

HA8000V シリーズ

Service Pack for HA8000V (SPH)

Version 4.50 14

Readme

2019年4月

1. はじめに

このたびは、日立アドバンスサーバ HA8000V シリーズをご利用いただき誠にありがとうございます。
ご使用になる前に、必ず本内容をご確認ください。

1.1 他社所有名称に対する表示

Microsoft および Windows Server は、米国 Microsoft Corporation の米国およびその他の国における登録商標または商標です。

Intel、インテル、Xeon は、アメリカ合衆国およびその他の国における Intel Corporation の商標です。

Linux は、Linus Torvalds 氏の日本およびその他の国における登録商標または商標です。

Red Hat は、米国およびその他の国で Red Hat, Inc. の登録商標もしくは商標です。

iLO は、Hewlett Packard Enterprise Development LP の商標です。

VMware は、米国およびその他の地域における VMware, Inc. の登録商標または商標です。

1.2 注意事項

- (1) 本書は改良のため、予告なしに変更することがあります。
- (2) Service Pack for HA8000V のご使用に当たっては、<CD ドライブ>¥EULA に格納された「エンドユーザー使用許諾契約書」をお読みください。
- (3) Service Pack for HA8000V に瑕疵が無いことを保証するものではありません。
- (4) Service Pack for HA8000V は、「3 適用機種及びOS」記載のプラットフォームでご使用いただけます。
- (5) 天災、人災、事故等で Service Pack for HA8000V 使用中に電源が切れますとシステム装置が正常に動作しなくなることがありますので十分に気を付けてください。
- (6) お客様は、Service Pack for HA8000V 並びに本書の全部又は一部を単独で又は他の情報等と組み合わせ、直接又は間接に以下に該当する取扱いをする場合、「外国為替及び外交貿易」の規制及び米国輸出管理規制等外国の輸出関連法規を確認し、適正な手続きを行う必要があります。

- 輸出するとき。
- 海外へ持ち出すとき。
- 非居住者へ提供し、又は使用させるとき。
- 上記に定めるほか、「外国為替及び外国貿易法」又は外国の輸出関連法規に定めがあるとき。

本ファイルに含まれている、いかなるファイルの内容の全部またはその一部を、無断で掲載またはコピーすることを固く禁じます。

1.3 変更履歴

| 発行日 | 変更内容 |
|----------|------------------------------------|
| 2018年10月 | 初版 |
| 2018年12月 | 5.2 追記, 5.8.1 , 5.8.4 , 6.2.6 誤記訂正 |
| 2019年2月 | 5.8.3 , 5.8.5 誤記訂正 |
| 2019年4月 | 5.9 追記 |

2. Service Pack for HA8000V (SPH)について

Service Pack for HA8000V(以降 SPH と呼びます)は、1 台または複数台の HA8000V サーバのファームウェア/システムソフトウェアの更新を簡素化するソリューションです。

SPH には、サーバ/コントローラ/ストレージのファームウェア/ドライバ/ユーティリティパッケージが含まれます。また、SPH に収録されている Smart Update Manager(以降 SUM と呼びます)は、更新されたファームウェアおよびシステムソフトウェアをデプロイする推奨ツールです。

SPH/SUM を使うことで、ファームウェアおよびシステムソフトウェアのオンラインアップデートが可能となります。アップデート操作を SUM に統合することにより、個々の HA8000V サーバのアップデートが迅速になり、システム全体のアップデート時間を短縮することができます。

SPH は定期的にリリースされます。最新版の SPH を使用して更新することを推奨します。

3. 適用機種及びOS

3.1 適用機種

- HA8000V/DL360 Gen10
- HA8000V/DL380 Gen10
- HA8000V/DL580 Gen10
- HA8000V/ML350 Gen10

3.2 適用 OS

- Microsoft® Windows Server® 2016
- Microsoft® Windows Server® 2012 R2
- Red Hat® Enterprise Linux® Server 7.5
- Red Hat® Enterprise Linux® Server 7.4
- Red Hat® Enterprise Linux® Server 6.9
- VMware vSphere® ESXi™ 6.5
- VMware vSphere® ESXi™ 6.0

4. 変更内容

本章では、今回のリリースの変更内容を記載しています。

4.1 新規サポート内容

- VMware® vSphere ESXi™ 6.0, 6.5 のドライバ・ユーティリティのアップデート対応

4.2 更新内容

『6.3 パッケージの変更内容』を参照ください。

5. 注意事項

本章では、SPH をご使用になる上で、注意頂く内容を記載しています。

5.1 ドライバ・ユーティリティなどの適用について

最新のドライバ・ファームウェア・ユーティリティなどを、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」で提供しております。

各アップデートプログラムの適用についてはお客様責任にて実施していただきますが、システム装置を安定してご使用いただくためにも、ホームページの[サポート]-[ダウンロード] に定期的にアクセスして、最新のドライバ・ファームウェア・ユーティリティへ更新していただくことをお勧めします。

5.2 OS の新規・再セットアップの場合の注意事項

OS の新規・再セットアップの際、初回の SPH 適用では、ファームウェアコンポーネントを除外し、ドライバ/ユーティリティコンポーネントのインストールを先に実施してください。これにより、デバイスの検出及びファームウェアの書き込みに適切なドライバ/ユーティリティがインストールされます。ドライバ/ユーティリティのインストール後は、OS を再起動し、再度 SUM を実行してファームウェアの更新を行ってください。

SUM でファームウェアコンポーネントを除外し、ドライバ/ユーティリティコンポーネントのみのインストールを指定するには、次の手順により行います。

GUI の場合：

SUM を起動し、「展開サマリー(Deployment summary)」画面右上の[アクション(Actions)]-[アドバンスドオプション(Advanced Options)]から「アドバンスドオプション(Advanced Options)」画面を開き、「インストールオプション(Installation Options)」の項目で「ソフトウェアのアップグレード(Upgrade Software)」を選択し、「OK」ボタンを押してください。

CLI の場合：

“setattributes”で firmware=false を設定してください。

例) # ./smartupdate setattributes --nodes localhost firmware=false

5.3 SUMによるアップデート時の注意事項

アップデート対象のファームウェア/ドライバには依存関係を持つ場合があります。一度のSUMの実行では全て更新できない場合があります。このため、SUMアップデート後、全ての更新対象がアップデートされているかを確認してください。もし、アップデートされていないパッケージがある場合、再度SUMを実行してください。全てアップデートされたかは、次の手順により確認できます。

GUIの場合：

SUMを起動し、「展開サマリー(Deployment summary)」画面にて、「推奨されたコンポーネント」数表示が、“0”となっていることを確認してください。

CLIの場合：

“Inventory”までの手順を実行後“getneededupdates”を実行し、“Component”セクションが表示されないことを確認してください。

5.4 SUMでのランゲージパックバージョン表示と適用に関する制限事項

SUM(Smart Update Manager)で表示される、適用中のランゲージパックのバージョンが正しく表示されない場合があります。正しいバージョンを確認するためには、iLO WEB インタフェースの[管理]>[言語]ページより現在適用中の言語パックのバージョンをご確認下さい。

また、上記確認の結果、目的のバージョンのランゲージパックが適用済みであっても、SUM実行後の「展開サマリー」画面で、ランゲージパックが適用対象として自動的に選択されている場合があります。この場合、ランゲージパックの適用は不要ですので、選択を解除してから展開ボタンをクリックをしてください。

【注意】

本制限のため、5.3 に示す確認手順で、ランゲージパックが適用対象として残る場合があります。

5.5 ASR(Automatic Server Recovery)について

ASR(Automatic Server Recovery)はブルースクリーン等の致命的なOSのエラーが発生したときに自動的にシステムの復旧をするべくサーバーの再起動をおこなう機能です。IP(version 3.10以降)を使ったOSのインストール又はSPH(version 3.00以降)の適用、その他の方法によるASRドライバーのインストールによりASRが自動的に有効になります。ASRが不要な場合やAlive Monitor、IPMI WDT等の他のOS死活監視を使う場合はASRを無効化してください。

5.5.1 ASR操作のPowerShellスクリプトの入手について

ASRの有効/無効の確認並びに切り替えはASRドライバーのパッケージに同梱されているPowerShellスクリプトを使って行います。下記を参照してPowerShellスクリプトを入手してください。

(1) ASRドライバーのパッケージを展開します

SPHのpackagesディレクトリ下にあるファイル群の中から、下表記載の各OSに対応したFilenameのファイルを実行してください。パッケージセットアップが起動するので解凍を選択し、任意のディレクトリにパッケージを展開してください。

| Description | Version | Filename |
|---|-------------|--------------|
| iLO 5 Automatic Server Recovery Driver for Windows Server | 4.2.0.0 (B) | cp034069.exe |
| iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2 | 4.2.0.0 (B) | cp034068.exe |

(2) PowerShell スクリプトを確認してください

展開したパッケージの中に下記の2つのPowerShell スクリプトが含まれている事を確認してください。必要に応じて任意のディレクトリにコピーしてください。

Get-AsrTimeout.ps1

Set-AsrTimeout.ps1

5.5.2 ASRの確認方法

Windows の PowerShell より Get-AsrTimeout.ps1 を実行してください。TimeoutInMinutes が 0 又は、コマンドの実行がエラーとなった場合 ASR は無効になっています。

```

実行例その 1 (TimeoutInMinutes が 0 の場合)
PS C:\Users\Administrator\Desktop> .\Get-AsrTimeout.ps1

Active InstanceName                                TimeoutInMinutes PSComputerName
-----
True PCI\VEN_103C&DEV_3306&SUBSYS_00E41590&REV_074&154b2d14&0&00E4_0          0

実行例その 2 (コマンドの実行がエラーとなる場合)
PS C:\Users\Administrator\Desktop> .\Get-AsrTimeout.ps1
Get-CimInstance : 無効なクラスです
発生場所 C:\Users\Administrator\Desktop\Get-AsrTimeout.ps1:25 文字:1
+ Get-CimInstance -Namespace "root\wmi" -ClassName "HP_iLO_ASR_Settings ...
+ ~~~~~
+ CategoryInfo          : MetadataError: (root\wmi:HP_iLO_ASR_Settings:String) [Get-CimInstance], CimException
+ FullyQualifiedErrorId : HRESULT 0x80041010,Microsoft.Management.Infrastructure.CimCmdlets.GetCimInstanc
eCommand

```

5.5.3 ASRの無効化方法

Windows の PowerShell より下記のオプションで Set-AsrTimeout.ps1 を実行してください。

Set-AsrTimeout.ps1 -Disable

