Chapter 3 of "Mellanox OFED Release notes" bundled with the driver download.

Fixes

Fixes in version 3.3-1.0.4.0:

- Fixed the issue where as a result of the ndo_set_mac_address support in IPoIB, a memory corruption issue was exposed in the bonding driver over IPoIB interface. This memory corruption issue could have caused unpredictable behavior, such as ports becoming dysfunctional in RedHat, kernel panicking in Ubuntu devices, and other behaviors.

Fixes in version 3.3-1.0.0.0:

- IB Core
  - Fixed a potential security breach in the InfiniBand stack that was caused due to wrong reliance on the write system call.

RoCE

- Fixed the issue where the InfiniBand error counters found under /sys/class/infiniband/<mlx5_dev>/ports/ <port>/ did not function properly in

  ConnectX-4 adapter cards.

- Installation
  - Fixed the issue where dapl package was missing in MLNX_OFED for Ubuntu PPC64LE.
- TX Queue Counter
  - Changed TX queue counter format to: xq_[tc]*[ring/channel].
- RDMA Sniffer
  - Fixed RDMA sniffer functionality issues.
- IPoIB
  - Fixed IPoIB Connected Mode in ConnectX-3 functionality issues.
  - Fixed the issue where in order to change the IPoIB mode (connected/datagram), the interface had to be taken down (via ifconfig ibX down or ifdown ibX). Now, the mode can be changed regardless of the interface's state ("up" or "down").
- mlx4_en
  - Added DCB PFC support through CEE netlink commands to prevent Priority Flow Control mode functionality issues on the host side.
- SR-IOV
  - Fixed an issue which added error messages to the dmesg when a VF used ethtool facilities.
  - Fixed an issue which cased any traffic from PF to any VF on the same port to drop when the physical link was down.

For additional information on fixes, please refer to the "Release Notes" document included with the driver download.

Enhancements

MLNX OFED v3.3-1.0.0.0 contains the following changes and new features:

For ConnectX-4/ConnectX-4 Lx :

- **Added support for the following features/changes on ConnectX-4/ConnectX-4 Lx**:
  - **VF MAC Address Anti-Spoofing** : Also known as MAC spoof-check, the VF MAC Address Anti-Spoofing prevents malicious VFs from faking their MAC addresses.
  - **VF All-multi Mode** : Added support for the VF to enter all-multi RX mode, meaning that in addition to the traffic originally targeted to the VF, it will receive all the multicast traffic sent from/to the other functions on the same physical port.

    Note: Only privileged/trusted VFs can enter the all-multi RX mode.

  - **VF Promiscuous Mode** : Added support for the VF to enter promiscuous RX mode, meaning that in addition to the traffic originally targeted to the VF, it will receive the unmatched traffic and all the multicast traffic that reaches the physical port.The unmatched traffic is any traffic's DMAC that does not match any of the VFs' or PFs' MAC addresses.

    Note: Only privileged/trusted VFs can enter the promiscuous RX mode.

  - **Privileged VF** : Added support for determining privileged/trusted VFs so security sensitive features can be enabled for these VFs, such as entering promiscuous and all-multi RX modes.
  - **DCBX** : Added support for standard DCBX CEE API.
  - **Per Priority Counters** : Exposed performance counters per priority.
  - **IB Error Counters** : Exposed IB sysfs error counters for mlx5 driver.
  - **Accelerated Receive Flow Steering (aRFS)** : Boosts the speed of RFS by adding hardware assistance. RFS is an in-kernel-logic responsible for load balancing between CPUs by attaching flows to CPUs that are used by flow's owner applications.
  - **Packet Pacing for UDP/TCP** : Performs rate limit per UDP/TCP connection.

For ConnectX-3/ConnectX-3 Pro/ConnectX-4/ConnectX-4 Lx :

- **Added support for the following features/changes on ConnectX-3/ConnectX-3 Pro/ConnectX-4/ConnectX-4 Lx :**
    - **MAD Congestion Control** : Added an SA MAD congestion control mechanism that is configurable using sysfs entries.
    - **Physical Memory Allocation** : Added support for Physical Address Memory Region (PA-MR) which allows managing physical memory used for posting send and receive requests.
    - **IB Router** : Added the ability to send traffic between two or more subnets.
    - **PeerDirect Async** : Mellanox PeerDirect Async™ sub-system gives peer hardware devices, such as GPU cards, and dedicated AS accelerators the ability to take control over HCA in critical path offloading CPU.
    - **Physical MR** : Allows the user to use physical addresses instead of virtual addresses in critical path. Thus enhances performance since there is no need in addresses translation.
    - **OFED Scripts** : Renamed the UP name that appears in mlnx_perf report to "TC", as the mlnx_perf script counts the packets and calculates the bandwidth on rings that belong to the same Traffic Class (TC).
    - **RoCE v1 (Layer 2) Compatibility** : Added the option to connect between nodes running MLNX_OFED and nodes running RoCE with Layer 2 GID format.

For additional information on the new features, please refer to the MLNX_OFED User Manual and Release Notes bundled with the software.

Supported Devices and Features

Supported Host Channel Adapters Firmware Versions:

HCA	Recommended Firmware Rev.	Additional Firmware Rev. Supported
Connect-IB®	10.14.2036	10.14.1100
ConnectX®-4 Lx	14.14.2036	14.14.1100
ConnectX®-4	12.14.2036	12.14.1100
ConnectX®-3 Pro	2.36.5000	2.35.5100
ConnectX®-3	2.36.5000	2.35.5100
ConnectX®-2	2.9.1000	2.9.1000

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net-mlx4_en driver component for VMware 5.5
Version: 2015.05.02 **(Recommended)**
Filename: cp025935.zip

Important Note!

This component is intended to be used by HP applications. It is a zip that contains the same driver deliverable available from the HP vibsdepot.hp.com webpage, plus an HP specific CPXXXX.xml file.

Fixes

Initial version

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net-mst kernel module driver component for VMware 5.5
Version: 2016.01.19 **(Recommended)**
Filename: cp029081.zip

Important Note!

This component is intended to be used by HP applications. It is a zip that contains the same driver deliverable available from the HP

vibsdepot.hp.com webpage, plus an HP specific CPXXXX.xml file.

Fixes

Initial version of 4.2.0.16 for Snap6

Enhancements

MST Version 4.2.0.16

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net-mst kernel module driver component for VMware 6.0
Version: 2016.01.19 **(Recommended)**
Filename: cp029082.zip

Important Note!

This component is intended to be used by HP applications. It is a zip that contains the same driver deliverable available from the HP vibsdepot.hp.com webpage, plus an HP specific CPXXXX.xml file.

Fixes

Initial version of 4.2.0.16 for Snap6

Enhancements

MST Version 4.2.0.16

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nmlx4_en driver component for VMware 6.0
Version: 2015.10.29 **(Recommended)**
Filename: cp028535.zip

Important Note!

Known Issues in 3.2.0.7:

- When the port is DOWN, the management interface port type field (nmlx_en_MgmtIFPortType) indicates one of the port types supported by the device, in the following order: TP, FIBER, DA, NONE. If the cable supports several types, the first type in the list mentioned above will be printed.
- When the port is UP, the management interface port type field (nmlx-_en_MgmtIFPortType) indicates which one of all possible supported typesis currently connected.
- Management interface port type field (nmlx_en_MgmtIFPortType) reports SFP-to-RJ45 cable as FIBER.
- Management interface auto negotiation field (nmlx_en_MgmtIFAutoNegMode) is equivalent to "esxcli network nic get -n vmnicX" field "Pause Autonegotiate".

Fixes

Fixes in 3.2.0.7:

- Management interface port type field (nmlx-_en_MgmtIFPortType) reported incorrect value.

VMware ESX 5.5 MST Drivers Offline Bundle for Mellanox Adapters

Version: 4.3.0.29 **(Recommended)**

Filename: MLNX-NET-MST-ESX-5.5.0-4.3.0.29.zip

Fixes

Initial version of 4.3.0.29

VMware ESX 6.0 MST Drivers Offline Bundle for Mellanox Adapters

Version: 4.3.0.29 **(Recommended)**

Filename: MLNX-NMST-ESX-6.0.0-4.3.0.29.zip

Fixes

Initial version of VM60 nmst 4.3.0.29

Driver - Storage

HP ProLiant Smart Array Embedded SATA RAID Controller Driver for Microsoft Windows Server 2012 and Microsoft Windows Server 2012 R2

Version: 6.18.4.64 (A) **(Optional)**

Filename: cp022401.exe

Enhancements

Added support for Microsoft Windows Server 2012 R2

HP ProLiant Smart Array Embedded SATA RAID Controller Driver for Windows 2003/2008 x64 Editions

Version: 6.18.0.64 (B) **(Optional)**

Filename: cp020545.exe

Important Note!

If the target controller was successfully updated to version 6.18.0.64(A) of this driver, then it is not necessary to update to version 6.18.0.64(B)

Enhancements

Support added for Microsoft Windows Small Business Server 2011 Standard and Essentials

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HP ProLiant Smart Array Embedded SATA RAID Controller Driver for Windows Server 2003/2008

Version: 6.18.0.32 (A) **(Optional)**

Filename: cp018782.exe

Important Note!

If the target controller was successfully updated to version 6.18.0.32, then it is not necessary to update to version 6.18.0.32(A)

Fixes

- Corrects an issue where HP B110i would try to resume the rebuild progress if the drive was replaced while the server was offline.
- To improve rebuild time, ensure that drive write cache is enabled during rebuild and disabled when rebuild completes.

Driver - Storage Controller	

REMOVED HPE ProLiant Smart Array HPCISSS3 Controller Driver for 64-bit Microsoft Windows Server 2012/2016 Editions

Version: 100.18.2.64 **(Recommended)**

Filename: cp032118.exe

Fixes

REMOVED: The HPCISSs3.sys version 100.18.2.64 driver is no longer available for download from HPE.com. When version 100.18.2.64 of the HPE ProLiant Smart Array HPCISSs3 Controller Driver is running on a system with Microsoft Windows Server 2012, 2012 R2, or 2016, a blue screen error may occur. Refer to HPE Customer Advisory for more details. http://h20564.www2.hpe.com/hpsc/doc/public/display?docId=emr_na-a00020203en_us

Click the "Obtain software" link to access the download web page for the replacement HPCISSs3.sys version 100.20.0.64 driver.

Fixes the following issue:

Resolved an issue where Microsoft Windows may become unresponsive when the operating system issues a reset to certain 6TB or 8TB drives configured in a dual domain configuration and when connected to a Gen9 Smart Array controller in HBA mode.

Drive models affected:

- MB6000JEQUV
- MB8000JEQVA
- MB4000JEQNL
- MB6000JEQNN

HP H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2008 x86 Editions

Version: 2.68.64.0 **(Optional)**

Filename: cp021866.exe

Enhancements

Updated for Version Control across all LSI_sas2 Windows Drivers.

HP H2xx SAS/SATA Host Bus Adapter Driver for 64-bit Microsoft Windows Server 2016 Editions

Version: 2.68.64.2 **(Optional)**

Filename: cp029941.exe

Enhancements

Added support for:

- Microsoft Windows Server 2016 - Server Core and Server with a Desktop.

HP H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2008 R2 Editions

Version: 2.68.64.0 **(Optional)**

Filename: cp021871.exe

Enhancements

Updated for Version Control across all LSI_sas2 Windows Drivers.

HP H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2008 x64 Editions

Version: 2.68.64.0 **(Optional)**

Filename: cp021868.exe

Enhancements

Updated for Version Control across all LSI_sas2 Windows Drivers.

HP H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2012 R2 x64 Editions

Version: 2.68.64.1 **(Optional)**

Filename: cp023630.exe

Enhancements

- Added support for Windows 8.1 and Windows Server 2012R2 to the build scripts.

- Add build support for new Windows Event Logging

- Add support for automatic selection of the default driver build parameters file during the build

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HP H2xx SAS/SATA Host Bus Adapter Driver for Microsoft Windows Server 2012 x64 Editions

Version: 2.68.64.0 **(Optional)**

Filename: cp021873.exe

Enhancements

Updated for Version Control across all LSI_sas2 Windows Drivers.

HP H2xx SAS/SATA Host Bus Adapter Driver for Red Hat Enterprise Linux 6 (AMD64/EM64T)

Version: 15.10.04.00-10 **(Recommended)**

Filename: kmod-mpt2sas-15.10.02.00-8.rhel6u0.x86_64.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u1.x86_64.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u2.x86_64.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u3.x86_64.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u4.x86_64.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u5.x86_64.rpm; kmod-mpt2sas-15.10.04.00-10.rhel6u8.x86_64.rpm; kmod-mpt2sas-15.10.04.00-3.rhel6u6.x86_64.rpm; kmod-mpt2sas-15.10.04.00-6.rhel6u7.x86_64.rpm

Enhancements

Added suppoprt for Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 6 (AMD64/EM64T) supported by this binary rpm are:

2.6.32-131.el6 - Red Hat Enterprise Linux 6 Update 1 (AMD64/EM64T) and future errata kernels for update 1.
2.6.32-220.el6 - Red Hat Enterprise Linux 6 Update 2 (AMD64/EM64T) and future errata kernels for update 2.
2.6.32-279.el6 - Red Hat Enterprise Linux 6 Update 3 (AMD64/EM64T) and future errata kernels for update 3.
2.6.32-358.el6 - Red Hat Enterprise Linux 6 Update 4 (AMD64/EM64T) and future errata kernels for update 4.
2.6.32-431.el6 - Red Hat Enterprise Linux 6 Update 5 (AMD64/EM64T) and future errata kernels for update 5.
2.6.32-504.el6 - Red Hat Enterprise Linux 6 Update 6 (AMD64/EM64T) and future errata kernels for update 6.
2.6.32-573.el6 - Red Hat Enterprise Linux 6 Update 7(AMD64/EM64T) and future errata kernels for update 7.
2.6.32-642.el6 - Red Hat Enterprise Linux 6 Update 8(AMD64/EM64T) and future errata kernels for update 8.

HP H2xx SAS/SATA Host Bus Adapter Driver for Red Hat Enterprise Linux 6 (x86)

Version: 15.10.04.00-10 **(Recommended)**

Filename: kmod-mpt2sas-15.10.02.00-7.rhel6u0.i686.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u1.i686.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u2.i686.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u3.i686.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u4.i686.rpm; kmod-mpt2sas-15.10.02.00-8.rhel6u5.i686.rpm; kmod-mpt2sas-15.10.04.00-10.rhel6u8.i686.rpm; kmod-mpt2sas-15.10.04.00-3.rhel6u6.i686.rpm; kmod-mpt2sas-15.10.04.00-6.rhel6u7.i686.rpm

Enhancements

Added suppoprt for Red Hat Enterprise Linux 6 Update 8.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 6 (x86) supported by this binary rpm are:
2.6.32-131.el6 - Red Hat Enterprise Linux 6 Update 1(x86) and future errata kernels for update 1.
2.6.32-220.el6 - Red Hat Enterprise Linux 6 Update 2(x86) and future errata kernels for update 2.
2.6.32-279.el6 - Red Hat Enterprise Linux 6 Update 3(x86) and future errata kernels for update 3.
2.6.32-358.el6 - Red Hat Enterprise Linux 6 Update 4(x86) and future errata kernels for update 4.
2.6.32-431.el6 - Red Hat Enterprise Linux 6 Update 5(x86) and future errata kernels for update 5.
2.6.32-504.el6 - Red Hat Enterprise Linux 6 Update 6(x86) and future errata kernels for update 6.
2.6.32-573.el6 - Red Hat Enterprise Linux 6 Update 7(x86) and future errata kernels for update 7.
2.6.32-642.el6 - Red Hat Enterprise Linux 6 Update 8(x86) and future errata kernels for update 8.

HP H2xx SAS/SATA Host Bus Adapter Driver for SUSE LINUX Enterprise Server 11 (AMD64/EM64T)

Version: 15.10.04.00-5 (A) **(Recommended)**

Filename: lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp1.x86_64.rpm; lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp2.x86_64.rpm; lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp3.x86_64.rpm; lsi-mpt2sas-kmp-default-15.10.04.00-5.sles11sp4.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp1.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp2.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp3.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.04.00-5.sles11sp4.x86_64.rpm

Enhancements

Added HPE digital signatures to RPM packages and included kernel objects. No functional changes were made to the driver.
If driver version 15.10.04.00-5 is installed on the target system, then it is not necessary to update to driver version 15.10.04.00-5(A).

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 11 (AMD64/EM64T) supported by this driver diskette are:
2.6.32.12-0.7 - SUSE LINUX Enterprise Server 11 SP 1 (AMD64/EM64T) plus future errata.
3.0.13-0.27.1- SUSE LINUX Enterprise Server 11 SP 2 (AMD64/EM64T) plus future errata.
3.0.76-0.11.1 - SUSE LINUX Enterprise Server 11 SP 3 (AMD64/EM64T) plus future errata.
3.0.101-63-default - SUSE LINUX Enterprise Server 11 SP 4 (AMD64/EM64T) plus future errata.

HP H2xx SAS/SATA Host Bus Adapter Driver for SUSE LINUX Enterprise Server 11 (x86)
Version: 15.10.04.00-5 (A) **(Recommended)**
Filename: lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp1.i586.rpm; lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp2.i586.rpm; lsi-mpt2sas-kmp-default-15.10.02.00-6.sles11sp3.i686.rpm; lsi-mpt2sas-kmp-default-15.10.04.00-5.sles11sp4.i686.rpm; lsi-mpt2sas-kmp-pae-15.10.02.00-6.sles11sp1.i586.rpm; lsi-mpt2sas-kmp-pae-15.10.02.00-6.sles11sp2.i586.rpm; lsi-mpt2sas-kmp-pae-15.10.02.00-6.sles11sp3.i686.rpm; lsi-mpt2sas-kmp-pae-15.10.04.00-5.sles11sp4.i686.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp1.i586.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp2.i586.rpm; lsi-mpt2sas-kmp-xen-15.10.02.00-6.sles11sp3.i686.rpm; lsi-mpt2sas-kmp-xen-15.10.04.00-5.sles11sp4.i686.rpm

Enhancements

Added HPE digital signatures to RPM packages and included kernel objects. No functional changes were made to the driver.
If driver version 15.10.04.00-5 is installed on the target system, then it is not necessary to update to driver version 15.10.04.00-6(A).

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of SUSE LINUX Enterprise Server 11 (x86) supported by this driver diskette are:
2.6.32.12-0.7 - SUSE LINUX Enterprise Server 11 SP 1 (x86) plus future errata.
3.0.13-0.27.1 - SUSE LINUX Enterprise Server 11 SP 2 (x86) plus future errata.
3.0.76-0.11.1 - SUSE LINUX Enterprise Server 11 SP 3 (x86) plus future errata.
3.0.101-63-default - SUSE LINUX Enterprise Server 11 SP 4 (x86) and future errata kernels for SP 4.

HP H2xx SAS/SATA Host Bus Adapter Driver for SUSE LINUX Enterprise Server 12 (AMD64/EM64T)
Version: 15.10.04.00-7 (A) **(Recommended)**
Filename: lsi-mpt2sas-kmp-default-15.10.04.00-3.sles12sp0.x86_64.rpm; lsi-mpt2sas-kmp-default-15.10.04.00-7.sles12sp1.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.04.00-3.sles12sp0.x86_64.rpm; lsi-mpt2sas-kmp-xen-15.10.04.00-7.sles12sp1.x86_64.rpm

Enhancements

Added HPE digital signatures to RPM packages and included kernel objects. No functional changes were made to the driver.
If driver version 15.10.04.00-7 is installed on the target system, then it is not necessary to update to driver version 15.10.04.00-7(A).

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 (AMD64/EM64T) supported by this binary rpm are:

3.12.28-4 - SUSE LINUX Enterprise Server 12 (AMD64/EM64T) and future update kernels.

3.12.49-11.1- SUSE LINUX Enterprise Server 12 (AMD64/EM64T) SP1 plus future errata.

HP ProLiant Smart Array Controller (AMD64/EM64T) Driver for SUSE LINUX Enterprise Server 12 (AMD64/EM64T)

Version: 3.4.16-145 **(Recommended)**

Filename: hpsa-kmp-default-3.4.16-145.sles12sp0.x86_64.rpm; hpsa-kmp-default-3.4.16-145.sles12sp1.x86_64.rpm; hpsa-kmp-xen-3.4.16-145.sles12sp0.x86_64.rpm; hpsa-kmp-xen-3.4.16-145.sles12sp1.x86_64.rpm

Enhancements

When a controller lock-up occurs, the controller now generates an NMI, which results in more diagnostic information in the AHS logs to better identify the cause of the lock-up.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 12 (AMD64/EM64T) supported by this binary rpm are:

3.12.28-4 - SUSE LINUX Enterprise Server 12 (AMD64/EM64T) and future update kernels.

3.12.49-11.1- SUSE LINUX Enterprise Server 12 (AMD64/EM64T) SP1 plus future errata.

HP ProLiant Smart Array SAS/SATA Controller Driver for Windows Server 2008

Version: 6.28.0.32 **(Optional)**

Filename: cp020622.exe

Enhancements

Minor performance enhancements

HP ProLiant Smart Array SAS/SATA Controller Driver for Windows Server 2008 x64 Edition

Version: 6.28.0.64 (C) **(Optional)**

Filename: cp028066.exe

Enhancements

Added support for HP ProLiant WS460c Gen8 Graphics Server Blade.

HP ProLiant Smart Array SAS/SATA Controller Driver for Windows Server 2012 x64 Edition

Version: 62.28.0.64 (C) **(Recommended)**

Filename: cp028045.exe

Enhancements

Added support for HPE ProLiant WS460c Gen9 Graphics Server Blade.

HP Smart Array B110i SATA RAID Controller Driver for Red Hat Enterprise Linux 6 (AMD64/EM64T)

Version: 1.2.6-18 (A) **(Recommended)**

Filename: kmod-hpahcisr-1.2.6-18.rhel6u1.x86_64.rpm; kmod-hpahcisr-1.2.6-18.rhel6u2.x86_64.rpm; kmod-hpahcisr-1.2.6-18.rhel6u3.x86_64.rpm; kmod-hpahcisr-1.2.6-18.rhel6u4.x86_64.rpm; kmod-hpahcisr-1.2.6-18.rhel6u5.x86_64.rpm; kmod-hpahcisr-1.2.6-18.rhel6u6.x86_64.rpm

Enhancements

RPMs are now signed. No other changes were made to the driver

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6 (AMD64/EM64T) supported by this binary rpm are:
2.6.32-131.el6 - Red Hat Enterprise Linux 6 Update 1(AMD64/EM64T) and future errata kernels for update 1.
2.6.32-220.el6 - Red Hat Enterprise Linux 6 Update 2(AMD64/EM64T) and future errata kernels for update 2.
2.6.32-279.el6 - Red Hat Enterprise Linux 6 Update 3(AMD64/EM64T) and future errata kernels for update 3.
2.6.32-358.el6 - Red Hat Enterprise Linux 6 Update 4(AMD64/EM64T) and future errata kernels for update 4.
2.6.32-431.el6 - Red Hat Enterprise Linux 6 Update 5(AMD64/EM64T) and future errata kernels for update 5.
2.6.32-504.el6 - Red Hat Enterprise Linux 6 Update 6(AMD64/EM64T) and future errata kernels for update 6.

HP Smart Array B110i SATA RAID Controller Driver for Red Hat Enterprise Linux 6 (x86)

Version: 1.2.6-18 (A) **(Recommended)**

Filename: kmod-hpahcisr-1.2.6-18.rhel6u1.i686.rpm; kmod-hpahcisr-1.2.6-18.rhel6u2.i686.rpm; kmod-hpahcisr-1.2.6-18.rhel6u3.i686.rpm; kmod-hpahcisr-1.2.6-18.rhel6u4.i686.rpm; kmod-hpahcisr-1.2.6-18.rhel6u5.i686.rpm; kmod-hpahcisr-1.2.6-18.rhel6u6.i686.rpm

Enhancements

RPMs are now signed. No other changes were made to the driver

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6 (x86) supported by this binary rpm are:
2.6.32-131.el6 - Red Hat Enterprise Linux 6 Update 1(x86) and future errata kernels for update 1.
2.6.32-220.el6 - Red Hat Enterprise Linux 6 Update 2(x86) and future errata kernels for update 2.
2.6.32-279.el6 - Red Hat Enterprise Linux 6 Update 3(x86) and future errata kernels for update 3.
2.6.32-358.el6 - Red Hat Enterprise Linux 6 Update 4(x86) and future errata kernels for update 4.
2.6.32-431.el6 - Red Hat Enterprise Linux 6 Update 5(x86) and future errata kernels for update 5.
2.6.32-504.el6 - Red Hat Enterprise Linux 6 Update 6(x86) and future errata kernels for update 6.

HP Smart Array B110i SATA RAID Controller Driver for SUSE LINUX Enterprise Server 11 (AMD64/EM64T)

Version: 1.2.6-17 (A) **(Recommended)**

Filename: hpahcisr-kmp-default-1.2.6-17.sles11sp1.x86_64.rpm; hpahcisr-kmp-default-1.2.6-17.sles11sp2.x86_64.rpm; hpahcisr-kmp-default-1.2.6-17.sles11sp3.x86_64.rpm

Enhancements

RPMs are now signed. No other changes were made to the driver

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 11 (AMD64/EM64T) supported by this binary rpm are:

2.6.32.12-0.7 - SUSE LINUX Enterprise Server 11 SP 1 (AMD64/EM64T) and future errata kernels for SP 1.

3.0.13-0.27.1 - SUSE LINUX Enterprise Server 11 SP 2 (AMD64/EM64T) and future errata kernels for SP 2.

3.0.76-0.11.1 - SUSE LINUX Enterprise Server 11 SP 3 (AMD64/EM64T) and future errata kernels for SP 3.

HP Smart Array B110i SATA RAID Controller Driver for SUSE LINUX Enterprise Server 11 (x86)

Version: 1.2.6-17 (A) **(Recommended)**

Filename: hpahcisr-kmp-default-1.2.6-17.sles11sp1.i586.rpm; hpahcisr-kmp-default-1.2.6-17.sles11sp2.i586.rpm; hpahcisr-kmp-default-1.2.6-17.sles11sp3.i586.rpm; hpahcisr-kmp-pae-1.2.6-17.sles11sp1.i586.rpm; hpahcisr-kmp-pae-1.2.6-17.sles11sp2.i586.rpm; hpahcisr-kmp-pae-1.2.6-17.sles11sp3.i586.rpm

Enhancements

RPMs are now signed. No other changes were made to the driver

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of SUSE LINUX Enterprise Server 11 (x86) supported by this binary rpm are:

2.6.32.12-0.7 - SUSE LINUX Enterprise Server 11 SP 1 (x86) and future errata kernels for SP 1.

3.0.13-0.27.1 - SUSE LINUX Enterprise Server 11 SP 2 (x86) and future errata kernels for SP 2.

3.0.76-0.11.1 - SUSE LINUX Enterprise Server 11 SP 3 (x86) and future errata kernels for SP 3.

HPE H2xx SAS/SATA Host Bus Adapter Driver for Red Hat Enterprise Linux 7 (64-bit)

Version: 15.10.06.00-5 **(Recommended)**

Filename: kmod-mpt2sas-15.10.05.00-3.rhel7u3.x86_64.rpm; kmod-mpt2sas-15.10.06.00-5.rhel7u4.x86_64.rpm

Enhancements

Added support for Red Hat Enterprise LINUX 7 Update 4.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 7 (64-bit) supported by this binary rpm are:

3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (64-bit) and future errata kernels for update 3.

3.10.0-693.el7- Red Hat Enterprise Linux 7 Update 4 (64-bit) and future errata kernels for update 4.

Note: This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE H2xx SAS/SATA Host Bus Adapter Driver for SUSE LINUX Enterprise Server 12 (64-bit)

Version: 15.10.06.00-6 **(Recommended)**

Filename: lsi-mpt2sas-kmp-default-15.10.06.00-2.sles12sp2.x86_64.rpm; lsi-mpt2sas-kmp-default-15.10.06.00-6.sles12sp3.x86_64.rpm

Enhancements

Added support for SUSE LINUX Enterprise Server 12 SP2 and SP3.

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.

Note: This driver component supports Gen9 servers only with H221 controllers and the controller does not support connection to D2600, D2700, and D6000 Disk Enclosures with Gen9 servers.

HPE ProLiant Smart Array Controller (32-bit) Driver for Red Hat Enterprise Linux 6 (32-bit)
Version: 3.4.20-100 **(Recommended)**
Filename: kmod-hpsa-3.4.20-100.rhel6u8.i686.rpm; kmod-hpsa-3.4.20-100.rhel6u9.i686.rpm

Fixes

Fixed the below:

In a multipath configuration with heavy IO running, the controller might not switch all traffic to the active path when one path fails.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6 (x86) supported by this binary rpm are:
2.6.32-642.el6 - Red Hat Enterprise Linux 6 Update 8(x86) and future errata kernels for update 8.
2.6.32-696.el6 - Red Hat Enterprise Linux 6 Update 9(x86) and future errata kernels for update 9.

HPE ProLiant Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 3.4.20-113 **(Recommended)**
Filename: kmod-hpsa-3.4.20-113.rhel7u3.x86_64.rpm; kmod-hpsa-3.4.20-113.rhel7u4.x86_64.rpm

Fixes

Fixed the below:

In a multipath configuration with heavy IO running, the controller might not switch all traffic to the active path when one path fails.

SmartPath might not be enabled in some situations.

Enhancements

Added support for Red Hat Enterprise LINUX 7 Update 3.

Added support for Smart Array Controller P830 and P830i

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 (64-bit) supported by this binary rpm are:
3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (64-bit) and future errata kernels for update 3.
3.10.0-693.el7- Red Hat Enterprise Linux 7 Update 4 (64-bit) and future errata kernels for update 4.

HPE ProLiant Smart Array Controller (AMD64/EM64T) Driver for Red Hat Enterprise Linux 6 (AMD64/EM64T)

Version: 3.4.18-108 **(Recommended)**

Filename: kmod-hpsa-3.4.18-108.rhel6u5.x86_64.rpm; kmod-hpsa-3.4.18-108.rhel6u6.x86_64.rpm; kmod-hpsa-3.4.18-108.rhel6u7.x86_64.rpm; kmod-hpsa-3.4.18-108.rhel6u8.x86_64.rpm; kmod-hpsa-3.4.18-108.rhel6u9.x86_64.rpm

Fixes

- In rare cases, the OS would offline drives.

Enhancements

- Added support for Red Hat Enterprise Linux 6 Update 9.
- Multiple performance improvements.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 6 (AMD64/EM64T) supported by this driver diskette are:
2.6.32-431.el6 - Red Hat Enterprise Linux 6 Update 5(AMD64/EM64T) and future errata kernels for update 5.
2.6.32-504.el6 - Red Hat Enterprise Linux 6 Update 6(AMD64/EM64T) and future errata kernels for update 6.
2.6.32-573.el6 - Red Hat Enterprise Linux 6 Update 7(AMD64/EM64T) and future errata kernels for update 7.
2.6.32-642.el6 - Red Hat Enterprise Linux 6 Update 8(AMD64/EM64T) and future errata kernels for update 8.
2.6.32-696.el6 - Red Hat Enterprise Linux 6 Update 9(AMD64/EM64T) and future errata kernels for update 9.

HPE ProLiant Smart Array Controller (AMD64/EM64T) Driver for SUSE LINUX Enterprise Server 11 (AMD64/EM64T)

Version: 3.4.18-105 **(Recommended)**

Filename: hpsa-kmp-default-3.4.18-105.sles11sp1.x86_64.rpm; hpsa-kmp-default-3.4.18-105.sles11sp2.x86_64.rpm; hpsa-kmp-default-3.4.18-105.sles11sp3.x86_64.rpm; hpsa-kmp-default-3.4.18-105.sles11sp4.x86_64.rpm; hpsa-kmp-xen-3.4.18-105.sles11sp1.x86_64.rpm; hpsa-kmp-xen-3.4.18-105.sles11sp2.x86_64.rpm; hpsa-kmp-xen-3.4.18-105.sles11sp3.x86_64.rpm; hpsa-kmp-xen-3.4.18-105.sles11sp4.x86_64.rpm

Fixes

- In rare cases, the OS would offline drives.

Enhancements

- Multiple performance improvements.

Supported Devices and Features

The kernels of SUSE LINUX Enterprise Server 11 (AMD64/EM64T) supported by this driver diskette are:

2.6.32.12-0.7 - SUSE LINUX Enterprise Server 11 SP 1 (AMD64/EM64T) and future errata kernels for SP 1.

3.0.13-0.27.1 - SUSE LINUX Enterprise Server 11 SP 2 (AMD64/EM64T) and future errata kernels for SP 2.

3.0.76-0.11.1 - SUSE LINUX Enterprise Server 11 SP 3 (AMD64/EM64T) and future errata kernels for SP 3.

3.0.101-63-default – SUSE LINUX Enterprise Server 11 SP 4 (AMD64/EM64T) and future errata kernels for SP 4.

HPE ProLiant Smart Array Controller Driver for VMware vSphere 5.5 (Bundle file)

Version: 5.5.0.124-1 **(Recommended)**

Filename: hpsa-5.5.0.124-4683595.zip

Fixes

Below is fixed in the hpsa driver version 5.5.0.124-1

On HPE ProLiant servers, reinserting and reactivating a previously hot-removed RAID 0 disk may cause the volume to fail to return to an online or ready state in VMware vSphere 5.5. The HPE Smart Array (HPSA) driver prevents the unplugged volume's offline state from being recognized by driver and when the volume is physically reinserted and reactivated with the Smart Storage Administrator (SSA) utility, the volume status remains as offline in a VMware vSAN environment.

Supported Devices and Features

Following is the list of Controllers supported by version 5.5.0.124-1 driver:

HP Smart Array P230i Controller
HP Smart Array P240nr Controller
HP Smart Array P244br Controller
HP Smart Array P246br Controller
HP Smart Array P430 Controller
HP Smart Array P431 Controller
HP Smart Array P440 Controller
HP Smart Array P440ar Controller
HP Smart Array P441 Controller
HP Smart Array P542D Controller
HP Smart Array P731m Controller
HP Smart Array P741m Controller
HP Smart Array P812 Controller
HP Smart Array P822 Controller
HP Smart Array P830 Controller
HP Smart Array P830i Controller
HP Smart Array P840 Controller
HP Smart Array P840ar Controller
HP Smart Array P841 Controller
HP Smart HBA H240
HP Smart HBA H240ar
HP Smart HBA H240nr Controller
HP Smart HBA H241
HP Smart HBA H244br
Smart Array P212
Smart Array P220i
Smart Array P222
Smart Array P410
Smart Array P410i
Smart Array P411

Smart Array P420
Smart Array P420i
Smart Array P421
Smart Array P700m
Smart Array P711m
Smart Array P712m
Smart Array P721m

HPE ProLiant Smart Array Controller Driver for VMware vSphere 5.5 (Driver Component).
Version: 2016.11.18 **(Recommended)**
Filename: cp031417.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 http://vibsdepot.hpe.com/ webpages, plus an HPE specific CPXXXX.xml file.