```

実行例
PS C:\Users\Administrator\Desktop> .\Set-AsrTimeout.ps1 -Disable

```

5.5.4 ASR の有効化方法

Windows の PowerShell より下記のオプションで Set-AsrTimeout.ps1 を実行してください。

```
Set-AsrTimeout.ps1 -Default
```

実行例

```
PS C:\Users\Administrator\Desktop> .\Set-AsrTimeout.ps1 -Default
```

5.6 ドライバアップデート時の注意事項

ネットワークアダプタドライバをアップデートした場合、ドライバアップデート後、設定値が初期化される場合があります。ドライバアップデート前に設定値を控え、アップデート後に再設定してください。

5.7 Linux 環境で TPM を有効にしている場合の注意事項

Linux 環境で Trusted Platform Module (TPM) を有効にしている場合、下記のエラーと共にランゲージパックのアップデートに失敗します。

```
ERROR: Conflicting command line options [--silent requires --tpmbypass option (Trusted Platform Module is present on this system)]
```

本問題を回避するには、Linux でのランゲージパックのアップデートには SUM を使用せず、アップデートファイルを直接実行します。

アップデートファイルは SPH の packages ディレクトリにある “firmware-lpk-ilo-1.30-1.1.x86_64.rpm” です。実行手順は次に示します。

(1) rpm コマンドでアップデートファイルを展開します。

```
# rpm -ivh firmware-lpk-ilo-1.30-1.1.x86_64.rpm
```

(2) cd コマンドでアップデートファイルの展開先に移動します。

```
# cd /usr/lib/x86_64-linux-gnu/firmware-lpk-ilo-1.30-1.1/
```

(3) setup コマンドでアップデートを実行します。

```
# ./setup
```

CAUTION: A Trusted Platform Module (TPM) has been detected in this system.

Failure to perform proper OS encryption procedures will result in loss of access to your data if recovery key is not available. Recommended procedure for Microsoft Windows(R) BitLocker(TM) is to "suspend" BitLocker prior to System ROM or Option ROM firmware flash. If you do not have your recovery key or have not suspended BitLocker, exit this flash: Failure to follow these instructions will result in loss of access to your data.

Continue (y/N)?y

FLASH_iLO5 v3.04 for Linux (Apr 11 2018)

Firmware image: lang_ja_130_p10.lpk

Language pack update:CP035841.xml reports language pack version 1.30

Server is in Production State;

This operation will update the language pack on the
iLO 5 in this server with version 1.30.

Continue (y/N)?y

Current firmware is 1.30 (May 31 2018 00:00:00)

Firmware image is 0x73afc(473852) bytes

Committing to flash part...

***** DO NOT INTERRUPT! *****

Flashing is underway... 100 percent programmed. –

Succeeded.

**** iLO 5 reboot in progress (may take more than 60 seconds.)

**** Please ignore console messages, if any.

iLO 5 reboot completed.

5.8 VMware をご使用にあたっての注意事項

5.8.1 ファームウェアの適用について

システム装置を安定してご使用いただくためには、ご使用の VMware バージョンに合わせたファームウェアを適用頂く必要があります。

【VMware vSphere® ESXi™ 6.0/6.5 をご使用の場合】

VMware 環境でのファームウェアの適用にあたっては、SUM のリモートオンライン 展開モード及びオフライン 展開モードが利用できます。

SUM の『リモートオンライン』展開モードをご使用の場合、iSUT が未インストールであれば、『5.8.2 iSUT のインストール』記載の手順に従ってインストールしてください。更に、ESXi ホストに対して、下記設定をアップデート作業前に実施して下さい。

- (1) ファームウェア/ドライバのアップデート作業を行う間は、ESXi ホストをメンテナンスモードに設定してください。
- (2) ESXi ホストをノードとして追加する場合、対象ノードとしてシステム装置の iLO を追加(ノードの IP アドレスに iLO の IP アドレスを指定、ノードタイプに iLO を選択)してください。
- (3) ファームウェア/ドライバのアップデートを有効化するためには VMware ESXi の再起動が必要です。アップデート後自動的に再起動させる場合は、再起動オプションを使用してください。

【VMware vSphere® ESXi™ 6.7 をご使用の場合】

VMware 環境でのファームウェアの適用にあたっては、SUM のオフライン 展開モードをご使用ください。本 SPH は、VMware 稼働中のオンラインファームウェアアップデートには対応しておりません。

なお、各 VMware バージョンと SPH サポート情報の詳細は、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」の[製品]ー[OS、ISV 情報]にある『VMware』に掲載している注意事項をご参照の上、推奨ドライババージョンをご確認ください。

5.8.2 iSUT のインストール

VMware システムに対して、SPH/SUM を使用しファームウェア/ドライバのアップデートを行うには、ESXi ホストに iSUT をインストールする必要があります。iSUT インストール後は、リモート PC から SUM の『リモートオンライン』展開モードを使用して ESXi ホストのファームウェア/ドライバのアップデートを行うことができます。

ESXi ホストに iSUT をインストールする手順を次に示します。次のインストール手順では、データストア名を「datastore1」としています。使用環境にあわせて読み換えてください。

- (1) iSUT は SPH の packages ディレクトリに収録されています。下表に示す zip ファイルを展開し、iSUT のオフラインバンドル(sut-esxi*. *-bundle-*. *. *. *. *.zip)を取り出してください。

| No. | VMware バージョン | SPH package ファイル名 | オフラインバンドルファイル名 |
|-----|---------------------------|-------------------|-----------------------------------|
| 1 | VMware vSphere® ESXi™ 6.0 | cp034493.zip | sut-esxi6.0-bundle-2.3.5.0-29.zip |
| 2 | VMware vSphere® ESXi™ 6.5 | cp034110.zip | sut-esxi6.5-bundle-2.3.5.0-22.zip |

- (2) 取り出した iSUT のオフラインバンドルを VMware ESXi の「datastore1」直下へに転送してください。
(3) VMware ESXi のコンソール画面で「F2」キーを押すと Login 画面が表示されるので、root ユーザーでログインします。
(4) 「System Customization」画面が表示されるので、「Troubleshooting Options」を選択し、「Enter」キーを押下します。
(5) 「Enable ESXi Shell」を選択し、「Enter」キーを押下して ESXi Shell を “Enable” に変更します。
(6) 「Alt」 + 「F1」キーを押下し、VMware ESXi の Shell 画面を開き、root ユーザーでログインします。
(7) 下記コマンドを実行しインストールします。

```
esxcli software vib install -d /vmfs/volumes/datastore1/<転送したバンドルファイル名>
```

- (8) VMware ESXi を再起動してください。
(9) 再起動後、再度 VMware ESXi の Shell 画面を開き、root ユーザーでログインします。
(10) 下記コマンドを実行し、iSUT を AutoDeployReboot モードに設定します。

```
sut -set mode=autodeployreboot
```

5.8.3 Management Bundle, Utility Bundle のインストール

VMware vSphere® ESXi™ 6.0 をご使用の場合、下記手順にて Management Bundle, Utility Bundle のインストールを行ってください。次のインストール手順では、データストア名を「datastore1」としています。使用環境にあわせて読み換えてください。

(1) Management Bundle/Utility Bundle は SPH の packages ディレクトリに収録されています。該当 zip ファイルを展開し、Management Bundle/Utility Bundle のオフラインバンドルを取り出してください。

| No. | 種別 | SPH package ファイル名 | オフラインバンドルファイル名 |
|-----|-------------------|-------------------|------------------------------------|
| 1 | Management Bundle | cp036328.zip | esxi6.0uX-mgmt-bundle-3.3.0-11.zip |
| 2 | Utility Bundle | cp036210.zip | esxi6.0-util-bundle-3.3.0-8.zip |

(2) 取り出したオフラインバンドルを Hypervisor の「datastore1」直下へに転送してください。

(3) VMware ESXi のコンソール画面で「F2」キーを押すと Login 画面が表示されるので、root ユーザーでログインします。

(4) 「System Customization」画面が表示されるので、「Troubleshooting Options」を選択して、「Enter」キーを押下します。

(5) 「Enable ESXi Shell」を選択し、「Enter」キーを押下して ESXi Shell を "Enable" に変更します。

(6) 「Alt」+「F1」キーを押下し、VMware ESXi の Shell 画面を開き、root ユーザーでログインします。

(7) 下記コマンドを実行しインストールします。

```
esxcli software vib install -d /vmfs/volumes/datastore1/esxi6.0uX-mgmt-bundle-3.3.0-11.zip
```

```
esxcli software vib install -d /vmfs/volumes/datastore1/esxi6.0-util-bundle-3.3.0-8.zip
```

(8) VMware ESXi を再起動してください。

5.8.4 Intel 製ネットワークアダプタファームウェアのインストールについて

VMware vSphere® ESXi™ 6.0/6.5 をご使用の場合、Intel 製ネットワークアダプタの VMware 稼働中のオンラインファームウェアアップデートには対応しておりません。当該アダプタをご使用の場合は、SUM のオフライン 展開モードをご使用ください。

【対象製品】

| 対象製品 | |
|-------------------|---|
| 形名(*1) | 製品名 |
| TQ-N□□-817745-B21 | Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター |
| TQ-N□□-817738-B21 | Ethernet 10Gb 2 ポート 562T ネットワークアダプター |
| TQ-N□□-665240-B21 | Ethernet 1Gb 4 ポート 366FLR ネットワークアダプター |
| TQ-N□□-652497-B21 | Ethernet 1Gb 2 ポート 361T ネットワークアダプター |
| TQ-N□□-811546-B21 | Ethernet 1Gb 4 ポート 366T ネットワークアダプター |
| TQ-N□□-727054-B21 | Ethernet 10Gb 2 ポート 562FLR-SFP+ ネットワークアダプター |
| TQ-N□□-727055-B21 | Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター |

(*1)：□には製品構成などにより異なった英数字が入ります。

5.8.5 Qlogic 製 Fibre Channel HBA ドライバのバージョン確認及びインストールについて

VMware vSphere® ESXi™ 6.0/6.5 をご使用の場合、適用中の Qlogic 製 Fibre Channel HBA ドライバ(qlnativefc)のバージョンが、SUM(Smart Update Manager)で正しく表示されない場合があります。正しいバージョンを確認するためには、VM ホストのコンソールから下記コマンドを実行してください。

```
esxcfg-module -i qlnativefc | grep Version
```

(実行例)

```
# esxcfg-module -i qlnativefc | grep Version
```

本 SPH 適用後の Qlogic 製 Fibre Channel HBA ドライバ(qlnativefc)のバージョンは、『6.2.7 Driver - Storage Fibre Channel and Fibre Channel over Ethernet』を参照してください。

また、上記不具合の結果、本 SPH 収録の Qlogic 製 Fibre Channel HBA ドライバが未適用にもかかわらず、適用対象として自動的に選択されない場合があります。この場合、下記手順にてインストールを実施してください。

【SUM GUI を使用する場合】

インベントリ実行後の「展開サマリー」画面で、該当ドライバの「コンポーネントを選択」列をクリックし、該当ドライバを選択状態にしてから展開ボタンを押してください。

【VM ホスト上の CLI を使用する場合】

- (1) Qlogic 製 Fibre Channel HBA ドライバは SPH の packages ディレクトリに収録されています。該当 zip ファイルを展開し、Qlogic 製 Fibre Channel HBA ドライバのオフラインバンドルを取り出してください。

| No. | VMware バージョン | SPH package ファイル名 | オフラインバンドルファイル名 |
|-----|---------------------------|-------------------|---|
| 1 | VMware vSphere® ESXi™ 6.0 | cp035928.zip | VMW-ESX-6.0.0-qlnativefc-2.1.73.0-8165290.zip |
| 2 | VMware vSphere® ESXi™ 6.5 | cp035929.zip | VMW-ESX-6.0.0-qlnativefc-2.1.73.0-8165290.zip |

- (2) 取り出したオフラインバンドルを Hypervisor の「datastore1」直下へに転送してください。
- (3) VMware ESXi のコンソール画面で「F2」キーを押すと Login 画面が表示されるので、root ユーザーでログインします。
- (4) 「System Customization」画面が表示されるので、「Troubleshooting Options」を選択して、「Enter」キーを押下します。
- (5) 「Enable ESXi Shell」を選択し、「Enter」キーを押下して ESXi Shell を "Enable" に変更します。
- (6) 「Alt」 + 「F1」キーを押下し、VMware ESXi の Shell 画面を開き、root ユーザーでログインします。
- (7) 下記コマンドを実行しインストールします。

```
esxcli software vib install -d /vmfs/volumes/datastore1/VMW-ESX-6.0.0-qlnativefc-2.1.73.0-8165290.zip
```

- (8) VMware ESXi を再起動してください。

5.8.6 Emulex 製 Fibre Channel HBA ドライバのインストールについて

SUM(Smart Update Manager)で表示される、利用可能な Emulex 製 Fibre Channel HBA FW のバージョンが正しく表示されない場合があります。このため、目的のバージョンのファームウェアが適用済みであっても、SUM 実行後の「展開サマリー」画面で、Emulex 製 Fibre Channel HBA FW が適用対象として自動的に選択されている場合があります。

この場合、「詳細の参照」をクリックして「コンポーネントの詳細」画面を開き、アクティブバージョンに表示されるバージョンが目的のバージョンと一致するか確認してください。一致しているコンポーネントは、選択を解除してから展開ボタンをクリックをしてください。なお、現在適用中のファームウェアバージョン(アクティブバージョン)は、iLO WEB インタフェースの[ファームウェア&OS ソフトウェア]>[

ファームウェア]ページからも確認することができます。

本 SPH 適用後の Emulex 製 Fibre Channel HBA のファームウェアバージョンは、『6.2.16 Firmware - Storage Fibre Channel』を参照ください。

【注意】

本制限のため、5.3 に示す確認手順で、Emulex 製 Fibre Channel HBA FW が適用対象として残る場合があります。

5.8.7 ドライバパラメータ再設定について

本 SPH を使用して VMware ドライバをアップデートした場合、ネイティブ ドライバが適用されます。ご使用の VMware 環境で VMKLinux ドライバをご使用の場合、ドライバが変更され、設定されているドライバパラメータが初期化されます。この問題を回避するために、ドライバアップデート後、ドライバパラメータを再設定してください。

【対象製品及びドライバ種】

下表に記載している対象製品並びにアップデート前のドライバ種をご使用の場合が対象となります。

| 対象製品 | | ドライバ種 | |
|---|--|-----------------------|--------------------|
| 形名(*1) | 製品名 | アップデート前 (VMKLinux) | アップデート後 (ネイティブ) |
| TQ-N□□-817745-B21 TQ-N□□-817738-B21 | Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター Ethernet 10Gb 2 ポート 562T ネットワークアダプター | net-ixgbe | ixgben |
| TQ-N□□-665240-B21 TQ-N□□-652497-B21 TQ-N□□-811546-B21 | Ethernet 1Gb 4 ポート 366FLR ネットワークアダプター Ethernet 1Gb 2 ポート 361T ネットワークアダプター Ethernet 1Gb 4 ポート 366T ネットワークアダプター | igb | igbn |
| TQ-N□□-727054-B21 TQ-N□□-727055-B21 | Ethernet 10Gb 2 ポート 562FLR-SFP+ ネットワークアダプター Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター | i40e | i40en |

(*1)：□には製品構成などにより異なった英数字が入ります。

【再設定手順】

(1) ドライバパラメータの確認及び記録

ドライバのアップデート前に、以下コマンドを実行し、ドライバパラメータ値を控えてください。

```
esxcfg-module -g <driver name>
```

<driver name>：アップデート前ドライバ種

以下実行例の「option = 'yyyy」の「yyyy」に設定値が表示されますので、値を控えてください。値が表示されない場合は、ドライバパラメータは未設定ですので、以降の作業は不要です。

(実行例) net-ixgbe の場合

```
# esxcfg-module -g net-ixgbe
net-ixgbe enabled = 1 options = 'yyyy'
```

また、下記の表示となる場合、net-ixgbe ドライバは未使用ですので、以降の作業は不要です。

(実行例) net-ixgbe の場合

```
# esxcfg-module -g net-ixgbe
Unknown module name net-ixgbe
```

(2) ドライバパラメータの再設定

ドライバのアップデート前に、以下コマンドを実行し、控えたドライバパラメータを再設定して下さい。

```
esxcfg-module -s "yyyy" <driver name>
yyyy : 控えたドライバパラメータ
<driver name> : アップデート前ドライバ種
```

以下実行例の「option = 'yyyy'」に控えたドライバパラメータを指定します。

(実行例) ixgben の場合

```
# esxcfg-module -s "yyyy" ixgben
```

(3) VMware ESXi の再起動

変更を有効にするため、VMware ESXi を再起動してください。

5.9 RHEL7.4 または RHEL7.5 環境での Intel 製ネットワークアダプタご使用について

Intel 製ネットワークアダプタのファームウェアは、特定バージョン以降、ダウングレードできない制約があります。

下表のファームウェアバージョン(SPH5.00 収録)以降が適用されている環境において、RHEL7.4 または、RHEL7.5 でネットワークアダプタをご使用になる場合、下表のファームウェアバージョンのまま、(a)(b)に示すドライバの組み合わせてご使用ください。

(a)RHEL7.4 : SPH4.60 収録ドライバ

(b)RHEL7.5 : OS 標準ドライバ または、SPH5.00 収録ドライバ(※)

※ : RHEL7.5 環境でご使用の場合は、SPH5.00 収録ドライバへアップデートを推奨します。

| 形名(*1) | 製品名 | ファームウェアバージョン |
|-------------------|---|--------------|
| TQ-N□□-817745-B21 | Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター | 10.4.4 |
| TQ-N□□-817738-B21 | Ethernet 10Gb 2 ポート 562T ネットワークアダプター | |
| TQ-N□□-727054-B21 | Ethernet 10Gb 2 ポート 562FLR-SFP+ | 10.4.3 |

| | | |
|-------------------|---|--|
| TQ-N□□-727055-B21 | ネットワークアダプター Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター | |
|-------------------|---|--|

(*1)：□には製品構成などにより異なった英数字が入ります。

6. SPH収録コンテンツ一覧

SPH の iso イメージに含まれるドライバ、ファームウェア、ユーティリティ(ソフトウェア)を示します。
SPH には、適用方法により下記の2種のコンテンツを含んでいます。

- OS セットアップ後、お客様自身で個別に適用頂くもの
- Smart Update Manager(SUM)を使って適用可能なもの

以降、それぞれのコンテンツについて説明します。

6.1 お客様により適用が必要なコンテンツ

次表に示すファイルは、SPH に含まれる SUM ツールでの適用対象ではありません。Windows Server OS の新規・再セットアップ(プレインストールセット除く)の場合は、SPH 適用後に各ツールを実行してください。

| No. | ツール | 説明 | iso 内格納場所 | 備考 |
|-----|--------------------------|---------------------------------|---------------------------|---------------------------------|
| 1 | IT Report Utility (ITRU) | サーバの構成情報、および障害の情報を採取します | ¥software¥Hitachi¥ITRU | |
| 2 | 2PRxDur settings | (レジストリ設定)ネットワークアダプタに関する設定を実施します | ¥software¥Hitachi¥RegTool | Broadcom 製 1Gb LAN アダプタ搭載構成のみ対象 |
| 3 | LargeRxRing settings | (レジストリ設定)ネットワークアダプタに関する設定を実施します | ¥software¥Hitachi¥RegTool | |

【Broadcom 製 1Gb LAN アダプタ】

- オンボード LAN(Ethernet 1Gb 4-port 331i Adapter)
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332T Adapter

(1) ITRU のインストール

ITRU をインストールするには、Administrator 権限にて DOS プロンプトより下記のバッチファイルを実行してください。

<CD ドライブ>:¥software¥Hitachi¥ITRU¥setup.bat

なお、ITRU のインストールに関する詳細情報は次の WEB ページ

https://www.hitachi.co.jp/cgi-bin/soft/sjst/select_open.cgi

に掲載されている Windows 版 ITRU 取扱説明書の 3 章をご確認願います。

(2) ネットワークアダプタ レジストリ設定の適用

ネットワークアダプタ レジストリ設定を適用するためには、Administrator 権限にて DOS プロンプトより下記のバッチファイルを実行してください。

<CD ドライブ>:¥software¥Hitachi¥RegTool¥2PRxDur.bat

<CD ドライブ>:¥software¥Hitachi¥RegTool¥LargeRxRing.bat

ツール実行後、OS を再起動してください。

6.2 SUM ツールで適用可能なファイル

次に示すドライバ/ファームウェア/ユーティリティ(ソフトウェア)は、SUM ツールにより適用可能なファイルです。SPH を使ってアップデート作業を行うには、SPH 内のデータをローカルドライブにコピーし、SUM を実行してください。SUM の GUI モードで使用する場合、OS 別の実行するコマンドを下記に示します。(管理者権限で実行してください。)

Windows 環境：