Fixes

Below is fixed in the hpsa driver version 5.5.0.124-1

On HPE ProLiant servers, reinserting and reactivating a previously hot-removed RAID 0 disk may cause the volume to fail to return to an online or ready state in VMware vSphere 5.5. The HPE Smart Array (HPSA) driver prevents the unplugged volume's offline state from being recognized by driver and when the volume is physically reinserted and reactivated with the Smart Storage Administrator (SSA) utility, the volume status remains as offline in a VMware vSAN environment.

Supported Devices and Features

Following is the list of Controllers supported by version 2016.10.21 of the Driver Component:

HP Smart Array P230i Controller
HP Smart Array P240nr Controller
HP Smart Array P244br Controller
HP Smart Array P246br Controller
HP Smart Array P430 Controller
HP Smart Array P431 Controller
HP Smart Array P440 Controller
HP Smart Array P440ar Controller
HP Smart Array P441 Controller
HP Smart Array P542D Controller
HP Smart Array P731m Controller
HP Smart Array P741m Controller
HP Smart Array P812 Controller
HP Smart Array P822 Controller
HP Smart Array P830 Controller
HP Smart Array P830i Controller
HP Smart Array P840 Controller
HP Smart Array P840ar Controller
HP Smart Array P841 Controller
HP Smart HBA H240

HP Smart HBA H240ar
HP Smart HBA H240nr Controller
HP Smart HBA H241
HP Smart HBA H244br
Smart Array P212
Smart Array P220i
Smart Array P222
Smart Array P410
Smart Array P410i
Smart Array P411
Smart Array P420
Smart Array P420i
Smart Array P421
Smart Array P700m
Smart Array P711m
Smart Array P712m
Smart Array P721m

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.0 (Bundle file)
Version: 6.0.0.124-1 **(Recommended)**
Filename: hpsa-6.0.0.124-4683364.zip

Fixes

Below is fixed in the hpsa driver version 6.0.0.124-1

On HPE ProLiant servers, reinserting and reactivating a previously hot-removed RAID 0 disk may cause the volume to fail to return to an online or ready state in VMware vSphere 6.0. The HPE Smart Array (HPSA) driver prevents the unplugged volume's offline state from being recognized by driver and when the volume is physically reinserted and reactivated with the Smart Storage Administrator (SSA) utility, the volume status remains as offline in a VMware vSAN environment.

Supported Devices and Features

Following is the list of Controllers supported by version 6.0.0.124-1 driver:

HP Smart Array P230i Controller
HP Smart Array P240nr Controller
HP Smart Array P244br Controller
HP Smart Array P246br Controller
HP Smart Array P430 Controller
HP Smart Array P431 Controller
HP Smart Array P440 Controller
HP Smart Array P440ar Controller
HP Smart Array P441 Controller
HP Smart Array P542D Controller
HP Smart Array P731m Controller
HP Smart Array P741m Controller
HP Smart Array P812 Controller
HP Smart Array P822 Controller
HP Smart Array P830 Controller
HP Smart Array P830i Controller

HP Smart Array P840 Controller
HP Smart Array P840ar Controller
HP Smart Array P841 Controller
HP Smart HBA H240
HP Smart HBA H240ar
HP Smart HBA H240nr Controller
HP Smart HBA H241
HP Smart HBA H244br
Smart Array P212
Smart Array P220i
Smart Array P222
Smart Array P410
Smart Array P410i
Smart Array P411
Smart Array P420
Smart Array P420i
Smart Array P421
Smart Array P700m
Smart Array P711m
Smart Array P712m
Smart Array P721m

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).

Version: 2016.11.18 **(Recommended)**

Filename: cp031418.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 http://vibsdepot.hpe.com/ webpages, plus an HPE specific CPXXXX.xml file.

Fixes

Below is fixed in the hpsa driver version 6.0.0.124-1

On HPE ProLiant servers, reinserting and reactivating a previously hot-removed RAID 0 disk may cause the volume to fail to return to an online or ready state in VMware vSphere 6.0. The HPE Smart Array (HPSA) driver prevents the unplugged volume's offline state from being recognized by driver and when the volume is physically reinserted and reactivated with the Smart Storage Administrator (SSA) utility, the volume status remains as offline in a VMware vSAN environment.

Supported Devices and Features

Following is the list of Controllers supported by version 2016.10.21 of the Driver Component:

HP Smart Array P230i Controller
HP Smart Array P240nr Controller
HP Smart Array P244br Controller
HP Smart Array P246br Controller
HP Smart Array P430 Controller
HP Smart Array P431 Controller

HP Smart Array P440 Controller
HP Smart Array P440ar Controller
HP Smart Array P441 Controller
HP Smart Array P542D Controller
HP Smart Array P731m Controller
HP Smart Array P741m Controller
HP Smart Array P812 Controller
HP Smart Array P822 Controller
HP Smart Array P830 Controller
HP Smart Array P830i Controller
HP Smart Array P840 Controller
HP Smart Array P840ar Controller
HP Smart Array P841 Controller
HP Smart HBA H240
HP Smart HBA H240ar
HP Smart HBA H240nr Controller
HP Smart HBA H241
HP Smart HBA H244br
Smart Array P212
Smart Array P220i
Smart Array P222
Smart Array P410
Smart Array P410i
Smart Array P411
Smart Array P420
Smart Array P420i
Smart Array P421
Smart Array P700m
Smart Array P711m
Smart Array P712m
Smart Array P721m

HPE ProLiant Smart Array HPCISSS3 Controller Driver for Windows Server 2008 x64 Edition

Version: 6.12.0.64 (A) **(Recommended)**

Filename: cp030674.exe

<u>Enhancements</u>

Added support for:

HPE Smart HBA H240nr Controller.
HPE Smart Array P240nr Controller.
HPE Smart Array P542D Controller.

Driver - Storage Fibre Channel and Fibre Channel Over Ethernet	

HP Storage Fibre Channel Over Ethernet Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2

Version: 9.1.13.10 **(Recommended)**

Filename: cp025684.exe

Important Note!

Release Notes:

[HP StorageWorks QLogic Adapters Release Notes](#)

Fixes

- Fixed condition to account for tape retry delay time when SCSI status busy and queue full without other status bits.

Enhancements

Updated to driver version 9.1.13.10

Supported Devices and Features

This driver supports the following HP adapters:
- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP Storage Fibre Channel Over Ethernet Adapter Kit for the x64 QLogic Storport Driver
Version: 9.1.13.10 **(Recommended)**
Filename: cp025685.exe

Important Note!

Release Notes:

[HP StorageWorks QLogic Adapters Release Notes](#)

Fixes

- Fixed condition to account for tape retry delay time when SCSI status busy and queue full without other status bits.

Enhancements

9.1.13.10 version

Supported Devices and Features

This driver supports the following HP adapters:
- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP Storage Fibre Channel Over Ethernet Adapter Kit for the x86 QLogic Storport Driver
Version: 9.1.13.10 **(Recommended)**
Filename: cp025686.exe

Important Note!

Release Notes:

[HP StorageWorks QLogic Adapters Release Notes](#)

Fixes

- Fixed condition to account for tape retry delay time when SCSI status busy and queue full without other status bits.

Enhancements

Updated the Smart Component to contain driver version 9.1.13.10

Supported Devices and Features

This driver supports the following HP adapters:
- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP Storage QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2012

Version: 3.2.5.0 **(Recommended)**

Filename: cp025313.exe

Important Note!

Release Notes:

[HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes](#)

To keep drivers and boot code synchronized, be sure to update your adapter with the latest boot image from [www.hp.com](#) before you install or update adapter driver packages.

Enhancements

Updated driver version to 3.2.5.0. This driver will identify 8Gb HBA/mezzanine cards as "QLogic" or "QLogic BR-series" in product description displays.

Supported Devices and Features

This driver supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HP Storage QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2012 R2

Version: 3.2.5.0 **(Recommended)**

Filename: cp025052.exe

Important Note!

Release Notes:
[HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes](#)

To keep drivers and boot code synchronized, be sure to update your adapter with the latest boot image from [www.hp.com](#) before you install or update adapter driver packages.

Enhancements

Updated driver version to 3.2.5.0. This driver will identify 8Gb HBA/mezzanine cards as "QLogic" or "QLogic BR-series" in product description displays.

Supported Devices and Features

This driver supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HP Storage x64 QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2008 R2

Version: 3.2.5.0 **(Recommended)**

Filename: cp025314.exe

Important Note!

Release Notes:
[HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes](#)

To keep drivers and boot code synchronized, be sure to update your adapter with the latest boot image from [www.hp.com](#) before you install or update adapter driver packages.

Enhancements

Updated driver version to 3.2.5.0. This driver will identify 8Gb HBA/mezzanine cards as "QLogic" or "QLogic BR-series" in product description displays.

Supported Devices and Features

This driver supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2

Version: 9.1.17.25 **(Recommended)**

Filename: cp031889.exe

Important Note!

Release Notes:

[HPE StoreFabric QLogic Adapters Release Notes](#)

Fixes

The driver update is a workaround to address unexpected path loss behavior during Brocade switch FOS upgrades

Enhancements

updated to driver version 9.1.17.25

Supported Devices and Features

This driver supports the following adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe 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 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2016

Version: 9.2.2.20 **(Recommended)**

Filename: cp029979.exe

Important Note!

Release Notes:

[HPE StoreFabric QLogic Adapters Release Notes](#)

Enhancements

Initial driver version 9.2.2.20

Supported Devices and Features

This driver supports the following adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe 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 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver

Version: 11.1.145.16 (C) **(Recommended)**

Filename: cp031671.exe

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This driver, version 11.1.145.16, adds support for the following devices:

- 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

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:

elxdrvr-fcoe-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version\x64\win2008

Supported Devices and Features

- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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
Version: 9.1.17.25 **(Recommended)**
Filename: cp031888.exe

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapters Release Notes

Fixes

The driver update is a workaround to address unexpected path loss behavior during Brocade switch FOS upgrades

Enhancements

Updated to driver version 9.1.17.25.

Supported Devices and Features

This driver supports the following adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

- HP StoreFabric SN1000Q 16GB 1-port PCIe 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 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x86 Emulex Storport Driver
Version: 11.1.145.16 **(Recommended)**
Filename: cp029980.exe

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Enhancements

Updated to driver version 11.1.145.16

- Added automatic recovery from errors that previously required a system reboot
- Added SmartSAN 2.0 support

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-fcoe-version.exe /q2 extract=2

The extracted files are located:

  C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

  C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version\x64\win2008

Supported Devices and Features

- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x86 QLogic Storport Driver

Version: 9.1.17.25 **(Recommended)**
Filename: cp031887.exe

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapters Release Notes

Fixes

The driver update is a workaround to address unexpected path loss behavior during Brocade switch FOS upgrades

Enhancements

Updated to Driver version 9.1.17.25

Supported Devices and Features

This driver supports the following HP adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

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HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 Emulex Storport Driver
Version: 11.1.145.16 **(Recommended)**
Filename: cp029983.exe

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Enhancements

Updated to driver version 11.1.145.16

- Added support for Windows Server 2016
- Added automatic recovery from errors that previously required a system reboot
- Added SmartSAN 2.0 support

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-fcoe-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version\x64\win2008

Supported Devices and Features

This driver supports the following HP adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP StorageWorks CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x86 Emulex Storport Driver
Version: 11.1.145.16 **(Recommended)**
Filename: cp029982.exe

Important Note!

Release Notes:
HPE Storefabric Emulex Adapters Release Notes

Enhancements

Updated to driver version 11.1.145.16

- Added automatic recovery from errors that previously required a system reboot
- Added SmartSAN 2.0 support

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-fcoe-version.exe /q2 extract=2

The extracted files are located:

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

C:\Users\Administrator\Documents\Emulex\Drivers\FCoE-version\x64\win2008

Supported Devices and Features

This driver supports the following HP adapters:

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP StorageWorks CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter

Red Hat Enterprise Linux 6 Server (x86-64) FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs

Version: 11.1.183.21 (C) **(Recommended)**

Filename: kmod-elx-lpfc-11.1.183.21-1.rhel6u6.x86_64.rpm; kmod-elx-lpfc-11.1.183.21-1.rhel6u7.x86_64.rpm; kmod-elx-lpfc-11.1.183.21-1.rhel6u8.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This driver, version 11.1.183.21, adds support for the following devices:

- 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

Supported Devices and Features

-
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter

HP FlexFabric 10Gb 2-port 554FLB Adapter

- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 6 Server (x86-64) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs
Version: 8.07.00.34.06.0-k1 (b) **(Recommended)**
Filename: kmod-qlgc-qla2xxx-8.07.00.34.06.0_k1-1.rhel6u9.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.06.0_k1-2.rhel6u7.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.06.0_k1-2.rhel6u8.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.

Enhancements

Initial support for Red Hat Enterprise Linux 6 update 9

driver version 8.07.00.34.06.0-k1

Supported Devices and Features

This driver supports the following HP adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter

- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs
Version: 11.1.183.21 (C) **(Recommended)**
Filename: kmod-elx-lpfc-11.1.183.21-1.rhel7u1.x86_64.rpm; kmod-elx-lpfc-11.1.183.21-1.rhel7u2.x86_64.rpm

<u>Important Note!</u>

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

<u>Prerequisites</u>

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

<u>Enhancements</u>

This driver, version 11.1.183.21, adds support for the following devices:

- 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

<u>Supported Devices and Features</u>

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs
Version: 8.07.00.34.07.0-k1 (b) **(Recommended)**
Filename: kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-1.rhel7u3.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-3.rhel7u1.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-3.rhel7u2.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

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Driver version 8.07.00.34.07.0-k1

Added support for Red Hat Enterprise Linux 7 Server update 3.

Added support for Private link statistics counters.

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This driver supports the following adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs
Version: 11.1.183.21 (C) **(Recommended)**
Filename: elx-lpfc-kmp-default-11.1.183.21_3.0.101_63-1.sles11sp4.x86_64.rpm; elx-lpfc-kmp-default-11.1.183.21_3.0.76_0.11-
1.sles11sp3.x86_64.rpm; elx-lpfc-kmp-trace-11.1.183.21_3.0.101_63-1.sles11sp4.x86_64.rpm; elx-lpfc-kmp-trace-11.1.183.21_3.0.76_0.11-
1.sles11sp3.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.0.101_63-1.sles11sp4.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.0.76_0.11-
1.sles11sp3.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This driver, version 11.1.183.21, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs
Version: 8.07.00.34.11.3-k (b) **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-8.07.00.34.11.3_k_3.0.101_63-3.sles11sp4.x86_64.rpm; qlgc-qla2xxx-kmp-default-8.07.00.34.11.3_k_3.0.76_0.11-3.sles11sp3.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.11.3_k_3.0.101_63-3.sles11sp4.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.11.3_k_3.0.76_0.11-3.sles11sp3.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.

Fixes

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Updated driver version 8.07.00.34.11.3-k

Added support for Private link statistics counters.

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This driver supports the following HP adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 11 (x86) FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs

Version: 11.1.183.21 **(Recommended)**

Filename: elx-lpfc-kmp-default-11.1.183.21_3.0.101_63-1.sles11sp4.i586.rpm; elx-lpfc-kmp-default-11.1.183.21_3.0.76_0.11-1.sles11sp3.i586.rpm; elx-lpfc-kmp-pae-11.1.183.21_3.0.101_63-1.sles11sp4.i586.rpm; elx-lpfc-kmp-pae-11.1.183.21_3.0.76_0.11-1.sles11sp3.i586.rpm; elx-lpfc-kmp-trace-11.1.183.21_3.0.101_63-1.sles11sp4.i586.rpm; elx-lpfc-kmp-trace-11.1.183.21_3.0.76_0.11-1.sles11sp3.i586.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.0.101_63-1.sles11sp4.i586.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.0.76_0.11-1.sles11sp3.i586.rpm

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapters Release Notes](#)

Enhancements

Updated driver to version 11.1.183.21

- Added automatic recovery from errors that previously required a system reboot

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric 84E 4-port Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 11 (x86) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs

Version: 8.07.00.34.11.3-k **(Recommended)**

Filename: qlgc-qla2xxx-kmp-default-8.07.00.34.11.3_k_3.0.101_63-3.sles11sp4.i586.rpm; qlgc-qla2xxx-kmp-pae-8.07.00.34.11.3_k_3.0.101_63-3.sles11sp4.i586.rpm; qlgc-qla2xxx-kmp-pae-8.07.00.34.11.3_k_3.0.76_0.11-3.sles11sp3.i586.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.11.3_k_3.0.101_63-3.sles11sp4.i586.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.11.3_k_3.0.76_0.11-3.sles11sp3.i586.rpm

Important Note!

Release Notes

[HPE StoreFabric QLogic Adapter Release Notes](#)

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

Fixes

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Updated to version 8.07.00.34.11.3-k

Added support for Private link statistics counters.

Supported Devices and Features

This driver supports the following HP adapters:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

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SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs

Version: 11.1.183.21 **(Recommended)**

Filename: elx-lpfc-kmp-default-11.1.183.21_3.12.28_4-1.sles12sp0.x86_64.rpm; elx-lpfc-kmp-default-11.1.183.21_3.12.49_11-1.sles12sp1.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.12.28_4-1.sles12sp0.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.12.49_11-1.sles12sp1.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Enhancements

Updated driver to version 11.1.183.21

- Added automatic recovery from errors that previously required a system reboot
- Added SmartSAN 2.0 support
- Added support for Red Hat Enterprise Linux 6 update 8

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA

SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE Emulex CNAs, HBAs and mezzanine HBAs and CNAs
Version: 11.1.183.21 (C) **(Recommended)**
Filename: elx-lpfc-kmp-default-11.1.183.21_3.12.28_4-1.sles12sp0.x86_64.rpm; elx-lpfc-kmp-default-11.1.183.21_3.12.49_11-1.sles12sp1.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.12.28_4-1.sles12sp0.x86_64.rpm; elx-lpfc-kmp-xen-11.1.183.21_3.12.49_11-1.sles12sp1.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Enhancements

This driver, version 11.1.183.21, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs
Version: 8.07.00.34.12.0-k1 (b) **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-8.07.00.34.12.0_k1_k3.12.28_4-3.sles12sp0.x86_64.rpm; qlgc-qla2xxx-kmp-default-8.07.00.34.12.0_k1_k3.12.49_11-3.sles12sp1.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.12.0_k1_k3.12.28_4-3.sles12sp0.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.12.0_k1_k3.12.49_11-3.sles12sp1.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.

Fixes

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Updated to version 8.07.00.34.12.0-k1

Added support for Private link statistics counters.

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This driver supports the following HP adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs
Version: 8.07.00.34.12.0-k1 (c) **(Recommended)**
Filename: qlgc-qla2xxx-kmp-default-8.07.00.34.12.0_k1_k3.12.28_4-3.sles12sp0.x86_64.rpm; qlgc-qla2xxx-kmp-default-8.07.00.34.12.0_k1_k3.12.49_11-3.sles12sp1.x86_64.rpm; qlgc-qla2xxx-kmp-default-8.07.00.34.12.2_k1_k4.4.21_69-1.sles12sp2.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.12.0_k1_k3.12.28_4-3.sles12sp0.x86_64.rpm; qlgc-qla2xxx-kmp-xen-8.07.00.34.12.0_k1_k3.12.49_11-3.sles12sp1.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

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Driver version 8.07.00.34.12.0-k1

Added support for SUSE Linux Enterprise Server 12 SP2

Added support for Private link statistics counters.

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This driver supports the following HP adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Driver - Storage Tape	

HPE StoreEver Tape Drivers for Microsoft Windows

Version: 4.2.0.0 **(Recommended)**

Filename: cp030019.exe

Enhancements

- New LTO Tape Drive driver version 1.0.9.1
    - Added support for Microsoft Windows Server 2016 x64
- New MSL Library and 1/8 G2 autoloader driver version 3.0.0.4
    - Added support for Microsoft Windows Server 2016 x64
- New ESL G3 Tape Library driver version 7.5.8.3
    - Added support for Microsoft Windows Server 2016 x64
- Use previous versions of this driver installer if older drivers are required.
- See table below for operating system support and driver versions
    - **bold -** new driver versions
    - * - not supported

	Microsoft Windows Client Operating Systems				
Driver Description (HP and HPE branded products are supported)	7 x86	7 x64	8 x64	8.1 x64	10 x64
LTO Tape Drive - (LTO-7 drives require version 1.0.9.1)	1.0.9.1	1.0.9.1	1.0.9.1	1.0.9.1	1.0.9.1
MSL6480 Tape Library for 1/8 G2 Tape Autoloader MSL2024 Tape Library MSL4048 Tape Library MSL8096 Tape Library	3.0.0.0	3.0.0.0	3.0.0.0	3.0.0.3	3.0.0.4
DAT Tape Drive	1.7.1.0	1.7.1.0	1.7.1.0	1.7.2.0	*
USB Mass Storage Controller - (DAT 72 & 160 only)	6.07.2010	6.07.2010	7.00.2012	8.00.2014	*

	Microsoft Windows Server Operating Systems			
Driver Description (HP and HPE branded products are supported)	Server	Server	Server	Server

	2008 R2 x64	2012 x64	2012 R2 x64	2016 x64
LTO Tape Drive - (LTO-7 drives require version 1.0.9.1)	1.0.9.1	1.0.9.1	1.0.9.1	**1.0.9.1**
MSL6480 Tape Library for 1/8 G2 Tape Autoloader MSL2024 Tape Library MSL4048 Tape Library MSL8096 Tape Library	3.0.0.0	3.0.0.0	3.0.0.3	**3.0.0.4**
ESL G3 Tape Library	7.5.7.1	7.5.8.1	7.5.8.2	**7.5.8.3**
ESL E Tape Library	1.5.1.0	1.5.1.1	*	*
DAT Tape Drive	1.7.1.0	1.7.1.0	1.7.2.0	*
USB Mass Storage Controller - (DAT 72 & 160 only)	6.07.2010	7.00.2012	8.00.2014	*

Driver - System Management

Combined Chipset Identifier for Windows Server 2008

Version: 8.2.0.0 (B) **(Optional)**

Filename: cp029650.exe

Important Note!

Version 8.1.0.0 of this component is the final version to support installation under Windows Server 2003.

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

Combined Chipset Identifier for Windows Server 2008 x64 Edition

Version: 8.2.0.0 (B) **(Optional)**

Filename: cp029651.exe

Important Note!

Version 8.1.0.0 of this component is the final version to support installation under Windows Server 2003 x64 Edition.

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

---

iLO 3/4 Channel Interface Driver for Windows Server 2008 to Server 2012 R2

Version: 3.30.0.0 **(Optional)**

Filename: cp029394.exe

Important Note!

The Channel Interface Driver was separated into its own component when the ProLiant Support Pack version 9.00 was released. Previously, the driver was a part of the *iLO 3 Management Controller Driver Package* component.

Fixes

Ensure that work items created by the driver are properly terminated if the driver has been restarted.

---

iLO 3/4 Channel Interface Driver for Windows Server 2008 X86
Version: 3.30.0.0 **(Optional)**
Filename: cp029393.exe

Important Note!

The Channel Interface Driver was separated into its own component when the ProLiant Support Pack version 9.00 was released. Previously, the driver was a part of the *iLO 3 Management Controller Driver Package* component.

Fixes

Ensure that work items created by the driver are properly terminated if the driver has been restarted.

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

---

iLO 3/4 Management Controller Driver Package for Windows Server 2008 to Server 2012 R2
Version: 3.30.0.0 **(Optional)**
Filename: cp029429.exe

Prerequisites

The *iLO 3/4 Channel Interface Driver for Windows Server 2008 to Server 2012 R2* (version 3.4.0.0 or later) must be installed prior to this component. The Channel Interface Driver was previously included within this component, but is now installed separately.

Enhancements

The support provided by the ProLiant System Shutdown service has been merged into the ProLiant Monitor service. The ProLiant System Shutdown service will no longer appear as a separate item in the list of services on the system.

---

iLO 3/4 Management Controller Driver Package for Windows Server 2008 X86
Version: 3.30.0.0 **(Optional)**
Filename: cp029428.exe

Prerequisites

The *iLO 3/4 Channel Interface Driver for Windows Server 2008 X86* (version 3.4.0.0 or later) must be installed prior to this component. The Channel Interface Driver was previously included within this component, but is now installed separately.

Enhancements

The support provided by the ProLiant System Shutdown service has been merged into the ProLiant Monitor service. The ProLiant System Shutdown service will no longer appear as a separate item in the list of services on the system.

Driver - Video	

ATI ES1000 Video Controller Driver for Windows Server 2008

Version: 6.14.10.6748 (B) **(Optional)**

Filename: cp029668.exe

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

ATI ES1000 Video Controller Driver for Windows Server 2008 x64 Editions

Version: 6.14.10.6748 (B) **(Optional)**

Filename: cp029669.exe

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

Matrox G200eH Video Controller Driver for Windows Server 2008 X64

Version: 6.12.1.1030 (C) **(Optional)**

Filename: cp029671.exe

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

Matrox G200eH Video Controller Driver for Windows Server 2008 X86

Version: 6.12.1.1030 (C) **(Optional)**

Filename: cp029670.exe

Enhancements

The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

Matrox G200eH Video Controller Driver for Windows Server 2012 and Server 2012 R2

Version: 9.15.1.143 **(Optional)**

Filename: cp029672.exe

Fixes

The Windows bug check display is now visible through the iLO Remote Console on systems that were booted in UEFI mode but do not have a monitor connected.

Enhancements

Updated component installer to only support Windows Server 2012 and Server 2012 R2.

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: 4.60 **(Recommended)**

Filename: cp031272.exe

Prerequisites

The 4.60 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 latest list of issues resolved can be found in the HPE Virtual Connect Release Notes that can be found in the following URL**:** http://www.hpe.com/info/vc/manuals

Enhancements

The latest list of enhancements can be found in the HPE Virtual Connect Release Notes that can be found in the following URL**:** http://www.hpe.com/info/vc/manuals

Supported Devices and Features

HPE Flex-10 10Gb Virtual Connect Ethernet Module for c-Class BladeSystem

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 HP 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: 4.60 **(Recommended)**

Filename: RPMS/i386/firmware-vceth-4.60-1.1.i386.rpm

Prerequisites

The 4.60 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 latest list of issues resolved can be found in the HPE Virtual Connect Release Notes that can be found in the following URL**:** http://www.hpe.com/info/vc/manuals

Enhancements

The latest list of enhancements can be found in the HPE Virtual Connect Release Notes that can be found in the following URL**:**
http://www.hpe.com/info/vc/manuals

Supported Devices and Features

HPE Flex-10 10Gb Virtual Connect Ethernet Module for c-Class BladeSystem

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 HP 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: 4.2.2.0 **(Recommended)**
Filename: RPMS/i586/hp-firmware-solex6gb-solex-4.2.2.0-1.1.i586.rpm

Fixes

- Firmware was changed to make it more robust and resilient to handle possible unresponsiveness due to a potential deadlock between multiple processes. If deadlock was to occur, it might cause an inability to establish an SSH session with the switch.

Enhancements

- Made changes to firmware to capture more debug information.

Online HPE 6Gb SAS BL Switch Firmware Smart Component for Windows (x86/x64)
Version: 4.2.2.0 (B) **(Recommended)**
Filename: cp030778.exe

Fixes

- Firmware was changed to make it more robust and resilient to handle possible unresponsiveness due to a potential deadlock between multiple processes. If deadlock was to occur, it might cause an inability to establish an SSH session with the switch.

Enhancements

- Made changes to firmware to capture more debug information.

- Added support for the Microsoft® Windows Server® 2016 OS.

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Linux

Version: 4.60 **(Optional)**

Filename: RPMS/x86_64/hp-firmware-oa-4.60-1.1.x86_64.rpm

Important Note!

Update to this firmware version if any documented fixes or enhanced functionality provided by this version would be useful to your system.

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 HP 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 HP SUM information can be found via HPE Smart Update Manager online help or at http://www.hp.com/go/hpsum/documentation.
- **FIPS**
    - OA 3.71 is in active evaluation for FIPS 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

The Onboard Administrator Smart Component contains 32-bit executable binaries. As a result, the client operating system upon which the OA Smart Component is installed and executed must either have native support for 32-bit executables or must have the 32-bit compatibility libraries installed.

Fixes

General

- Addressed an issue where EFM was reporting success while firmware update of iLO 4 failed.
- Fixed an issue where OA might lose its IP address after OA firmware upgrade when ENCLOSURE_IP_MODE was enabled .
- Fixed an issue where all iLOs were reset after making EBIPA changes to an empty bay. Now only the specific iLOs are reset.
- Resolved an issue where iLOs became inaccessible after OA failover occurs with iLOs configured in EBIPA for IPv6. This occurs when an external router in the management network is configured to send Router Advertisements.
- Corrected the type mismatch of OID cpqRackCommonEnclosureManagerLocation which could cause failures in the SNMP clients. The definition is changed from STRING to INTEGER.

- Resolved an issue where information on only the last server NIC port of a multiport adaptor was shown on GUI and CLI. Now details of all the server NIC ports are displayed.
- Resolved an issue of time synchronization between active and standby OA when date and time settings were changed from "Manual" to "NTP".
- Resolved EFM discovery/update failure when the server power policy in the EFM configuration is set to "must be off".
- **Security**

  The following security vulnerabilities were fixed:

  - CVE-2016-2108 – Addressed a vulnerability in ASN.1 implementation in OpenSSL that can cause Denial Of Service via any field in crafted serialized data
  - CVE-2015-8605 - UDP payload length not properly checked. Addressed a vulnerability where a badly formed packet with an invalid IPv4 UDP length field can cause a DHCP server, client, or relay program to terminate abnormally.
  - CVE-2012-3954 - Fixed a memory leak issue in DHCPv6 daemon that could result in out of memory condition in OA.
  - CVE-2016-0797 and CVE-2016-0799 - Addressed a vulnerability in OpenSSL that could enable security attacks by passing large amount of untrusted data to certain functions in OpenSSL.
  - CVE-2015-8605 - Addressed a vulnerability in IPv4 stack that can be exploited to cause a Denial Of Service via an invalid length field in a UDP IPv4 packet.
  - CVE-2015-3196 - Addressed a vulnerability in OpenSSL that results in Denial Of Service by remote servers via a crafted ServerKeyExchange message.
  - CVE-2015-3195 - Addressed a vulnerability in OpenSSL that can be exploited to obtain sensitive information from process memory by triggering a decoding failure in a PKCS#7 or CMS application.
  - CVE-2015-6564 - Addressed a vulnerability in OpenSSH that might allow local users to gain privileges by leveraging control of the sshd uid to send an unexpectedly early MONITOR_REQ_PAM_FREE_CTX request.
  - CVE-2015-6563 - Addressed a vulnerability in OpenSSH that allows local users to conduct impersonation attacks by leveraging any SSH login access in conjunction with control of the sshd uid.
  - CVE-2015-5621 - Addressed a vulnerability in Net-SNMP that causes a Denial Of Service and possibly allows execution of arbitrary code via a crafted packet.
  - CVE-2015-5364 and CVE-2015-5366 - Addressed a vulnerability in UDP stack that can be exploited in UDP flood scenario to cause Denial Of Service in the OA.

Enhancements

Onboard Administrator 4.60 provides support for the following enhancements:

- **Hardware Additions**
  - None.
- **Features Additions and Changes**
  - **General**
    - GUI, CLI, Smart components, help files, URLs, Product Names rebranded to align with HPE branding guidelines.
    - Enhanced information reporting of Gen9 servers booted in UEFI mode.
    - Support the configuration of SNMP trap agent address when non-default VLAN is enabled on OA.
    - Enhanced syslog to show the flooding information when VLAN configured nodes flood the management network.
  - **Remote Support**
    - Modified to connect to the HPE remote support URL.
  - **EFM**
    - Enhanced error handling mechanism in EFM for servers in UEFI boot mode.
    - Enhanced EFM to display detailed name for smart array controllers .
    - EFM enhanced to identify more devices in the EFM report.
    - Enhanced the status reporting of EFM operations to align with HPSUM return codes

Online HPE BladeSystem c-Class Onboard Administrator Firmware Component for Windows

Version: 4.60 **(Optional)**

Filename: cp028008.exe

Important Note!

Update to this firmware version if any documented fixes or enhanced functionality provided by this version would be useful to your system.

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 HP 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 HP SUM information can be found via HPE Smart Update Manager online help or at http://www.hp.com/go/hpsum/documentation.
- **FIPS**
  - OA 3.71 is in active evaluation for FIPS 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.

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Fixes

General

- Addressed an issue where EFM was reporting success while firmware update of iLO 4 failed.
- Fixed an issue where OA might lose its IP address after OA firmware upgrade when ENCLOSURE_IP_MODE was enabled .
- Fixed an issue where all iLOs were reset after making EBIPA changes to an empty bay. Now only the specific iLOs are reset.
- Resolved an issue where iLOs became inaccessible after OA failover occurs with iLOs configured in EBIPA for IPv6. This occurs when an external router in the management network is configured to send Router Advertisements.
- Corrected the type mismatch of OID cpqRackCommonEnclosureManagerLocation which could cause failures in the SNMP clients. The

definition is changed from STRING to INTEGER.

- Resolved an issue where information on only the last server NIC port of a multiport adaptor was shown on GUI and CLI. Now details of all the server NIC ports are displayed.
- Resolved an issue of time synchronization between active and standby OA when date and time settings were changed from "Manual" to "NTP".
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- CVE-2012-3954 - Fixed a memory leak issue in DHCPv6 daemon that could result in out of memory condition in OA.
- CVE-2016-0797 and CVE-2016-0799 - Addressed a vulnerability in OpenSSL that could enable security attacks by passing large amount of untrusted data to certain functions in OpenSSL.
- CVE-2015-8605 - Addressed a vulnerability in IPv4 stack that can be exploited to cause a Denial Of Service via an invalid length field in a UDP IPv4 packet.
- CVE-2015-3196 - Addressed a vulnerability in OpenSSL that results in Denial Of Service by remote servers via a crafted ServerKeyExchange message.
- CVE-2015-3195 - Addressed a vulnerability in OpenSSL that can be exploited to obtain sensitive information from process memory by triggering a decoding failure in a PKCS#7 or CMS application.
- CVE-2015-6564 - Addressed a vulnerability in OpenSSH that might allow local users to gain privileges by leveraging control of the sshd uid to send an unexpectedly early MONITOR_REQ_PAM_FREE_CTX request.
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- CVE-2015-5621 - Addressed a vulnerability in Net-SNMP that causes a Denial Of Service and possibly allows execution of arbitrary code via a crafted packet.
- CVE-2015-5364 and CVE-2015-5366 - Addressed a vulnerability in UDP stack that can be exploited in UDP flood scenario to cause Denial Of Service in the OA.

Enhancements

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- **Hardware Additions**
  - None.
- **Features Additions and Changes**
  - **General**
    - GUI, CLI, Smart components, help files, URLs, Product Names rebranded to align with HPE branding guidelines.
    - Enhanced information reporting of Gen9 servers booted in UEFI mode.
    - Support the configuration of SNMP trap agent address when non-default VLAN is enabled on OA.
    - Enhanced syslog to show the flooding information when VLAN configured nodes flood the management network.
  - **Remote Support**
    - Modified to connect to the HPE remote support URL.
  - **EFM**
    - Enhanced error handling mechanism in EFM for servers in UEFI boot mode.
    - Enhanced EFM to display detailed name for smart array controllers .
    - EFM enhanced to identify more devices in the EFM report.
    - Enhanced the status reporting of EFM operations to align with HPSUM return codes.