```
.\%launch_sum.bat
```

Linux 環境：

```
./launch_sum.sh
```

なお、SUM の詳細な操作方法は、<https://www.hitachi.co.jp/ha8000v/>に掲載されている『Smart Update Manager ユーザーガイド』を参照ください。

Category 一覧

- [Application - System Management](#)
- [BIOS - System ROM](#)
- [Driver – Chipset](#)
- [Driver – Network](#)
- [Driver – Storage](#)
- [Driver - Storage Controller](#)
- [Driver - Storage Fibre Channel and Fibre Channel over Ethernet](#)
- [Driver - System Management](#)
- [Driver – Video](#)
- [Firmware - Lights-Out Management](#)
- [Firmware – Network](#)
- [Firmware - Power Management](#)
- [Firmware - SAS Storage Disk](#)
- [Firmware - SATA Storage Disk](#)
- [Firmware - Storage Controller](#)
- [Firmware - Storage Fibre Channel](#)
- [Firmware – System](#)
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- [Software - Storage Fibre Channel](#)
- [Software - Storage Fibre Channel HBA](#)
- [Software - System Management](#)
- [Utility - Tools](#)

6.2.1 Application - System Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|--------|-----------------|-------------------------|--------|
| 1 | Integrated Smart Update Tools for ESXi 6.0 | cp034493.zip | - | 2018.09.10 | 6.0.0.2.3.5.0-65 | 新規追加 |
| 2 | Integrated Smart Update Tools for ESXi 6.5 | cp034110.zip | - | 2018.09.10 | 6.5.0.2.3.5-59 | 新規追加 |
| 3 | Smart Update Tools for Windows x64 | cp034225.exe | - | 2.3.0.0 | 2.3.0.0 | 新規追加 |

6.2.2 BIOS - System ROM

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|-------------------|-----------------|-------------------------|--------|
| 4 | Online ROM Flash Component for Linux - OEM System ROM U34 | firmware-system-oem-u34-1.42_2018_06_20-1.1.x86_64.rpm | System BIOS - U34 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 5 | Online ROM Flash Component for Linux - System ROM U30 | firmware-system-oem-u30-1.42_2018_06_20-1.1.x86_64.rpm | System BIOS - U30 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 6 | Online ROM Flash Component for Linux - System ROM U32 | firmware-system-oem-u32-1.42_2018_06_20-1.1.x86_64.rpm | System BIOS - U32 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 7 | Online ROM Flash Component for Linux - System ROM U41 | firmware-system-oem-u41-1.42_2018_06_20-1.1.x86_64.rpm | System BIOS - U41 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 8 | Online ROM Flash Component for Windows x64 - OEM System ROM U34 | cp036859.exe | System BIOS - U34 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 9 | Online ROM Flash Component for Windows x64 - System ROM U30 | cp036843.exe | System BIOS - U30 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 10 | Online ROM Flash Component for Windows x64 - System ROM U32 | cp036783.exe | System BIOS - U32 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |
| 11 | Online ROM Flash Component for Windows x64 - System ROM U41 | cp036847.exe | System BIOS - U41 | 1.42_06-20-2018 | v1.42 (06/20/2018) | 更新 |

6.2.3 Driver - Chipset

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|--------|-----------------|-------------------------|--------|
| 12 | Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 and Server 2016 | cp034634.exe | - | 10.1.2.86 (B) | 10.1.2.86 (B) | |

6.2.4 Driver - Network

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|--|-----------------|-------------------------|--------|
| 13 | HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions | cp034731.exe | HP Ethernet 1Gb 2-port 332T Adapter | 212.0.0.0 | 212.0.0.0 | |
| 14 | HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions | cp034731.exe | HP Ethernet 1Gb 4-port 331FLR Adapter | 212.0.0.0 | 212.0.0.0 | |
| 15 | HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions | cp034731.exe | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 212.0.0.0 | 212.0.0.0 | |
| 16 | HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions | cp034731.exe | HP Ethernet 1Gb 4-port 331T Adapter | 212.0.0.0 | 212.0.0.0 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|---|--|-----------------|------------------------------------|--------|
| 17 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-tg3-3.137w-3.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 2-port 332T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 18 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-tg3-3.137w-3.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 4-port 331FLR Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 19 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-tg3-3.137w-3.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 3.137w-3 | 3.137w-3 | 更新 |
| 20 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-tg3-3.137w-3.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 4-port 331T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 21 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 2-port 332T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 22 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 4-port 331FLR Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 23 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 3.137w-3 | 3.137w-3 | 更新 |
| 24 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 4-port 331T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 25 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u5.x86_64.rpm | HP Ethernet 1Gb 2-port 332T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 26 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u5.x86_64.rpm | HP Ethernet 1Gb 4-port 331FLR Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 27 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u5.x86_64.rpm | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 3.137w-3 | 3.137w-3 | 更新 |
| 28 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-tg3-3.137w-3.rhel7u5.x86_64.rpm | HP Ethernet 1Gb 4-port 331T Adapter | 3.137w-3 | 3.137w-3 | 更新 |
| 29 | HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0 | cp035307.zip | HP Ethernet 1Gb 2-port 332T Adapter | 2018.09.00 | 3.137l.v60.1-1 OEM.600.0.0.2494585 | 新規追加 |
| 30 | HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0 | cp035307.zip | HP Ethernet 1Gb 4-port 331T Adapter | 2018.09.00 | 3.137l.v60.1-1 OEM.600.0.0.2494585 | 新規追加 |
| 31 | HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0 | cp035307.zip | HP Ethernet 1Gb 4-port 331FLR Adapter | 2018.09.00 | 3.137l.v60.1-1 OEM.600.0.0.2494585 | 新規追加 |
| 32 | HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0 | cp035307.zip | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 2018.09.00 | 3.137l.v60.1-1 OEM.600.0.0.2494585 | 新規追加 |
| 33 | HPE Intel E1R Driver for Windows Server 2016 | cp031179.exe | HP Ethernet 1Gb 2-port 361T Adapter | 12.15.184.0 (B) | 12.15.184.0 (B) | |
| 34 | HPE Intel E1R Driver for Windows Server 2016 | cp031179.exe | HP Ethernet 1Gb 4-port 366FLR Adapter | 12.15.184.0 (B) | 12.15.184.0 (B) | |
| 35 | HPE Intel E1R Driver for Windows Server 2016 | cp031179.exe | HP Ethernet 1Gb 4-port 366T Adapter | 12.15.184.0 (B) | 12.15.184.0 (B) | |
| 36 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel6u9.x86_64.rpm | HPE Ethernet 1Gb 4-port 369i Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |
| 37 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|--|-----------------|----------------------------|--------|
| 38 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |
| 39 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel7u4.x86_64.rpm | HPE Ethernet 1Gb 4-port 369i Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |
| 40 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |
| 41 | HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-i40e-2.4.6.1-7.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 2.4.6.1-7 | 2.4.6.1-7 | 更新 |
| 42 | HPE Intel i40ea Driver for Windows Server 2012 R2 | cp034517.exe | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 1.8.94.0 | 1.8.94.0 | |
| 43 | HPE Intel i40ea Driver for Windows Server 2012 R2 | cp034517.exe | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 1.8.94.0 | 1.8.94.0 | |
| 44 | HPE Intel i40ea Driver for Windows Server 2016 | cp034518.exe | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 1.8.94.0 | 1.8.94.0 | |
| 45 | HPE Intel i40ea Driver for Windows Server 2016 | cp034518.exe | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 1.8.94.0 | 1.8.94.0 | |
| 46 | HPE Intel i40eb Driver for Windows Server 2012 R2 | cp034519.exe | HPE Ethernet 1Gb 4-port 369i Adapter | 1.8.94.0 | 1.8.94.0 | |
| 47 | HPE Intel i40eb Driver for Windows Server 2016 | cp034520.exe | HPE Ethernet 1Gb 4-port 369i Adapter | 1.8.94.0 | 1.8.94.0 | |
| 48 | HPE Intel i40en Driver for VMware vSphere 6.0 | cp035292.zip | HPE Ethernet 1Gb 4-port 369i Adapter | 2018.09.00 | 1.5.8-10EM.600.0.0.2768847 | 新規追加 |
| 49 | HPE Intel i40en Driver for VMware vSphere 6.0 | cp035292.zip | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 2018.09.00 | 1.5.8-10EM.600.0.0.2768847 | 新規追加 |
| 50 | HPE Intel i40en Driver for VMware vSphere 6.0 | cp035292.zip | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 2018.09.00 | 1.5.8-10EM.600.0.0.2768847 | 新規追加 |
| 51 | HPE Intel i40en Driver for VMware vSphere 6.5 | cp035293.zip | HPE Ethernet 1Gb 4-port 369i Adapter | 2018.09.00 | 1.5.8-10EM.650.0.0.4598673 | 新規追加 |
| 52 | HPE Intel i40en Driver for VMware vSphere 6.5 | cp035293.zip | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 2018.09.00 | 1.5.8-10EM.650.0.0.4598673 | 新規追加 |
| 53 | HPE Intel i40en Driver for VMware vSphere 6.5 | cp035293.zip | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 2018.09.00 | 1.5.8-10EM.650.0.0.4598673 | 新規追加 |
| 54 | HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40evf-3.5.6.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 1Gb 4-port 369i Adapter | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |
| 55 | HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40evf-3.5.6.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |
| 56 | HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-i40evf-3.5.6.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |
| 57 | HPE Intel i40evf Drivers for Red | kmod-hp-i40evf-3.5.6.1 | HPE Ethernet 1Gb | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|--|-----------------|----------------------------|--------|
| | Hat Enterprise Linux 7 x86_64 | -8.rhel7u4.x86_64.rpm | 4-port 369i Adapter | | | |
| 58 | HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-i40evf-3.5.6.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |
| 59 | HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-i40evf-3.5.6.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 3.5.6.1-8 | 3.5.6.1-8 | 更新 |
| 60 | HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 2-port 361T Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 61 | HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 4-port 366FLR Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 62 | HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel6u9.x86_64.rpm | HP Ethernet 1Gb 4-port 366T Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 63 | HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 2-port 361T Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 64 | HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 4-port 366FLR Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 65 | HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-igb-5.3.5.15-7.rhel7u4.x86_64.rpm | HP Ethernet 1Gb 4-port 366T Adapter | 5.3.5.15-7 | 5.3.5.15-7 | 更新 |
| 66 | HPE Intel igbn Driver for VMware vSphere 6.0 | cp035295.zip | HP Ethernet 1Gb 2-port 361T Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 67 | HPE Intel igbn Driver for VMware vSphere 6.0 | cp035295.zip | HP Ethernet 1Gb 4-port 366FLR Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 68 | HPE Intel igbn Driver for VMware vSphere 6.0 | cp035295.zip | HP Ethernet 1Gb 4-port 366T Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 69 | HPE Intel igbn Driver for VMware vSphere 6.5 | cp035305.zip | HP Ethernet 1Gb 2-port 361T Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 70 | HPE Intel igbn Driver for VMware vSphere 6.5 | cp035305.zip | HP Ethernet 1Gb 4-port 366FLR Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 71 | HPE Intel igbn Driver for VMware vSphere 6.5 | cp035305.zip | HP Ethernet 1Gb 4-port 366T Adapter | 2018.09.00 | 1.4.1-10EM.600.0.0.2768847 | 新規追加 |
| 72 | HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-ixgbe-5.3.5.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 5.3.5.1-8 | 5.3.5.1-8 | 更新 |
| 73 | HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-ixgbe-5.3.5.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562T Adapter | 5.3.5.1-8 | 5.3.5.1-8 | 更新 |