Firmware CD Supplemental Update / Online ROM Flash Component for Linux - HP Integrated Lights-Out 3

Version: 1.88 **(Optional)**

Filename: CP029099.scexe

Important Note!

KNOWN ISSUES:

- Authentication may work intermittently if you have a large number of Active Directory groups.

Prerequisites

Customers running a version of iLO 3 previous to v1.20 must upgrade v1.20 before upgrading to this version. iLO 3 v1.20 may be obtained from the following locations:

Linux: https://downloads.hpe.com/pub/softlib2/software1/sc-linux-fw-ilo/p1255562964/v64722/CP014002.scexe

Windows: https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p901462262/v64721/cp014001.exe

Win64:   https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p1728391553/v64720/cp014000.exe

Fixes

The following issues are resolved in this version:

- Addressed Security Bulletins HPSBHF03440 and HPSBHF03441.

- Removed the iLO 3 short-name from the SAN field in the Certificate Signing Request.

- Changed the IPMI master write read completion code to avoid retries by the open IPMI driver.

- Changed the IPMI close session request to utilize the session handle, if present.

- Fixed the IPMI channel privilege level setting.

- Fixed an issue that allowed authenticated iLO web interface users to use browser debug tools to set their own password below the configured minimum password length.

- Fixed an issue that prevents users from using the CLI to set a password that contains the "\" character.

- Disabled TLSv1.0 when the FIPS mode or Enforce AES/3DES Encryption options are enabled.

- Added X-Frame-Options to the HTTP header as a countermeasure for Clickjacking.

- Fixed an issue in which the IPMI Set SOL Configuration parameters return an error completion code when the configuration change was successful

- Fixed IPMI OEM commands for setting and getting the serial number and product ID.

- Fixed an intermittent loss of OA communications after an iLO firmware update on a blade server.

Enhancements

iLO 3 v1.88 includes the following enhancements:

- Added support for AES-CTR ciphers and HMAC-SHA2-256 to the SSH server.

- Disabled the CBC ciphers in the SSH server when iLO 3 is in FIPS mode or when the Enforce AES/3DES Encryption option is enabled.

- Certificate Signing Requests now use the SHA256 algorithm for the signature.

- The Java IRC now includes two alternatives: A Java Web Start console and a Java applet-based console. The Java Web Start option works in newer browsers that do not allow the applet version to run. On systems with OpenJDK, you must use the Java applet-based console with a browser (such as Firefox) that supports a Java plug-in.

Firmware CD Supplemental Update / Online ROM Flash Component for VMware ESXi - HP Integrated Lights-Out 3

Version: 1.88 **(Optional)**
Filename: CP029098.zip

Important Note!

KNOWN ISSUES:

- Authentication may work intermittently if you have a large number of Active Directory groups.

Prerequisites

Customers running a version of iLO 3 previous to v1.20 must upgrade v1.20 before upgrading to this version. iLO 3 v1.20 may be obtained from the following locations:

Linux: https://downloads.hpe.com/pub/softlib2/software1/sc-linux-fw-ilo/p1255562964/v64722/CP014002.scexe
Windows: https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p901462262/v64721/cp014001.exe
Win64:   https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p1728391553/v64720/cp014000.exe

Fixes

The following issues are resolved in this version:
- Addressed Security Bulletins HPSBHF03440 and HPSBHF03441.
- Removed the iLO 3 short-name from the SAN field in the Certificate Signing Request.
- Changed the IPMI master write read completion code to avoid retries by the open IPMI driver.
- Changed the IPMI close session request to utilize the session handle, if present.
- Fixed the IPMI channel privilege level setting.
- Fixed an issue that allowed authenticated iLO web interface users to use browser debug tools to set their own password below the configured minimum password length.
- Fixed an issue that prevents users from using the CLI to set a password that contains the "\" character.
- Disabled TLSv1.0 when the FIPS mode or Enforce AES/3DES Encryption options are enabled.
- Added X-Frame-Options to the HTTP header as a countermeasure for Clickjacking.
- Fixed an issue in which the IPMI Set SOL Configuration parameters return an error completion code when the configuration change was successful
- Fixed IPMI OEM commands for setting and getting the serial number and product ID.
- Fixed an intermittent loss of OA communications after an iLO firmware update on a blade server.

Enhancements

iLO 3 v1.88 includes the following enhancements:
- Added support for AES-CTR ciphers and HMAC-SHA2-256 to the SSH server.
- Disabled the CBC ciphers in the SSH server when iLO 3 is in FIPS mode or when the Enforce AES/3DES Encryption option is enabled.
- Certificate Signing Requests now use the SHA256 algorithm for the signature.
- The Java IRC now includes two alternatives: A Java Web Start console and a Java applet-based console. The Java Web Start option works in newer browsers that do not allow the applet version to run. On systems with OpenJDK, you must use the Java applet-based console with a browser (such as Firefox) that supports a Java plug-in.

Online ROM Flash Component for Windows - HP Integrated Lights-Out 3
Version: 1.88 **(Optional)**
Filename: cp029100.exe

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

KNOWN ISSUES:

- Authentication may work intermittently if you have a large number of Active Directory groups.

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

Customers running a version of iLO 3 previous to v1.20 must upgrade v1.20 before upgrading to this version. iLO 3 v1.20 may be obtained from the following locations:

Linux: https://downloads.hpe.com/pub/softlib2/software1/sc-linux-fw-ilo/p1255562964/v64722/CP014002.scexe

Windows: https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p901462262/v64721/cp014001.exe

Win64:   https://downloads.hpe.com/pub/softlib2/software1/sc-windows-fw-ilo/p1728391553/v64720/cp014000.exe

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

The following issues are resolved in this version:
- Addressed Security Bulletins HPSBHF03440 and HPSBHF03441.
- Removed the iLO 3 short-name from the SAN field in the Certificate Signing Request.
- Changed the IPMI master write read completion code to avoid retries by the open IPMI driver.
- Changed the IPMI close session request to utilize the session handle, if present.
- Fixed the IPMI channel privilege level setting.
- Fixed an issue that allowed authenticated iLO web interface users to use browser debug tools to set their own password below the configured minimum password length.
- Fixed an issue that prevents users from using the CLI to set a password that contains the "\" character.
- Disabled TLSv1.0 when the FIPS mode or Enforce AES/3DES Encryption options are enabled.
- Added X-Frame-Options to the HTTP header as a countermeasure for Clickjacking.
- Fixed an issue in which the IPMI Set SOL Configuration parameters return an error completion code when the configuration change was successful
- Fixed IPMI OEM commands for setting and getting the serial number and product ID.
- Fixed an intermittent loss of OA communications after an iLO firmware update on a blade server.

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

iLO 3 v1.88 includes the following enhancements:
- Added support for AES-CTR ciphers and HMAC-SHA2-256 to the SSH server.
- Disabled the CBC ciphers in the SSH server when iLO 3 is in FIPS mode or when the Enforce AES/3DES Encryption option is enabled.
- Certificate Signing Requests now use the SHA256 algorithm for the signature.
- The Java IRC now includes two alternatives: A Java Web Start console and a Java applet-based console. The Java Web Start option works in newer browsers that do not allow the applet version to run. On systems with OpenJDK, you must use the Java applet-based console with a browser (such as Firefox) that supports a Java plug-in.

Firmware - Network   <u>**Top**</u>

HP QLogic P3 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 4.0.0.21 **(Optional)**

Filename: cp025867.exe

Prerequisites

This package requires the appropriate driver version for your network adapter be installed before firmware can be updated. This package requires one of the following, as appropriate for your platform:

- HP QLogic P3P Multifunction Driver for Windows Server 2008 x64 Editions, version 5.3.26.605 or later
- HP QLogic P3P Multifunction Driver for Windows Server 2008 R2, version 5.3.26.605 or later
- HP QLogic P3P Multifunction Driver for Windows Server 2012, version 5.3.26.605 or later
- HP QLogic P3P Multifunction Driver for Windows Server 2012 R2, version 5.3.26.605 or later

Enhancements

This product contains an updated help file and component installer.

Supported Devices and Features

This software supports the following HP QLogic P3 network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3 Online Firmware Upgrade Utility for Linux x86

Version: 5.6.10 **(Optional)**

Filename: hp-firmware-nic-netxen-5.6.10-1.1.i386.rpm

Important Note!

HP recommends *HP QLogic nx_nic Drivers*, versions 4.0.596.1-5, for use with this firmware.

Prerequisites

This package requires an HP QLogic nx_nic Drivers RPM for the appropriate platform be installed before firmware can be updated.

This package version can be used to upgrade adapters with firmware versioned 4.0.230 and later.

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 7.

This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

This software supports the following HP QLogic P3 network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3 Online Firmware Upgrade Utility for Linux x86_64

Version: 5.6.10 **(Optional)**
Filename: hp-firmware-nic-netxen-5.6.10-1.1.x86_64.rpm

Important Note!

HP recommends the following drivers, as appropriate, for use with this firmware:

- HP QLogic nx_nic Drivers for Red Hat Enterprise Linux 6 x86_64, version 4.0.596.1-5
- HP QLogic nx_nic Drivers for Red Hat Enterprise Linux 7 x86_64, version 4.0.596.1-2
- HP QLogic nx_nic Drivers for SUSE Linux Enterprise Server 11 x86_64, version 4.0.596.1-5
- HP QLogic nx_nic Drivers for SUSE Linux Enterprise Server 12 x86_64, version 4.0.596.1-4

Prerequisites

This package requires an HP QLogic nx_nic Drivers RPM for the appropriate platform be installed before firmware can be updated.

This package version can be used to upgrade adapters with firmware versioned 4.0.230 and later.

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 7.

This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

This software supports the following HP QLogic P3 network adapters:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

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HP QLogic P3 Online Firmware Upgrade Utility for Windows Server 2008
Version: 4.0.0.21 **(Optional)**
Filename: cp025866.exe

Prerequisites

This package requires HP QLogic P3P Multifunction Driver for Windows Server 2008, version 5.3.26.605 or later, be installed before firmware can be updated.

Enhancements

This product contains an updated help file and component installer.

Supported Devices and Features

This software supports the following HP QLogic P3 network adapter:

- HP NC375i Integrated Quad Port Multifunction Gigabit Server Adapter

HP QLogic P3P Online Firmware Upgrade Utility for Linux x86

Version: 1.9.7 **(Optional)**

Filename: hp-firmware-nic-qlogic-p3p-1.9.7-1.1.i386.rpm

Important Note!

> HP recommends *HP QLogic qlcnic Drivers*, versions 5.3.62.1-4, for use with this firmware.

Prerequisites

> This package can be used with the *HP Smart Update Manager (HPSUM)* version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

> This package requires *HP QLogic qlcnic Drivers RPM* for the appropriate platform be installed before firmware can be updated.

Fixes

> This product addresses an issue that results in the Fibre Channel Ping command (fcping) taking more than 3ms for each ping.

Enhancements

> This product now supports Red Hat Enterprise Linux 6 Update 7.

> This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

> This package supports the following network adapters:

> - HP CN1000Q Dual Port Converged Network Adapter
> - HP NC523SFP 10Gb 2-port Ethernet Server Adapter
> - HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP QLogic P3P Online Firmware Upgrade Utility for Linux x86_64

Version: 1.9.7 **(Optional)**

Filename: hp-firmware-nic-qlogic-p3p-nic-1.9.7-1.1.x86_64.rpm

Important Note!

> HP recommends the following drivers, as appropriate, for use with this firmware:

> - HP QLogic qlcnic Drivers for Red Hat Enterprise Linux 6 x86_64, version 5.3.62.1-4
> - HP QLogic qlcnic Drivers for Red Hat Enterprise Linux 7 x86_64, version 5.3.62.1-1
> - HP QLogic qlcnic Drivers for Red Hat Enterprise Linux 11 x86_64, version 5.3.62.1-4
> - HP QLogic qlcnic Drivers for Red Hat Enterprise Linux 12 x86_64, version 5.3.62.1-1

Prerequisites

> This package can be used with the *HP Smart Update Manager (HPSUM)* version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

This package requires *HP QLogic qlcnic Drivers RPM* for the appropriate platform be installed before firmware can be updated.

Fixes

This product addresses an issue that results in the Fibre Channel Ping command (fcping) taking more than 3ms for each ping.

Enhancements

This product now supports Red Hat Enterprise Linux 6 Update 7.

This product now supports SUSE LINUX Enterprise Server 11 SP4.

Supported Devices and Features

This package supports the following network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP NC523SFP 10Gb 2-port Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HP QLogic P3P Online Firmware Upgrade Utility for VMware
Version: 2.5.5 **(Optional)**
Filename: CP026998.txt; CP026998.zip

Important Note!

HP recommends the following drivers, as appropriate, for use with the firmware provided in this package:

- HP QLogic P3P Drivers for VMware ESXi 5.0/vSphere 5.1, version 2015.02.23
- HP QLogic P3P iSCSI Drivers for VMware ESXi 5.0/vSphere 5.1, version 2015.07.17
- HP QLogic P3P Drivers for VMware vSphere 5.5/6.0, version 2015.02.23
- HP QLogic P3P iSCSI Drivers for VMware vSphere 5.5/6.0, version 2015.07.17
- HP QLogic P3P Drivers for VMware vSphere 6.0, version 2015.10.01
- HP QLogic P3P iSCSI Drivers for VMware vSphere 6.0, version 2015.10.01

Prerequisites

This package requires the appropriate HP QLogic driver for VMware for your device to be installed before firmware can be updated.

Fixes

This product addresses an issue that results in the Fibre Channel Ping command (fcping) taking more than 3ms for each ping.

Enhancements

This product now supports VMware vSphere 6.0 Update 1.

Supported Devices and Features

This package supports the following network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP NC523SFP 10Gb 2-port Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86
Version: 2.17.6 **(Optional)**
Filename: hp-firmware-nic-broadcom-2.17.6-1.1.i386.rpm

Important Note!

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.137o or later, for use with this firmware.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (*ifup ethX* or *ifconfig ethX up*) before firmware can be updated.

Fixes

This product addresses an issue where the server makes high speed fan noise after the PXE firmware on the adapter is updated to version 17.0.2.

This product addresses an issue where an incorrect firmware version is reported when updating firmware on the HP Ethernet 1Gb 2-port 332i Adapter.

This product addresses an issue where older smart components report an incorrect Bootcode version after the firmware on the adapter was originally updated using the component version 2.16.4 or later.

This product addresses an issue where an error code 7 is reported when updating firmware on the HP Ethernet 1Gb 4-port 331i-SPI Adapter.

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64
Version: 2.17.6 **(Optional)**
Filename: hp-firmware-nic-broadcom-2.17.6-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.137o or later, for use with this firmware.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (*ifup ethX* or *ifconfig ethX up*) before firmware can be updated.

Fixes

This product addresses an issue where the server makes high speed fan noise after the PXE firmware on the adapter is updated to version 17.0.2.

This product addresses an issue where an incorrect firmware version is reported when updating firmware on the HP Ethernet 1Gb 2-port 332i Adapter.

This product addresses an issue where older smart components report an incorrect Bootcode version after the firmware on the adapter was originally updated using the component version 2.16.4 or later.

This product addresses an issue where an error code 7 is reported when updating firmware on the HP Ethernet 1Gb 4-port 331i-SPI Adapter.

HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware
Version: 1.14.5 **(Optional)**
Filename: CP028672.zip

Important Note!

HPE recommends *HP Broadcom tg3 Ethernet Drivers for VMware*, versions 2015.10.01 or later, for use with this firmware.

Prerequisites

This package requires the appropriate HPE Broadcom driver for VMware for your device to be installed before firmware can be updated.

Fixes

This product addresses an issue where the server makes high speed fan noise after the PXE firmware on the adapter is updated to version 17.0.2.

HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server 2008
Version: 5.0.0.22 **(Optional)**
Filename: cp028976.exe

Important Note!

HPE recommends *HPE Broadcom 1Gb Driver for Windows Server 2008*, version 17.4.0.0 or later, for use with this firmware.

Prerequisites

This package requires the *HPE Broadcom 1Gb Driver for Windows Server 2008* be installed before firmware can be updated.

Fixes

This product addresses an issue where the server makes high speed fan noise after the PXE firmware on the adapter is updated to version 17.0.2.

HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.0.0.24 **(Optional)**
Filename: cp029395.exe

Important Note!

HPE recommends *HPE Broadcom 1Gb Driver for Windows Server x64 Editions*, version 17.4.0.0, for use with this firmware.

Prerequisites

This package requires the *HPE Broadcom 1Gb Driver for Windows Server x64 Editions* be installed before firmware can be updated.

Enhancements

This product now supports Windows Server 2016.

HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x64)
Version: 2016.10.05 **(Recommended)**
Filename: RPMS/x86_64/hp-firmware-cna-emulex-2016.10.05-1.2.x86_64.rpm

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied NIC driver must be installed prior to this firmware component if you want to update the firmware for the CNA. The driver is available on the HPE.com website at [http://www.hpe.com/.](http://www.hpe.com/)

HPE Emulex 10Gbe Driver for Linux, version 11.1.183.21

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 HPE supplied Emulex FCoE/iSCSI driver. The FCoE protocol also requires the HPE Emulex Enablement Kit be installed. The driver and enablement kit are also available on the HPE.com website at [http://www.hpe.com/.](http://www.hpe.com/)

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FC/FCoE Driver Kit, reboot, and then install the Enablement Kit.

Fixes

This fix resolves the following:

- unexpected behavior in which ProLiant Gen 9 c-class server blades equipped with 650FLB or 650M adapters may not complete Power-On Self Test (POST)
- unexpected behavior which occurred after upgrading firmware to 11.1.183.23, resulting in network ports losing connections
- unexpected behavior in which 650FLB network ports were inadvertently assigned the same MAC address, resulting in network packets being sent to the incorrect ports.
- behavior in which Microsoft Windows terminates unexpectedly

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 (BE3) firmware 11.1.183.23
CNA (XE100 series) firmware 11.1.183.62

Supported Devices and Features

BE3:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE StoreFabric CN1200E-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters - Linux (x86)
Version: 2016.10.01 **(Recommended)**
Filename: RPMS/i386/hp-firmware-cna-emulex-2016.10.01-1.21.i386.rpm

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied NIC driver must be installed prior to this firmware component if you want to update the firmware for the CNA. The driver is available on the HPE.com website at http://www.hpe.com/.

HPE Emulex 10Gbe Driver for Linux, version 11.1.183.21

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 HPE supplied Emulex FCoE/iSCSI driver. The FCoE protocol also requires the HPE Emulex Enablement Kit be installed. The driver and enablement kit are also available on the HPE.com website at http://www.hpe.com/.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FC/FCoE Driver Kit, reboot, and then install the Enablement Kit.

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a converged network adapter update component.

Updated CNA (BE3) firmware

Firmware

BE3 firmware:

- Provides a recovery mechanism that addresses unhandled exceptions on the supported devices
- Added Secure Firmware Update support
- Added PMCI Implementation Spec v1.03 (Active Health over MCTP)

Contains:
CNA (BE3) firmware 11.1.183.23

Supported Devices and Features

BE3:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter

HP FlexFabric 10Gb 2-port 554FLB Adapter

HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x64)
Version: 2016.10.05 **(Recommended)**
Filename: cp031846.exe

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex NIC driver must be installed prior to this firmware component being identified by HP SUM for deployment.
The driver is available on the HPE.com website at http://www.hpe.com/.

HPE Emulex 10GbE Driver for Windows Server 2008 x64 Editions v11.1.145.30 cp029510.exe
HPE Emulex 10GbE Driver for Windows Server 2008 R2 v11.1.145.30 cp029511.exe
HPE Emulex 10Gbe Driver for Windows Server 2012 v11.1.145.30 cp029512.exe
HPE Emulex 10Gbe Driver for Windows Server 2012 R2 v11.1.145.30 cp029513.exe

HPE Emulex 10/20 GbE Driver for Windows Server 2016 v11.1.196.4 cp029150.exe

Note: To enable the FCoE/iSCSI protocol on devices that support it, please install the appropriate HPE supplied Emulex FCoE/iSCSI driver which is available on the HPE.com website at http://www.hpe.com/.

Fixes

This fix resolves the following:

- unexpected behavior in which ProLiant Gen 9 c-class server blades equipped with 650FLB or 650M adapters may not complete Power-On Self Test (POST)
- unexpected behavior which occurred after upgrading firmware to 11.1.183.23, resulting in network ports losing connections
- unexpected behavior in which 650FLB network ports were inadvertently assigned the same MAC address, resulting in network packets being sent to the incorrect ports.
- behavior in which Microsoft Windows terminates unexpectedly

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 (BE3) firmware 11.1.183.23
CNA (XE100 series) firmware 11.1.183.62

<u>Supported Devices and Features</u>

BE3:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE StoreFabric CN1200E-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters - Windows (x86)
Version: 2016.10.01 **(Recommended)**
Filename: cp029999.exe

<u>Important Note!</u>

Release Notes:

[HPE StoreFabric Emulex Adapters Release Notes](#)

<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 Emulex NIC driver must be installed prior to this firmware component being identified by HP SUM for deployment.
The driver is available on the HPE.com website at http://www.hpe.com/.

HPE Emulex 10GbE Driver for Windows Server 2008 x86 Editions v11.1.145.30 cp029509.exe

Note: To enable the FCoE/iSCSI protocol on devices that support it, please install the appropriate HPE supplied Emulex FCoE/iSCSI driver available on the HPE.com website at http://www.hpe.com/.

<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 (BE3) firmware

Firmware

BE3 firmware:

- Provides a recovery mechanism that addresses unhandled exceptions on the supported devices
- Added Secure Firmware Update support
- Added PMCI Implementation Spec v1.03 (Active Health over MCTP)

Contains:
CNA (BE3) firmware 11.1.183.23

Supported Devices and Features

BE3:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter

HPE Intel Online Firmware Upgrade Utility for Linux x86
Version: 1.11.13 **(Recommended)**
Filename: hp-firmware-nic-intel-1.11.13-1.1.i386.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 5.3.5.3 or later
- HPE Intel ixgbe Drivers for Linux , versions 4.4.6 or later

Prerequisites

This package requires the appropriate driver for your network adapter be installed before firmware can be updated.

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

Fixes

This product fixes link flapping issue reported on the HP Ethernet 10Gb 2-port 560FLB Adapter.

Supported Devices and Features

This package supports the following network adapters:

HP Ethernet 1Gb 2-port 361i Adapter

- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel Online Firmware Upgrade Utility for Linux x86_64

Version: 1.11.13 **(Recommended)**

Filename: hp-firmware-nic-intel-1.11.13-1.1.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 5.3.5.3 or later
- HPE Intel ixgbe Drivers for Linux , versions 4.3.13 or later
- HPE Intel i40e Drivers for Linux, versions 1.3.46 or later

Prerequisites

This product requires that the appropriate driver for the target device be installed before firmware can be updated.

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

Fixes

This product fixes link flapping issue reported on the HP Ethernet 10Gb 2-port 560FLB Adapter.

This product addresses a security issue reported on the following network adapters:

- HP Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HP Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter

    See the security bulletin HPSBHF03695 for more information.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter

- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter
- HPE Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter

HPE Intel Online Firmware Upgrade Utility for VMware

Version: 3.1.11 **(Recommended)**

Filename: CP031546.zip

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 VMware,* versions 2016.10.07 or later
- *HPE Intel ixgbe Drivers for VMware,* versions 2016.10.07 or later
- *HPE Intel i40e Drivers for VMware,* versions 2016.03.29 or later

Prerequisites

This package requires the appropriate HPE Broadcom driver for VMware for your device to be installed before firmware can be updated.

Fixes

This product fixes link flapping issue reported on the HP Ethernet 10Gb 2-port 560FLB Adapter.

This product addresses a security issue reported on the following network adapters:

- HP Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HP Ethernet 10Gb 2-port 562SFP+ Adapter

  See the security bulletin HPSBHF03695 for more information.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter

- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter
- HPE Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel Online Firmware Upgrade Utility for Windows Server 2008

Version: 5.0.0.27 (B) **(Recommended)**

Filename: cp031547.exe

Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- *HP Intel E1R Driver for Windows Server 2008*, version 12.7.29.0(C) or later
- *HP Intel ixn/ixt Drivers for Windows Server 2008*, version 3.5.22.0(D) or later

Prerequisites

This package requires the appropriate driver version for your network adapter be installed before firmware can be updated.

Fixes

This product fixes link flapping issue reported on the HP Ethernet 10Gb 2-port 560FLB Adapter.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter

- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.0.0.27 (B) **(Recommended)**

Filename: cp031548.exe

Important Note!

HPE recommends at least one of the following, as appropriate for your device, for use with this firmware:

- *HP Intel E1R Driver for Windows Server 2008 x64 Editions,* version 12.7.29.0(C)
- *HPE Intel E1R Driver for Windows Server 2008 R2,* version 12.14.8.0
- *HPE Intel E1R Driver for Windows Server 2012,* version 12.14.8.0
- *HPE Intel E1R Driver for Windows Server 2012 R2,* version 12.14.8.0
- *HPE Intel E1R Driver for Windows Server 2016,* version 12.15.187.0
- *HP Intel ixn/ixt Drivers for Windows Server 2008 x64 Editions,* version 3.5.22.0(D)
- *HPE Intel ixn/ixt Drivers for Windows Server 2008 R2,* version 3.9.58.9101(C)
- *HPE Intel ixn/ixt Drivers for Windows Server 2012,* version 3.9.58.9101(C)
- *HPE Intel ixn/ixt Drivers for Windows Server 2012 R2,* version 3.9.58.9101(C)
- *HPE Intel ixn/ixt Drivers for Windows Server 2016,* version 4.0.213.0
- *HPE Intel i40ea Driver for Windows Server 2008 R2 ,* version 1.2.130.0 (C)
- *HPE Intel i40ea Driver for Windows Server 2012,* version 1.2.133.0 (B)
- *HPE Intel i40ea Driver for Windows Server 2012 R2,* version 1.2.133.0(C)
- *HPE Intel i40ea Driver for Windows Server 2016,* version 1.5.59.0

Prerequisites

This package requires the appropriate driver for your network adapter be installed before firmware can be updated.

Fixes

This product fixes link flapping issue reported on the HP Ethernet 10Gb 2-port 560FLB Adapter.

This product addresses a security issue reported on the following network adapters:

- HP Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HP Ethernet 10Gb 2-port 562SFP+ Adapter

  See the security bulletin HPSBHF03695 for more information.

Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter

HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 1-port 364i 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 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- HP Ethernet 10Gb 2-port 560FLB Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560M Adapter
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter
- HPE Ethernet 10Gb 2-port 562SFLR-FP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE QLogic NC382i/NC532x Online Firmware Upgrade Utility for Linux x86

Version: 2.18.1 **(Optional)**

Filename: CP028810.scexe; CP028810.txt; hp-firmware-nic-qlogic-57xx-2.18.1-1.1.i386.rpm

Important Note!

HPE recommends the *HPE QLogic NX2 1/10/20 GbE Multifunction Drivers*, version 7.13.59-1 or later, for use with the firmware in this product.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

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 adpaters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter (3654)
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter (7058)
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter

HPE QLogic NC382i/NC532x Online Firmware Upgrade Utility for Linux x86_64

Version: 2.18.1 **(Optional)**

Filename: CP028811.scexe; CP028811.txt; hp-firmware-nic-qlogic-57xx-2.18.1-1.1.x86_64.rpm

Important Note!

HPE recommends the *HPE QLogic NX2 1/10/20 GbE Multifunction Drivers,* version 7.13.59-1 or later, for use with the firmware in this product.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

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 adpaters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter (3654)
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter (7058)
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter

HPE QLogic NC382i/NC532x Online Firmware Upgrade Utility for VMware
Version: 1.15.1 **(Optional)**
Filename: CP028840.zip

Important Note!

HPE recommends the *HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for VMware*, version 2016.10.07 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate HPE QLogic NX2 driver for VMware for your device to be installed before firmware can be updated.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adpaters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter

HPE QLogic NC382i/NC532x Online Firmware Upgrade Utility for Windows Server 2008
Version: 4.1.0.25 **(Optional)**
Filename: cp028812.exe

Important Note!

HPE recommends the following drivers, as applicable, for use with the firmware in this product:

- *HP Broadcom 1Gb Multifunction Drivers for Windows Server 2008*, version 7.8.50.0(D) or later
- *HPE QLogic NX2 10/20GbE Multifunction Driver for Windows Server 2008*, version 7.13.60.0 or later

Prerequisites

This package requires the appropriate driver for your network adapter be installed before firmware can be updated.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adpaters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter

HPE QLogic NC382i/NC532x Online Firmware Upgrade Utility for Windows Server x64 Editions
Version: 4.1.0.25 **(Optional)**
Filename: cp028813.exe

Important Note!

HPE recommends the following drivers, as applicable, for use with the firmware in this product:

- *HP Broadcom 1Gb Multifunction Drivers for Windows Server 2008 x64 Editions*, version 7.8.50.0(D) or later
- *HPE QLogic NX2 10/20GbE Multifunction Driver for Windows Server 2008 x64 Editions*, version 7.13.60.0 or later

Prerequisites

This package requires the appropriate driver for your network adapter be installed before firmware can be updated.

Enhancements

Initial release.

Supported Devices and Features

This product supports the following network adpaters:

- HP NC382i Integrated Dual Port Multifunction Gigabit Server Adapter
- HP NC532i Dual Port 10GbE Multifunction BL-c Adapter
- HP NC532m Dual Port 10GbE Multifunction BL-c Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86
Version: 2.18.44 **(Optional)**
Filename: hp-firmware-nic-qlogic-nx2-2.18.44-1.1.i386.rpm

Important Note!

HPE recommends *HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for Linux*, versions 7.14.07 or later, for use with the firmware in this package.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (*ifup ethX* or *ifconfig ethX up*) before firmware can be updated.

Fixes

This product addresses an issue where the iSCSI and FCoE configuration menus are displayed after NPAR is enabled.

This product addresses an issue where expected network devices don't appear in the Legacy BIOS Boot Order menu.

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64
Version: 2.18.44 **(Optional)**
Filename: hp-firmware-nic-qlogic-nx2-2.18.44-1.1.x86_64.rpm

Important Note!

HPE recommends *HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for Linux*, versions 7.14.07 or later, for use with the firmware in this package.

Prerequisites

This package can be used with the HP Smart Update Manager (HPSUM) version 7.0.0.0 or later. Earlier versions of HPSUM cannot install this package correctly.

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (*ifup ethX* or *ifconfig ethX up*) before firmware can be updated.

Fixes

This product addresses an issue where the iSCSI and FCoE configuration menus are displayed after NPAR is enabled.

This product addresses an issue where expected network devices don't appear in the Legacy BIOS Boot Order menu.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 3820C 10/20Gb Converged Network Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for VMware
Version: 1.12.43 **(Optional)**
Filename: CP028018.zip

Important Note!

HPE recommends HPE QLogic NX2 1/10/20 GbE Multifunction Drivers for VMware, versions 2016.10.07 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate HPE QLogic NX2 driver for VMware for your device to be installed before firmware can be updated.

Enhancements

This product now supports the following network adapters:

- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server 2008
Version: 5.0.0.24 **(Optional)**
Filename: cp028019.exe

Important Note!

HPE recommends *HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server 2008*, version 7.13.104.0 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate driver version for your network adapter be installed before firmware can be updated.

Fixes

This product addresses an issue where the iSCSI and FCoE configuration menus are displayed after NPAR is enabled.

This product addresses an issue where expected network devices don't appear in the Legacy BIOS Boot Order menu.

HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.0.0.24 **(Optional)**

Filename: cp028020.exe

Important Note!

HPE recommends *HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server 2008 x64 Editions,* version 7.13.104.0 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate driver version for your network adapter be installed before firmware can be updated.

Enhancements

This product now supports Windows Server 2016.

This product now supports the following network adapters:

- HPE Synergy 10Gb 2820C Ethernet Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE QLogic P3P Online Firmware Upgrade Utility for Windows Server 2008

Version: 4.0.0.21 (C) **(Optional)**

Filename: cp027813.exe

Important Note!

HPE recommends *HPE QLogic P3P Multifunction Driver for Windows Server 2008,* version 5.3.30.1001, for use with this firmware.

Prerequisites

This package requires the driver for your adapter be installed before firmware can be updated.

Fixes

This product addresses a rarely seen issue where an attempt to flash updates to an adapter results in an "incompatible table layout" error message.

Supported Devices and Features

This package supports the following network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP NC523SFP 10Gb 2-port Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

HPE QLogic P3P Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 4.0.0.21 (C) **(Optional)**

Filename: cp027814.exe

Important Note!

HPE recommends the appropriate *HPE QLogic P3P Multifunction Driver,* versions 5.3.30.1001, for use with this firmware.

Prerequisites

This package requires the appropriate driver for your platform be installed before firmware can be updated.

Fixes

This product addresses a rarely seen issue where an attempt to flash updates to an adapter results in an "incompatible table layout" error message.

Supported Devices and Features

This package supports the following network adapters:

- HP CN1000Q Dual Port Converged Network Adapter
- HP NC523SFP 10Gb 2-port Ethernet Server Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter

Online Firmware Upgrade Utility (ESXi 5.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 5.5
Version: 1.0.4 (A) **(Recommended)**
Filename: CP030114.zip

Important Note!

Known Issues:

- 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 0xfffff).
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX®-3 adapters.
- On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- 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.
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1 FDIR-BV.
- When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- 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.
- Driver restart required when switching from InfiniBand FDR link with LLR enabled to InfiniBand link w/o LLR (for example: between

SwitchX® and GD4036).

- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, Release the following message is displayed due to the mlxconfig tool:

  DMFS steering mode with IB in Linux You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do youwant 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.
- 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".
- 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.
- 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.
- 56GbE link is not raised when using 100GbE optic cables.

Fixes

Fixes in 2.36.5000:

- Fixed an issue which caused packet transmission to get stuck when the software tried to send pause frames with dmac equal to one of the device's MAC addresses.
- Fixed an issue which caused a firmware internal error when handling QP alternative context.
- Fixed an issue which caused an internal firmware error when APM changed the QPs port mapping.
- Fixed an issue which caused NVRAM to get stuck when it filled non-valid information in TLV.
- Fixed an issue which caused lack of IB traffic on SR-IOV VPI.
- Fixed a race in handling a duplicated "read request from middle".
- Fixed an issue which caused NVCONFIG to fail when the number of sector was set to 1 and the sector was zeroed.
- Fixed an issue which caused TX traffic to stop when the message MTU size was larger than QP.mtu.
- MLNX_OEM command GET_TEMP returned a wrong value in the max_temp field.
- Fixed a default hardware configuration issue which caused RDP over IPv4 traffic to be dropped.
- Fixed performance issues causing slow performance when running in NO-DRAM-NIC mode.
- Disabled High Rate Steering mode in the INI to enable its compatibility with NC-SI over VLAN.
- Fixed failure instances when initiating FLR in the Physical Function.
- Fixed a wrong returned status in cable info MAD when the cable was not connected.
- Fixed the length calculation of UDP. The incorrect UDP length in the CNP packet caused miss-calculation of the ICRC.
- Fixed a completion error issue when ECN was enabled. The ECN usage caused ordering errors in completion queues (CQ).