| 74 | HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-ixgbe-5.3.5.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 5.3.5.1-8 | 5.3.5.1-8 | 更新 |
| 75 | HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-ixgbe-5.3.5.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562T Adapter | 5.3.5.1-8 | 5.3.5.1-8 | 更新 |
| 76 | HPE Intel ixgben Driver for VMware vSphere 6.0 | cp035297.zip | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 2018.09.00 | 1.6.5-10EM.600.0.0.2768847 | 新規追加 |
| 77 | HPE Intel ixgben Driver for VMware vSphere 6.0 | cp035297.zip | HPE Ethernet 10Gb 2-port 562T Adapter | 2018.09.00 | 1.6.5-10EM.600.0.0.2768847 | 新規追加 |
| 78 | HPE Intel ixgben Driver for | cp035306.zip | HPE Ethernet | 2018.09.00 | 1.6.5-10EM.6 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|--|-----------------|----------------------------|--------|
| | VMware vSphere 6.5 | | 10Gb 2-port 562FLR-T Adapter | | 00.0.0.2768847 | |
| 79 | HPE Intel ixgben Driver for VMware vSphere 6.5 | cp035306.zip | HPE Ethernet 10Gb 2-port 562T Adapter | 2018.09.00 | 1.6.5-1OEM.600.0.0.2768847 | 新規追加 |
| 80 | HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-ixgbevf-4.3.3.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 4.3.3.1-8 | 4.3.3.1-8 | 更新 |
| 81 | HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-hp-ixgbevf-4.3.3.1-8.rhel6u9.x86_64.rpm | HPE Ethernet 10Gb 2-port 562T Adapter | 4.3.3.1-8 | 4.3.3.1-8 | 更新 |
| 82 | HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-ixgbevf-4.3.3.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 4.3.3.1-8 | 4.3.3.1-8 | 更新 |
| 83 | HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-hp-ixgbevf-4.3.3.1-8.rhel7u4.x86_64.rpm | HPE Ethernet 10Gb 2-port 562T Adapter | 4.3.3.1-8 | 4.3.3.1-8 | 更新 |
| 84 | HPE Intel ixs Driver for Windows Server 2012 R2 | cp033709.exe | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 3.14.75.0 | 3.14.75.0 | |
| 85 | HPE Intel ixs Driver for Windows Server 2012 R2 | cp033709.exe | HPE Ethernet 10Gb 2-port 562T Adapter | 3.14.75.0 | 3.14.75.0 | |
| 86 | HPE Intel ixs Driver for Windows Server 2016 | cp033710.exe | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 4.1.74.0 | 4.1.74.0 | |
| 87 | HPE Intel ixs Driver for Windows Server 2016 | cp033710.exe | HPE Ethernet 10Gb 2-port 562T Adapter | 4.1.74.0 | 4.1.74.0 | |
| 88 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2 | cp034468.exe | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 89 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2 | cp034468.exe | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 90 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2 | cp034468.exe | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 91 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016 | cp034469.exe | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 92 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016 | cp034469.exe | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 93 | HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016 | cp034469.exe | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 1.90.19216.0 | 1.90.19216.0 | |
| 94 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel6u9.x86_64.rpm | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 4.3 | 4.3 | |
| 95 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel6u9.x86_64.rpm | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 4.3 | 4.3 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|--|-----------------|-------------------------------------|--------|
| 96 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel6u9.x86_64.rpm | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 4.3 | 4.3 | |
| 97 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 4 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel7u4.x86_64.rpm | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 4.3 | 4.3 | |
| 98 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 4 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel7u4.x86_64.rpm | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 4.3 | 4.3 | |
| 99 | HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 4 (x86_64) | kmod-mlnx-ofa_kernel-4.3-OFED.4.3.1.0.1.1.g8509e41.rhel7u4.x86_64.rpm | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 4.3 | 4.3 | |
| 100 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0 | cp035304.zip | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 2018.09.00 | 2.713.60.v60.2-10EM.600.0.0.2494585 | 新規追加 |
| 101 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0 | cp035304.zip | HP Ethernet 10Gb 2-port 530T Adapter | 2018.09.00 | 2.713.60.v60.2-10EM.600.0.0.2494585 | 新規追加 |
| 102 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0 | cp035304.zip | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 2018.09.00 | 2.713.60.v60.2-10EM.600.0.0.2494585 | 新規追加 |
| 103 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5 | cp035302.zip | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 2018.09.00 | 1.0.60.3-10EM.650.0.0.4598673 | 新規追加 |
| 104 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5 | cp035302.zip | HP Ethernet 10Gb 2-port 530T Adapter | 2018.09.00 | 1.0.60.3-10EM.650.0.0.4598673 | 新規追加 |
| 105 | HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5 | cp035302.zip | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 2018.09.00 | 1.0.60.3-10EM.650.0.0.4598673 | 新規追加 |
| 106 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-netxtreme2-7.14.48-1.rhel6u9.x86_64.rpm | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 107 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-netxtreme2-7.14.48-1.rhel6u9.x86_64.rpm | HP Ethernet 10Gb 2-port 530T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 108 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64 | kmod-netxtreme2-7.14.48-1.rhel6u9.x86_64.rpm | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 109 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u4.x86_64.rpm | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 110 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u4.x86_64.rpm | HP Ethernet 10Gb 2-port 530T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 111 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u4.x86_64.rpm | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 112 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u5.x86_64.rpm | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 113 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u5.x86_64.rpm | HP Ethernet 10Gb 2-port 530T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 114 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64 | kmod-netxtreme2-7.14.48-1.rhel7u5.x86_64.rpm | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 7.14.48-1 | 7.14.48-1 | 更新 |
| 115 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for | cp034362.exe | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 7.13.145.0 | 7.13.145.0 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| | Windows Server x64 Editions | | Adapter | | | |
| 116 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions | cp034362.exe | HP Ethernet 10Gb 2-port 530T Adapter | 7.13.145.0 | 7.13.145.0 | |
| 117 | HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions | cp034362.exe | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 7.13.145.0 | 7.13.145.0 | |

6.2.5 Driver – Storage

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|--------|-----------------|-------------------------|--------|
| 118 | HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2 and Windows Server 2016 | cp036395.exe | - | 100.8.0.0 | 100.8.0.0 | 更新 |

6.2.6 Driver – Storage Controller

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| 119 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit) | kmod-smartpqi-1.1.4-133.rhel6u9.x86_64.rpm | HPE Smart Array P408i-a SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 120 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u4.x86_64.rpm | HPE Smart Array P408i-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 121 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u4.x86_64.rpm | HPE Smart Array P816i-a SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 122 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u4.x86_64.rpm | HPE Smart Array E208e-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 123 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u4.x86_64.rpm | HPE Smart Array E208i-a SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 124 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u4.x86_64.rpm | HPE Smart Array E208i-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 125 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array P408i-a SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 126 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array P408i-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 127 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array P816i-a SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 128 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array E208e-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 129 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array E208i-a SR Gen10 | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-----------------------------------|--------|
| | for Red Hat Enterprise Linux 7 (64-bit) | | Controller | | | |
| 130 | HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit) | kmod-smartpqi-1.1.4-133.rhel7u5.x86_64.rpm | HPE Smart Array E208i-p SR Gen10 Controller | 1.1.4-133 (A) | 1.1.4-133 (A) | 更新 |
| 131 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array P408i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 132 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array P408i-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 133 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array P816i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 134 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array E208e-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 135 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array E208i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 136 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component). | cp036830.zip | HPE Smart Array E208i-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.600.0.0.2 768847 | 新規追加 |
| 137 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array P408i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 138 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array P408i-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 139 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array P816i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 140 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array E208e-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 141 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array E208i-a SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 142 | HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component). | cp036831.zip | HPE Smart Array E208i-p SR Gen10 Controller | 2018.07.18 | 1.0.2.1038-10 EM.650.0.0.4 598673 | 新規追加 |
| 143 | HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016 | cp034601.exe | HPE Smart Array P408i-a SR Gen10 Controller | 100.62.0.64 | 100.62.0.64 | |
| 144 | HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016 | cp034601.exe | HPE Smart Array P408i-p SR Gen10 Controller | 100.62.0.64 | 100.62.0.64 | |
| 145 | HPE Smart Array Gen10 Controller Driver for Windows | cp034601.exe | HPE Smart Array P816i-a SR Gen10 | 100.62.0.64 | 100.62.0.64 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| | Server 2012 R2 and Windows Server 2016 | | Controller | | | |
| 146 | HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016 | cp034601.exe | HPE Smart Array E208e-p SR Gen10 Controller | 100.62.0.64 | 100.62.0.64 | |
| 147 | HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016 | cp034601.exe | HPE Smart Array E208i-a SR Gen10 Controller | 100.62.0.64 | 100.62.0.64 | |
| 148 | HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016 | cp034601.exe | HPE Smart Array E208i-p SR Gen10 Controller | 100.62.0.64 | 100.62.0.64 | |

6.2.7 Driver - Storage Fibre Channel and Fibre Channel over Ethernet

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| 149 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016 | cp034221.exe | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.7 | 11.4.334.7 | |