Enhancements

Firmware for the following devices are updated to 2.36.5000:

644161-B21
644160-B21
649282-B21
649281-B21
649283-B21

Firmware for the following devices are updated to 2.36.5000:

764282-B21
764283-B21
764284-B21

Firmware for the following devices are updated to 2.36.5000:

764285-B21
764286-B21

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
644161-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544M Adapter	HP_0240230019
644160-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544M Adapter	HP_0250230018
649281-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544QSFP Adapter	HP_0280210019
649282-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544FLR-QSFP Adapter	HP_0230240019 HP_0230220019
649283-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544FLR-QSFP Adapter	HP_0230240009 HP_0230220009
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 6.0) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 6.0

Version: 1.0.4 (A) **(Recommended)**

Filename: CP030115.zip

Important Note!

Known Issues:

- 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 0xfffff).
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX®-3 adapters.
- On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- 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.
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1 FDIR-BV.
- When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- 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.
- Driver restart required when switching from InfiniBand FDR link with LLR enabled to InfiniBand link w/o LLR (for example: between SwitchX® and GD4036).
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, Release the following message is displayed due to the mlxconfig tool:
  DMFS steering mode with IB in Linux You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do youwant 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.
- 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".
- 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.
- 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.
- 56GbE link is not raised when using 100GbE optic cables.

Fixes

Fixes in 2.36.5000:

- Fixed an issue which caused packet transmission to get stuck when the software tried to send pause frames with dmac equal to one of the device's MAC addresses.
- Fixed an issue which caused a firmware internal error when handling QP alternative context.
- Fixed an issue which caused an internal firmware error when APM changed the QPs port mapping.
- Fixed an issue which caused NVRAM to get stuck when it filled non-valid information in TLV.
- Fixed an issue which caused lack of IB traffic on SR-IOV VPI.
- Fixed a race in handling a duplicated "read request from middle".
- Fixed an issue which caused NVCONFIG to fail when the number of sector was set to 1 and the sector was zeroed.
- Fixed an issue which caused TX traffic to stop when the message MTU size was larger than QP.mtu.
- MLNX_OEM command GET_TEMP returned a wrong value in the max_temp field.
- Fixed a default hardware configuration issue which caused RDP over IPv4 traffic to be dropped.
- Fixed performance issues causing slow performance when running in NO-DRAM-NIC mode.
- Disabled High Rate Steering mode in the INI to enable its compatibility with NC-SI over VLAN.
- Fixed failure instances when initiating FLR in the Physical Function.
- Fixed a wrong returned status in cable info MAD when the cable was not connected.
- Fixed the length calculation of UDP. The incorrect UDP length in the CNP packet caused miss-calculation of the ICRC.
- Fixed a completion error issue when ECN was enabled. The ECN usage caused ordering errors in completion queues (CQ).

Enhancements

Firmware for the following devices are updated to 2.36.5000:

644161-B21
644160-B21
649282-B21
649281-B21
649283-B21

Firmware for the following devices are updated to 2.36.5000:

764282-B21
764283-B21
764284-B21

Firmware for the following devices are updated to 2.36.5000:

764285-B21
764286-B21

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
644161-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544M Adapter	HP_0240230019
644160-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544M Adapter	HP_0250230018

649281-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544QSFP Adapter	HP_0280210019
649282-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544FLR-QSFP Adapter	HP_0230240019 HP_0230220019
649283-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544FLR-QSFP Adapter	HP_0230240009 HP_0230220009
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 HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Linux x86_64 platform

Version: 1.0.4 (A) **(Recommended)**

Filename: hp-firmware-hca-mellanox-vpi-eth-ib-1.0.4-2.1.x86_64.rpm

Important Note!

> **Known Issues:**

- 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 0xffff).
- 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.
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1 FDIR-BV.
- When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- 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.
- Driver restart required when switching from InfiniBand FDR link with LLR enabled to InfiniBand link w/o LLR (for example: between SwitchX® and GD4036).
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, Release the following message is displayed due to the mlxconfig

tool:

DMFS steering mode with IB in Linux You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do youwant 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.
- 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".
- 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.
- 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.
- 56GbE link is not raised when using 100GbE optic cables.

Fixes

Fixes in 2.36.5000:

- Fixed an issue which caused packet transmission to get stuck when the software tried to send pause frames with dmac equal to one of the device's MAC addresses.
- Fixed an issue which caused a firmware internal error when handling QP alternative context.
- Fixed an issue which caused an internal firmware error when APM changed the QPs port mapping.
- Fixed an issue which caused NVRAM to get stuck when it filled non-valid information in TLV.
- Fixed an issue which caused lack of IB traffic on SR-IOV VPI.
- Fixed a race in handling a duplicated "read request from middle".
- Fixed an issue which caused NVCONFIG to fail when the number of sector was set to 1 and the sector was zeroed.
- Fixed an issue which caused TX traffic to stop when the message MTU size was larger than QP.mtu.
- MLNX_OEM command GET_TEMP returned a wrong value in the max_temp field.
- Fixed a default hardware configuration issue which caused RDP over IPv4 traffic to be dropped.
- Fixed performance issues causing slow performance when running in NO-DRAM-NIC mode.
- Disabled High Rate Steering mode in the INI to enable its compatibility with NC-SI over VLAN.
- Fixed failure instances when initiating FLR in the Physical Function.
- Fixed a wrong returned status in cable info MAD when the cable was not connected.
- Fixed the length calculation of UDP. The incorrect UDP length in the CNP packet caused miss-calculation of the ICRC.
- Fixed a completion error issue when ECN was enabled. The ECN usage caused ordering errors in completion queues (CQ).

Enhancements

Firmware for the following devices are updated to 2.36.5000:

644161-B21
644160-B21
649282-B21
649281-B21
649283-B21

Firmware for the following devices are updated to 2.36.5000:

764282-B21
764283-B21
764284-B21

Firmware for the following devices are updated to 2.36.5000:

764285-B21
764286-B21

<u>**Supported Devices and Features**</u>

Supported Devices:

HP Part Number	Device Name	PSID
644161-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544M Adapter	HP_0240230019
644160-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544M Adapter	HP_0250230018
649281-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544QSFP Adapter	HP_0280210019
649282-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544FLR-QSFP Adapter	HP_0230240019 HP_0230220019
649283-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544FLR-QSFP Adapter	HP_0230240009 HP_0230220009
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
SL4540 & SL4545 LOM	HP Infiniband QDR/Ethernet 10Gb 2P 544i Adapter	HP_0280110018
778509-B21	HP Infiniband FDR/Ethernet 10Gb/40Gb 2-port 544+A8L Adapter	HP_2010110021

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on Windows x86_64 platform
Version: 1.0.0.4 (B) **(Recommended)**

Filename: cp030161.exe

<u>Important Note!</u>

Known Issues:

- 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.
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1 FDIR-BV.
- When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- 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.
- Driver restart required when switching from InfiniBand FDR link with LLR enabled to InfiniBand link w/o LLR (for example: between SwitchX® and GD4036).
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, Release the following message is displayed due to the mlxconfig tool:
  DMFS steering mode with IB in Linux You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations will be cleared, do youwant 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.
- 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".
- 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.
- 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.
- 56GbE link is not raised when using 100GbE optic cables.

Fixes

Fixes in 2.36.5000:

- Fixed an issue which caused packet transmission to get stuck when the software tried to send pause frames with dmac equal to one of the device's MAC addresses.
- Fixed an issue which caused a firmware internal error when handling QP alternative context.
- Fixed an issue which caused an internal firmware error when APM changed the QPs port mapping.
- Fixed an issue which caused NVRAM to get stuck when it filled non-valid information in TLV.
- Fixed an issue which caused lack of IB traffic on SR-IOV VPI.
- Fixed a race in handling a duplicated "read request from middle".
- Fixed an issue which caused NVCONFIG to fail when the number of sector was set to 1 and the sector was zeroed.
- Fixed an issue which caused TX traffic to stop when the message MTU size was larger than QP.mtu.
- MLNX_OEM command GET_TEMP returned a wrong value in the max_temp field.
- Fixed a default hardware configuration issue which caused RDP over IPv4 traffic to be dropped.
- Fixed performance issues causing slow performance when running in NO-DRAM-NIC mode.
- Disabled High Rate Steering mode in the INI to enable its compatibility with NC-SI over VLAN.
- Fixed failure instances when initiating FLR in the Physical Function.
- Fixed a wrong returned status in cable info MAD when the cable was not connected.
- Fixed the length calculation of UDP. The incorrect UDP length in the CNP packet caused miss-calculation of the ICRC.
- Fixed a completion error issue when ECN was enabled. The ECN usage caused ordering errors in completion queues (CQ).

Enhancements

Firmware for the following devices are updated to 2.36.5000:

644161-B21
644160-B21
649282-B21
649281-B21
649283-B21

Firmware for the following devices are updated to 2.36.5000:

764282-B21
764283-B21
764284-B21

Firmware for the following devices are updated to 2.36.5000:

764285-B21
764286-B21

Supported Devices and Features

Supported Devices:

HP Part Number	Device Name	PSID
644161-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544M Adapter	HP_0240230019
644160-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544M Adapter	HP_0250230018
649281-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544QSFP Adapter	HP_0280210019
649282-B21	HP InfiniBand FDR/EN 10/40Gb Dual Port 544FLR-QSFP Adapter	HP_0230240019 HP_0230220019
649283-B21	HP InfiniBand QDR/EN 10Gb Dual Port 544FLR-QSFP Adapter	HP_0230240009 HP_0230220009
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
SL4540 and SL4545 LOM	HP Infiniband QDR/Ethernet 10Gb 2P 544i Adapter	HP_0280110018

Firmware - SAS Storage Disk

Online ROM Flash Component for VMware ESXi - DG0146FARVU, DG0300FARVV, DG0146BAMYQ, DG0300BAMYR, EG0146FAWJC, and EG0300FAWJD Drives
Version: HPDG (F) **(Critical)**
Filename: CP029329.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDG do not need to update to HPDG (F).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDG (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more

than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDG (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPDG (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EG0300FBLSE, EG0450FBLSF, EG0600FBLSH, and EG0900FBLSK drives
Version: HPD8 (C) **(Recommended)**
Filename: CP029335.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (C).**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD8 resolves this issue.

Problems Fixed for HPD8 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features for HPD8 (B):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD4 **(Recommended)**
Filename: CP030786.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Online ROM Flash Component for VMware ESXi - EH0146FBQDC and EH0300FBQDD drives
Version: HPD5 (B) **(Recommended)**
Filename: CP029346.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (B).**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD5 resolves this issue.

Problems Fixed for HPD5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EH0600JDYTN Drive
Version: HPD5 (B) **(Recommended)**
Filename: CP029350.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (B).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MB1000FAMYU and MB2000FAMYV Drives
Version: HPD7 (F) **(Critical)**
Filename: CP029354.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (F).**

Fixes

Problem Fixed:

- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

Problems Fixed for HPD7 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD7 (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD7 (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB4000JEQNL and MB6000JEQNN Drives
Version: HPD7 (B) **(Critical)**
Filename: CP029372.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (B).**

Fixes

Problems Fixed:

- This firmware fixes a potential incorrect data issue in write-cached enabled multi-initiator unaligned write environments, where reservation commands are used.

Problems Fixed for HPD7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM0500FBFVQ and MM1000FBFVR Drives
Version: HPD9 (B) **(Recommended)**
Filename: CP029378.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (B).**

Problems Fixed:

- HPD9 firmware prevents a condition in which data fails to be committed to disk after the host issues a hard reset in a lab stress test environment with write cache enabled.

Problems Fixed for HPD9 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM1000FECVH Drives
Version: HPD2 (B) **(Recommended)**
Filename: CP029380.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPD2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Online ROM Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029382.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).

<u>Fixes</u>

Problems Fixed:

- Version HPD4 prevents the potential for incorrect data to be written to the drive under extremely rare circumstances when the drive experiences a hard reset. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM1000JFJTH Drives
Version: HPD1 **(Recommended)**
Filename: CP030809.zip

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.

<u>Fixes</u>

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD1. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - DH0072FAQRD, DH0146FAQRE, EH0146FAWJB, and EH0072FAWJA Drives
Version: HPDK (B) **(Recommended)**
Filename: CP029330.zip

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPDK do not need to update to HPDK (B).

<u>Fixes</u>

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPDK resolves this issue.

Problems Fixed for HPDK (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EF0300FARMU, EF0450FARMV, EF0600FARNA Drives
Version: HPD9 **(Recommended)**
Filename: CP030803.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

<u>Fixes</u>

Problems Fixed:

- This firmware contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - EF0300FATFD, EF0450FATFE, and EF0600FATFF Drives
Version: HPDB (F) **(Critical)**
Filename: CP029332.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDB do not need to update to HPDB (F).**

<u>Fixes</u>

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDB (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDB (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPDB (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EG0300FBDBR, EG0450FBDBT and EG0600FBDBU Drives
Version: HPDA (G) **(Critical)**
Filename: CP029333.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (G).**

Fixes

Firmware Dependency:

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDA (G):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (E):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPDA (F):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EG0300FBDSP, EG0450FBDSQ, and EG0600FBDSR drives
Version: HPD6 (F) **(Optional)**
Filename: CP029334.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (F).**

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Problems Fixed for HPD6 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD6 (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EG0300FBVFL, EG0450FBVFM, EG0600FBVFP, and EG0900FBVFQ Drives
Version: HPDE (B) **(Recommended)**
Filename: CP029336.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDE do not need to update to HPDE (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPDE (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Online ROM Flash Component for VMware ESXi - EG0300FCHHR, EG0450FCHHT, EG0600FCHHU, and EG0900FCHHV Drives
Version: HPD8 (B) **(Recommended)**
Filename: CP029337.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).**

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

Problems Fixed:

- A potential issue existed where the drive would become unresponsive if the host sent a high number of overlapping task management commands. The drive would require a power cycle to be recovered.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

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

Enhancements/New Features:

- Improved write protection robustness before drive spin down.
- Implemented minor performance improvements in RAID environments.

Online ROM Flash Component for VMware ESXi - EG0300FCVBF, EG0450FCVBH, EG0600FCVBK, and EG0900FCVBL Drives
Version: HPD9 (B) **(Recommended)**
Filename: CP029338.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (B).**

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

Problems Fixed:

- Drives could become unresponsive due to unexpected responses from the serial port diagnostic debug connection.

Problems Fixed for HPD9 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD3 (B) **(Recommended)**
Filename: CP029339.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD3 do not need to update to HPD3 (B).**

<u>Fixes</u>

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029340.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

<u>Fixes</u>

Problems Fixed:

- The expected time to completion of Sanitize, Format and DST operations was incorrectly reported in the Vital Products Data page D0h. If time to completion is used by an application to determine when to terminate an operation, the operation might be terminated before the operation completed. Firmware version HPD4 now correctly reports the expected time to completion for these operations.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures

attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EG0900FDJYR and EG1200FDJYT Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029341.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).

Fixes

Problems Fixed:

- Prevents the potential for incorrect data from being "read from" or "written to" the drive under extremely rare circumstances where the drive experiences consecutive error recoveries during a background scan and the Error Correction Code (ECC) fails. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EG1200FDNJT and EG1200FCVBQ Drives
Version: HPD8 (B) **(Recommended)**
Filename: CP029342.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Online ROM Flash Component for VMware ESXi - EG1800JEHMD Drive
Version: HPD4 (B) **(Recommended)**
Filename: CP029343.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EG1800JEMDB Drives
Version: HPD2 **(Recommended)**
Filename: CP030028.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - EH0072FARUA and EH0146FARUB drives
Version: HPD9 (F) **(Optional)**
Filename: CP029344.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (F).**

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Problems Fixed for HPD9 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD9 (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EH0072FARWC and EH0146FARWD Drives
Version: HPDD (F) **(Critical)**
Filename: CP029345.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPDD do not need to update to HPDD (F).

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDD (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDD (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPDD (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - EH0146FCBVB and EH0300FCBVC drives
Version: HPD8 **(Recommended)**
Filename: CP030798.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- New SMART trip when device senses an abnormal change in the motor electric current.

Online ROM Flash Component for VMware ESXi - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives
Version: HPD3 **(Recommended)**
Filename: CP029792.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Online ROM Flash Component for VMware ESXi - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029348.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

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

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives
Version: HPD4 **(Recommended)**
Filename: CP029742.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - EO0200FBRVV, MO0200FBRWB, EO0400FBRWA, MO0400FBRWC, and MO0800FBRWD drives
Version: HPD9 (F) **(Optional)**
Filename: CP029351.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (F).**

Fixes

Problems Fixed:

- In previous firmware revisions when the solid state drive was issued a Report Support Operation Code (RSOC) command (A3h) and the reporting options field was set to 001 , the drive incorrectly responded with 05/24/00 indicating that the RSOC command was not supported. The error was logged in the system log files. The drive should have communicated non-support using the Command Data Parameter (CDP) format. The firmware now complies with the RSOC industry standard specification.

Problems Fixed for HPD9 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more

than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD9 (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB1000FBZPL and MB2000FBZPN drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029355.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- ProLiant servers would power down due a hard drive over temperature condition that was falsely reported. HPD4 firmware resolves this issue.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MB1000FCWDE, MB2000FCWDF, MB3000FCWDH, and MB4000FCWDK Drives
Version: HPDA **(Recommended)**
Filename: CP030186.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPDA.

- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - MB1000FCWPP, MB2000FCVBV, MB3000FCVCA, and MB4000FCVCB Drives
Version: HPD2 (D) **(Recommended)**
Filename: CP029357.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (D).**

Fixes

Problems Fixed:

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).
- Enhancements also include performance improvements.
- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD2 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD2 (C):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000FBUCL and MB3000FBUCN drives
Version: HPDA (E) **(Critical)**
Filename: CP029362.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (E).**

Fixes

Problems Fixed:

- This firmware improves background scans for media robustness, and also corrects a laboratory induced rare condition that could result in the disk not being updated with the latest cache data.

Problems Fixed for HPDA (E):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (C):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPDA (D):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000FCQPF and MB3000FBNWV Drives
Version: HPD9 **(Recommended)**
Filename: CP030829.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD9 resolves this issue.

Online ROM Flash Component for VMware ESXi - MB2000FCZGH, MB3000FCZGK, and MB4000FCZGL Drives
Version: HPD7 (B) **(Recommended)**
Filename: CP029364.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (B).**

Fixes

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD1 **(Recommended)**
Filename: CP030059.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Online ROM Flash Component for VMware ESXi - MB2000JFEPA and MB4000JFEPB Drives
Version: HPD2 **(Recommended)**
Filename: CP030845.zip

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - MB4000JEFNC and MB6000JEFND Drives
Version: HPD5 **(Critical)**
Filename: CP029714.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD5. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - MB6000FEDAU Drives
Version: HPD4 (B) **(Recommended)**
Filename: CP029373.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM0500FAMYT Drives
Version: HPD6 (F) **(Critical)**
Filename: CP029377.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (F).**

Fixes

Problem Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPD6 prevents this condition from occurring.
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

Problems Fixed for HPD6 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (D):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Enhancements/New Features for HPD6 (E):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MO0200FCTRN, MO0400FCTRP, and MO0800FCTRQ drives
Version: HPD5 **(Recommended)**
Filename: CP029540.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- An issue was found where the drive responded with a format error if power-cycled multiple times while in the process of un-mapping Logical Block Addresses (LBA). HPD5 firmware adds additional protection during power-cycles to ensure that the drive can recover its LBA to Physical Memory map.

Online ROM Flash Component for VMware ESXi - MO0200JDVET, MO0400JDVEU, MO0800JDVEV, EO0200JDVFA, EO0400JDVFB, and EO0800JDVFC Drives
Version: HPD2 (B) **(Optional)**
Filename: CP029385.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (B).**

Fixes

Problems Fixed:

- Solid-state drives (SSD) running firmware versions prior to HPD2 support Unmap commands. Application clients can make use of the Unmap command to specify certain LBAs do not contain vital data. The SSD can use the unmapped LBAs as needed. This feature will no longer be supported on these SSDs running firmware version HPD2 and later.

Problems Fixed for HPD2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD1 (C) **(Critical)**
Filename: CP029386.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD1 do not need to update to HPD1 (C).**

Fixes

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data. For additional information please refer to the customer advisory #c04650586

Problems Fixed for HPD1 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features for HPD1(B):

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD4 **(Optional)**
Filename: CP029644.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Online ROM Flash Component for VMware ESXi - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD4 **(Optional)**
Filename: CP029645.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Online ROM Flash Component for VMware ESXi - VO1920JEUQQ Drives
Version: HPD1 (B) **(Critical)**
Filename: CP029391.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD1 do not need to update to HPD1 (B).**

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

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data. (Additional information can be obtained for this issue in Customer Advisory c04650586)

Problems Fixed for HPD1 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for Windows (x64) - DG0146FARVU, DG0300FARVV, DG0146BAMYQ, DG0300BAMYR, EG0146FAWJC, and EG0300FAWJD Drives
Version: HPDG (D) **(Critical)**
Filename: cp029243.exe; cp029243.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDG do not need to update to HPDG (D).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDG (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDG (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDG (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - DH0072FAQRD, DH0146FAQRE, EH0146FAWJB, and EH0072FAWJA Drives
Version: HPDK (B) **(Recommended)**
Filename: cp029244.exe; cp029244.md5

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDK do not need to update to HPDK (B).**

<u>Fixes</u>

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPDK resolves this issue.

Problems Fixed for HPDK (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

<u>Enhancements</u>

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EF0300FARMU, EF0450FARMV, EF0600FARNA drives
Version: HPD9 **(Recommended)**
Filename: cp030805.exe; cp030805.md5

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EF0300FATFD, EF0450FATFE, and EF0600FATFF Drives
Version: HPDB (D) **(Critical)**
Filename: cp029246.exe; cp029246.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDB do not need to update to HPDB (D).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDB (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDB (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDB (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FBDBR, EG0450FBDBT and EG0600FBDBU Drives
Version: HPDA (D) **(Critical)**
Filename: cp029247.exe; cp029247.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (D).**

Prerequisites

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

Fixes

Firmware Dependency:

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDA (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDA (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FBDSP, EG0450FBDSQ, and EG0600FBDSR drives
Version: HPD6 (D) **(Optional)**
Filename: cp029248.exe; cp029248.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (D).**

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Problems Fixed for HPD6 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD6 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FBLSE, EG0450FBLSF, EG0600FBLSH, and EG0900FBLSK drives
Version: HPD8 (C) **(Recommended)**
Filename: cp029249.exe; cp029249.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (C).**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD8 resolves this issue.

Problems Fixed for HPD8 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD8 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FBVFL, EG0450FBVFM, EG0600FBVFP, and EG0900FBVFQ Drives
Version: HPDE (B) **(Recommended)**
Filename: cp029250.exe; cp029250.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

- **Customers who already installed firmware version HPDE do not need to update to HPDE (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.
- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDE (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FCHHR, EG0450FCHHT, EG0600FCHHU, and EG0900FCHHV Drives
Version: HPD8 (C) **(Recommended)**
Filename: cp029251.exe; cp029251.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (C).**

Fixes

Problems Fixed:

- A potential issue existed where the drive would become unresponsive if the host sent a high number of overlapping task management commands. The drive would require a power cycle to be recovered.

Problems Fixed for HPD8 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD8 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improved write protection robustness before drive spin down.
- Implemented minor performance improvements in RAID environments.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300FCVBF, EG0450FCVBH, EG0600FCVBK, and EG0900FCVBL Drives
Version: HPD9 (C) **(Recommended)**
Filename: cp029252.exe; cp029252.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (C).**

Fixes

Problems Fixed:

- Drives could become unresponsive due to unexpected responses from the serial port diagnostic debug connection.

Problems Fixed for HPD9 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD9 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD3 (C) **(Recommended)**
Filename: cp029253.exe; cp029253.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD3 do not need to update to HPD3 (C).

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD3 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD3 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD4 (C) **(Recommended)**
Filename: cp029254.exe; cp029254.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

Fixes

Problems Fixed:

- The expected time to completion of Sanitize, Format and DST operations was incorrectly reported in the Vital Products Data page D0h. If time to completion is used by an application to determine when to terminate an operation, the operation might be terminated before the operation completed. Firmware version HPD4 now correctly reports the expected time to completion for these operations.

Problems Fixed for HPD4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp030990.exe; cp030990.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD4 (B).**

Enhancements

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Enhancements/New Features for HPD4 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG0900FDJYR and EG1200FDJYT Drives
Version: HPD4 (C) **(Recommended)**
Filename: cp029255.exe; cp029255.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).

Fixes

Problems Fixed:

- Prevents the potential for incorrect data from being "read from" or "written to" the drive under extremely rare circumstances where the drive experiences consecutive error recoveries during a background scan and the Error Correction Code (ECC) fails. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG1200FDNJT and EG1200FCVBQ Drives
Version: HPD8 (B) **(Recommended)**
Filename: cp029256.exe; cp029256.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).**

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

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.
- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

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

Enhancements/New Features:

- Added servo improvements which reduce power consumption.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG1800JEHMD Drive
Version: HPD4 (C) **(Recommended)**
Filename: cp029257.exe; cp029257.md5

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

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

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EG1800JEMDB Drives
Version: HPD2 **(Recommended)**
Filename: cp030030.exe; cp030030.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0072FARUA and EH0146FARUB drives
Version: HPD9 (D) **(Optional)**
Filename: cp029258.exe; cp029258.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (D).**

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

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Problems Fixed for HPD9 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

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

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0072FARWC and EH0146FARWD Drives
Version: HPDD (D) **(Critical)**
Filename: cp029259.exe; cp029259.md5

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDD do not need to update to HPDD (D).**

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

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDD (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDD (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDD (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0146FBQDC and EH0300FBQDD drives
Version: HPD5 (C) **(Recommended)**
Filename: cp029260.exe; cp029260.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (C).**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD5 resolves this issue.

Problems Fixed for HPD5 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD5 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0146FCBVB and EH0300FCBVC drives
Version: HPD8 (B) **(Recommended)**
Filename: cp030991.exe; cp030991.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD8 (B).**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- New SMART trip when device senses an abnormal change in the motor electric current.

Enhancements

Enhancements/New Features for HPD8 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives
Version: HPD3 (B) **(Recommended)**
Filename: cp030992.exe; cp030992.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD3 (B).**

Enhancements

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Enhancements/New Features for HPD3 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD4 (C) **(Recommended)**
Filename: cp029262.exe; cp029262.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp030993.exe; cp030993.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features for HPD4 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EH0600JDYTN Drive
Version: HPD5 (C) **(Recommended)**
Filename: cp029264.exe; cp029264.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (C).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD5(B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD5 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - EO0200FBRVV, MO0200FBRWB, EO0400FBRWA, MO0400FBRWC, and MO0800FBRWD drives
Version: HPD9 (D) **(Optional)**
Filename: cp029265.exe; cp029265.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (D).**

Fixes

Problems Fixed:

- In previous firmware revisions when the solid state drive was issued a Report Support Operation Code (RSOC) command (A3h) and the reporting options field was set to 001 , the drive incorrectly responded with 05/24/00 indicating that the RSOC command was not supported. The error was logged in the system log files. The drive should have communicated non-support using the Command Data Parameter (CDP) format. The firmware now complies with the RSOC industry standard specification.

Problems Fixed for HPD9(C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40

characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000FAMYU and MB2000FAMYV Drives
Version: HPD7 (D) **(Critical)**
Filename: cp029268.exe; cp029268.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (D).**

Fixes

Problem Fixed:

- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

Problems Fixed for HPD7 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD7 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD7 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000FBZPL and MB2000FBZPN drives
Version: HPD4 (B) **(Recommended)**
Filename: cp029269.exe; cp029269.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- ProLiant servers would power down due a hard drive over temperature condition that was falsely reported. HPD4 firmware resolves this issue.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000FCWDE, MB2000FCWDF, MB3000FCWDH, and MB4000FCWDK Drives
Version: HPDA **(Recommended)**
Filename: cp030188.exe; cp030188.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**

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

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPDA.

- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

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

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000FCWPP, MB2000FCVBV, MB3000FCVCA, and MB4000FCVCB Drives
Version: HPD2 (D) **(Recommended)**
Filename: cp029271.exe; cp029271.md5

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (D).**

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

Problems Fixed for HPD2 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD2 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

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

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).
- Enhancements also include performance improvements.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD2 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000FBUCL and MB3000FBUCN drives
Version: HPDA (D) **(Critical)**
Filename: cp029276.exe; cp029276.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (D).**

Fixes

Problems Fixed:

- This firmware improves background scans for media robustness, and also corrects a laboratory induced rare condition that could result in the disk not being updated with the latest cache data.

Problems Fixed for HPDA (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPDA (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (B):

- Updated the flash engine to standardize logging across all SAS drive components.

Enhanced logging capability to improve the details provided in the component log file.

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000FCQPF and MB3000FBNWV Drives
Version: HPD9 **(Recommended)**
Filename: cp030831.exe; cp030831.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD9 resolves this issue.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000FCZGH, MB3000FCZGK, and MB4000FCZGL Drives
Version: HPD7 (B) **(Recommended)**
Filename: cp029278.exe; cp029278.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (B).**

Fixes

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more

than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD1 **(Recommended)**
Filename: cp030061.exe; cp030061.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000JFEPA and MB4000JFEPB Drives
Version: HPD2 **(Recommended)**
Filename: cp030847.exe; cp030847.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB4000JEFNC and MB6000JEFND Drives
Version: HPD5 (B) **(Critical)**
Filename: cp030995.exe; cp030995.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (B).**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD5. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features for HPD5 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB4000JEQNL and MB6000JEQNN Drives
Version: HPD7 (C) **(Critical)**
Filename: cp029286.exe; cp029286.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (C).**

Fixes

Problems Fixed:

- This firmware fixes a potential incorrect data issue in write-cached enabled multi-initiator unaligned write environments, where

reservation commands are used.

Problems Fixed for HPD7 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD7 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

<u>Enhancements</u>

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB6000FEDAU Drives
Version: HPD4 (B) **(Recommended)**
Filename: cp029287.exe; cp029287.md5

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

<u>Fixes</u>

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

<u>Enhancements</u>

Enhancements/New Features:

Online ROM Flash Component for Windows (x64) - MM0500FAMYT Drives
Version: HPD6 (D) **(Critical)**
Filename: cp029291.exe; cp029291.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (D).**

Fixes

Problem Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPD6 prevents this condition from occurring.
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

Problems Fixed for HPD6 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD6 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM0500FBFVQ and MM1000FBFVR Drives

Version: HPD9 (B) **(Recommended)**

Filename: cp029292.exe; cp029292.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (B).**

Fixes

Problems Fixed:

- HPD9 firmware prevents a condition in which data fails to be committed to disk after the host issues a hard reset in a lab stress test environment with write cache enabled.

Problems Fixed for HPD9 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM1000FECVH Drives

Version: HPD2 (B) **(Recommended)**

Filename: cp029294.exe; cp029294.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.
- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD4 (C) **(Recommended)**
Filename: cp029296.exe; cp029296.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

Fixes

Problems Fixed:

- Version HPD4 prevents the potential for incorrect data to be written to the drive under extremely rare circumstances when the drive experiences a hard reset. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM1000JFJTH Drives
Version: HPD1 **(Recommended)**
Filename: cp030811.exe; cp030811.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD1. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MO0200FCTRN, MO0400FCTRP, and MO0800FCTRQ drives
Version: HPD5 (C) **(Recommended)**
Filename: cp030996.exe; cp030996.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD5 (C).**

Fixes

Problems Fixed:

- An issue was found where the drive responded with a format error if power-cycled multiple times while in the process of un-mapping Logical Block Addresses (LBA). HPD5 firmware adds additional protection during power-cycles to ensure that the drive can recover its LBA to Physical Memory map.

Problems Fixed for HPD5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features for HPD5 (C):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MO0200JDVET, MO0400JDVEU, MO0800JDVEV, EO0200JDVFA, EO0400JDVFB, and EO0800JDVFC Drives
Version: HPD2 (C) **(Optional)**
Filename: cp029299.exe; cp029299.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (C).**

Fixes

Problems Fixed:

- Solid-state drives (SSD) running firmware versions prior to HPD2 support Unmap commands. Application clients can make use of the Unmap command to specify certain LBAs do not contain vital data. The SSD can use the unmapped LBAs as needed. This feature will no longer be supported on these SSDs running firmware version HPD2 and later.

Problems Fixed for HPD2 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD2 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD1 (C) **(Critical)**
Filename: cp029300.exe; cp029300.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD1 do not need to update to HPD1 (C).**

Fixes

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data. For additional information please refer to the customer advisory #[c04650586](c04650586)

Problems Fixed for HPD1 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD1 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD4 (B) **(Optional)**

Filename: cp030997.exe; cp030997.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Enhancements

Enhancements/New Features for HPD4 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD4 (B) **(Optional)**
Filename: cp030998.exe; cp030998.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Enhancements

Enhancements/New Features for HPD4 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - VO1920JEUQQ Drives

Version: HPD1 (C) **(Critical)**
Filename: cp029305.exe; cp029305.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD1 do not need to update to HPD1 (C).

Fixes

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data. (Additional information can be obtained for this issue in Customer Advisory c04650586)

Problems Fixed for HPD1 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPD1 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows - DG0146FARVU, DG0300FARVV, DG0146BAMYQ, DG0300BAMYR, EG0146FAWJC, and EG0300FAWJD Drives
Version: HPDG (B) **(Critical)**
Filename: cp020424.exe; cp020424.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.
- Customers who already installed firmware version HPDG do not need to update to HPDG(B).

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - DH0072FAQRD, DH0146FAQRE, EH0146FAWJB, and EH0072FAWJA Drives
Version: HPDK **(Recommended)**
Filename: cp028852.exe; cp028852.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPDK resolves this issue.

Online ROM Flash Component for Windows - EF0300FARMU, EF0450FARMV, EF0600FARNA drives
Version: HPD9 **(Recommended)**
Filename: cp030801.exe; cp030801.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for Windows - EF0300FATFD, EF0450FATFE, and EF0600FATFF Drives
Version: HPDB (B) **(Critical)**
Filename: cp020433.exe; cp020433.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.
- Customers who already installed firmware version HPDB do not need to update to HPDB(B).

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - EG0300FBDBR, EG0450FBDBT and EG0600FBDBU Drives
Version: HPDA (B) **(Critical)**
Filename: cp020307.exe; cp020307.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPDA do not need to update to HPDA(B).

Prerequisites

- Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.

Fixes

Firmware Dependency:

- Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Online ROM Flash Component for Windows - EG0300FBDSP, EG0450FBDSQ, and EG0600FBDSR drives
Version: HPD6 (B) **(Optional)**
Filename: cp020435.exe; cp020435.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6(B).**

Fixes

Problems Fixed:
- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Enhancements

Enhancements/New Features:
- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - EG0300FBLSE, EG0450FBLSF, EG0600FBLSH, and EG0900FBLSK drives
Version: HPD8 **(Recommended)**
Filename: cp025755.exe

Fixes

Problems Fixed:
- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD8 resolves this issue.