| 150 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016 | cp034221.exe | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.7 | 11.4.334.7 | |
| 151 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016 | cp034221.exe | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.7 | 11.4.334.7 | |
| 152 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016 | cp034221.exe | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.7 | 11.4.334.7 | |
| 153 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2 | cp034232.exe | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 154 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2 | cp034232.exe | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 155 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2 | cp034232.exe | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 156 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2 | cp034232.exe | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 157 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016 | cp034233.exe | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|---|--------------------|-------------------------|--------|
| 158 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016 | cp034233.exe | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 159 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016 | cp034233.exe | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 160 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016 | cp034233.exe | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 9.2.8.20 | 9.2.8.20 | |
| 161 | Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.06.0_k1-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.06.0-k1 | 8.08.00.08.06.0-k1 | 更新 |
| 162 | Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.06.0_k1-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.06.0-k1 | 8.08.00.08.06.0-k1 | 更新 |
| 163 | Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.06.0_k1-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.06.0-k1 | 8.08.00.08.06.0-k1 | 更新 |
| 164 | Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.06.0_k1-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.06.0-k1 | 8.08.00.08.06.0-k1 | 更新 |
| 165 | Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 166 | Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 167 | Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 168 | Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel6u9.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 169 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.0_k1-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 170 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.0_k1-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|---|---|--------------------|-------------------------|--------|
| | | | Adapter | | | |
| 171 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.0_k1-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 172 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.0_k1-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 173 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.5_k1-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 174 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.5_k1-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 175 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.5_k1-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 176 | Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters | kmod-qlgc-qla2xxx-8.08.00.08.07.5_k1-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 8.08.00.08.07.5-k1 | 8.08.00.08.07.5-k1 | 更新 |
| 177 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 178 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 179 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 180 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u4.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 181 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 182 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |
| 183 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus | kmod-elx-lpfc-11.4.334.26-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre | 11.4.334.26 | 11.4.334.26 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| | Adapters and mezzanine Host Bus Adapters | | Channel Host Bus Adapter | | | |
| 184 | Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters | kmod-elx-lpfc-11.4.334.26-1.rhel7u5.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.26 | 11.4.334.26 | 更新 |

6.2.8 Driver - System Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|--------|-----------------|-------------------------|--------|
| 185 | iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2 | cp034068.exe | - | 4.2.0.0 (B) | 4.2.0.0 (B) | |
| 186 | iLO 5 Automatic Server Recovery Driver for Windows Server 2016 | cp034069.exe | - | 4.2.0.0 (B) | 4.2.0.0 (B) | |
| 187 | iLO 5 Channel Interface Driver for Windows Server 2012 R2 | cp034070.exe | - | 4.3.0.0 | 4.3.0.0 | |
| 188 | iLO 5 Channel Interface Driver for Windows Server 2016 | cp034071.exe | - | 4.3.0.0 | 4.3.0.0 | |

6.2.9 Driver - Video

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|--------|-----------------|-------------------------|--------|
| 189 | Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2 | cp033123.exe | - | 9.15.1.184 (B) | 9.15.1.184 (B) | |
| 190 | Matrox G200eH3 Video Controller Driver for Windows Server 2016 | cp033124.exe | - | 9.15.1.184 (B) | 9.15.1.184 (B) | |

6.2.10 Firmware - Lights-Out Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--------------------------------------|---------------------------------------|-----------------|-------------------------|--------|
| 191 | Language Pack - Japanese | cp035842.exe | Integrated Lights-Out 5 Language Pack | 1.30 | 1.30 | |
| 192 | Language Pack - Japanese | firmware-lpk-ilo-1.30-1.1.x86_64.rpm | Integrated Lights-Out 5 Language Pack | 1.30 | 1.30 | |
| 193 | Online ROM Flash Component for Linux - iLO 5 | firmware-ilo5-1.35-1.1.x86_64.rpm | Integrated Lights-Out 5 Firmware | 1.35 | 1.35 | 更新 |
| 194 | Online ROM Flash Component for Windows x64 - iLO 5 | cp037219.exe | Integrated Lights-Out 5 Firmware | 1.35 | 1.35 | 更新 |

6.2.11 Firmware - Network

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---------------------------------------|-----------------|-------------------------|--------|
| 195 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-broadcom-2.21.58-1.1.x86_64.rpm | HP Ethernet 1Gb 2-port 332T Adapter | 2.21.58 | 20.12.41 | 更新 |
| 196 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-broadcom-2.21.58-1.1.x86_64.rpm | HP Ethernet 1Gb 4-port 331FLR Adapter | 2.21.58 | 20.12.41 | 更新 |
| 197 | HPE Broadcom NX1 Online | firmware-nic-broadcom | HP Ethernet 1Gb | 2.21.58 | 20.12.41 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|--|-----------------|-------------------------|--------|
| | Firmware Upgrade Utility for Linux x86_64 | -2.21.58-1.1.x86_64.rpm | 4-port 331i Adapter (22BE) | | | |
| 198 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-broadcom-2.21.58-1.1.x86_64.rpm | HP Ethernet 1Gb 4-port 331T Adapter | 2.21.58 | 20.12.41 | 更新 |
| 199 | HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware | CP035378.zip | HP Ethernet 1Gb 2-port 332T Adapter | 1.22.1 | 20.12.41 | 新規追加 |
| 200 | HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware | CP035378.zip | HP Ethernet 1Gb 4-port 331FLR Adapter | 1.22.1 | 20.12.41 | 新規追加 |
| 201 | HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware | CP035378.zip | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 1.22.1 | 20.12.41 | 新規追加 |
| 202 | HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware | CP035378.zip | HP Ethernet 1Gb 4-port 331T Adapter | 1.22.1 | 20.12.41 | 新規追加 |
| 203 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034766.exe | HP Ethernet 1Gb 2-port 332T Adapter | 5.1.3.0 | 20.12.41 | |
| 204 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034766.exe | HP Ethernet 1Gb 4-port 331FLR Adapter | 5.1.3.0 | 20.12.41 | |
| 205 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034766.exe | HP Ethernet 1Gb 4-port 331i Adapter (22BE) | 5.1.3.0 | 20.12.41 | |
| 206 | HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034766.exe | HP Ethernet 1Gb 4-port 331T Adapter | 5.1.3.0 | 20.12.41 | |
| 207 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HPE Ethernet 1Gb 4-port 369i Adapter | 1.15.56 | 1.1904.0 | 更新 |
| 208 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HP Ethernet 1Gb 2-port 361T Adapter | 1.15.56 | 1.1904.0 | 更新 |
| 209 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HP Ethernet 1Gb 4-port 366FLR Adapter | 1.15.56 | 1.1904.0 | 更新 |
| 210 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HP Ethernet 1Gb 4-port 366T Adapter | 1.15.56 | 1.1904.0 | 更新 |
| 211 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 1.15.56 | 10.3.5 | 更新 |
| 212 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 1.15.56 | 10.3.5 | 更新 |
| 213 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 1.15.56 | 10.3.5 | 更新 |
| 214 | HPE Intel Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-intel-1.15.56-1.1.x86_64.rpm | HPE Ethernet 10Gb 2-port 562T Adapter | 1.15.56 | 10.3.5 | 更新 |
| 215 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HPE Ethernet 1Gb 4-port 369i Adapter | 3.8.0 | 1.1904.0 | 新規追加 |
| 216 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HP Ethernet 1Gb 2-port 361T Adapter | 3.8.0 | 1.1904.0 | 新規追加 |
| 217 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HP Ethernet 1Gb 4-port 366FLR Adapter | 3.8.0 | 1.1904.0 | 新規追加 |
| 218 | HPE Intel Online Firmware | CP035380.zip | HP Ethernet 1Gb | 3.8.0 | 1.1904.0 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|--|-----------------|-------------------------|--------|
| | Upgrade Utility for VMware | | 4-port 366T Adapter | | | |
| 219 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 3.8.0 | 10.3.5 | 新規追加 |
| 220 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 3.8.0 | 10.3.5 | 新規追加 |
| 221 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 3.8.0 | 10.3.5 | 新規追加 |
| 222 | HPE Intel Online Firmware Upgrade Utility for VMware | CP035380.zip | HPE Ethernet 10Gb 2-port 562T Adapter | 3.8.0 | 10.3.5 | 新規追加 |
| 223 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HPE Ethernet 1Gb 4-port 369i Adapter | 5.1.3.0 | 1.1904.0 | |
| 224 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HP Ethernet 1Gb 2-port 361T Adapter | 5.1.3.0 | 1.1904.0 | |
| 225 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HP Ethernet 1Gb 4-port 366FLR Adapter | 5.1.3.0 | 1.1904.0 | |
| 226 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HP Ethernet 1Gb 4-port 366T Adapter | 5.1.3.0 | 1.1904.0 | |
| 227 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 5.1.3.0 | 10.3.5 | |
| 228 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HPE Ethernet 10Gb 2-port 562FLR-T Adapter | 5.1.3.0 | 10.3.5 | |
| 229 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 5.1.3.0 | 10.3.5 | |
| 230 | HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034074.exe | HPE Ethernet 10Gb 2-port 562T Adapter | 5.1.3.0 | 10.3.5 | |
| 231 | HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-qlogic-nx2-2.22.56-1.1.x86_64.rpm | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 2.22.56 | 7.17.19 | 更新 |
| 232 | HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-qlogic-nx2-2.22.56-1.1.x86_64.rpm | HP Ethernet 10Gb 2-port 530T Adapter | 2.22.56 | 7.17.19 | 更新 |
| 233 | HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64 | firmware-nic-qlogic-nx2-2.22.56-1.1.x86_64.rpm | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 2.22.56 | 7.17.19 | 更新 |
| 234 | HPE QLogic NX2 Online Firmware Upgrade Utility for VMware | CP035389.zip | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 1.22.2 | 7.17.19 | 新規追加 |
| 235 | HPE QLogic NX2 Online Firmware Upgrade Utility for VMware | CP035389.zip | HP Ethernet 10Gb 2-port 530T Adapter | 1.22.2 | 7.17.19 | 新規追加 |
| 236 | HPE QLogic NX2 Online Firmware Upgrade Utility for VMware | CP035389.zip | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 1.22.2 | 7.17.19 | 新規追加 |
| 237 | HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034083.exe | HP Ethernet 10Gb 2-port 530SFP+ Adapter | 5.1.3.0 | 7.17.19 | |
| 238 | HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034083.exe | HP Ethernet 10Gb 2-port 530T Adapter | 5.1.3.0 | 7.17.19 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|--|-----------------|-------------------------|--------|