Enhancements

Enhancements/New Features:
None

Online ROM Flash Component for Windows - EG0300FBVFL, EG0450FBVFM, EG0600FBVFP, and EG0900FBVFQ Drives
Version: HPDE **(Recommended)**
Filename: cp028191.exe; cp028191.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Online ROM Flash Component for Windows - EG0300FCVBF, EG0450FCVBH, EG0600FCVBK, and EG0900FCVBL Drives
Version: HPD9 **(Recommended)**
Filename: cp028285.exe; cp028285.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Drives could become unresponsive due to unexpected responses from the serial port diagnostic debug connection.

Online ROM Flash Component for Windows - EG0900FDJYR and EG1200FDJYT Drives
Version: HPD4 **(Recommended)**
Filename: cp027736.exe; cp027736.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Prevents the potential for incorrect data from being "read from" or "written to" the drive under extremely rare circumstances where the drive experiences consecutive error recoveries during a background scan and the Error Correction Code (ECC) fails. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Online ROM Flash Component for Windows - EG1200FDNJT and EG1200FCVBQ Drives
Version: HPD8 **(Recommended)**
Filename: cp028210.exe; cp028210.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Online ROM Flash Component for Windows - EH0072FARUA and EH0146FARUB drives
Version: HPD9 (B) **(Optional)**
Filename: cp020437.exe; cp020437.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9(B).**

Fixes

Problems Fixed:
- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.

Enhancements

Enhancements/New Features:
- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - EH0072FARWC and EH0146FARWD Drives
Version: HPDD (B) **(Critical)**
Filename: cp020438.exe; cp020438.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPDD do not need to update to HPDD(B).**

Fixes

Problems Fixed:
- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Enhancements

Enhancements/New Features:
- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - EH0146FBQDC and EH0300FBQDD drives
Version: HPD5 **(Recommended)**
Filename: cp027318.exe; cp027318.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD5 resolves this issue.

Online ROM Flash Component for Windows - EH0146FCBVB and EH0300FCBVC drives
Version: HPD8 **(Recommended)**
Filename: cp030797.exe; cp030797.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- New SMART trip when device senses an abnormal change in the motor electric current.

Online ROM Flash Component for Windows - EO0200FBRVV, MO0200FBRWB, EO0400FBRWA, MO0400FBRWC, and MO0800FBRWD drives
Version: HPD9 (B) **(Recommended)**
Filename: cp020440.exe; cp020440.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9(B).**

Fixes

Problems Fixed:

- In previous firmware revisions when the solid state drive was issued a Report Support Operation Code (RSOC) command (A3h) and the reporting options field was set to 001 , the drive incorrectly responded with 05/24/00 indicating that the RSOC command was not supported. The error was logged in the system log files. The drive should have communicated non-support using the Command Data Parameter (CDP) format. The firmware now complies with the RSOC industry standard specification.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - MB1000FAMYU and MB2000FAMYV Drives

Version: HPD7 (B) **(Critical)**

Filename: cp020455.exe; cp020455.md5

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

- ○ **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- ○ **Customers who already installed firmware version HPD7 do not need to update to HPD7(B).**

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

Problem Fixed:

- ○ This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

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

Enhancements/New Features:

- ○ The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - MB1000FBZPL and MB2000FBZPN drives

Version: HPD4 **(Recommended)**

Filename: cp028674.exe; cp028674.md5

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

- ○ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- ○ ProLiant servers would power down due a hard drive over temperature condition that was falsely reported. HPD4 firmware resolves this issue.

Online ROM Flash Component for Windows - MB1000FCWDE, MB2000FCWDF, MB3000FCWDH, and MB4000FCWDK Drives

Version: HPDA **(Recommended)**

Filename: cp030190.exe; cp030190.md5

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPDA.

- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for Windows - MB1000FCWPP, MB2000FCVBV, MB3000FCVCA, and MB4000FCVCB Drives
Version: HPD2 **(Recommended)**
Filename: cp022639.exe; cp022639.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).
- Enhancements also include performance improvements.

Online ROM Flash Component for Windows - MB2000FBUCL and MB3000FBUCN drives
Version: HPDA **(Critical)**
Filename: cp021545.exe; cp021545.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves background scans for media robustness, and also corrects a laboratory induced rare condition that could result in the disk not being updated with the latest cache data.

Online ROM Flash Component for Windows - MB2000FCQPF and MB3000FBNWV Drives
Version: HPD9 **(Recommended)**
Filename: cp030828.exe; cp030828.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD9 resolves this issue.

Online ROM Flash Component for Windows - MM0500FAMYT Drives
Version: HPD6 (B) **(Critical)**
Filename: cp020466.exe; cp020466.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6(B).**

Fixes

Problem Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPD6 prevents this condition from occurring.
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.

Enhancements

Enhancements/New Features:
- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3

Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - MM0500FBFVQ and MM1000FBFVR Drives
Version: HPD9 **(Recommended)**
Filename: cp028681.exe; cp028681.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPD9 firmware prevents a condition in which data fails to be committed to disk after the host issues a hard reset in a lab stress test environment with write cache enabled.

Online ROM Flash Component for Windows - MO0200FCTRN, MO0400FCTRP, and MO0800FCTRQ Drives
Version: HPD5 **(Recommended)**
Filename: cp029640.exe; cp029640.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- An issue was found where the drive responded with a format error if power-cycled multiple times while in the process of un-mapping Logical Block Addresses (LBA). HPD5 firmware adds additional protection during power-cycles to ensure that the drive can recover its LBA to Physical Memory map.

Supplemental Update / Online ROM Flash Component for Linux - DG0146FARVU, DG0300FARVV, DG0146BAMYQ, DG0300BAMYR, EG0146FAWJC, and EG0300FAWJD Drives
Version: HPDG (C) **(Critical)**
Filename: CP022308.md5; CP022308.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPDG do not need to update to HPDG(C).

Fixes

Problems Fixed:
- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - EG0300FBDBR, EG0450FBDBT and EG0600FBDBU Drives
Version: HPDA (C) **(Critical)**
Filename: CP022312.md5; CP022312.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA(C).**

Prerequisites

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

Fixes

Firmware Dependency:
- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**
Problems Fixed:
- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - EG0300FBDSP, EG0450FBDSQ, and EG0600FBDSR drives

Version: HPD6 (C) **(Optional)**
Filename: CP022313.md5; CP022313.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPD6 do not need to update to HPD6(C).

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - EG0300FBLSE, EG0450FBLSF, EG0600FBLSH, and EG0900FBLSK drives
Version: HPD8 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-815e5e101b-HPD8-1.1.i386.rpm

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD8 resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux - EG0300FBVFL, EG0450FBVFM, EG0600FBVFP, and EG0900FBVFQ Drives
Version: HPDE **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-b94f345c05-HPDE-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Supplemental Update / Online ROM Flash Component for Linux - EG0900FDJYR and EG1200FDJYT Drives
Version: HPD4 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-7cfa9118b1-HPD4-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Prevents the potential for incorrect data from being "read from" or "written to" the drive under extremely rare circumstances where the drive experiences consecutive error recoveries during a background scan and the Error Correction Code (ECC) fails. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Supplemental Update / Online ROM Flash Component for Linux - EG1200FDNJT and EG1200FCVBQ Drives
Version: HPD8 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-33aee979c2-HPD8-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Supplemental Update / Online ROM Flash Component for Linux - EH0072FARUA and EH0146FARUB drives
Version: HPD9 (C) **(Optional)**
Filename: CP022318.md5; CP022318.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9(C).**

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - EH0146FBQDC and EH0300FBQDD drives
Version: HPD5 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-1ec3c02013-HPD5-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD5 resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux - EH0146FCBVB and EH0300FCBVC drives

Version: HPD8 **(Recommended)**

Filename: rpm/RPMS/i386/hp-firmware-hdd-74df2d6c5c-HPD8-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- New SMART trip when device senses an abnormal change in the motor electric current.

Supplemental Update / Online ROM Flash Component for Linux - EO0200FBRVV, MO0200FBRWB, EO0400FBRWA, MO0400FBRWC, and MO0800FBRWD drives

Version: HPD9 (C) **(Optional)**

Filename: CP022322.md5; CP022322.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9(C).**

Fixes

Problems Fixed:

- In previous firmware revisions when the solid state drive was issued a Report Support Operation Code (RSOC) command (A3h) and the reporting options field was set to 001 , the drive incorrectly responded with 05/24/00 indicating that the RSOC command was not supported. The error was logged in the system log files. The drive should have communicated non-support using the Command Data Parameter (CDP) format. The firmware now complies with the RSOC industry standard specification.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB1000FAMYU and MB2000FAMYV Drives

Version: HPD7 (D) **(Critical)**

Filename: CP022325.md5; CP022325.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPD7 do not need to update to HPD7(D).

Fixes

Problem Fixed:
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.
- HPD7 (B) resolves an issue with offline flashing where the component would time out during the upgrade process.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB1000FBZPL and MB2000FBZPN drives

Version: HPD4 **(Recommended)**

Filename: rpm/RPMS/i386/hp-firmware-hdd-b33fedbbdf-HPD4-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- ProLiant servers would power down due a hard drive over temperature condition that was falsely reported. HPD4 firmware resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux - MB1000FCWPP, MB2000FCVBV, MB3000FCVCA, and MB4000FCVCB Drives

Version: HPD2 **(Recommended)**

Filename: CP022638.md5; CP022638.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).
- Enhancements also include performance improvements.

Supplemental Update / Online ROM Flash Component for Linux - MM0500FAMYT Drives
Version: HPD6 (C) **(Critical)**
Filename: CP022338.md5; CP022338.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPD6 do not need to update to HPD6(C).

Fixes

Problem Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPD6 prevents this condition from occurring.
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MM0500FBFVQ and MM1000FBFVR Drives
Version: HPD9 **(Recommended)**

Filename: rpm/RPMS/i386/hp-firmware-hdd-4b3e11848c-HPD9-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- HPD9 firmware prevents a condition in which data fails to be committed to disk after the host issues a hard reset in a lab stress test environment with write cache enabled.

Supplemental Update / Online ROM Flash Component for Linux - MO0200FCTRN, MO0400FCTRP, and MO0800FCTRQ Drives
Version: HPD5 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-37893275d3-HPD5-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- An issue was found where the drive responded with a format error if power-cycled multiple times while in the process of un-mapping Logical Block Addresses (LBA). HPD5 firmware adds additional protection during power-cycles to ensure that the drive can recover its LBA to Physical Memory map.

Supplemental Update / Online ROM Flash Component for Linux (x64) - DG0146FARVU, DG0300FARVV, DG0146BAMYQ, DG0300BAMYR, EG0146FAWJC, and EG0300FAWJD Drives
Version: HPDG (C) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-fdfb5070cf-HPDG-3.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPDG do not need to update to HPDG (C).

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

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPDG (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

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

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDG (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FBDBR, EG0450FBDBT and EG0600FBDBU Drives
Version: HPDA (C) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-f1eafd9715-HPDA-3.1.x86_64.rpm

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (C).**

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

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

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

Firmware Dependency:

- **Minimum firmware required - HPD7. HPDA drive firmware will fail when downgrading to versions below HPD7.**

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.

Problems Fixed for HPDA (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0600JETKA, EG0900JETKB, and EG1200JETKC Drives
Version: HPD4 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-7505dfb5ae-HPD4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

- **Reliability enhancement for applications that write data to a narrow range of tracks.**

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000FECVH Drives
Version: HPD2 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-eb0a0d48e5-HPD2-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (B).**

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

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPD2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

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

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives
Version: HPD4 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b04257b77b-HPD4-2.1.x86_64.rpm

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

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

Problems Fixed:

- Version HPD4 prevents the potential for incorrect data to be written to the drive under extremely rare circumstances when the drive experiences a hard reset. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - DH0072FAQRD, DH0146FAQRE, EH0146FAWJB, and EH0072FAWJA Drives
Version: HPDK (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-ca173adbad-HPDK-2.1.x86_64.rpm

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPDK do not need to update to HPDK (B).

<u>Fixes</u>

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPDK resolves this issue.

Problems Fixed for HPDK (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EF0300FARMU, EF0450FARMV, and EF0600FARNA Drives
Version: HPD9 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-c7ed905f46-HPD9-1.1.x86_64.rpm

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.

<u>Fixes</u>

Problems Fixed:

- This firmware contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EF0300FATFD, EF0450FATFE, and EF0600FATFF Drives
Version: HPDB (C) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-009c9a2503-HPDB-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDB do not need to update to HPDB (C).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPDB (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDB (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FBDSP, EG0450FBDSQ, and EG0600FBDSR Drives
Version: HPD6 (C) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-06ac84a5d4-HPD6-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (C).**

Fixes

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPD6 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FBLSE, EG0450FBLSF, EG0600FBLSH, and EG0900FBLSK Drives
Version: HPD8 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-815e5e101b-HPD8-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD8 resolves this issue.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the

firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FBVFL, EG0450FBVFM, EG0600FBVFP, and EG0900FBVFQ Drives
Version: HPDE (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b94f345c05-HPDE-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDE do not need to update to HPDE (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPDE (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FCHHR, EG0450FCHHT, EG0600FCHHU, and EG0900FCHHV Drives
Version: HPD8 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-8a9b54701e-HPD8-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).**

Fixes

Problems Fixed:

- A potential issue existed where the drive would become unresponsive if the host sent a high number of overlapping task management commands. The drive would require a power cycle to be recovered.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Improved write protection robustness before drive spin down.
- Implemented minor performance improvements in RAID environments.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300FCVBF, EG0450FCVBH, EG0600FCVBK, and EG0900FCVBL Drives
Version: HPD9 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-415992e26f-HPD9-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (B).**

Fixes

Problems Fixed:

- Drives could become unresponsive due to unexpected responses from the serial port diagnostic debug connection.

Problems Fixed for HPD9 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives
Version: HPD3 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-31f91b8622-HPD3-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD3 do not need to update to HPD3 (B).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives
Version: HPD4 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-ac3fda26eb-HPD4-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- The expected time to completion of Sanitize, Format and DST operations was incorrectly reported in the Vital Products Data page D0h. If time to completion is used by an application to determine when to terminate an operation, the operation might be terminated before the operation completed. Firmware version HPD4 now correctly reports the expected time to completion for these operations.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure

attached to an HP Host Bus Adapter H22x.

- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0900FDJYR and EG1200FDJYT Drives
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-7cfa9118b1-HPD4-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

Fixes

Problems Fixed:

- Prevents the potential for incorrect data from being "read from" or "written to" the drive under extremely rare circumstances where the drive experiences consecutive error recoveries during a background scan and the Error Correction Code (ECC) fails. This issue has only been observed in a rigorous test environment and has NOT been reported in a customer production environment.

Problems Fixed for HPD4 (B):

- Linux Smart Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1200FDNJT and EG1200FCVBQ Drives
Version: HPD8 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-33aee979c2-HPD8-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD8 do not need to update to HPD8 (B).**

Fixes

Problems Fixed:

- Drive self-test did not complete within the specified time.
- During a fully cached workload, SMART would report incorrect temperature values.

Problems Fixed for HPD8 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added servo improvements which reduce power consumption.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEHMD Drive
Version: HPD4 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-8a2c06af48-HPD4-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (C).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- Linux Smart Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPD4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEMDB Drives
Version: HPD2 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-0a38b25661-HPD2-1.1.x86_64.rpm

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

<u>Fixes</u>

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0072FARUA and EH0146FARUB Drives
Version: HPD9 (C) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-88df5ee1cd-HPD9-3.1.x86_64.rpm

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD9 do not need to update to HPD9 (C).

<u>Fixes</u>

Problems Fixed:

- This firmware reduces the possibility of the controller and drive not properly negotiating link signaling, resulting in the controller not being able to identify a drive attached to a particular port/slot during system boot up. This firmware improves signal quality between the drive and the controller.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPD9 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0072FARWC and EH0146FARWD Drives

Version: HPDD (C) **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-92875cb465-HPDD-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDD do not need to update to HPDD (C).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPDD (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDD (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0146FBQDC and EH0300FBQDD Drives

Version: HPD5 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-1ec3c02013-HPD5-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD5 do not need to update to HPD5 (B).

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD5 resolves this issue.

Problems Fixed for HPD5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0146FCBVB and EH0300FCBVC Drives

Version: HPD8 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-74df2d6c5c-HPD8-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.
- New SMART trip when device senses an abnormal change in the motor electric current.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JDXBA, EH0450JDXBB, and EH0600JDXBC Drives

Version: HPD3 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-1cbab97ff0-HPD3-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives
Version: HPD4 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b9340d29be-HPD4-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.
- Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives
Version: HPD4 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-8c4a212ff9-HPD4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**

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

Problems Fixed:

○ This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0600JDYTN Drive
Version: HPD5 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-f3faa195ff-HPD5-2.1.x86_64.rpm

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

○ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

○ **Customers who already installed firmware version HPD5 do not need to update to HPD5 (B).**

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

Problems Fixed:

○ Self-initiated reset during ATI (Adjacent Track Interference) mitigation issue, where the drive reported a 06/29/04 (Self-Initiated Reset) to the controller. Then the controller would re-establish link with the drive and resend the command.

○ Servo miscalculations that resulted in degraded drive performance.

Problems Fixed for HPD5 (B):

○ Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

○ Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EO0200FBRVV, MO0200FBRWB, EO0400FBRWA, MO0400FBRWC, and MO0800FBRWD Drives
Version: HPD9 (C) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-792f35abb6-HPD9-3.1.x86_64.rpm

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

○ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (C).**

Fixes

Problems Fixed:

- In previous firmware revisions when the solid state drive was issued a Report Support Operation Code (RSOC) command (A3h) and the reporting options field was set to 001 , the drive incorrectly responded with 05/24/00 indicating that the RSOC command was not supported. The error was logged in the system log files. The drive should have communicated non-support using the Command Data Parameter (CDP) format. The firmware now complies with the RSOC industry standard specification.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPD9 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD9 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000FAMYU and MB2000FAMYV Drives
Version: HPD7 (C) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-2db44cb024-HPD7-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (C).**

Fixes

Problem Fixed:

- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.
- HPD7 (B) resolves an issue with offline flashing where the component would time out during the upgrade process.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPD7 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD7 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000FBZPL and MB2000FBZPN Drives
Version: HPD4 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b33fedbbdf-HPD4-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- ProLiant servers would power down due a hard drive over temperature condition that was falsely reported. HPD4 firmware resolves this issue.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000FCWDE, MB2000FCWDF, MB3000FCWDH, and MB4000FCWDK Drives

Version: HPDA **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-4892d09bcf-HPDA-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPDA.

- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000FCWPP, MB2000FCVBV, MB3000FCVCA, and MB4000FCVCB Drives

Version: HPD2 (C) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-64ffa21017-HPD2-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (C).**

Fixes

Problems Fixed for HPD2 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in

an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).

- Enhancements also include performance improvements.

Enhancements/New Features HPD2(B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000FBUCL and MB3000FBUCN Drives
Version: HPDA (C) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-e0a45065fd-HPDA-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDA do not need to update to HPDA (C).**

Fixes

Problems Fixed:

- This firmware improves background scans for media robustness, and also corrects a laboratory induced rare condition that could result in the disk not being updated with the latest cache data.

Problems Fixed for HPDA (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPDA (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000FCQPF and MB3000FBNWV Drives
Version: HPD9 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-52de99d707-HPD9-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD9 resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000FCZGH, MB3000FCZGK, and MB4000FCZGL Drives
Version: HPD7 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-a8d1969535-HPD7-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (B).**

Fixes

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000JFDSL and MB4000JFDSN Drives
Version: HPD1 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-46fc43ab26-HPD1-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Enhancements

Enhancements/New Features:

  - Reliability enhancement for applications that write data to a narrow range of tracks.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000JFEPA and MB4000JFEPB Drives

Version: HPD2 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-326de7c0f2-HPD2-1.1.x86_64.rpm

Important Note!

  - **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

  - This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD2. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB4000JEFNC and MB6000JEFND Drives

Version: HPD5 **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-af802bb412-HPD5-1.1.x86_64.rpm

Important Note!

  - **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

  - This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD5. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB4000JEQNL and MB6000JEQNN Drives

Version: HPD7 (B) **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-2cfaac41db-HPD7-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD7 do not need to update to HPD7 (B).**

Fixes

Problems Fixed:

- This firmware fixes a potential incorrect data issue in write-cached enabled multi-initiator unaligned write environments, where reservation commands are used.

Problems Fixed for HPD7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000FEDAU Drives

Version: HPD4 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-85e544eca4-HPD4-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD4 do not need to update to HPD4 (B).**

Fixes

Problems Fixed:

- This firmware corrects an issue which could result in a failure of the drive to be discovered after power on.

Problems Fixed for HPD4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure

attached to an HP Host Bus Adapter H22x.

- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM0500FAMYT Drives

Version: HPD6 (C) **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-ff472f94c8-HPD6-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD6 do not need to update to HPD6 (C).**

Fixes

Problem Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPD6 prevents this condition from occurring.
- This firmware prevents a rare condition that may occur during a WRITE SAME command sequence that may result in incorrect data being written to the hard drive. The WRITE SAME command may be used during RAID ARRAY parity initialization.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Problems Fixed for HPD6 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPD6 (B):

- Updated the flash engine to standardize logging across all SAS drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM0500FBFVQ and MM1000FBFVR Drives

Version: HPD9 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-4b3e11848c-HPD9-2.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPD9 do not need to update to HPD9 (B).

Fixes

Problems Fixed:

- HPD9 firmware prevents a condition in which data fails to be committed to disk after the host issues a hard reset in a lab stress test environment with write cache enabled.

Problems Fixed for HPD9 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives
Version: HPD1 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-fa46c607d6-HPD1-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPD1. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MO0200FCTRN, MO0400FCTRP, and MO0800FCTRQ Drives
Version: HPD5 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-37893275d3-HPD5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- An issue was found where the drive responded with a format error if power-cycled multiple times while in the process of un-mapping Logical Block Addresses (LBA). HPD5 firmware adds additional protection during power-cycles to ensure that the drive can recover its LBA to Physical Memory map.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MO0200JDVET, MO0400JDVEU, MO0800JDVEV, EO0200JDVFA, EO0400JDVFB, and EO0800JDVFC Drives
Version: HPD2 (B) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-8c5d34ba77-HPD2-2.1.x86_64.rpm

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD2 do not need to update to HPD2 (B).**

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

Problems Fixed:

- Solid-state drives (SSD) running firmware versions prior to HPD2 support Unmap commands. Application clients can make use of the Unmap command to specify certain LBAs do not contain vital data. The SSD can use the unmapped LBAs as needed. This feature will no longer be supported on these SSDs running firmware version HPD2 and later.

Problems Fixed for HPD2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MO0200JEFNV, MO0400JEFPA, MO0800JEFPB, MO1600JEFPC, EO0200JEFPD, EO0400JEFPE, and EO0800JEFPF Drives
Version: HPD1 (B) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-71af849f3b-HPD1-2.1.x86_64.rpm

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD1 do not need to update to HPD1 (B).**

Fixes

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data. For additional information please refer to the customer advisory #c04650586

Problems Fixed for HPD1 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MO0400JFFCF, MO0800JFFCH, MO1600JFFCK, and MO3200JFFCL Drives
Version: HPD4 **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-edf6dcd906-HPD4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Supplemental Update / Online ROM Flash Component for Linux (x64) - VO0480JFDGT, VO0960JFDGU, VO1920JFDGV, and VO3840JFDHA Drives
Version: HPD4 **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-8ed8893abd-HPD4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- This firmware contains several low level maintenance fixes including debug data retrieval through read buffer. The fixes addressed events observed in a specialized lab testing environment, and are not expected to be experienced in customer use case scenarios.

Supplemental Update / Online ROM Flash Component for Linux (x64) - VO1920JEUQQ Drives
Version: HPD1 (B) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-5d9e841607-HPD1-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD1 do not need to update to HPD1 (B).**

Fixes

Problem Fixed:

- Incorrect data reads might occur when accessing unaligned 4k reads and the data read has zero content preceding customer data.

Problems Fixed for HPD1 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux - DH0072FAQRD, DH0146FAQRE, EH0146FAWJB, and EH0072FAWJA Drives
Version: HPDK **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-ca173adbad-HPDK-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPDK resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux - EF0300FARMU, EF0450FARMV, and EF0600FARNA drives
Version: HPD9 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-c7ed905f46-HPD9-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux - EF0300FATFD, EF0450FATFE, and EF0600FATFF Drives
Version: HPDB (C) **(Critical)**
Filename: CP022311.md5; CP022311.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPDB do not need to update to HPDB(C).**

Fixes

Problems Fixed:

- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - EG0300FCVBF, EG0450FCVBH, EG0600FCVBK, and EG0900FCVBL Drives
Version: HPD9 **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-415992e26f-HPD9-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Drives could become unresponsive due to unexpected responses from the serial port diagnostic debug connection.

Supplemental Update / Online ROM Flash Component for Linux - EH0072FARWC and EH0146FARWD Drives
Version: HPDD (C) **(Critical)**
Filename: CP022319.md5; CP022319.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPDD do not need to update to HPDD(C).

Fixes

Problems Fixed:
- This firmware corrects a possible condition in which stale data might be written to the disk. This results in unexpected data being returned in subsequent requests. This data issue has been duplicated in laboratory firmware stress tests.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB1000FCWDE, MB2000FCWDF, MB3000FCWDH, and MB4000FCWDK Drives
Version: HPDA **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-hdd-4892d09bcf-HPDA-1.1.i386.rpm

Important Note!

Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

■ This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPDA.

■ This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux - MB2000FBUCL and MB3000FBUCN drives
Version: HPDA (B) **(Critical)**
Filename: CP022332.md5; CP022332.scexe

Important Note!

○ **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
○ **Customers who already installed firmware version HPDA do not need to update to HPDA(B).**

Fixes

Problems Fixed:
○ This firmware improves background scans for media robustness, and also corrects a laboratory induced rare condition that could result in the disk not being updated with the latest cache data.

Enhancements

Enhancements/New Features:
○ Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB2000FCQPF and MB3000FBNWV Drives
Version: HPD9 **(Recommended)**
Filename: CP030827.md5; CP030827.scexe; rpm/RPMS/i386/hp-firmware-52de99d707-HPD9-1.1.i386.rpm

Important Note!

■ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HP ProLiant servers would power down due a hard drive overtemp condition that was falsely reported. Hard disk drive firmware HPD9 resolves this issue.

Online ROM Flash Component for ESXi - MB3000EBKAB Drives
Version: HPG6 (F) **(Critical)**
Filename: CP029367.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG6 do not need to update to HPG6 (F).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPG6 prevents this condition from occurring.
- This firmware corrects "command timeouts" and seek errors which can result in poor performance or a Device Fault condition, the latter of which will result in the drive failed by the Controller or sub system.

Problems Fixed for HPG6 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG6 (E):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB0500GCEHF, MB1000GCEHH, and MB2000GCEHK Drives
Version: HPGD (G) **(Critical)**
Filename: CP029352.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPGD do not need to update to HPGD (G).

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPGD prevents this condition from occurring.

Problems Fixed for HPGD (G):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPGD(F):

- Updated the flash engine to standardize logging across all SATA drive components.

- Enhanced logging capability to improve the details provided in the component log file.

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB1000ECWCQ, MB2000ECWCR, MB3000ECWCT, and MB4000ECWCU Drives
Version: HPG5 **(Critical)**
Filename: CP031115.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.

Fixes

Problems Fixed:

- HPG5 firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second.

Online ROM Flash Component for VMware ESXi - MB1000GCEEK Drives
Version: HPG2 (B) **(Recommended)**
Filename: CP029358.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG2 do not need to update to HPG2 (B).

Fixes

Problems Fixed:

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).

Online ROM Flash Component for VMware ESXi - MB1000GCWCV, MB2000GCWDA, MB3000GCWDB, and MB4000GCWDC Drives
Version: HPGH **(Critical)**
Filename: CP029171.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- HPGH firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second. As a result, hard disk drives may become unresponsive.

Online ROM Flash Component for VMware ESXi - MB2000EAZNL Drives
Version: HPG4 (F) **(Optional)**
Filename: CP029359.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (F).**

Fixes

Problems Fixed:

- This firmware contains general maintenance release and code improvement items. Drives built with or upgraded to hard drive firmware version HPG4 should not be downgraded to an earlier version of firmware due to hard drive manufacturing process changes.

Problems Fixed for HPG4 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG4 (E):

- Updated the flash engine to standardize logging across all SATA drive components.

- Enhanced logging capability to improve the details provided in the component log file.

- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000EBUCF and MB3000EBUCH Drives
Version: HPG4 (F) **(Recommended)**
Filename: CP029360.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG4 do not need to update to HPG4 (F).

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Problems Fixed for HPG4 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG4 (E):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000ECVJF, MB3000ECVJH, and MB4000ECVJK Drives
Version: HPG5 (C) **(Critical)**
Filename: CP029361.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG5 do not need to update to HPG5 (C).

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

Problem Fixed:

○ Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (C):

○ Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

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

Enhancements/New Features for HPG5 (B):

○ Updated the flash engine to standardize logging across all SATA drive components.
○ Enhanced logging capability to improve the details provided in the component log file.
○ VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000ECWLP, MB3000ECWLQ, and MB4000ECWLR Drives
Version: HPG4 **(Recommended)**
Filename: CP030519.zip

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

○ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

■ Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Online ROM Flash Component for VMware ESXi - MB2000GBUPB and MB3000GBUCK drives
Version: HPG4 (F) **(Recommended)**
Filename: CP029365.zip

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

○ **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (F).**

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

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Problems Fixed for HPG4 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

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

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG4 (E):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000GCQXQ and MB3000GBKAC Drives
Version: HPGK **(Recommended)**
Filename: CP030682.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problem Fixed:

- HP ProLiant servers would power down due a hard drive over temp condition that was falsely reported. Hard disk drive firmware HPGK resolves this issue.

Online ROM Flash Component for VMware ESXi - MB2000GCVBR, MB3000GCVBT, and MB4000GCVBU Drives
Version: HPG5 (C) **(Critical)**
Filename: CP029366.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG5 do not need to update to HPG5 (C).

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features for HPG5 (B):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 **(Recommended)**
Filename: CP030522.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Online ROM Flash Component for VMware ESXi - MB4000GEQNH and MB6000GEQNK Drives
Version: HPG7 (B) **(Recommended)**
Filename: CP029370.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (B).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MB6000GEQUT and MB8000GEQUU Drives
Version: HPG7 (B) **(Recommended)**
Filename: CP029374.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (B).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures

attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MK0100GCTYU, MK0200GCTYV, MK0400GCTZA, and MK0800GCTZB Drives
Version: HPG4 (D) **(Optional)**
Filename: CP029375.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- This maintenance release corrects a failure seen during a HP Insight Diagnostic hard drive test. The failure was due to Device Extended Self-Test not completing in the drives advertised Self-Test completion time. This failure is not an indication that the drive is bad or marginal.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG4 (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Online ROM Flash Component for VMware ESXi - MK0960GECQK Drives
Version: HPG3 (B) **(Critical)**
Filename: CP029376.zip

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).

<u>Fixes</u>

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM0500GBKAK and MM1000GBKAL Drives
Version: HPGE **(Recommended)**
Filename: CP030581.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

<u>Fixes</u>

Problems Fixed:

- Corrected a medium level assert that can occur when the host issues resets after >250ms of idle time. If a drive is affected by the issue, it might display reduced performance and possibly would cease to operate. A hot plug removal and insertion of the affected drive temporarily resolves this issue. Update to drive firmware version HPGE to resolve this issue.

Online ROM Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG3 (B) **(Recommended)**
Filename: CP029381.zip

<u>Important Note!</u>

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).**

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

Problems Fixed:

- After HDD power cycle, the Background Media Scan (BGMS) pointer would invoke a second BGMS routine starting at LBA 0, which could affect performance until the second BGMS has completed.
- When writing to the HDD after it entered or returned from a standby state, the potential existed for a Non Volatile Cache issue to occur..

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - MM1000GFJTE Drives
Version: HPG1 **(Recommended)**
Filename: CP030832.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

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

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG1.
- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Online ROM Flash Component for VMware ESXi - TK0120GECQL, VK0240GECQN, and VK0480GECQP Drives
Version: HPG3 (B) **(Critical)**
Filename: CP029387.zip

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).**

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

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - VK0240GDJXU, VK0300GDUQV, VK0480GDJXV, VK0600GDUTQ, and VK0800GDJYA Drives
Version: HPG1 (C) **(Optional)**
Filename: CP029390.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG1 do not need to update to HPG1 (C).**

<u>Fixes</u>

Problems Fixed:

- This maintenance firmware updates temperature reporting, Sanitize Block Erase and includes read performance improvements.

Problems Fixed for HPG1 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Online ROM Flash Component for VMware ESXi - XP0032GDZME Drives
Version: HPS5 **(Recommended)**
Filename: CP030369.zip

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

<u>Fixes</u>

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Online ROM Flash Component for VMware ESXi - XP0032GEFEN Drives
Version: HPS5 **(Recommended)**
Filename: CP030372.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Online ROM Flash Component for VMware ESXi - XP0064GDZMF Drives
Version: HPS5 **(Recommended)**
Filename: CP030375.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Online ROM Flash Component for VMware ESXi - XP0064GEFEP Drives
Version: HPS5 **(Recommended)**
Filename: CP030378.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Online ROM Flash Component for Windows (x64) - XP0032GDZME Drives
Version: HPS5 **(Recommended)**
Filename: cp030371.exe; cp030371.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - XP0032GEFEN Drives
Version: HPS5 **(Recommended)**
Filename: cp030374.exe; cp030374.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - XP0064GEFEP Drives
Version: HPS5 (B) **(Recommended)**
Filename: cp031000.exe; cp031000.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPS5 (B).**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Enhancements/New Features for HPS5 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB0500GCEHF, MB1000GCEHH, and MB2000GCEHK Drives
Version: HPGD (D) **(Critical)**
Filename: cp029266.exe; cp029266.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPGD do not need to update to HPGD (D).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPGD prevents this condition from occurring.

Problems Fixed for HPGD(C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPGD (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure

attached to an HP Host Bus Adapter H22x.

- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000ECWCQ, MB2000ECWCR, MB3000ECWCT, and MB4000ECWCU Drives
Version: HPG5 **(Critical)**
Filename: cp031117.exe; cp031117.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPG5 firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second.

Online ROM Flash Component for Windows (x64) - MB1000GCEEK Drives
Version: HPG2 (C) **(Recommended)**
Filename: cp029272.exe; cp029272.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG2 do not need to update to HPG2 (C).**

Fixes

Problems Fixed for HPG2 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG2 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000GCWCV, MB2000GCWDA, MB3000GCWDB, and MB4000GCWDC Drives
Version: HPGH (B) **(Critical)**
Filename: cp030994.exe; cp030994.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPGH (B).**

Fixes

Problems Fixed:

- HPGH firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second. As a result, hard disk drives may become unresponsive.

Enhancements

Enhancements/New Features for HPGH (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 **(Recommended)**
Filename: cp030808.exe; cp030808.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Known Issues:

- Firmware cannot be downgraded to HPG3 after updating to HPG4.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000EAZNL Drives
Version: HPG4 (D) **(Optional)**
Filename: cp029273.exe; cp029273.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- This firmware contains general maintenance release and code improvement items. Drives built with or upgraded to hard drive firmware version HPG4 should not be downgraded to an earlier version of firmware due to hard drive manufacturing process changes.