| 239 | HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions | cp034083.exe | HPE FlexFabric 10Gb 2-port 533FLR-T Adapter | 5.1.3.0 | 7.17.19 | |
| 240 | Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters | firmware-nic-mellanox-ethernet-only-1.0.8-2.1.x86_64.rpm | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 1.0.8 (A) | 14.22.1414 | |
| 241 | Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters | firmware-nic-mellanox-ethernet-only-1.0.8-2.1.x86_64.rpm | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 1.0.8 (A) | 14.22.1414 | |
| 242 | Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Linux x86_64 platform | firmware-hca-mellanox-vpi-connectx4-1.0.4-1.1.x86_64.rpm | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 1.0.4 | 16.22.4030 | |
| 243 | Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters | cp037168.exe | HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter | 1.0.0.8 (B) | 14.22.1414 | 更新 |
| 244 | Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters | cp037168.exe | HPE Ethernet 25Gb 2-port 640SFP28 Adapter | 1.0.0.8 (B) | 14.22.1414 | 更新 |
| 245 | Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Windows x86_64 platform | cp037170.exe | HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter | 1.0.0.4 (A) | 16.22.4030 | 更新 |

6.2.12 Firmware - Power Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| 246 | Online ROM Flash for Linux - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors | firmware-powerpic-1.0.4-1.1.x86_64.rpm | Advanced Power Capping Microcontroller Firmware | 1.0.4 | 1.0.4 | |
| 247 | Online ROM Flash for Windows x64 - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors | cp033359.exe | Advanced Power Capping Microcontroller Firmware | 1.0.4 | 1.0.4 | |

6.2.13 Firmware - SAS Storage Disk

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|---------------|-----------------|-------------------------|--------|
| 248 | Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives | CP036115.zip | EG000600JWEBH | HPD3 (C) | HPD3 | 新規追加 |
| 249 | Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives | CP036115.zip | EG000300JWEBF | HPD3 (C) | HPD3 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|----------------|-----------------|-------------------------|--------|
| 250 | Online ROM Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives | CP036119.zip | EG002400JWJNT | HPD1 (A) | HPD1 | 新規追加 |
| 251 | Online ROM Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives | CP036122.zip | EG1200JEMDA | HPD6 (C) | HPD6 | 新規追加 |
| 252 | Online ROM Flash Component for VMware ESXi - EG1800JEMDB Drives | CP036125.zip | EG1800JEMDB | HPD5 (A) | HPD5 | 新規追加 |
| 253 | Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | CP036128.zip | EH000300JWCPK | HPD3 (C) | HPD3 | 新規追加 |
| 254 | Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | CP036128.zip | EH000600JWCPL | HPD3 (C) | HPD3 | 新規追加 |
| 255 | Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | CP036128.zip | EH000900JWCPN | HPD3 (C) | HPD3 | 新規追加 |
| 256 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | EO000400JWDKP | HPD1 (C) | HPD1 | 新規追加 |
| 257 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | EO000800JWDKQ | HPD1 (C) | HPD1 | 新規追加 |
| 258 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | EO001600JWDKR | HPD1 (C) | HPD1 | 新規追加 |
| 259 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | MO000400JWDK U | HPD1 (C) | HPD1 | 新規追加 |
| 260 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | MO000800JWDK V | HPD1 (C) | HPD1 | 新規追加 |
| 261 | Online ROM Flash Component for VMware ESXi - | CP036132.zip | MO001600JWDLA | HPD1 (C) | HPD1 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|---------------|-----------------|-------------------------|--------|
| | EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | | | | | |
| 262 | Online ROM Flash Component for VMware ESXi - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | CP036132.zip | MO003200JWDLB | HPD1 (C) | HPD1 | 新規追加 |
| 263 | Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | CP036142.zip | MB1000JVYZL | HPD2 (C) | HPD2 | 新規追加 |
| 264 | Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | CP036142.zip | MB2000JVYZN | HPD2 (C) | HPD2 | 新規追加 |
| 265 | Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | CP036142.zip | MB4000JVYZQ | HPD2 (C) | HPD2 | 新規追加 |
| 266 | Online ROM Flash Component for VMware ESXi - MB6000JVYV Drives | CP036159.zip | MB6000JVYV | HPD2 (C) | HPD2 | 新規追加 |
| 267 | Online ROM Flash Component for VMware ESXi - MB8000JFECQ Drives | CP036162.zip | MB8000JFECQ | HPD7 (A) | HPD7 | 新規追加 |
| 268 | Online ROM Flash Component for VMware ESXi - MM1000JEFRC and MM2000JEFRC Drives | CP036167.zip | MM2000JEFRC | HPD8 (A) | HPD8 | 新規追加 |
| 269 | Online ROM Flash Component for VMware ESXi - MM1000JFJTH Drives | CP036168.zip | MM1000JFJTH | HPD3 (A) | HPD3 | 新規追加 |
| 270 | Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives | cp034292.exe | EG000600JWEBH | HPD3 (B) | HPD3 | |
| 271 | Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives | cp034292.exe | EG000300JWEBF | HPD3 (B) | HPD3 | |
| 272 | Online ROM Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives | cp035599.exe | EG002400JWJNT | HPD1 | HPD1 | |
| 273 | Online ROM Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives | cp034298.exe | EG1200JEMDA | HPD6 (B) | HPD6 | |
| 274 | Online ROM Flash Component for Windows (x64) - EG1800JEMDB Drives | cp035863.exe | EG1800JEMDB | HPD5 | HPD5 | |
| 275 | Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and | cp034310.exe | EH000300JWCPK | HPD3 (B) | HPD3 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|---------------|-----------------|-------------------------|--------|
| | EH000900JWCPN Drives | | | | | |
| 276 | Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | cp034310.exe | EH000600JWCPL | HPD3 (B) | HPD3 | |
| 277 | Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | cp034310.exe | EH000900JWCPN | HPD3 (B) | HPD3 | |
| 278 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | EO000400JWDKP | HPD1 (B) | HPD1 | |
| 279 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | EO000800JWDKQ | HPD1 (B) | HPD1 | |
| 280 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | EO001600JWDKR | HPD1 (B) | HPD1 | |
| 281 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | MO000400JWDKU | HPD1 (B) | HPD1 | |
| 282 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | MO000800JWDKV | HPD1 (B) | HPD1 | |
| 283 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | MO001600JWDLA | HPD1 (B) | HPD1 | |
| 284 | Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | cp035545.exe | MO003200JWDLB | HPD1 (B) | HPD1 | |
| 285 | Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and | cp035654.exe | MB1000JVYZL | HPD2 (B) | HPD2 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|---------------|-----------------|-------------------------|--------|
| | MB4000JVYZQ Drives | | | | | |
| 286 | Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | cp035654.exe | MB2000JVYZN | HPD2 (B) | HPD2 | |
| 287 | Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | cp035654.exe | MB4000JVYZQ | HPD2 (B) | HPD2 | |
| 288 | Online ROM Flash Component for Windows (x64) - MB6000JVYYV Drives | cp035655.exe | MB6000JVYYV | HPD2 (B) | HPD2 | |
| 289 | Online ROM Flash Component for Windows (x64) - MB8000JFECQ Drives | cp035652.exe | MB8000JFECQ | HPD7 | HPD7 | |
| 290 | Online ROM Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives | cp034562.exe | MM2000JEFRC | HPD8 | HPD8 | |
| 291 | Online ROM Flash Component for Windows (x64) - MM1000JFJTH Drives | cp034509.exe | MM1000JFJTH | HPD3 | HPD3 | |
| 292 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives | firmware-hdd-aa9e289524-HPD3-2.1.x86_64.rpm | EG000600JWEBH | HPD3 (B) | HPD3 | |
| 293 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives | firmware-hdd-aa9e289524-HPD3-2.1.x86_64.rpm | EG000300JWEBF | HPD3 (B) | HPD3 | |
| 294 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives | firmware-hdd-b1c9eaf74c-HPD1-1.1.x86_64.rpm | EG002400JWJNT | HPD1 | HPD1 | |
| 295 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives | firmware-hdd-ac3fda26eb-HPD6-3.1.x86_64.rpm | EG1200JEMDA | HPD6 (C) | HPD6 | |
| 296 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEMDB Drives | firmware-hdd-0a38b25661-HPD5-2.1.x86_64.rpm | EG1800JEMDB | HPD5 (B) | HPD5 | |
| 297 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | firmware-hdd-3d97759111-HPD3-2.1.x86_64.rpm | EH000900JWCPN | HPD3 (B) | HPD3 | |
| 298 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | firmware-hdd-3d97759111-HPD3-2.1.x86_64.rpm | EH000600JWCPL | HPD3 (B) | HPD3 | |
| 299 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives | firmware-hdd-3d97759111-HPD3-2.1.x86_64.rpm | EH000300JWCPK | HPD3 (B) | HPD3 | |
| 300 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JW | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | EO000400JWDKP | HPD1 (B) | HPD1 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|---|---------------|-----------------|-------------------------|--------|
| | DKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | | | | | |
| 301 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | EO000800JWDKQ | HPD1 (B) | HPD1 | |
| 302 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | EO001600JWDKR | HPD1 (B) | HPD1 | |
| 303 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | MO000400JWDKU | HPD1 (B) | HPD1 | |
| 304 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | MO000800JWDKV | HPD1 (B) | HPD1 | |
| 305 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | MO001600JWDLA | HPD1 (B) | HPD1 | |
| 306 | Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives | firmware-hdd-5dcf26fa42-HPD1-2.1.x86_64.rpm | MO003200JWDLB | HPD1 (B) | HPD1 | |
| 307 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | firmware-hdd-b85516c7d2-HPD2-2.1.x86_64.rpm | MB1000JVYZL | HPD2 (B) | HPD2 | |
| 308 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | firmware-hdd-b85516c7d2-HPD2-2.1.x86_64.rpm | MB2000JVYZN | HPD2 (B) | HPD2 | |
| 309 | Supplemental Update / Online ROM Flash Component for | firmware-hdd-b85516c7d2-HPD2-2.1.x86_64.r | MB4000JVYZQ | HPD2 (B) | HPD2 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|---|-------------|-----------------|-------------------------|--------|
| | Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives | pm | | | | |
| 310 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JVYYV Drives | firmware-hdd-0595c2a887-HPD2-2.1.x86_64.rpm | MB6000JVYYV | HPD2 (B) | HPD2 | |
| 311 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives | firmware-hdd-252770cdda-HPD7-1.1.x86_64.rpm | MB8000JFECQ | HPD7 | HPD7 | |
| 312 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives | firmware-hdd-b04257b77b-HPD8-1.1.x86_64.rpm | MM2000JEFRC | HPD8 | HPD8 | |
| 313 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives | firmware-hdd-fa46c607d6-HPD3-1.1.x86_64.rpm | MM1000JFJTH | HPD3 | HPD3 | |

6.2.14 Firmware - SATA Storage Disk

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---------------|-----------------|-------------------------|--------|
| 314 | Online ROM Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives | CP036135.zip | MB001000GWFGF | HPG3 (A) | HPG3 | 新規追加 |
| 315 | Online ROM Flash Component for VMware ESXi - MB006000GWBXQ and MB008000GWBYL Drives | CP036136.zip | MB006000GWBXQ | HPG5 (D) | HPG5 | 新規追加 |
| 316 | Online ROM Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives | CP036141.zip | MB4000GVYZK | HPG4 (C) | HPG4 | 新規追加 |
| 317 | Online ROM Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives | CP036165.zip | MM2000GEFRA | HPG5 (D) | HPG5 | 新規追加 |
| 318 | Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives | cp036260.exe | MB001000GWCBC | HPG4 (D) | HPG4 | 更新 |
| 319 | Online ROM Flash Component for Windows (x64) - MB001000GWFVK and MB002000GFWFL Drives | cp036261.exe | MB002000GFWFL | HPG4 (D) | HPG4 | 更新 |
| 320 | Online ROM Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives | cp036262.exe | MB001000GWFGF | HPG3 (B) | HPG3 | 更新 |
| 321 | Online ROM Flash Component for Windows (x64) - MB006000GWBXQ and MB008000GWBYL Drives | cp036838.exe | MB006000GWBXQ | HPG6 (B) | HPG6 | 更新 |
| 322 | Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives | cp036268.exe | MB4000GVYZK | HPG4 (D) | HPG4 | 更新 |
| 323 | Online ROM Flash Component for Windows (x64) - | cp036278.exe | MB8000GFECR | HPG5 (C) | HPG5 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|---|---------------|-----------------|-------------------------|--------|