Problems Fixed for HPG4 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000EBUCF and MB3000EBUCH Drives
Version: HPG4 (D) **(Recommended)**
Filename: cp029274.exe; cp029274.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Problems Fixed for HPG4 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000ECVJF, MB3000ECVJH, and MB4000ECVJK Drives
Version: HPG5 (C) **(Critical)**
Filename: cp029275.exe; cp029275.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG5 do not need to update to HPG5 (C).**

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG5 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000ECWLP, MB3000ECWLQ, and MB4000ECWLR Drives
Version: HPG4 **(Recommended)**
Filename: cp030518.exe; cp030518.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE**

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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000GBUPB and MB3000GBUCK Drives
Version: HPG4 (D) **(Recommended)**
Filename: cp029279.exe; cp029279.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Problems Fixed for HPG4 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000GCQXQ and MB3000GBKAC Drives
Version: HPGK **(Recommended)**
Filename: cp030684.exe; cp030684.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problem Fixed:

- HP ProLiant servers would power down due a hard drive over temp condition that was falsely reported. Hard disk drive firmware HPGK resolves this issue.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000GCVBR, MB3000GCVBT, and MB4000GCVBU Drives
Version: HPG5 (C) **(Critical)**
Filename: cp029280.exe; cp029280.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG5 do not need to update to HPG5 (C).**

Fixes

Problem Fixed:

Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG5 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 **(Recommended)**
Filename: cp030521.exe; cp030521.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB3000EBKAB Drives

Version: HPG6 (D) **(Critical)**
Filename: cp029281.exe; cp029281.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG6 do not need to update to HPG6 (D).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPG6 prevents this condition from occurring.
- This firmware corrects "command timeouts" and seek errors which can result in poor performance or a Device Fault condition, the latter of which will result in the drive failed by the Controller or sub system.

Problems Fixed for HPG6 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG6 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Enhancements/New Features for (B):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG4 **(Recommended)**
Filename: cp030033.exe; cp030033.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB4000GEQNH and MB6000GEQNK Drives
Version: HPG7 (C) **(Recommended)**
Filename: cp029284.exe; cp029284.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (C).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG7 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB6000GEQUT and MB8000GEQUU Drives
Version: HPG7 (C) **(Recommended)**
Filename: cp029288.exe; cp029288.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (C).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG7 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB6000GEXXV Drives
Version: HPG2 **(Recommended)**
Filename: cp030840.exe; cp030840.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MB8000GFECR Drives
Version: HPG3 **(Recommended)**
Filename: cp030844.exe; cp030844.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG3.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MK0100GCTYU, MK0200GCTYV, MK0400GCTZA, and MK0800GCTZB Drives
Version: HPG4 (D) **(Optional)**
Filename: cp029289.exe; cp029289.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- This maintenance release corrects a failure seen during a HP Insight Diagnostic hard drive test. The failure was due to Device Extended Self-Test not completing in the drives advertised Self-Test completion time. This failure is not an indication that the drive is bad or marginal.

Problems Fixed for HPG4 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Improvements have been made to enhance drive reliability, performance and handle sudden shock situations.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MK0960GECQK Drives
Version: HPG3 (C) **(Critical)**
Filename: cp029290.exe; cp029290.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (C).**

Fixes

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG3 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM0500GBKAK and MM1000GBKAL Drives
Version: HPGE **(Recommended)**
Filename: cp030583.exe; cp030583.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Corrected a medium level assert that can occur when the host issues resets after >250ms of idle time. If a drive is affected by the issue, it might display reduced performance and possibly would cease to operate. A hot plug removal and insertion of the affected drive temporarily resolves this issue. Update to drive firmware version HPGE to resolve this issue.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG3 (B) **(Recommended)**

Filename: cp029295.exe; cp029295.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.
- Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).

Fixes

Problems Fixed:

- After HDD power cycle, the Background Media Scan (BGMS) pointer would invoke a second BGMS routine starting at LBA 0, which could affect performance until the second BGMS has completed.
- When writing to the HDD after it entered or returned from a standby state, the potential existed for a Non Volatile Cache issue to occur..
- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MM1000GFJTE Drives
Version: HPG1 **(Recommended)**
Filename: cp030834.exe; cp030834.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may

become unresponsive when using HDD firmware prior to version HPG1.

- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - MO0100EBTJT, MO0200EBTJU, and MO0400EBTJV drives
Version: HPG4 (C) **(Optional)**
Filename: cp029297.exe; cp029297.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (C).**

Fixes

Problems Fixed:

- Firmware version HPG4 resolved a wear-out issue which was caused by frequently issued PIO commands and resulted in a non-responsive drive.

Problems Fixed for HPG4 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - TK0120GECQL, VK0240GECQN, and VK0480GECQP Drives
Version: HPG3 (C) **(Critical)**
Filename: cp029301.exe; cp029301.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (C).**

Fixes

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG3 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - VB0160EAVEQ and VB0160CBCDE Drives
Version: HPG9 (D) **(Recommended)**
Filename: cp029302.exe; cp029302.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9 (D).**

Fixes

Problems Fixed:

This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Problems Fixed for HPG9 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Enhancements/New Features for (B):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - VB0250EAVER Drives
Version: HPG9 (D) **(Recommended)**
Filename: cp029303.exe; cp029303.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9 (D).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Problems Fixed for HPG9 (C):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Enhancements/New Features for (B):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - VK0240GDJXU, VK0300GDUQV, VK0480GDJXV, VK0600GDUTQ, and VK0800GDJYA Drives
Version: HPG1 (C) **(Optional)**
Filename: cp029304.exe; cp029304.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG1 do not need to update to HPG1 (C).**

Fixes

Problems Fixed:

- This maintenance firmware updates temperature reporting, Sanitize Block Erase and includes read performance improvements.

Problems Fixed for HPG1 (B):

- The component would fail to flash drive firmware on a server with a Trusted Platform Module (TPM) enabled when using the /tpmbypass switch.

Problems Fixed for HPG1 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more

than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

- Component would cause an exception error when deployed on a computer with a fully qualified domain name greater than 40 characters in length.

Enhancements

Enhancements/New Features:

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows (x64) - XP0064GDZMF Drives
Version: HPS5 (B) **(Recommended)**
Filename: cp030999.exe; cp030999.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD5 do not need to update to HPS5 (B).**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Enhancements/New Features for HPS5 (B):

- Added support for Microsoft Windows Server 2016.

Online ROM Flash Component for Windows - MB0500GCEHF, MB1000GCEHH, and MB2000GCEHK Drives
Version: HPGD (B) **(Critical)**
Filename: cp020453.exe; cp020453.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.

- **Customers who already installed firmware version HPGD do not need to update to HPGD(B).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPGD prevents this condition from occurring.

Enhancements

Enhancements/New Features:
- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - MB1000ECWCQ, MB2000ECWCR, MB3000ECWCT, and MB4000ECWCU Drives
Version: HPG5 **(Critical)**
Filename: cp031119.exe; cp031119.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPG5 firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second.

Online ROM Flash Component for Windows - MB1000GCWCV, MB2000GCWDA, MB3000GCWDB, and MB4000GCWDC Drives
Version: HPGH **(Critical)**
Filename: cp029175.exe; cp029175.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPGH firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second. As a result, hard disk drives may become unresponsive.

Online ROM Flash Component for Windows - MB2000EAZNL Drives
Version: HPG4 **(Optional)**
Filename: cp020390.exe; cp020390.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware contains general maintenance release and code improvement items. Drives built with or upgraded to hard drive firmware version HPG4 should not be downgraded to an earlier version of firmware due to hard drive manufacturing process changes.

Online ROM Flash Component for Windows - MB2000EBUCF and MB3000EBUCH Drives
Version: HPG4 **(Recommended)**
Filename: cp020667.exe; cp020667.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Online ROM Flash Component for Windows - MB2000ECVJF, MB3000ECVJH, and MB4000ECVJK Drives
Version: HPG5 **(Critical)**
Filename: cp025326.exe; cp025326.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Online ROM Flash Component for Windows - MB2000GBUPB and MB3000GBUCK Drives
Version: HPG4 **(Recommended)**
Filename: cp020664.exe; cp020664.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:
- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Online ROM Flash Component for Windows - MB2000GCQXQ and MB3000GBKAC Drives
Version: HPGK **(Recommended)**
Filename: cp030680.exe; cp030680.md5

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problem Fixed:

- HP ProLiant servers would power down due a hard drive over temp condition that was falsely reported. Hard disk drive firmware HPGK resolves this issue.

Online ROM Flash Component for Windows - MB2000GCVBR, MB3000GCVBT, and MB4000GCVBU Drives

Version: HPG5 **(Critical)**
Filename: cp025321.exe; cp025321.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Online ROM Flash Component for Windows - MB3000EBKAB Drives
Version: HPG6 (B) **(Critical)**
Filename: cp020461.exe; cp020461.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPG6 do not need to update to HPG6(B).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPG6 prevents this condition from occurring.
- This firmware corrects "command timeouts" and seek errors which can result in poor performance or a Device Fault condition, the latter of which will result in the drive failed by the Controller or sub system.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - MK0100GCTYU, MK0200GCTYV, MK0400GCTZA, and MK0800GCTZB Drives
Version: HPG4 **(Optional)**

Filename: cp022699.exe; cp022699.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- This maintenance release corrects a failure seen during a HP Insight Diagnostic hard drive test. The failure was due to Device Extended Self-Test not completing in the drives advertised Self-Test completion time. This failure is not an indication that the drive is bad or marginal.

Online ROM Flash Component for Windows - MM0500GBKAK and MM1000GBKAL Drives
Version: HPGE **(Recommended)**
Filename: cp030584.exe; cp030584.md5

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Corrected a medium level assert that can occur when the host issues resets after >250ms of idle time. If a drive is affected by the issue, it might display reduced performance and possibly would cease to operate. A hot plug removal and insertion of the affected drive temporarily resolves this issue. Update to drive firmware version HPGE to resolve this issue.

Online ROM Flash Component for Windows - MO0100EBTJT, MO0200EBTJU, and MO0400EBTJV drives
Version: HPG4 **(Optional)**
Filename: cp024525.exe; cp024525.md5

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:

- Firmware version HPG4 resolved a wear-out issue which was caused by frequently issued PIO commands and resulted in a non-responsive drive.

Online ROM Flash Component for Windows - VB0160EAVEQ and VB0160CBCDE Drives
Version: HPG9 (B) **(Recommended)**
Filename: cp020477.exe; cp020477.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9(B).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - VB0250EAVER Drives
Version: HPG9 (B) **(Recommended)**
Filename: cp020478.exe; cp020478.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9(B).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Enhancements

Enhancements/New Features:

- The firmware component installer can now install the drive firmware successfully when the new HP ProLiant Smart Array HPCISSS3 Controller Driver (**hpcisss3.sys**) is running on the system being updated.

Online ROM Flash Component for Windows - VK0240GDJXU, VK0300GDUQV, VK0480GDJXV, VK0600GDUTQ, and VK0800GDJYA Drives
Version: HPG1 (B) **(Optional)**
Filename: cp026952.exe; cp026952.md5

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG1 do not need to update to HPG1(B).**

Fixes

Problems Fixed:

- This maintenance firmware updates temperature reporting, Sanitize Block Erase and includes read performance improvements.

Supplemental Update / Online ROM Flash Component for ESXi - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 **(Recommended)**
Filename: CP030806.zip

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Known Issues:

- Firmware cannot be downgraded to HPG3 after updating to HPG4.

Supplemental Update / Online ROM Flash Component for ESXi - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG4 **(Recommended)**

Filename: CP030031.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for ESXi - MB6000GEXXV Drives
Version: HPG2 **(Recommended)**
Filename: CP030838.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Supplemental Update / Online ROM Flash Component for ESXi - MB8000GFECR Drives
Version: HPG3 **(Recommended)**
Filename: CP030842.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG3.

Supplemental Update / Online ROM Flash Component for ESXi - MO0100EBTJT, MO0200EBTJU, and MO0400EBTJV drives
Version: HPG4 (B) **(Optional)**
Filename: CP029383.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (B).**

Fixes

Problems Fixed:

- Firmware version HPG4 resolved a wear-out issue which was caused by frequently issued PIO commands and resulted in a non-responsive drive.

Problems Fixed for HPG4 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Supplemental Update / Online ROM Flash Component for ESXi - VB0160EAVEQ and VB0160CBCDE Drives
Version: HPG9 (F) **(Recommended)**
Filename: CP029388.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9 (F).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Problems Fixed for HPG9 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG9 (E):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Supplemental Update / Online ROM Flash Component for ESXi - VB0250EAVER Drives
Version: HPG9 (F) **(Recommended)**
Filename: CP029389.zip

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9 (F).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.

Problems Fixed for HPG9 (F):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

Enhancements

Enhancements/New Features:

- Added support for VMware vSphere 5.5.
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Added support for HP Dynamic Smart Array B140i Controller.

Enhancements/New Features for HPG9 (E):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.
- VMware Firmware Smart component packaging has changed from a *.scexe package to a *.zip package, which contains an executable binary that provides enhanced security during installation. The functionality of the VMware Smart Component has not changed.

Supplemental Update / Online ROM Flash Component for Linux - MB2000EAZNL drives
Version: HPG4 (B) **(Optional)**
Filename: CP022329.md5; CP022329.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4(B).**

Fixes

Problems Fixed:
- This firmware contains general maintenance release and code improvement items. Drives built with or upgraded to hard drive firmware version HPG4 should not be downgraded to an earlier version of firmware due to hard drive manufacturing process changes.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB2000EBUCF and MB3000EBUCH Drives
Version: HPG4 (B) **(Recommended)**
Filename: CP022330.md5; CP022330.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4(B).**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB2000GBUPB and MB3000GBUCK drives
Version: HPG4 (B) **(Recommended)**
Filename: CP022333.md5; CP022333.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4(B).**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux (x64) - XP0064GEFEP Drives
Version: HPS5 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-e151c3ad27-HPS5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB0500GCEHF, MB1000GCEHH, and MB2000GCEHK Drives
Version: HPGD (D) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b583d96f94-HPGD-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPGD do not need to update to HPGD (D).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPGD prevents this condition from occurring.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.
- Resolved a component installation issue where the drive model, MB2000GCEHK, was being detected, but would fail to flash.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPGD (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPGD (C):

- Updated the flash engine to standardize logging across all SATA drive components.

Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000ECWCQ, MB2000ECWCR, MB3000ECWCT, and MB4000ECWCU Drives

Version: HPG5 **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-a92b4196b5-HPG5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPG5 firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GCEEK Drives

Version: HPG2 (B) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-7aa341f927-HPG2-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG2 do not need to update to HPG2 (B).**

Fixes

Problems Fixed for HPG2 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:
- This firmware improves reliability by modifying the pivot bearing grease wear leveling algorithm, which if not implemented, could result in

an increased drive failure rate for specific usage applications (eg, very long periods of small range seeks).

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GCWCV, MB2000GCWDA, MB3000GCWDB, and MB4000GCWDC Drives
Version: HPGH **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-a1b08f8a6b-HPGH-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problems Fixed:

- HPGH firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second. As a result, hard disk drives may become unresponsive.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GDUNU, MB2000GDUNV, MB3000GDUPA, and MB4000GDUPB Drives
Version: HPG4 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-3ab4c70e64-HPG4-1.1.x86_64.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 and Microsoft Windows environments. All other OSes would require an offline update using the SPP and HP SUM.

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Known Issues:

- Firmware cannot be downgraded to HPG3 after updating to HPG4.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000EAZNL Drives
Version: HPG4 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-800c4d6b2e-HPG4-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

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

Problems Fixed:

- This firmware contains general maintenance release and code improvement items. Drives built with or upgraded to hard drive firmware version HPG4 should not be downgraded to an earlier version of firmware due to hard drive manufacturing process changes.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

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

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000EBUCF and MB3000EBUCH Drives
Version: HPG4 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-74fefb9767-HPG4-4.1.x86_64.rpm

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

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

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

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000ECVJF, MB3000ECVJH, and MB4000ECVJK Drives
Version: HPG5 (B) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b923956874-HPG5-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG5 do not need to update to HPG5 (B).**

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the

firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000ECWLP, MB3000ECWLQ, and MB4000ECWLR Drives

Version: HPG4 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-b508a3352b-HPG4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000GBUPB and MB3000GBUCK Drives

Version: HPG4 (D) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-166dc88573-HPG4-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- The system did not recognize some drives after a power-cycle. This is due to the drive initialization process being interrupted by a reset, causing the drive to take more time than allotted to report commands.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPG4 (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000GCQXQ and MB3000GBKAC Drives
Version: HPGK **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-c9026c29f7-HPGK-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problem Fixed:

- HP ProLiant servers would power down due a hard drive over temp condition that was falsely reported. Hard disk drive firmware HPGK resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000GCVBR, MB3000GCVBT, and MB4000GCVBU Drives
Version: HPG5 (B) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-e4f5b5c9a7-HPG5-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG5 do not need to update to HPG5 (B).**

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Problems Fixed for HPG5 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000GCWLT, MB3000GCWLU, and MB4000GCWLV Drives
Version: HPG4 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-2e70ce7412-HPG4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Improves the drive idle time behavior by reducing long periods of track dwell time, which if not implemented, could increase media lube depletion and reduce drive reliability.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB3000EBKAB Drives
Version: HPG6 (D) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-3675aa63c9-HPG6-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG6 do not need to update to HPG6 (D).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPG6 prevents this condition from occurring.
- This firmware corrects "command timeouts" and seek errors which can result in poor performance or a Device Fault condition, the latter of which will result in the drive failed by the Controller or sub system.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG6 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPG6 (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB4000GEFNA and MB6000GEFNB Drives
Version: HPG4 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-40277d55d3-HPG4-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG4. This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB4000GEQNH and MB6000GEQNK Drives
Version: HPG7 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-bfc95f0628-HPG7-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (B).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000GEQUT and MB8000GEQUU Drives
Version: HPG7 (C) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-1d7f19120b-HPG7-3.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG7 do not need to update to HPG7 (C).**

Fixes

Problems Fixed:

- This firmware corrects possible unrecovered errors caused by the track refresh algorithm not working properly.

Problems Fixed for HPG7 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000GEXXV Drives
Version: HPG2 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-a629fcea59-HPG2-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Reliability enhancement for applications that write data to a narrow range of tracks.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives
Version: HPG3 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-6d922fc9a8-HPG3-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG3.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MK0100GCTYU, MK0200GCTYV, MK0400GCTZA, and MK0800GCTZB Drives
Version: HPG4 (D) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-b2d9e3a264-HPG4-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (D).**

Fixes

Problems Fixed:

- This maintenance release corrects a failure seen during a HP Insight Diagnostic hard drive test. The failure was due to Device Extended Self-Test not completing in the drives advertised Self-Test completion time. This failure is not an indication that the drive is bad or marginal.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG4 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.
- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MK0960GECQK Drives
Version: HPG3 (B) **(Critical)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-3e34285be7-HPG3-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).**

Fixes

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM0500GBKAK and MM1000GBKAL Drives
Version: HPGE **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-a08f92a4f9-HPGE-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Corrected a medium level assert that can occur when the host issues resets after >250ms of idle time. If a drive is affected by the issue, it might display reduced performance and possibly would cease to operate. A hot plug removal and insertion of the affected drive temporarily resolves this issue. Update to drive firmware version HPGE to resolve this issue.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives
Version: HPG3 (B) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-ec908c3650-HPG3-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).**

Fixes

Problems Fixed:

- After HDD power cycle, the Background Media Scan (BGMS) pointer would invoke a second BGMS routine starting at LBA 0, which could affect performance until the second BGMS has completed.
- When writing to the HDD after it entered or returned from a standby state, the potential existed for a Non Volatile Cache issue to occur..

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GFJTE Drives

Version: HPG1 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-95af9a555e-HPG1-1.1.x86_64.rpm

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

<u>Fixes</u>

Problems Fixed:

- This firmware improves HDD reliability when HDDs are exposed to long periods of host inactivity that exceed 1 second. HDDs may become unresponsive when using HDD firmware prior to version HPG1.
- This firmware also contains a change which prevents an incorrect reassign status of a repaired sector from being logged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MO0100EBTJT, MO0200EBTJU, and MO0400EBTJV drives

Version: HPG4 (C) **(Optional)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-72e5d6942f-HPG4-3.1.x86_64.rpm

<u>Important Note!</u>

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG4 do not need to update to HPG4 (C).**

<u>Fixes</u>

Problems Fixed:

- Firmware version HPG4 resolved a wear-out issue which was caused by frequently issued PIO commands and resulted in a non-responsive drive.

Problems Fixed for HPG4 (C):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features for HPG4 (B):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - TK0120GECQL, VK0240GECQN, and VK0480GECQP Drives

Version: HPG3 (B) **(Critical)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-5699d4778d-HPG3-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG3 do not need to update to HPG3 (B).**

Fixes

Problems Fixed:

- Firmware resolves a data mismanagement issue associated with unaligned sequential write operations.

Problems Fixed for HPG3 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - VB0160EAVEQ and VB0160CBCDE Drives

Version: HPG9 (D) **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-181eec78ee-HPG9-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

- **Customers who already installed firmware version HPG9 do not need to update to HPG9 (D).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file - "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - VB0250EAVER Drives
Version: HPG9 (D) **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-hdd-e6bc718d4e-HPG9-4.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPD9 do not need to update to HPD9 (D).**

Fixes

Problems Fixed:

- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.
- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Problems Fixed for HPG9 (D):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.
- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Enhancements/New Features for HPG9 (C):

- Updated the flash engine to standardize logging across all SATA drive components.
- Enhanced logging capability to improve the details provided in the component log file.

Supplemental Update / Online ROM Flash Component for Linux (x64) - VK0240GDJXU, VK0300GDUQV, VK0480GDJXV, VK0600GDUTQ, and VK0800GDJYA Drives
Version: HPG1 (B) **(Optional)**
Filename: rpm/RPMS/x86_64/hp-firmware-ef3ea1e703-HPG1-2.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG1 do not need to update to HPG1 (B).**

Fixes

Problems Fixed:

- This maintenance firmware updates temperature reporting, Sanitize Block Erase and includes read performance improvements.

Problems Fixed for HPG1 (B):

- Component would fail to install drive firmware for drives present in a system configured with two or more external drive enclosures attached to an HP Host Bus Adapter H22x. The following message would be reported in the component log file – "Device appears more than once in tree". The drive firmware installation failure was not observed in configurations having only one external drive enclosure attached to an HP Host Bus Adapter H22x.

- Component fails to update the firmware for drives connected behind an HP Smart Array P431 controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Supplemental Update / Online ROM Flash Component for Linux (x64) - XP0032GDZME Drives

Version: HPS5 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-62faa20443-HPS5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Supplemental Update / Online ROM Flash Component for Linux (x64) - XP0032GEFEN Drives

Version: HPS5 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-f286f98973-HPS5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Supplemental Update / Online ROM Flash Component for Linux (x64) - XP0064GDZMF Drives

Version: HPS5 **(Recommended)**

Filename: rpm/RPMS/x86_64/hp-firmware-hdd-43bc195082-HPS5-1.1.x86_64.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Resolves an issue with the option kit in which an M.2 SSD is installed: when RAID 1 is selected, devices go into a RAID rebuild mode

Enhancements

Enhancements/New Features:

- Enables sanitize device function for HP specific environments
- Adds UECC Read-retry algorithm for timeout handling
- Adds single binary file drive firmware update support

Supplemental Update / Online ROM Flash Component for Linux - MB0500GCEHF, MB1000GCEHH, and MB2000GCEHK Drives

Version: HPGD (E) **(Critical)**

Filename: CP022323.md5; CP022323.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPGD do not need to update to HPGD(E).**

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPGD prevents this condition from occurring.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware

installation failures.

- **HPGD (D)** resolved a component installation issue where the drive model, MB2000GCEHK, was being detected, but would fail to flash.

Enhancements

Enhancements/New Features:

- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MB1000ECWCQ, MB2000ECWCR, MB3000ECWCT, and MB4000ECWCU Drives
Version: HPG5 **(Critical)**
Filename: rpm/RPMS/i386/hp-firmware-a92b4196b5-HPG5-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPG5 firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second.

Supplemental Update / Online ROM Flash Component for Linux - MB1000GCWCV, MB2000GCWDA, MB3000GCWDB, and MB4000GCWDC Drives
Version: HPGH **(Critical)**
Filename: rpm/RPMS/i386/hp-firmware-a1b08f8a6b-HPGH-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- HPGH firmware improves drive reliability where disk drives are exposed to long periods of host inactivity which exceed 1 second. As a result, hard disk drives may become unresponsive.

Supplemental Update / Online ROM Flash Component for Linux - MB2000ECVJF, MB3000ECVJH, and MB4000ECVJK Drives
Version: HPG5 **(Critical)**
Filename: rpm/RPMS/i386/hp-firmware-b923956874-HPG5-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could result in data written to incorrect sectors.

Supplemental Update / Online ROM Flash Component for Linux - MB2000GCQXQ and MB3000GBKAC Drives

Version: HPGK **(Recommended)**

Filename: rpm/RPMS/i386/hp-firmware-c9026c29f7-HPGK-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.

Fixes

Problem Fixed:

- HP ProLiant servers would power down due a hard drive over temp condition that was falsely reported. Hard disk drive firmware HPGK resolves this issue.

Supplemental Update / Online ROM Flash Component for Linux - MB2000GCVBR, MB3000GCVBT, and MB4000GCVBU Drives

Version: HPG5 **(Critical)**

Filename: rpm/RPMS/i386/hp-firmware-e4f5b5c9a7-HPG5-1.1.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problem Fixed:

- Fixes a rare but potential data integrity error during low 5v drive voltage and specific sequential data streaming conditions, which could

result in data written to incorrect sectors.

Supplemental Update / Online ROM Flash Component for Linux - MB3000EBKAB Drives
Version: HPG6 (C) **(Critical)**
Filename: CP022335.md5; CP022335.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPG6 do not need to update to HPG6(C).

Fixes

Problems Fixed:

- After long term use of the HDD, a rare condition might occur following a power cycle where the drive heads may land on areas of the disk containing data, which could potentially cause data loss or mechanical damage. Firmware version HPG6 prevents this condition from occurring.
- This firmware corrects "command timeouts" and seek errors which can result in poor performance or a Device Fault condition, the latter of which will result in the drive failed by the Controller or sub system.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

Enhancements

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - MK0100GCTYU, MK0200GCTYV, MK0400GCTZA, and MK0800GCTZB Drives
Version: HPG4 **(Optional)**
Filename: CP022698.md5; CP022698.scexe

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

Fixes

Problems Fixed:
- This maintenance release corrects a failure seen during a HP Insight Diagnostic hard drive test. The failure was due to Device Extended Self-Test not completing in the drives advertised Self-Test completion time. This failure is not an indication that the drive is bad or marginal.

Supplemental Update / Online ROM Flash Component for Linux - MM0500GBKAK and MM1000GBKAL Drives
Version: HPGE **(Recommended)**
Filename: rpm/RPMS/i386/hp-firmware-a08f92a4f9-HPGE-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HPE Smart Array controller running in Zero Memory (ZM) mode or an HPE 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Corrected a medium level assert that can occur when the host issues resets after >250ms of idle time. If a drive is affected by the issue, it might display reduced performance and possibly would cease to operate. A hot plug removal and insertion of the affected drive temporarily resolves this issue. Update to drive firmware version HPGE to resolve this issue.

Supplemental Update / Online ROM Flash Component for Linux - MO0100EBTJT, MO0200EBTJU, and MO0400EBTJV drives
Version: HPG4 **(Optional)**
Filename: rpm/RPMS/i386/hp-firmware-72e5d6942f-HPG4-1.1.i386.rpm

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**

Fixes

Problems Fixed:

- Firmware version HPG4 resolved a wear-out issue which was caused by frequently issued PIO commands and resulted in a non-responsive drive.

Supplemental Update / Online ROM Flash Component for Linux - VB0160EAVEQ and VB0160CBCDE Drives
Version: HPG9 (C) **(Recommended)**
Filename: CP022342.md5; CP022342.scexe

Important Note!

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.

- **Customers who already installed firmware version HPG9 do not need to update to HPG9(C).**

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

Problems Fixed:
- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

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

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - VB0250EAVER Drives
Version: HPG9 (C) **(Recommended)**
Filename: CP022343.md5; CP022343.scexe

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

- **Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.**
- **Customers who already installed firmware version HPG9 do not need to update to HPG9(C).**

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

Problems Fixed:
- This firmware corrects the possibility of the drive becoming unresponsive and requiring a power cycle following a soft system reboot. This behavior appears as if the drive is no longer attached to the system following the system soft reboot. It is most often observed during Operating System Installation but can occur following any system soft reboot.
- Flashing drives connected behind an HP H2xx Host Bus Adapter (HBA) no longer causes an interrupt resulting in drive firmware installation failures.

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

Enhancements/New Features:
- Added support for UEFI (Universal Extensible Firmware Interface) based servers.

Supplemental Update / Online ROM Flash Component for Linux - VK0240GDJXU, VK0300GDUQV, VK0480GDJXV, VK0600GDUTQ, and VK0800GDJYA Drives
Version: HPG1 (C) **(Optional)**
Filename: rpm/RPMS/i386/hp-firmware-ef3ea1e703-HPG1-3.i386.rpm

Important Note!

- Online firmware flashing of drives attached to an HP Smart Array controller running in Zero Memory (ZM) mode or an HP 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 SPP and HP SUM.
- Customers who already installed firmware version HPG1 do not need to update to HPG1(C).

Fixes

Problems Fixed:

- This maintenance firmware updates temperature reporting, Sanitize Block Erase and includes read performance improvements.

Problem fixed in HPG1(B):

- Linux Smart Component fails to update firmware on SATA drive connected behind a SATA HBA controller. Component reports the firmware update was successful. However, after a power cycle, the firmware version remains unchanged.

Firmware - Storage Controller   **Top**

HP D6000 6Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)
Version: 2.98 **(Critical)**
Filename: cp029908.exe; cp029908.md5

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

IMPORTANT: Power up/down sequence is important to maintain integrity of the configuration, please refer to "HP D6000 Disk Enclosure User Guide" document for more details.

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\Verbose.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\Verbose.log and flash summary is logged to %systemdrive%\CPQSYSTEM\Log\cpqsetup.log.

Fixes

Following issue is fixed in this version of firmware:

Changed the settings in the SAS Expander to support disk discovery when 12Gb SAS HDDs are installed in the enclosure

Supported Devices and Features

HP D6000 Disk Enclosure can be connected behind any of the following devices :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P421 Controller

HP D6000 6Gb SAS Disk Enclosure ROM Flash Component for Windows (x86)
Version: 2.98 **(Critical)**
Filename: cp029005.exe; cp029005.md5

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

IMPORTANT: Power up/down sequence is important to maintain integrity of the configuration, please refer to "HP D6000 Disk Enclosure User Guide" document for more details.

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\Verbose.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\Verbose.log and flash summary is logged to %systemdrive%\CPQSYSTEM\Log\cpqsetup.log.

Fixes

Following issue is fixed in this version of firmware:

Changed the settings in the SAS Expander to support disk discovery when 12Gb SAS HDDs are installed in the enclosure

Supported Devices and Features

HP D6000 Disk Enclosure can be connected behind any of the following devices :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P421 Controller

HP D3600/D3700 12Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)

Version: 3.61 **(Critical)**

Filename: RPMS/x86_64/hp-firmware-d3600-d3700-3.61-1.1.x86_64.rpm

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

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 issues were fixed in firmware 3.61:

- Few drives moved to Not Available state after power cycle.

- False positive in sherlock: Pcfg file JBOD ID and reported ID from JBOD do not match - but there were no mismatch in logs.

Supported Devices and Features

The D3600 / D3700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller

- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller

HP D3600/D3700 12Gb SAS Disk Enclosure ROM Flash Component for Linux (x86)

Version: 3.61 **(Critical)**

Filename: RPMS/i386/hp-firmware-d3600-d3700-3.61-1.1.i386.rpm

Important Note!

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.

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 issues were fixed in firmware 3.61:

- Few drives moved to Not Available state after power cycle.
- False positive in sherlock: Pcfg file JBOD ID and reported ID from JBOD do not match - but there were no mismatch in logs.

Supported Devices and Features

The D3600 / D3700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller

HP Smart Array P822 Controller
- HP Smart Array P841 Controller

HP D3600/D3700 12Gb SAS Disk Enclosure ROM Flash Component for VMware (esxi)
Version: 3.61 **(Critical)**
Filename: CP032023.md5; CP032023.zip

Important Note!

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.

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 issues were fixed in firmware 3.61:

- Few drives moved to Not Available state after power cycle.
- False positive in sherlock: Pcfg file JBOD ID and reported ID from JBOD do not match - but there were no mismatch in logs.

Supported Devices and Features

The D3600 / D3700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller

HP D3600/D3700 12Gb SAS Disk Enclosure ROM Flash Component for Windows (x64)

Version: 3.61 **(Critical)**
Filename: cp032026.exe

Important Note!

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.

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 issues were fixed in firmware 3.61:

- Few drives moved to Not Available state after power cycle.
- False positive in sherlock: Pcfg file JBOD ID and reported ID from JBOD do not match - but there were no mismatch in logs.

Supported Devices and Features

The D3600 / D3700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller

HP D3600/D3700 12Gb SAS Disk Enclosure ROM Flash Component for Windows (x86)
Version: 3.61 **(Critical)**
Filename: cp032022.exe

Important Note!

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.

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 issues were fixed in firmware 3.61:

- Few drives moved to Not Available state after power cycle.
- False positive in sherlock: Pcfg file JBOD ID and reported ID from JBOD do not match - but there were no mismatch in logs.

Supported Devices and Features

The D3600 / D3700 Enclosure can be attached to any of the following HP Storage Controllers and Host Bus Adapters :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P421 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller

HP D6000 6Gb SAS Disk Enclosure ROM Flash Component for Linux (x64)
Version: 2.98 **(Critical)**
Filename: RPMS/x86_64/hp-firmware-smartarray-d6000-2.98-1.1.x86_64.rpm

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

IMPORTANT: Power up/down sequence is important to maintain integrity of the configuration, please refer to "HP D6000 Disk Enclosure User Guide" document for more details.

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/Verbose.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/Verbose.log and flash summary is logged to /var/cpq/Component.log.

Fixes

Following issue is fixed in this version of firmware:

Changed the settings in the SAS Expander to support disk discovery when 12Gb SAS HDDs are installed in the enclosure

Supported Devices and Features

HP D6000 Disk Enclosure can be connected behind any of the following devices :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P421 Controller

HP D6000 6Gb SAS Disk Enclosure ROM Flash Component for Linux (x86)
Version: 2.98 **(Critical)**
Filename: RPMS/i386/hp-firmware-smartarray-d6000-2.98-1.1.i386.rpm

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

IMPORTANT: Power up/down sequence is important to maintain integrity of the configuration, please refer to "HP D6000 Disk Enclosure User Guide" document for more details.

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/Verbose.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/Verbose.log and flash summary is logged to /var/cpq/Component.log.

Fixes

Following issue is fixed in this version of firmware:

Changed the settings in the SAS Expander to support disk discovery when 12Gb SAS HDDs are installed in the enclosure

Supported Devices and Features

HP D6000 Disk Enclosure can be connected behind any of the following devices :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P421 Controller

HP D6000 6Gb SAS Disk Enclosure ROM Flash Component for VMware (esxi)
Version: 2.98 **(Critical)**
Filename: CP029051.md5; CP029051.zip

Important Note!

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

IMPORTANT: Power up/down sequence is important to maintain integrity of the configuration, please refer to HP D6000 Disk Enclosure User Guide document for more details.

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/Verbose.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/Verbose.log and flash summary is logged to /var/cpq/Component.log.

Fixes

Following issue is fixed in this version of firmware:

Changed the settings in the SAS Expander to support disk discovery when 12Gb SAS HDDs are installed in the enclosure

Supported Devices and Features

HP D6000 Disk Enclosure can be connected behind any of the following devices :

- HP H222 Host Bus Adapter
- HP H221 Host Bus Adapter
- HP H241 Smart Host Bus Adapter
- HP Smart Array P731m Controller
- HP Smart Array P741m Controller
- HP Smart Array P721m Controller
- HP Smart Array P441 Controller
- HP Smart Array P431 Controller
- HP Smart Array P822 Controller
- HP Smart Array P841 Controller
- HP Smart Array P421 Controller

Online ROM Flash Component for VMware ESXi - Smart Array P212, P410, P410i, P411, P711m, P712m, and P812
Version: 6.64 (B) **(Recommended)**
Filename: CP027482.zip

Fixes

- Running SMARTCTL (smartmontools) on HP Proliant G6/G7 (Px1x) Smart Array controllers that have firmware version 5.70 to 6.62 installed with SATA drives attached may result in system not responding or reboot. When reboot occurred, a reboot 1719 POST error message with lockup 0x15 displayed.

Online ROM Flash Component for Windows (x64) - Smart Array P212, P410, P410i, P411, P711m, P712m, and P812
Version: 6.64 (B) **(Recommended)**
Filename: cp027485.exe; cp027485.md5

Fixes

- Running SMARTCTL (smartmontools) on HP Proliant G6/G7 (Px1x) Smart Array controllers that have firmware version 5.70 to 6.62 installed with SATA drives attached may result in system not responding or reboot. When reboot occurred, a reboot 1719 POST error message with lockup 0x15 displayed.

Online ROM Flash Component for Windows (x64) - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822
Version: 8.00 **(Recommended)**
Filename: cp030726.exe; cp030726.md5

Fixes

- Drive temperatures for SATA drives might not be reported after hot-inserting the drive.

- System might hang at POST following a reboot.
- System fans might go to 100% if connected drives were spun down.
- SATA SSD's were incorrectly marked as worn out.

<u>Enhancements</u>

- Increased performance of SATA drives by increasing command queue depth.

Online ROM Flash Component for Windows - Smart Array P212, P410, P410i, P411, P711m, P712m, and P812
Version: 6.64 (B) **(Recommended)**
Filename: cp027484.exe; cp027484.md5

<u>Fixes</u>

- Running SMARTCTL (smartmontools) on HP Proliant G6/G7 (Px1x) Smart Array controllers that have firmware version 5.70 to 6.62 installed with SATA drives attached may result in system not responding or reboot. When reboot occurred, a reboot 1719 POST error message with lockup 0x15 displayed.

Online ROM Flash Component for Windows - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822
Version: 8.00 **(Recommended)**
Filename: cp030725.exe; cp030725.md5

<u>Fixes</u>

- Drive temperatures for SATA drives might not be reported after hot-inserting the drive.
- System might hang at POST following a reboot.
- System fans might go to 100% if connected drives were spun down.
- SATA SSD's were incorrectly marked as worn out.

<u>Enhancements</u>

- Increased performance of SATA drives by increasing command queue depth.

Online ROM Flash Component for Windows - Smart Array P700m
Version: 7.24 (B) **(Recommended)**
Filename: cp019156.exe; cp019156.md5

<u>Important Note!</u>

Customers who already installed firmware version 7.24 do not need to update to 7.24(B).

<u>Fixes</u>

Firmware Dependency:
- Updating the HP DL360G5 System ROM to revision P58 3/9/08 or higher is required in addition to updating to this HP Smart Array firmware revision for the modified shutdown sequence to ensure sufficient time for HDD head parking of internal HDDs.
- Updating the HP MSA 60 and/or MSA 70 firmware version to 2.16 or higher is required to enable dual domain functionality.

Problems Fixed:

- Resolved an issue where the server's system event log would fill with Event ID 129 warnings and the Smart Array controller would become unresponsive.
- **FW version 7.24(B)** - Fixed an issue where a decimal conversion was not being interpreted correctly when installing the component under certain regional settings in Windows. This would cause the component installation to end with a return code 3 (already up to date) and a force install would be required to successfully update the FW.

Supplemental Update / Online ROM Flash Component for Linux (x64) - Smart Array P212, P410, P410i, P411, P711m, P712m, and P812
Version: 6.64 (B) **(Recommended)**
Filename: hp-firmware-smartarray-14ef73e580-6.64-2.x86_64.rpm

Important Note!

- **Customers who already installed firmware version 6.64 do not need to update to 6.64 (B).**

Fixes

- Running SMARTCTL (smartmontools) on HP Proliant G6/G7 (Px1x) Smart Array controllers that have firmware version 5.70 to 6.62 installed with SATA drives attached may result in system not responding or reboot. When reboot occurred, a reboot 1719 POST error message with lockup 0x15 displayed.

Supplemental Update / Online ROM Flash Component for Linux (x64) - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822
Version: 8.00 **(Recommended)**
Filename: rpm/RPMS/x86_64/hp-firmware-smartarray-46a4d957a7-8.00-1.1.x86_64.rpm

Important Note!

- When booting a system running Red Hat Enterprise Linux 7.1 Operating System, the HP Smart Array controllers might not be recognized. This issue is due to changes in the OS where the sg driver is no longer loaded during system boot. The work around for this issue is to manually issue a "**modprobe sg**" command which should load the sg driver. After the sg driver is loaded, the /dev/sg* devices should be present and the sg driver can be used to access SCSI devices.

Fixes

- Drive temperatures for SATA drives might not be reported after hot-inserting the drive.
- System might hang at POST following a reboot.
- System fans might go to 100% if connected drives were spun down.
- SATA SSD's were incorrectly marked as worn out.

Enhancements

- Increased performance of SATA drives by increasing command queue depth.

Supplemental Update / Online ROM Flash Component for Linux - Smart Array P212, P410, P410i, P411, P711m, P712m, and P812
Version: 6.64 (B) **(Recommended)**
Filename: hp-firmware-smartarray-14ef73e580-6.64-2.i386.rpm

Fixes

Running SMARTCTL (smartmontools) on HP Proliant G6/G7 (Px1x) Smart Array controllers that have firmware version 5.70 to 6.62 installed with SATA drives attached may result in system not responding or reboot. When reboot occurred, a reboot 1719 POST error message with lockup 0x15 displayed.

Supplemental Update / Online ROM Flash Component for Linux - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822

Version: 8.00 **(Recommended)**

Filename: rpm/RPMS/i386/hp-firmware-smartarray-46a4d957a7-8.00-1.1.i386.rpm

Important Note!

- When booting a system running Red Hat Enterprise Linux 7.1 Operating System, the HP Smart Array controllers might not be recognized. This issue is due to changes in the OS where the sg driver is no longer loaded during system boot. The work around for this issue is to manually issue a "**modprobe sg**" command which should load the sg driver. After the sg driver is loaded, the /dev/sg* devices should be present and the sg driver can be used to access SCSI devices.

Fixes

- Drive temperatures for SATA drives might not be reported after hot-inserting the drive.
- System might hang at POST following a reboot.
- System fans might go to 100% if connected drives were spun down.
- SATA SSD's were incorrectly marked as worn out.

Enhancements

- Increased performance of SATA drives by increasing command queue depth.

Supplemental Update / Online ROM Flash Component for Linux - Smart Array P700m

Version: 7.24 **(Recommended)**

Filename: CP017696.md5; CP017696.scexe

Important Note!

When running VMware ESX/ESXi, only offline updates are supported using the HP Smart Update Manager on the Firmware Maintenance CD.

Fixes

Firmware Dependency:
- Updating the HP DL360G5 System ROM to revision P58 3/9/08 or higher is required in addition to updating to this HP Smart Array firmware revision for the modified shutdown sequence to ensure sufficient time for HDD head parking of internal HDDs.
- Updating the HP MSA 60 and/or MSA 70 firmware version to 2.16 or higher is required to enable dual domain functionality.

Problems Fixed:
- Resolved an issue where the server's system event log would fill with Event ID 129 warnings and the Smart Array controller would become unresponsive.

Firmware - Storage Fibre Channel   **Top**

HP Firmware Flash for QLogic BR-series Fibre Channel Host Bus Adapters - Linux (x86_64)

Version: 2015.02.01 (B) **(Recommended)**

Filename: RPMS/x86_64/hp-firmware-fc-brocade-2015.02.01-2.x86_64.rpm

Important Note!

Release Notes:

HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes

Prerequisites

The HP supplied enablement kit must be installed prior to this firmware component being identified by HP SUM for deployment. The software is available from www.hp.com/go/fchba. Select your product and then select the Software and Drivers page to find the enablement kit. The enablement kit is also available on the HP Service Pack for Proliant (SPP) version 2015.03.0 which is available at www.hp.com/go/spp/download.

- HP Fibre Channel Enablement Kit for Linux, HP-FC-Brocade-Enablement-Kit-5.0.0.0-3.x86_64.rpm

Enhancements

This component contains the same payload as version 2015.02.01.   However, the resulting executable files contained within the rpm have been renamed for commonality across all HP Linux firmware components.

Contains updated boot bios version 3.2.5.0. This version is supported on the following operating systems:

- Red Hat Enterprise Linux 6 updates 5 and 6
- Red Hat Enterprise Linux 7
- SUSE Linux Enterprise Server 12

Supported Devices and Features

This firmware supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HP Firmware Flash for QLogic BR-series Fibre Channel Host Bus Adapters for vSphere 5.5 and 6.0

Version: 2015.02.01 (b) **(Recommended)**

Filename: CP025934.md5; CP025934.zip

Important Note!

Release Notes:

HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes

Enhancements

This component contains the same payload as version 2015.02.01. However, the resulting executable format has been changed from .scexe to .zip.

Contains boot bios, version 3.2.5.0.

Supported Devices and Features

This firmware supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HP Firmware Online Flash for QLogic BR-series Fibre Channel Host Bus Adapters - Windows 2008 R2/2012/2012 R2 (x64)

Version: 2015.02.01 **(Recommended)**

Filename: cp025186.exe

Important Note!

Release Notes:
[HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes](#)

Prerequisites

The HP supplied QLogic BR-series driver must be installed prior to this firmware component being identified by HP SUM for deployment. The software is available from www.hp.com/go/fchba. Select your product and then select the Software and Drivers page to find the required driver. The HP Brocade driver is also available on the HP Service Pack for Proliant (SPP) version 2015.03.0 which is available at www.hp.com/go/spp/download.

- HP Storage x64 QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2008 R2, version 3.2.5.0, cp025314.exe
- HP Storage x64 QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2012, version 3.2.5.0, cp025313.exe
- HP Storage x64 QLogic BR-series Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2012 R2, version 3.2.5.0, cp025052.exe

Enhancements

Boot bios updated to version 3.2.5.0 to synchronize with HP's QLogic BR-series 3.2.5.0 driver.

Supported Devices and Features

This firmware supports the following HP adapters:
- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters - Linux (x64)

Version: 2016.10.04 **(Recommended)**

Filename: RPMS/x86_64/hp-firmware-fc-emulex-2016.10.04-1.5.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver and enablement kit must be installed prior to this firmware component being identified by HP SUM for deployment. The driver and enablement kit are available on the HPE.com website which is available at http://www.hpe.com/.

Linux FC Driver Kit for HPE Branded Emulex FC HBAs and mezz cards, version 11.1.183.21, for RedHat 6, RedHat 7, and Novell SUSE 11, SUSE12

HPE Fibre Channel Enablement Kit for Linux, HP-CNA-FC-Emulex_Enablement-Kit, version 11.1.183.22-1

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 HBAs

Fixes

This fix resolves an issue in which 16Gb HBAs were unable to login when connected directly to a target port on 3PAR arrays

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Updated 16Gb HBA/Mezz uninversal boot

Contains:

16 Gb HBA/Mezz universal boot 11.1.183.58

8 Gb standup/mezz firmware 2.03X6

8 Gb standup universal boot image 5.21x11 (2.20a7 BIOS, 4.20a15 UEFI)

8 Gb mezzanine universal boot image 6.21x1 (3.30a14 BIOS, 4.20a15 UEFI)

Supported Devices and Features

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters - Linux (x86)

Version: 2016.10.04 **(Recommended)**

Filename: RPMS/i386/hp-firmware-fc-emulex-2016.10.04-1.3.i386.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver and enablement kit must be installed prior to this firmware component being identified by HP SUM for deployment. The driver and enablement kit are available on the HPE.com website which is available at http://www.hpe.com/.

Linux FC Driver Kit for HPE Branded Emulex FC HBAs and mezz cards, version 11.1.183.21, for RedHat 6, RedHat 7, and Novell SUSE 11, SUSE12

HPE Fibre Channel Enablement Kit for Linux, HP-CNA-FC-Emulex_Enablement-Kit, version 11.1.183.22-1

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 HBAs

Fixes

This fix resolves an issue in which 16Gb HBAs were unable to login when connected directly to a target port on 3PAR arrays

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Updated 16 Gb HBA/Mezz uninversal boot

Contains:

16 Gb HBA/Mezz universal boot 11.1.183.58

8 Gb standup/mezz firmware 2.03X6

8 Gb standup universal boot image 5.21x11 (2.20a7 BIOS, 4.20a15 UEFI)

8 Gb mezzanine universal boot image 6.21x1 (3.30a14 BIOS, 4.20a15 UEFI)

Supported Devices and Features

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Fibre Channel Host Bus and Converged Network Adapters for VMware vSphere 5.5 and 6.0

Version: 2016.10.05 **(Recommended)**

Filename: CP031843.md5; CP031843.zip

Important Note!

Release Notes:

[HPE StoreFabric Emulex Adapter Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

This fix resolves the following:

- unexpected behavior in which ProLiant Gen 9 c-class server blades equipped with 650FLB or 650M adapters may not complete Power-On Self Test (POST)
- unexpected behavior which occurred after upgrading firmware to 11.1.183.23, resulting in network ports losing connections
- unexpected behavior in which 650FLB network ports were inadvertently assigned the same MAC address, resulting in network packets being sent to the incorrect ports.
- behavior in which Microsoft Windows terminates unexpectedly
- resolves an issue in which 16Gb HBAs were unable to login when connected directly to a target port on 3PAR arrays

Enhancements

Updated CNA (XE100 series) firmware

Contains:

CNA (BE3) firmware 11.1.183.23
CNA (XE100 series) firmware 11.1.183.62
16 Gb HBA/Mezz universal boot 11.1.183.58

8 Gb standup/mezz firmware 2.03x6

8 Gb standup universal boot image 5.21x11 (2.20a7 BIOS, 4.20a15 UEFI)

8 Gb mezzanine universal boot image 6.21x1 (3.30a14 BIOS, 4.20a15 UEFI)

Supported Devices and Features

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

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 FC HBA
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter

BE3:

- HP NC552SFP 10Gb 2-port Ethernet Server Adapter
- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP Flex-10 10Gb 2-port 552M Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter

XE100 Series:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP Ethernet 10Gb 2-port 557SFP+ Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE StoreFabric CN1200E-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86)
Version: 2016.10.01 **(Recommended)**
Filename: RPMS/i386/hp-firmware-fc-qlogic-2016.10.01-1.22.i386.rpm

Important Note!

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 and enablement kit must be installed prior to this firmware component being identified by HP SUM for deployment. The software is available in the Service Pack for ProLiant 2016.10.0, which is available at http://www.hpe.com/servers/spp/download:

- SUSE Linux Enterprise Server 11 (x86) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.34.11.3-k

- HPE Fibre Channel Enablement Kit for Linux - QLogic, version 6.0.0.0-2

Enhancements

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz

  - Package 3.75.07
  - Firmware 8.02.00
  - UEFI 6.45
  - BIOS 3.31

- 16 Gb HBA/Mezz
  - Package 6.01.14
  - Firmware 8.02.51
  - UEFI 6.39
  - BIOS 3.31

Supported Devices and Features

This firmware supports the following HP adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)
Version: 2016.10.01 **(Recommended)**
Filename: RPMS/x86_64/hp-firmware-fc-qlogic-2016.10.01-1.8.x86_64.rpm

Important Note!

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 and enablement kit must be installed prior to this firmware component being identified by HP SUM for deployment. Use the appropriate software included in the Service Pack for ProLiant 2016.10.0, which is available at www.hpe.com/servers/spp/download

- Red Hat Enterprise Linux 6 Server (x86-64) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.34.06.0-k4

- Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs, version 8.07.00.34.07.0-k4

- SUSE Linux Enterprise Server 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.34.11.3-k

- SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs version 8.07.00.34.12.0-k1

- HPE Fibre Channel Enablement Kit for Linux - QLogic, version 6.0.0.0-2

Enhancements

Add support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz
  - Package 3.75.07
  - Firmware 8.02.00
  - UEFI 6.45
  - BIOS 3.31

- 16 Gb HBA/Mezz
  - Package 6.01.14
  - Firmware 8.02.51
  - UEFI 6.39
  - BIOS 3.31

- 16 Gb SN1100Q
  - Package 01.70.17
  - Firmware 8.03.05
  - UEFI 6.19

- BIOS 3.37

<u>**Supported Devices and Features**</u>

This firmware supports the following HP adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 5.5 and VMware vSphere 6.0
Version: 2016.10.01 **(Recommended)**
Filename: CP029695.md5; CP029695.zip

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

HPE StoreFabric QLogic Adapter Release Notes

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

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

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

Add support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz
  - Package 3.75.07
  - Firmware 8.02.00
  - UEFI 6.45
  - BIOS 3.31

- 16 Gb HBA/Mezz
  - Package 6.01.14
  - Firmware 8.02.51

- UEFI 6.39
- BIOS 3.31

- 16 Gb SN1100Q
  - Package 1.70.17
  - Firmware 8.03.05
  - UEFI 6.19
  - BIOS 3.37

Supported Devices and Features

This firmware supports the following HPE adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Firmware Online Flash for Emulex Fibre Channel Host Bus Adapters - Windows 2008 x86
Version: 2016.10.04 **(Recommended)**
Filename: cp031815.exe

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by HP SUM for deployment. The driver is available on the HPE.com website at http://www.hpe.com/:

HPE Storage Fibre Channel Adapter Kit for the x86 Emulex Storport Driver v11.1.145.16 cp029980.exe

Fixes

This fix resolves an issue in which 16Gb HBAs were unable to login when connected directly to a target port on 3PAR arrays

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Updated 16 Gb HBA/Mezz uninversal boot

Contains:

16 Gb HBA/Mezz universal boot 11.1.183.58

8 Gb standup/mezz firmware 2.03X6

8 Gb standup universal boot image 5.21x11 (2.20a7 BIOS, 4.20a15 UEFI)

8 Gb mezzanine universal boot image 6.21x1 (3.30a14 BIOS, 4.20a15 UEFI)

Supported Devices and Features

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Firmware Online Flash for Emulex Fibre Channel Host Bus Adapters - Windows 2008/2012/2012 R2/2016 x64
Version: 2016.10.04 **(Recommended)**
Filename: cp031813.exe

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by HP SUM for deployment. The driver is available on the HPE.com website at http://www.hpe.com/:

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver v11.1.145.16 cp029981.exe

Fixes

This fix resolves an issue in which 16Gb HBAs were unable to login when connected directly to a target port on 3PAR arrays

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Updated 16 Gb HBA/Mezz uninversal boot

Contains:

16 Gb HBA/Mezz universal boot 11.1.183.58

8 Gb standup/mezz firmware 2.03X6

8 Gb standup universal boot image 5.21x11 (2.20a7 BIOS, 4.20a15 UEFI)

8 Gb mezzanine universal boot image 6.21x1 (3.30a14 BIOS, 4.20a15 UEFI)

Supported Devices and Features

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA

HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2008 (x86)
Version: 2016.10.01 **(Recommended)**
Filename: cp028117.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 HPE supplied QLogic driver must be installed prior to this firmware component being identified by HP SUM for deployment. Use the appropriate driver included in the Service Pack for ProLiant 2016.10.0, which is available at http://www.hpe.com/servers/spp/download:

- HPE Storage Fibre Channel Adapter Kit for the x86 QLogic Storport Driver v9.1.17.22, cp028132.exe

- HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x86 QLogic Storport Driver v9.1.13.10, cp025686.exe

Enhancements

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz

    - Package 3.75.07
    - Firmware 8.02.00
    - UEFI 6.45
    - BIOS 3.31

- 16 Gb HBA/Mezz
    - Package 6.01.14
    - Firmware 8.02.51
    - UEFI 6.39
    - BIOS 3.31

Supported Devices and Features

This firmware supports the following HP adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

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HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2008/2012 (x64)
Version: 2016.10.01 **(Recommended)**
Filename: cp029691.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 HPE supplied QLogic driver must be installed prior to this firmware component being identified by HP SUM for deployment. Use the appropriate driver included in the Service Pack for ProLiant 2016.10.0, which is available at http://www.hpe.com/servers/spp/download:

- HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver v9.1.17.22, cp028133.exe
- HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2 v9.1.17.22,

cp028134.exe

- HPE Storage Fibre Channel Over Ethernet Adapter Kit for the x64 QLogic Storport Driver v9.1.13.10, cp025685.exe
- HPE Storage Fibre Channel Over Ethernet Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2 v9.1.13.10, cp025684.exe

Enhancements

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz
  - Package 3.75.07
  - Firmware 8.02.00
  - UEFI 6.45
  - BIOS 3.31

- 16 Gb HBA/Mezz
  - Package 6.01.14
  - Firmware 8.02.51
  - UEFI 6.39
  - BIOS 3.31

- 16 Gb SN1100Q
  - Package 01.70.17
  - Firmware 8.03.05
  - UEFI 6.19
  - BIOS 3.37

Supported Devices and Features

This firmware supports the following adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows Server 2016

Version: 2016.10.01 **(Recommended)**

Filename: cp030690.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 HPE supplied QLogic driver must be installed prior to this firmware component being identified by HP SUM for deployment. Use the appropriate driver included in the HPE Service Pack for ProLiant 2016.10.0, which is available at http://www.hpe.com/servers/spp/download:

- HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2016 version 9.2.2.20, cp029979.exe

Enhancements

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Updated the Firmware/BIOS/UEFI packages for 8 Gb and 16 Gb products.

- 8 Gb HBA/Mezz
  - Package 3.75.07
  - Firmware 8.02.00
  - UEFI 6.45
  - BIOS 3.31

- 16 Gb HBA/Mezz
  - Package 6.01.14
  - Firmware 8.02.51
  - UEFI 6.39
  - BIOS 3.31

- 16 Gb SN1100Q
  - Package 01.70.17
  - Firmware 8.03.05
  - UEFI 6.19
  - BIOS 3.37

Supported Devices and Features

This firmware supports the following adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Firmware - Storage Tape

HPE StoreEver Tape Firmware for Microsoft Windows
Version: 4.1.0.0 **(Optional)**
Filename: cp030021.exe

Fixes

The following issues are resolved in firmware revisions listed below:

StoreEver LTO-6 Ultrium 6250 SAS Tape Drive

Drive firmware version 35BD
Supersedes 353D

- Reduced the occurrence of a class of write failure (0x5093) events.
- Fixed a rare case where the tape drive could report an incorrect LAST LOGICAL OBJECT POSITION to the host after a **READ POSITI**ON command.
- Corrected the reporting of product IDs on Inquiry Page CCh.

StoreEver LTO-6 Ultrium 6650 SAS Tape Drive

Drive firmware version O5DD
Supersedes O53D

- Reduced the occurrence of a class of write failure (0x5093) events.
- Fixed a rare case where the tape drive could report an incorrect LAST LOGICAL OBJECT POSITION to the host after a **READ POSITI**ON command.
- Corrected the reporting of product IDs on Inquiry Page CCh.

StoreEver LTO-5 Ultrium 3000 SAS Tape Drive

Drive firmware version Z6ED
Supersedes Z64D

- Possibility of a drive reset (assert) after an off-track event due to additional write position checks introduced in previous code release.

StoreEver LTO-5 Ultrium 3280 SAS Tape Drive

Drive firmware version X6ED

Supersedes X64D

- Possibility of a drive reset (assert) after an off-track event due to additional write position checks introduced in previous code release.

Enhancements

The enhancements below are only applicable for the following firmware revisions and devices:

StoreEver LTO-6 Ultrium 6250 SAS Tape Drive

Drive firmware version 35BD
Supersedes 353D

- New error code 0x50b4 reported for a Space to EOD failure if cartridge memory (CM) indicates no valid EOD on tape.
- Improved tape alert reporting for additional types of load and read failures.
- Improved supportability by enhancing internal drive logging.
- Improved supportability by enhancing the **VERIFY** command.
    - Added Immediate mode support on primary port when VTE=1.
    - Added Verify by Filemarks (VBF) bit.
- A TapeAlert is now reported for a previously undetected CM problem.

StoreEver LTO-6 Ultrium 6650 SAS Tape Drive

Drive firmware version O5DD
Supersedes O53D

- New error code 0x50b4 reported for a Space to EOD failure if cartridge memory (CM) indicates no valid EOD on tape.
- Improved tape alert reporting for additional types of load and read failures.
- Improved supportability by enhancing internal drive logging.
- Improved supportability by enhancing the **VERIFY** command.
    - Added Immediate mode support on primary port when VTE=1.
    - Added Verify by Filemarks (VBF) bit.
- A TapeAlert is now reported for a previously undetected CM problem.

StoreEver LTO-5 Ultrium 3000 SAS Tape Drive

Drive firmware version Z6ED
Supersedes Z64D

- Added a cleaning request following a space failure.
- New error code 0x50b4 reported for a Space to EOD failure if CM indicates no valid EOD on tape.
- Added functionality to the **READ POSITION** command for support of Last Logical Object Position.
- Improved supportability by enhancing internal drive logging.
- Improved supportability by enhancing the **VERIFY** command.
    - Added the Verify to End (VTE), Verify Logical Block Protection Method (VLBPM), and Verify by Filemarks (VBF) bits.
    - Added Immediate mode support on primary port when VTE=1.
- Improved tape alert reporting for additional types of load and read failures.

StoreEver LTO-5 Ultrium 3280 SAS Tape Drive

Drive firmware version X6ED
Supersedes X64D

- Added a cleaning request following a space failure.
- New error code 0x50b4 reported for a Space to EOD failure if CM indicates no valid EOD on tape.
- Added functionality to the **READ POSITION** command for support of Last Logical Object Position.

- Improved supportability by enhancing internal drive logging.
- Improved supportability by enhancing the **VERIFY** command.
    - Added the Verify to End (VTE), Verify Logical Block Protection Method (VLBPM), and Verify by Filemarks (VBF) bits.
    - Added Immediate mode support on primary port when VTE=1.
- Improved tape alert reporting for additional types of load and read failures.

Supported Devices and Features

Supported tape drives and firmware revisons included in this package

Tape Drive	Firmware Revision
HP DAT 72 USB	ZUD4
HP DAT160 USB	WU8B
HP DAT160 SAS	WSB8
HP DAT320 USB	VUA8
HP DAT320 SAS	VSA6
HP Ultrium 232 SCSI	P61D
HP Ultrium 448 SCSI	S65D
HP Ultrium 448 SAS	T65D
HP Ultrium 460 SCSI	F63D
HP Ultrium 920 SCSI	D26D
HP Ultrium 920 SAS	C26D
HP Ultrium 920 SAS	Q51D
HP Ultrium 960 SCSI	G66D
HP Ultrium 1760 SAS	U64D
HP Ultrium 1760 SCSI	W62D
HP Ultrium 1840 SAS	A63D
HP Ultrium 1840 SCSI	B63D
HP Ultrium 3000 SAS	Z6ED
HP Ultrium 3280 SAS	X6ED
HP Ultrium 6250 SAS	35BD
HP Ultrium 6650 SAS	O5DD

Software - Lights-Out Management	**[Top](#)**

Headless Server Registry Update for Windows Server 2008 to Server 2012 R2
Version: 1.0.0.0 (l) **(Optional)**
Filename: cp029425.exe

Enhancements

- The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.
- Updated component installer to only support Windows Server 2008 to Server 2012 R2.

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)
Version: 4.6.0-0 **(Optional)**

Filename: hponcfg-4.6.0-0.x86_64.rpm

Prerequisites

This utility requires the following minimum firmware revisions:
- Integrated Lights-Out 2 firmware v1.00 or later
- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later

The management interface driver and management agents must be installed on the server.

Fixes

HPONCFG displays an appropriate error message with -w option when LOCK_CONFIGURATION is enabled.

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)

Version: 5.1.0-0 **(Recommended)**

Filename: hponcfg-5.1.0-0.x86_64.compsig; hponcfg-5.1.0-0.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 v1.10 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.

Enhancements

Introduced support for iLO 5 v1.15.

HP Lights-Out Online Configuration Utility for Linux (x86/AMD32)

Version: 4.6.0 **(Optional)**

Filename: hponcfg-4.6.0-0.i386.rpm

Prerequisites

This utility requires the following minimum firmware revisions:
- Integrated Lights-Out 2 firmware v1.00 or later
- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later

The management interface driver and management agents must be installed on the server.

Fixes

HPONCFG displays an appropriate error message with -w option when LOCK_CONFIGURATION is enabled.

HP Lights-Out Online Configuration Utility for Windows Server 2008
Version: 4.8.0.0 **(Recommended)**
Filename: cp028861.exe

Prerequisites

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 2 firmware v1.00 or later
- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later

The management interface driver must be installed on the server.

Microsoft .Net Framework 2.0 or later is required to launch HPONCFG GUI.

Fixes

- HPONCFG command line interface when used with option 's' displays an error message when substituting values for same key multiple times.
- HPONCFG allows iLO firmware update only with file extension ".bin".
- HPONCFG GUI displays valid range for VLAN ID when wrong value is set.
- Added length validation for Kerberos realm in HPONCFG GUI.
- Network settings which are not applicable for Blade Servers are now grayed out in HPONCFG GUI.

HP Lights-Out Online Configuration Utility for Windows x64 Editions
Version: 5.1.0.0 **(Recommended)**
Filename: cp032766.compsig; cp032766.exe

Important Note!

HPONCFG for Windows Server supports iLO in PRODUCTION/HIGH/FIPS security state only.

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 v1.10 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

- Higher security states support enabled in HPONCFG when iLO is set to HIGH/FIPS Security States.
- Use /u and /p command line arguments when iLO is in HIGH/FIPS Security States.
- HPONCFG is now signed by Hewlett Packard Enterprise.

Note: Command line user name and password override those which are in the script file.

PFA Server Registry Update for Windows Server 2008 R2 to Server 2012 R2
Version: 1.0.0.0 (G) **(Optional)**
Filename: cp029408.exe

Enhancements

Updated component installer to only support Windows Server 2008 R2 to Server 2012 R2.

Broadcom Active Health System Agent for HPE ProLiant Network Adapters for Linux i586
Version: 1.0.20-1 **(Optional)**
Filename: hp-tg3sd-1.0.20-1.i586.rpm; hp-tg3sd-1.0.20-1.i586.txt

Fixes

This product addresses an issue where the tg3sd daemon must be started after rpm installation.

Supported Devices and Features

This software supports the following Broadcom network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (18D2)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 2-port 332i Adapter (2133)
- HP Ethernet 1Gb 2-port 332T Adapter

Broadcom Active Health System Agent for HPE ProLiant Network Adapters for Linux x86_64
Version: 1.0.20-1 **(Optional)**
Filename: hp-tg3sd-1.0.20-1.x86_64.rpm; hp-tg3sd-1.0.20-1.x86_64.txt

Fixes

This product addresses an issue where the tg3sd daemon must be started after rpm installation.

Supported Devices and Features

This software supports the following Broadcom network adapters:

- HP Ethernet 1Gb 2-port 330i Adapter (182D)
- HP Ethernet 1Gb 2-port 330i Adapter (22BD)
- HP Ethernet 1Gb 4-port 331i Adapter (3372)
- 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 (2133)
- HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- HP Ethernet 1Gb 2-port 332T Adapter

HPE Intel esx-provider for VMware
Version: 2016.10.07 **(Optional)**
Filename: cp029084.zip

Fixes

This product resolves an issue where an excessive number of error messages is logged.

Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 4-port 366T Adapter
- 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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 562SFP+ Adapter

Intel Active Health System Agent for HPE ProLiant Network Adapters for Linux i586
Version: 1.1.80.0-1 **(Optional)**
Filename: hp-ocsbbd-1.1.80.0-1.i586.rpm; hp-ocsbbd-1.1.80.0-1.i586.txt

Fixes

This product addresses an issue where the ocsbbd daemon must be started after rpm installation.

This product addresses an issue where there is a discrepancy in the display of the NIC firmware version and serial number on the Active Health System (AHS) Dashboard.

Supported Devices and Features

This software supports the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter

- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 2-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- 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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

Intel Active Health System Agent for HPE ProLiant Network Adapters for Linux x86_64

Version: 1.1.80.0-1 **(Optional)**

Filename: hp-ocsbbd-1.1.80.0-1.x86_64.rpm; hp-ocsbbd-1.1.80.0-1.x86_64.txt

Fixes

This product addresses an issue where the ocsbbd daemon must be started after rpm installation.

This product addresses an issue where there is a discrepancy in the display of the NIC firmware version and serial number on the Active Health System (AHS) Dashboard.

Supported Devices and Features

This software supports the following Intel network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- HP Ethernet 1Gb 2-port 361FLB Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 2-port 364i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 4-port 366M Adapter
- HP Ethernet 1Gb 2-port 367i Adapter
- 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
- HP Ethernet 10Gb 2-port 561FLR-T Adapter
- HP Ethernet 10Gb 2-port 561T Adapter
- HP Ethernet 10Gb 2-port 562i Adapter

Software - Storage Controller

HP ProLiant Smart Array SAS/SATA Event Notification Service for for 64-bit Windows Server Editions

Version: 6.46.0.64 (A) **(Optional)**

Filename: cp030137.exe

Enhancements

Added support for Microsoft Windows Server 2016

HP ProLiant Smart Array SAS/SATA Event Notification Service for Windows Server 2008 (x86) 32-bit
Version: 6.36.0.32 **(Optional)**
Filename: cp021155.exe

Fixes

Fixed issue in which "last lockup code" was not being reported in proper hex format.

Enhancements

- Added support for new PHY disabled event.
- Added support for new PHY threshold exceeded events.

Software - Storage Fibre Channel	

Emulex Fibre Channel driver component for VMware vSphere 5.5
Version: 2016.10.02 (B) **(Recommended)**
Filename: cp031675.zip

Important Note!

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

Fixes

This driver version, 11.1.183.43, resolves an unexpected behavior where I/O operations appear unresponsive when T10 DIF is enabled on the host.

Enhancements

This driver, version 11.1.183.43, adds support for the following devices:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter

- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA

Emulex Fibre Channel driver component for VMware vSphere 6.0

Version: 2016.10.02 (B) **(Recommended)**

Filename: cp031676.zip

Important Note!

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

Fixes

This driver version, 11.1.183.43, resolves an unexpected behavior where I/O operations appear unresponsive when T10 DIF is enabled on the host.

Enhancements

This driver, version 11.1.183.43, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter

HP CN1100E Dual Port Converged Network Adapter

- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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

QLogic BR-series Fibre Channel driver component for VMware vSphere 5.5/6.0
Version: 2016.06.01 **(Recommended)**
Filename: cp028780.zip

Important Note!

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

To keep drivers and boot code synchronized, be sure to update your adapter with the latest boot image from www.hpe.com before you install or update adapter driver packages.

Fixes

This driver version corrects a system instability issue seen on VMware vSphere 6.0.

Enhancements

Updated driver version to 3.2.6.0.

This driver will identify 8Gb HBA cards as "QLogic" or "QLogic BR-series" in product description displays.

Supported Devices and Features

This driver component supports the following HPE adapters:

- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter

QLogic Fibre Channel driver component for VMware vSphere 5.5
Version: 2016.12.01 **(Recommended)**
Filename: cp031259.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.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

http://www.hpe.com/storage/spock/

Fixes

Fix for an unexpected behavior in the Hewlett Packard Enterprise QLogic 16Gb Fibre Channel HBA firmware which causes a small amount of resources within the HBA to remain unavailable for use following Read Diagnostic Parameter (RDP) exchanges. Over time this can result in an unresponsive system.

Enhancements

Updated driver component for VMware vSphere 5.5 with version 1.1.77.0

Supported Devices and Features

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA

QLogic Fibre Channel driver component for VMware vSphere 6.0
Version: 2016.10.01 **(Recommended)**
Filename: cp028144.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.

Fixes

This driver version resolves the following:

- Corrected multiple PSODs
- Corrected instance where the system terminates unexpectedly while running scsi passthru traffic
- Corrected instances where certain port states were not being displayed properly in a user-space application

Enhancements

Updated the driver component for VMware vSphere 6.0 with driver version 2.1.50.0.

Added support for the following devices:

- 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 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP CN1000Q Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HP Synergy 3830C 16G Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA

Software - Storage Fibre Channel HBA	

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86)

Version: 3.3-1 **(Optional)**

Filename: fibreutils-3.3-1.i386.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

General update.

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)
Version: 3.3-1 (B) **(Optional)**
Filename: fibreutils-3.3-1.x86_64.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

General update.

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)
Version: 3.3-3 **(Optional)**
Filename: fibreutils-3.3-3.x86_64.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

General update.

HP Fibre Channel Enablement Kit for Linux - QLogic BR-Series
Version: 5.0.0.0 (D) **(Recommended)**
Filename: HP-FC-Brocade-Enablement-Kit-5.0.0.0-3.x86_64.rpm

Important Note!

Release Notes:
[HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes](#)

Enhancements

Added support for Red Hat Enterprise Linux 7 operating system

Supported Devices and Features

- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HPE Emulex Smart SAN Enablement Kit for Linux

Version: 1.0.0.0-2 **(Optional)**

Filename: hpe-emulex-smartsan-enablement-kit-1.0.0.0-2.noarch.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. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added support for the HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

Supported Devices and Features

- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- 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
- HP Fibre Channel 16Gb LPe1605 Mezz Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter

HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems
Version: 1.0.0.1 (c) **(Optional)**
Filename: cp030472.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. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added support for the HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

Added support for Microsoft Windows Server 2016 operating system

Supported Devices and Features

- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- 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
- HP Fibre Channel 16Gb LPe1605 Mezz Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Fibre Channel Enablement Kit for Linux - QLogic

Version: 6.0.0.0-2 **(Recommended)**

Filename: HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-2.noarch.rpm

Important Note!

Release Notes:
[HPE StoreFabric QLogic Adapters Release Notes](#)

Enhancements

Updated the kit to version 6.0.0.0-2

Added support for the following devices:

- 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 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This version of Enablement kit supports following Devices:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA

HPE Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server - Emulex

Version: 11.1.183.22 **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.rhel6.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

This kit, version 11.1.183.22, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server - Emulex
Version: 11.1.183.22 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.rhel7.x86_64.rpm

Important Note!

Release Notes:

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

This kit, version 11.1.183.22, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 11 (AMD64/EM64T) - Emulex

Version: 11.1.183.22 (C) **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles11sp3.x86_64.rpm; HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles11sp4.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Adapters Release Notes](#)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

This kit, version 11.1.183.22, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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

Version: 11.1.183.22 **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles11sp3.i386.rpm; HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles11sp4.i386.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version 11.1.183.22

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 12- Emulex

Version: 11.1.183.22 **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles12sp0.x86_64.rpm; HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles12sp1.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the

libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Updated to version 11.1.183.22

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA

HPE Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 12- Emulex
Version: 11.1.183.38 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.38-1.sles12sp2.x86_64.rpm

Important Note!

Release Notes:
[HPE StoreFabric Emulex Adapters Release Notes](#)

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

Initial support for SUSE Linux Enterprise Server 12.

Initial support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 Fibre Channel Enablement Kit for SUSE Linux Enterprise Server 12- Emulex

Version: 11.1.183.22 (C) **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles12sp0.x86_64.rpm; HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.sles12sp1.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Enhancements

This kit, version 11.1.183.22, adds support for the following devices:

- 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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- 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 QLogic Smart SAN enablement kit for Linux

Version: 3.3-1 **(Optional)**

Filename: hpe-qlogic-smartsan-enablement-kit-3.3-1.noarch.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. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

This is the initial release of a configurable component using the QLogic Smart SAN executable.

Supported Devices and Features

- HP 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

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HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems
Version: 1.0.0.1 (b) **(Optional)**
Filename: cp030243.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.

<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. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

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

Added support for Microsoft Windows Server 2016 operating system

<u>**Supported Devices and Features**</u>

This enablement kit is supported on the following HPE adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Software - System Management	**Top**

HP ProLiant DL980 System Providers for Windows Server x64 Editions
Version: 9.3.0.2 (B) **(Recommended)**
Filename: cp024577.exe

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

Component packaging has been updated; no impact to product's functionality

HPE Insight Management Agents for Windows Server
Version: 10.60.0.0 **(Optional)**
Filename: cp030266.exe

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

Change in existing feature with SNMP as data source:

The existing feature on SMH, "*SMH->SNMP & Agents Settings->Threshold Text mode*" will depends on Java runtime (JRE) when it is set to 'UI Mode' i.e.Disable . And in this mode it is observed that, the recent Java versions (v7.x onwards) is taking significant amount of time to load the webapp links on SMH which is affecting the agents performance.So, this feature is modified to disable the 'UI mode' and display the threshold

settings only in '*Text mode*' from HP Insight Management Agents v10.50.0.0 and later releases.

Prerequisites

SNMP Service.

Fixes

The following items have been fixed:

Server / Foundation Agents:

- VCA showing incorrect installed version of Advanced Power Capping
- Incorrect memory rank information displayed in SMH
- Agents reporting degraded events when cluster resource of Virtual Machine type is taken offline
- Hyphens are now allowed in SNMP community name
- "NVRAM space" field is missing in SMH iLO Self Test results
- Incorrect name of NIC cards displayed under PCI Devices in SMH
- RNVDIMM Technology is not displayed correctly in SMH
- Incorrect name of Mellanox adapters in PCI Devices
- CSRF vulnerabilities have been rectified in the SMH Settings tab
- SMH links which has Threshold settings feature are taking long time to load/refresh in UI Mode. This mode will use Java Runtime(JRE) and latest Java releases (7.x or later) is causing the delay. So, the UI Mode is disabled and now the Threshold settings will display in Text Mode only.
- Event Notifier Not Sending Email alert for storage system Power Supply failure trap.
- Dispalying rebranded name 'HPE' in Agents Control panel Applet
- On SMH Wrong OS name displaying for core OS installation
- cpqHeResMem2ModuleTechnology showing wrong values
- cpqHeFltTolPwrSupplyStatus showing wrong value .

Enhancements

Server/Foundation Agents:

- Update NIC device database.

HPE Insight Management Agents for Windows Server x64 Editions
Version: 10.60.0.0 **(Optional)**
Filename: cp030048.exe

Prerequisites

SNMP service.

Fixes

The following items have been fixed:

Server / Foundation Agents:

- VCA showing incorrect installed version of Advanced Power Capping
- Incorrect memory rank information displayed in SMH

- Agents reporting degraded events when cluster resource of Virtual Machine type is taken offline
- Hyphens are now allowed in SNMP community name
- "NVRAM space" field is missing in SMH iLO Self Test results
- Incorrect name of NIC cards displayed under PCI Devices in SMH
- RNVDIMM Technology is not displayed correctly in SMH
- Incorrect name of Mellanox adapters in PCI Devices
- CSRF vulnerabilities have been rectified in the SMH Settings tab.
- SMH links which has Threshold settings feature are taking long time to load/refresh in UI Mode. This mode will use Java Runtime(JRE) and latest Java releases (7.x or later) is causing the delay. So, the UI Mode is disabled and now the Threshold settings will display in Text Mode only.
- Event Notifier Not Sending Email alert for storage system Power Supply failure trap.
- Dispalying rebranded name 'HPE' in Agents Control panel Applet
- On SMH Wrong OS name displaying for WS2k16 Storage Server
- On SMH Wrong OS name displaying for core OS installation.
- cpqHeResMem2ModuleTechnology showing wrong values
- cpqHeFltTolPwrSupplyStatus showing wrong value .

Enhancements

- WS2016 OS Support

Server/Foundation Agents:

- Update NIC device database.

Network Agents:

Added support for following network adapters:

- HPE Ethernet 25Gb 4-port 620QSFP28 Adapter
- HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
- HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE FlexFabric 10Gb 2-port 556FLB Adapter
- HPE Synergy 10Gb 2-port 2820C Converged Network Adapter
- HPE Synergy 3520C 10/20Gb Converged Network Adapter
- HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE Insight Management WBEM Providers for Windows Server
Version: 10.60.0.0 **(Optional)**
Filename: cp030090.exe

Important Note!

Version 10.60.0.0 will be the last HPE Insight Management WBEM Providers release. Though HPE Insight Management WBEM Providers 10.60.0.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers.

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.

Fixes

- Fixed the issue with Insight Management WBEM override root\interop namespace for Hyper-V.

- 50% slow performance/backup issue with HP Ultrium/LTO polling issues.

- Tape backup fails randomly (irrespective of any server or controller/backup software) when HPE Insight Management WBEM Providers is upgraded to version 10.X.

- Providers are causing spare drives to be spun up every few minutes.

Enhancements

Added support for new ProLiant servers and options.

HPE Insight Management WBEM Providers for Windows Server x64 Editions
Version: 10.61.0.0 **(Optional)**
Filename: cp031735.exe

Important Note!

Version 10.61.0.0 will be the last HPE Insight Management WBEM Providers release to support Gen8 servers and below.

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.

Fixes

None

Enhancements

- Applied a SHA-256 digital signature to the WBEM Providers MSI file as well as all the binary files contained in it.
- Allowed installation to proceed on systems with the Windows Remote Registry service disabled.

HPE Smart Storage Administrator (HPE SSA) CLI for Linux
Version: 2.65-7.0 **(Optional)**
Filename: ssacli-2.65-7.0.i386.compsig; ssacli-2.65-7.0.i386.rpm; ssacli-2.65-7.0.i386.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.

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit
Version: 2.60-19.0 **(Optional)**
Filename: ssacli-2.60-19.0.x86_64.rpm; ssacli-2.60-19.0.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

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit
Version: 2.65-7.0 **(Optional)**
Filename: ssacli-2.65-7.0.x86_64.compsig; ssacli-2.65-7.0.x86_64.rpm; ssacli-2.65-7.0.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.

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator (HPE SSA) CLI for Windows
Version: 2.50.5.0 **(Optional)**

Filename: cp028650.exe

<u>Important Note!</u>

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.

<u>Enhancements</u>

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for Smart Array Px4x Controllers

Added ability to enable erase and stop erase on multiple drives

Added dual path support when specifying physical drives on the create/move/add/remove/and heal commands, for example:

ctrl slot=1 create type=ld drives=[1e:1:1,1e:4:1],[1e:1:2,1e:4:2]

Scripting now accepts drive input of the form:

Drive= 1E:1:1 [2E:2:1],…

On playback, Scripting will attempt to find the first path, 1E:1:1. If this doesn't exist, it will try the second path, 2E:2:1.

This change is to support dual domain systems where different controllers in a system may not see the same paths to a targeted physical drive.

HPE Smart Storage Administrator (HPE SSA) CLI for Windows 64-bit
Version: 2.65.7.0 **(Optional)**
Filename: cp031009.exe

<u>Important Note!</u>

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.

<u>Fixes</u>

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator (HPE SSA) for Linux
Version: 2.65-7.0 **(Optional)**
Filename: ssa-2.65-7.0.i386.compsig; ssa-2.65-7.0.i386.rpm; ssa-2.65-7.0.i386.txt

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.

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator (HPE SSA) for Linux 64-bit
Version: 2.60-18.0 **(Optional)**
Filename: ssa-2.60-18.0.x86_64.rpm; ssa-2.60-18.0.x86_64.txt

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

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator (HPE SSA) for Linux 64-bit
Version: 2.65-7.0 **(Optional)**
Filename: ssa-2.65-7.0.x86_64.compsig; ssa-2.65-7.0.x86_64.rpm; ssa-2.65-7.0.x86_64.txt

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.

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator (HPE SSA) for Windows
Version: 2.50.5.0 **(Optional)**
Filename: cp028648.exe

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.

Enhancements

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator (HPE SSA) for Windows 64-bit
Version: 2.65.7.0 **(Optional)**
Filename: cp031007.exe

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.

<u>Fixes</u>

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux
Version: 2.65-7.0 **(Optional)**
Filename: ssaducli-2.65-7.0.i386.compsig; ssaducli-2.65-7.0.i386.rpm; ssaducli-2.65-7.0.i386.txt

<u>Important Note!</u>

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).

<u>Fixes</u>

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit
Version: 2.60-18.0 **(Optional)**
Filename: ssaducli-2.60-18.0.x86_64.rpm; ssaducli-2.60-18.0.x86_64.txt

<u>Important Note!</u>

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).

<u>Enhancements</u>

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit
Version: 2.65-7.0 **(Optional)**
Filename: ssaducli-2.65-7.0.x86_64.compsig; ssaducli-2.65-7.0.x86_64.rpm; ssaducli-2.65-7.0.x86_64.txt

<u>Important Note!</u>

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).

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Windows

Version: 2.50.5.0 **(Optional)**

Filename: cp028652.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

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for Smart Array Px4x Controllers

Added ability to enable erase and stop erase on multiple drives

Added dual path support when specifying physical drives on the create/move/add/remove/and heal commands, for example:

ctrl slot=1 create type=ld drives=[1e:1:1,1e:4:1],[1e:1:2,1e:4:2]

Scripting now accepts drive input of the form:

Drive= 1E:1:1 [2E:2:1],…

On playback, Scripting will attempt to find the first path, 1E:1:1. If this doesn't exist, it will try the second path, 2E:2:1.

This change is to support dual domain systems where different controllers in a system may not see the same paths to a targeted physical drive.

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Windows 64-bit

Version: 2.65.7.0 **(Optional)**

Filename: cp031011.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).

Fixes

SSA incorrectly displays 64 characters for the encryption master key length in local mode. The length was changed to 32 characters.

HPE SNMP Agents for Red Hat Enterprise Linux 6 (AMD64/EM64T)

Version: 10.6.1 **(Optional)**

Filename: hp-snmp-agents-10.61-2939.2.rhel6.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

> *rpm –qp –-requires hp-snmp-agents-<version>.rpm*

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

HPE SNMP Agents for Red Hat Enterprise Linux 6 (x86)

Version: 10.6.1 **(Optional)**

Filename: hp-snmp-agents-10.61-2939.2.rhel6.i686.rpm

Prerequisites

The **hp-snmp-agents** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

Enhancements

cpqnicd stability improvements

HPE SNMP Agents for Red Hat Enterprise Linux 7 Server

Version: 10.6.1 **(Optional)**

Filename: hp-snmp-agents-10.61-2939.2.rhel7.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

HPE SNMP Agents for SUSE LINUX Enterprise Server 11 (AMD64/EM64T)
Version: 10.6.1 **(Optional)**
Filename: hp-snmp-agents-10.61-2939.2.sles11.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

HPE SNMP Agents for SUSE LINUX Enterprise Server 11 (x86)
Version: 10.6.1 **(Optional)**
Filename: hp-snmp-agents-10.61-2939.2.sles11.i586.rpm

Prerequisites

The **hp-snmp-agents** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

Enhancements

cpqnicd stability improvements

HPE SNMP Agents for SUSE LINUX Enterprise Server 12
Version: 10.5.0 **(Optional)**
Filename: hp-snmp-agents-10.50-2926.40.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

- SMH showing complete 'System ROM' version in System section.
- cmahostd handles nfs and autofs mount point to fix performance problem.

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

Added support for the following storage controllers:

- HPE Smart Array P240nr Controller
- HPE Smart HBA H240nr Controller
- HPE Smart Array P542D Controller

Added support for the following network adapters:

- HPE Synergy 3520C 10/20Gb Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Ethernet 25Gb 4-port 620SFP28 Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter

HPE SNMP Agents for SUSE LINUX Enterprise Server 12
Version: 10.6.1 **(Optional)**
Filename: hp-snmp-agents-10.61-2939.2.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

> ***rpm –qp –-requires hp-snmp-agents-<version>.rpm***

Fixes

Fixed the following items:

- Files in directories under /var/spool/compaq/hpasm/registry/ have SGID bit set
- Total MEM shows"0MB" w/ 32pcs 128G DIMM in SMH-System Board in Linux
- HPSUM discovery works for G7 platforms

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 6 (AMD64/EM64T)
Version: 10.6.0 (a) **(Optional)**
Filename: hp-health-10.60-1838.1.rhel6.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

> rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 6 (x86)
Version: 10.6.0 (a) **(Optional)**
Filename: hp-health-10.60-1838.1.rhel6.i686.rpm

Prerequisites

The **hp-health** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-health, type:

> rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 7 Server
Version: 10.6.0 (a) **(Optional)**
Filename: hp-health-10.60-1838.1.rhel7.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

> rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 11 (AMD64/EM64T)
Version: 10.6.0 (a) **(Optional)**
Filename: hp-health-10.60-1838.1.sles11.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

> rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 11 (x86)

Version: 10.6.0 (a) **(Optional)**

Filename: hp-health-10.60-1838.1.sles11.i586.rpm

Prerequisites

The **hp-health** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-health, type:

rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 12

Version: 10.5.0 **(Optional)**

Filename: hp-health-10.50-1826.37.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm –qp –requires hp-health-< version >.rpm

Fixes

- iLO reset doesn't affect running hp-health service.
- Fixed an issue where hp-health was consuming 100% CPU utilization on hpasmxld (iLO2).
- After modifying execution order of asr and hp-health service, hp-asrd runs properly.
- Fixed hp-health and iLO target connectivity issue.
- The hpasmcli command 'show server' now displays embedded NICs.

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

HPE System Health Application and Command Line Utilities for SUSE LINUX Enterprise Server 12
Version: 10.6.0 (a) **(Optional)**
Filename: hp-health-10.60-1838.1.sles12.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- File permissions for hp-health services
- HPSUM discovery works with G7 platforms

Enhancements

- Fixed hp-health to work with linux kernel versions 4.X

HPE System Management Homepage for Linux (AMD64/EM64T)
Version: 7.6.0-11 **(Recommended)**
Filename: hpsmh-7.6.0-11.x86_64.rpm

Important Note!

Version 7.6.0 will be the last SMH release. Though SMH 7.6.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers. Any future patch releases will be available, only on SMH web page. Please refer to HPE SMH [Release Notes](#)

Prerequisites

Before installing the SMH software, the RPM verifies that the required versions of Linux library dependencies are present. If any dependencies are not present, then a list of the missing dependencies is provided. The user must manually install all missing dependencies to satisfy the prerequisites before proceeding with the RPM installation.

Fixes

- Proper handling of Single Sign-On requests and certificates, which are in bad format
- HPE Rebranding changes

Enhancements

- Updated the following components:

    - PHP to version 5.5.38

    - Curl to version 7.49.1

    - OpenSSL to version 1.0.2h

    - Libxml2 to version libxml2-2.9.4

- SSL Cipher Suite is set to TLSv1.2 as default

- Improved Security features [Please find more details in the Security Bulletin (ID: HPSBMU03653)]

HPE System Management Homepage for Linux (x86)

Version: 7.6.0-11 **(Recommended)**

Filename: hpsmh-7.6.0-11.i386.rpm

Important Note!

Version 7.6.0 will be the last SMH release. Though SMH 7.6.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers. Any future patch releases will be available, only on SMH web page. Please refer to HPE SMH Release Notes

Prerequisites

Before installing the SMH software, the RPM verifies that the required versions of Linux library dependencies are present. If any dependencies are not present, then a list of the missing dependencies is provided. The user must manually install all missing dependencies to satisfy the prerequisites before proceeding with the RPM installation.

Fixes

- Proper handling of Single Sign-On requests and certificates, which are in bad format
- HPE Rebranding changes

Enhancements

- Updated the following components:

    - PHP to version 5.5.38

    - Curl to version 7.49.1

    - OpenSSL to version 1.0.2h

    - Libxml2 to version libxml2-2.9.4

SSL Cipher Suite is set to TLSv1.2 as default

- Improved Security features [Please find more details in the Security Bulletin (ID: HPSBMU03653)]

HPE System Management Homepage for Windows x64

Version: 7.6.0.11 **(Recommended)**

Filename: cp029674.exe

Important Note!

Version 7.6.0 will be the last SMH release. Though SMH 7.6.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers. Any future patch releases will be available, only on SMH web page. Please refer to HPE SMH Release Notes

Fixes

- Proper handling of Single Sign-On requests and certificates, which are in bad format
- HPE Rebranding changes

Enhancements

- Updated the following components:

  - PHP to version 5.5.38

  - Curl to version 7.49.1

  - OpenSSL to version 1.0.2h

  - Libxml2 to version libxml2-2.9.4

- SSL Cipher Suite is set to TLSv1.2 as default

- Improved Security features [Please find more details in the Security Bulletin (ID: HPSBMU03653)]

HPE System Management Homepage for Windows x86

Version: 7.6.0.11 **(Recommended)**

Filename: cp029673.exe

Important Note!

Version 7.6.0 will be the last SMH release. Though SMH 7.6.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers. Any future patch releases will be available, only on SMH web page. Please refer to HPE SMH Release Notes

Fixes

- Proper handling of Single Sign-On requests and certificates, which are in bad format
- HPE Rebranding changes

Enhancements

- Updated the following components:

- PHP to version 5.5.38

- Curl to version 7.49.1

- OpenSSL to version 1.0.2h

- Libxml2 to version libxml2-2.9.4

- SSL Cipher Suite is set to TLSv1.2 as default

- Improved Security features [Please find more details in the Security Bulletin (ID: HPSBMU03653)]

HPE System Management Homepage Templates for Linux
Version: 10.5.0 **(Optional)**
Filename: hp-smh-templates-10.5.0-1462.26.noarch.rpm

Important Note!

The HP System Health Application and Insight Management Agents (hpasm) version 8.0.0 was split into three individual rpm packages:

- HP System Health Application and Command Line Utilities (hp-health) version 8.1.0
- HP SNMP Agents (hp-snmp-agents) version 8.1.0
- HP System Management Homepage Templates (hp-smh-templates) version 8.1.0

These three packages provide equivalent functionality as hpasm v8.0.0 and allow for more modular installation choices.

Prerequisites

To get the list of all dependency files for hp-smh-templates type:

rpm –qp –-requires hp-smh-templates-<version>.rpm

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

HPE System Management Homepage Templates for Linux
Version: 10.6.1 **(Optional)**
Filename: hp-smh-templates-10.6.1-1481.4.noarch.rpm

Important Note!

The HP System Health Application and Insight Management Agents (hpasm) version 8.0.0 was split into three individual rpm packages:

- HP System Health Application and Command Line Utilities (hp-health) version 8.1.0
- HP SNMP Agents (hp-snmp-agents) version 8.1.0
- HP System Management Homepage Templates (hp-smh-templates) version 8.1.0

These three packages provide equivalent functionality as hpasm v8.0.0 and allow for more modular installation choices.

Prerequisites

The **hp-smh-templates** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required

by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-smh-templates type:

rpm –qp –-requires hp-smh-templates-<version>.rpm

Fixes

Fixed the following items:

- NIC tab is now visible on SMH Home page after setting data source as snmp

- HPSUM discovery works for G7 platforms

Insight Diagnostics Online Edition for Linux (x86 32-bit)
Version: 10.60.2109 **(Recommended)**
Filename: hpdiags-10.60.2109-2176.linux.i586.rpm

Important Note!

The online version of Insight Diagnostics provides the same functionality as the Survey Utility for Windows and Linux and does not perform any hardware tests on the system. Although not required, it is recommended that you uninstall the current Survey Utility for Windows or Linux before beginning the installation of Insight Diagnostics Online Edition.

Prerequisites

The following component(s) are required for Insight Diagnostics Online Edition for Linux:

- System Management Homepage, version 7.0.0-12 or higher

The following component(s) are recommended for HP Insight Diagnostics Online Edition for Linux to make full use of its capabilities:

- System Health Application, version 9.0.0 or higher

Fixes

- Translations fixes.
- Fixed a problem where saving the survey with a system with 124+ luns failed.
- Fixed a problem where the crontab entry from the Insight Diagnostics schedule feature was not removed when unistalled.

Enhancements

Addded support for P542D storage controller.
Added support for NVIDIA Tesla K40 XL 12Gb Module.
Support Wellsburg 6-Port SATA Controller.
Support for new Gen9 systems.

See the [Service Pack for ProLiant Release Notes](#) for more information.

See the [Service Pack for ProLiant Server Support Guide](#) for information on supported servers.

Insight Diagnostics Online Edition for Linux (x86-64)

Version: 10.60.2109 **(Recommended)**

Filename: hpdiags-10.60.2109-2176.linux.x86_64.rpm

Important Note!

The online version of Insight Diagnostics provides the same functionality as the Survey Utility for Windows and Linux and does not perform any hardware tests on the system. Although not required, it is recommended that you uninstall the current Survey Utility for Windows or Linux before beginning the installation of Insight Diagnostics Online Edition.

Prerequisites

The following component(s) are required for Insight Diagnostics Online Edition for Linux:

- System Management Homepage, version 7.0.0-12 or higher

The following component(s) are recommended for Insight Diagnostics Online Edition for Linux to make full use of its capabilities:

- System Health Application, version 9.0.0 or higher

You can install them by using the SPP or downloading them individually from HPE Support Center.

Fixes

- Translations fixes.
- Fixed a problem where saving the survey with a system with 124+ luns failed.
- Fixed a problem where the crontab entry from the Insight Diagnostics schedule feature was not removed when unistalled.

Enhancements

Addded support for P542D storage controller.
Added support for NVIDIA Tesla K40 XL 12Gb Module.
Support Wellsburg 6-Port SATA Controller.
Support for new Gen9 systems.

See the [Service Pack for ProLiant Release Notes](#) for more information.

See the [Service Pack for ProLiant Server Support Guide](#) for information on supported servers.

Insight Diagnostics Online Edition for Windows

Version: 10.60.2116.0 **(Recommended)**

Filename: cp028680.exe

Important Note!

Known Limitations

1. Under Insight Diagnostics Online Edition for Windows, the Survey feature no longer supports displaying properties of Logical Drives that are attached to certain Smart Array controllers, either directly or through an enclosure (such as an Modular Smart Array). The controllers affected are:

- Smart Array 6i Controller

- Smart Array 641 Controller
- Smart Array 642 Controller
- Smart Array 6402 Controller
- Smart Array 6404 Controller

These controllers do not support the commands used to obtain logical drive properties. There are currently no plans to add such support to the controllers, nor to add legacy support to future versions of Insight Diagnostics.

As a work-around, Insight Diagnostics Online Edition for Windows, version **8.5 or earlier**, may be used to display logical drive properties in Survey. The Array Configuration Utility, available from hpe.com, can also display information about logical drives attached to these controllers.

2. Windows Server 2008 R2 SP1 is the minimum requirement for Gen9 platforms.

3. Adaptec devices are no longer supported on this version, please use version 10.16.1650 for this.

Other:

1. The online version of Insight Diagnostics provides the same functionality as the Survey Utility for Windows and Linux and does not perform any hardware tests on the system. Although not required, it is recommended that you uninstall the current Survey Utility for Windows or Linux before beginning the installation of Insight Diagnostics Online Edition.

Prerequisites

The following component(s) are required for Insight Diagnostics Online Edition for Windows:

- System Management Homepage, version 7.0.0-12 or higher

The following component(s) are recommended for Insight Diagnostics Online Edition for Windows to make full use of its capabilities:

- ProLiant Agentless Management Service, version 9.0.0.0 or higher
- ProLiant Integrated Lights-Out Management Interface Driver, version 1.15.0.0 or higher

Fixes

- Translations fixes.
- Fixed a problem where saving the survey with a system with 124+ luns failed.

Enhancements

Addded support for P542D storage controller.
Added support for NVIDIA Tesla K40 XL 12Gb Module.
Support Wellsburg 6-Port SATA Controller.
Support for new Gen9 systems.

See the [Service Pack for ProLiant Release Notes](#) for more information.

See the [Service Pack for ProLiant Server Support Guide](#) for information on supported servers.

Insight Diagnostics Online Edition for Windows x64 Editions

Version: 10.60.2116.0 **(Recommended)**
Filename: cp028679.exe

Important Note!

Known Limitations

1. Under Insight Diagnostics Online Edition for Windows, the Survey feature no longer supports displaying properties of Logical Drives that are attached to certain Smart Array controllers, either directly or through an enclosure (such as an Modular Smart Array). The controllers affected are:

- Smart Array 6i Controller
- Smart Array 641 Controller
- Smart Array 642 Controller
- Smart Array 6402 Controller
- Smart Array 6404 Controller

These controllers do not support the commands used to obtain logical drive properties. There are currently no plans to add such support to the controllers, nor to add legacy support to future versions of Insight Diagnostics.

As a work-around, Insight Diagnostics Online Edition for Windows, version **8.5 or earlier**, may be used to display logical drive properties in Survey. The Array Configuration Utility, available from hpe.com, can also display information about logical drives attached to these controllers.

2. Windows Server 2008 R2 SP1 is the minimum requirement for Gen9 platforms.

3. Adaptec devices are no longer supported on this version, please use version 10.16.1650 for this.

Other:

1. The online version of Insight Diagnostics provides the same functionality as the Survey Utility for Windows and Linux and does not perform any hardware tests on the system. Although not required, it is recommended that you uninstall the current Survey Utility for Windows or Linux before beginning the installation of Insight Diagnostics Online Edition.

Prerequisites

The following component(s) are required for Insight Diagnostics Online Edition for Windows:

- System Management Homepage, version 7.0.0-12 or higher

The following component(s) are recommended for Insight Diagnostics Online Edition for Windows to make full use of its capabilities:

- ProLiant Agentless Management Service, version 9.0.0.0 or higher
- ProLiant Integrated Lights-Out Management Interface Driver, version 1.15.0.0 or higher

Fixes

- Translations fixes.
- Fixed a problem where saving the survey with a system with 124+ luns failed.

Enhancements

Addded support for P542D storage controller.

Added support for NVIDIA Tesla K40 XL 12Gb Module.

Support Wellsburg 6-Port SATA Controller.

Support for new Gen9 systems.

See the [Service Pack for ProLiant Release Notes](#) for more information.

See the [Service Pack for ProLiant Server Support Guide](#) for information on supported servers.

Integrated Management Log Viewer for Windows Server x64 Editions

Version: 7.8.0.0 **(Optional)**

Filename: cp029435.exe

Important Note!

Starting with version 7.0.0.0, this application will only install on HP ProLiant systems supporting the iLO 2, iLO 3, or iLO 4 management controllers. Installation in a virtual machine is no longer supported.

Starting with version 6.5.0.0, this application requires Administrator privileges through Windows User Account Control.

Version 6.2.0.0 of this application is the final version that will support installation under Windows Server 2003 x64 Edition.

Starting with version 6.0.0.0, the dependencies on the HP ProLiant Remote Monitor Service and the HP ProLiant Remote IML Service have been removed. This application no longer provides access to the Integrated Management Log on a remote system.

Starting with version 5.22.0.0, separate 32-bit and 64-bit releases of this application are available. If you wish to downgrade to version 5.21.0.0 or earlier, use Windows Add or Remove Programs to uninstall the 64-bit release before installing the earlier 32-bit version.

Enhancements

Add support for Windows Server 2016.

Integrated Management Log Viewer for Windows Server x86 Editions

Version: 7.7.0.0 **(Optional)**

Filename: cp028661.exe

Important Note!

Starting with version 7.0.0.0, this application will only install on HP ProLiant systems supporting the iLO 2, iLO 3, or iLO 4 management controllers. Installation in a virtual machine is no longer supported.

Starting with version 6.5.0.0, this application requires Administrator privileges through Windows User Account Control.

Version 6.2.0.0 of this application is the final version that will support installation under Windows Server 2003.

Starting with version 6.0.0.0, the dependencies on the HP ProLiant Remote Monitor Service and the HP ProLiant Remote IML Service have been removed. This application no longer provides access to the Integrated Management Log on a remote system.

Starting with version 5.22.0.0, a 64-bit release of this application is available. Version 5.22.0.0 and later of the 32-bit release will not install under 64-bit Windows.

Starting with version 5.3.0.0, installation is based on the Microsoft Installer (MSI). If you wish to downgrade to version 5.2.0.0 or earlier, use Windows Add or Remove Programs to uninstall this application before installing the earlier version.

<u>Enhancements</u>

- Add new events to the Power Subsystem class.
- The component executable is now digitally signed with both SHA-1 and SHA-256 signatures.

System file generation using manifest file
Version: 7.2.1.0 **(Optional)**
Filename: mapping.xml

<u>Fixes</u>

See the [HP SUM Release Notes](#) for information about the issues resolved in this release.

System file generation using manifest file
Version: 7.4.0.0 **(Optional)**
Filename: mapping.xml

<u>Fixes</u>

See the [HP SUM Release Notes](#) for information about the issues resolved in this release.

System file generation using manifest file
Version: 7.3.9.9 **(Optional)**
Filename: mapping.xml

<u>Fixes</u>

See the [HP SUM Release Notes](#) for information about the issues resolved in this release.

System file generation using manifest file
Version: 7.5.0.0 **(Optional)**
Filename: mapping.xml

<u>Fixes</u>

See the [HP SUM Release Notes](#) for information about the issues resolved in this release.

System file generation using manifest file
Version: 7.5.9.9 **(Optional)**
Filename: mapping.xml

<u>Fixes</u>

See the [HP SUM Release Notes](#) for information about the issues resolved in this release.