| | MB8000GFECR Drives | | | | | |
| 324 | Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives | cp036834.exe | MM2000GEFRA | HPG8 (B) | HPG8 | 更新 |
| 325 | Supplemental Update / Online ROM Flash Component for ESXi - MB001000GWCBC and MB002000GWCBD Drives | CP036133.zip | MB001000GWCBC | HPG4 (C) | HPG4 | 新規追加 |
| 326 | Supplemental Update / Online ROM Flash Component for ESXi - MB001000GWFVK and MB002000GWFVL Drives | CP036134.zip | MB002000GWFVL | HPG4 (C) | HPG4 | 新規追加 |
| 327 | Supplemental Update / Online ROM Flash Component for ESXi - MB8000GFECR Drives | CP036161.zip | MB8000GFECR | HPG5 (A) | HPG5 | 新規追加 |
| 328 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives | firmware-hdd-68b12e54d2-HPG4-4.1.x86_64.rpm | MB001000GWCBC | HPG4 (D) | HPG4 | 更新 |
| 329 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWFVK and MB002000GWFVL Drives | firmware-hdd-bfc4af697b-HPG4-4.1.x86_64.rpm | MB002000GWFVL | HPG4 (D) | HPG4 | 更新 |
| 330 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives | firmware-hdd-0b575b5895-HPG3-2.1.x86_64.rpm | MB001000GWFGF | HPG3 (B) | HPG3 | 更新 |
| 331 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB006000GWBXQ and MB008000GWBXL Drives | firmware-hdd-a1fd19f9ca-HPG6-2.1.x86_64.rpm | MB006000GWBXQ | HPG6 (B) | HPG6 | 更新 |
| 332 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives | firmware-hdd-0a7010918e-HPG4-4.1.x86_64.rpm | MB4000GVYZK | HPG4 (D) | HPG4 | 更新 |
| 333 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives | firmware-hdd-6d922fc9a8-HPG5-3.1.x86_64.rpm | MB8000GFECR | HPG5 (C) | HPG5 | 更新 |
| 334 | Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives | firmware-hdd-ec908c3650-HPG8-2.1.x86_64.rpm | MM2000GEFRA | HPG8 (B) | HPG8 | 更新 |

6.2.15 Firmware - Storage Controller

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|---|-----------------|-------------------------|--------|
| 335 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | CP037352.zip | HPE Smart Array P816i-a SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |
| 336 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, | CP037352.zip | HPE Smart Array P408i-a SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|---|-----------------|-------------------------|--------|
| | P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | | | | | |
| 337 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | CP037352.zip | HPE Smart Array P408i-p SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |
| 338 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | CP037352.zip | HPE Smart Array E208e-p SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |
| 339 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | CP037352.zip | HPE Smart Array E208i-p SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |
| 340 | Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | CP037352.zip | HPE Smart Array E208i-a SR Gen10 Controller | 1.65 | 1.65 | 新規追加 |
| 341 | Online ROM Flash Component for VMware ESXi 夔・HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers | CP033904.zip | HPE 12Gb SAS Expander Card | 4.02 | 4.02 | 新規追加 |
| 342 | Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers | cp034755.exe | HPE 12Gb SAS Expander Card | 4.02 (B) | 4.02 | |
| 343 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | cp037353.exe | HPE Smart Array P816i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 344 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | cp037353.exe | HPE Smart Array P408i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 345 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, | cp037353.exe | HPE Smart Array P408i-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| | P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | | | | | |
| 346 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | cp037353.exe | HPE Smart Array E208e-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 347 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | cp037353.exe | HPE Smart Array E208i-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 348 | Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | cp037353.exe | HPE Smart Array E208i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 349 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array P816i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 350 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array P408i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 351 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array P408i-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 352 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array E208e-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 353 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array E208i-p SR Gen10 Controller | 1.65 | 1.65 | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| | P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | | | | | |
| 354 | Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 | firmware-smartarray-f7c07bdbbd-1.65-1.1.x86_64.rpm | HPE Smart Array E208i-a SR Gen10 Controller | 1.65 | 1.65 | 更新 |
| 355 | Supplemental Update / Online ROM Flash Component for Linux (x64) 震•HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers | firmware-smartarray-2de15b6882-4.02-1.1.x86_64.rpm | HPE 12Gb SAS Expander Card | 4.02 | 4.02 | |

6.2.16 Firmware - Storage Fibre Channel

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|---|-----------------|-------------------------|--------|
| 356 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64) | firmware-fc-emulex-2018.09.02-1.3.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 357 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64) | firmware-fc-emulex-2018.09.02-1.3.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 358 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64) | firmware-fc-emulex-2018.09.02-1.3.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 359 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64) | firmware-fc-emulex-2018.09.02-1.3.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 360 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP037461.zip | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 361 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP037461.zip | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 362 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP037461.zip | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 363 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP037461.zip | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|--|---|-----------------|-------------------------|--------|
| 364 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP037460.zip | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 365 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP037460.zip | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 366 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP037460.zip | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 367 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP037460.zip | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 新規追加 |
| 368 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016 x64 | cp037458.exe | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 369 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016 x64 | cp037458.exe | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 370 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016 x64 | cp037458.exe | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 371 | HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016 x64 | cp037458.exe | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.02 | 11.4.334.10 | 更新 |
| 372 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64) | firmware-fc-qlogic-2018.09.01-1.1.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 更新 |
| 373 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64) | firmware-fc-qlogic-2018.09.01-1.1.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 更新 |
| 374 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64) | firmware-fc-qlogic-2018.09.01-1.1.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 更新 |
| 375 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64) | firmware-fc-qlogic-2018.09.01-1.1.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 更新 |
| 376 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP035931.zip | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus | 2018.09.01 | 01.70.85 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| | | | Adapter | | | |
| 377 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP035931.zip | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 378 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP035931.zip | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 379 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0 | CP035931.zip | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 380 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP035932.zip | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 381 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP035932.zip | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 382 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP035932.zip | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 383 | HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5 | CP035932.zip | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 01.70.85 | 新規追加 |
| 384 | HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016 (x86_64) | cp034231.exe | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.06.01 | 01.70.85 | |
| 385 | HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016 (x86_64) | cp034231.exe | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.06.01 | 01.70.85 | |
| 386 | HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016 (x86_64) | cp034231.exe | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.06.01 | 01.70.85 | |
| 387 | HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016 (x86_64) | cp034231.exe | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.06.01 | 01.70.85 | |

6.2.17 Firmware – System

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|--------------------|-----------------|-------------------------|--------|
| 388 | Online Flash Component for Linux - Gen10 NVMe Backplane PIC Firmware | firmware-nvmebackplane-gen10-1.20-4.1.x86_64.rpm | NVMe Backplane PIC | 1.20 (D) | 1.20 | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|--------------------|-----------------|-------------------------|--------|
| 389 | Online Flash Component for Windows x64 - Gen10 NVMe Backplane PIC Firmware | cp036570.exe | NVMe Backplane PIC | 1.20 (C) | 1.20 | |

6.2.18 Software - Lights-Out Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|----------------------------|--------|-----------------|-------------------------|--------|
| 390 | HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T) | hponcfg-5.3.0-0.x86_64.rpm | - | 5.3.0-0 (A) | 5.3.0-0 (A) | 更新 |
| 391 | HP Lights-Out Online Configuration Utility for Windows x64 Editions | cp033351.exe | - | 5.2.0.0 | 5.2.0.0 | |

6.2.19 Software - Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|--------|-----------------|-------------------------|--------|
| 392 | HPE Management Bundle Smart Component for ESXi 6.0 | cp036328.zip | - | 2018.09.01 | 2018.09.01 | 新規追加 |
| 393 | HPE Management Bundle Smart Component for ESXi 6.5 | cp036329.zip | - | 2018.09.01 | 2018.09.01 | 新規追加 |

6.2.20 Software - Network

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|-----------------------------------|------------------|--|-----------------|-------------------------|--------|
| 394 | HPE Intel esx-provider for VMware | cp035296.zip | HP Ethernet 1Gb 2-port 361T Adapter | 2018.09.00 | 0.6-4.3 | 新規追加 |
| 395 | HPE Intel esx-provider for VMware | cp035296.zip | HP Ethernet 1Gb 4-port 366FLR Adapter | 2018.09.00 | 0.6-4.3 | 新規追加 |
| 396 | HPE Intel esx-provider for VMware | cp035296.zip | HP Ethernet 1Gb 4-port 366T Adapter | 2018.09.00 | 0.6-4.3 | 新規追加 |
| 397 | HPE Intel esx-provider for VMware | cp035296.zip | HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter | 2018.09.00 | 0.6-4.3 | 新規追加 |
| 398 | HPE Intel esx-provider for VMware | cp035296.zip | HPE Ethernet 10Gb 2-port 562SFP+ Adapter | 2018.09.00 | 0.6-4.3 | 新規追加 |

6.2.21 Software - Storage Controller

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| 399 | HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions | cp034018.exe | HPE Smart Array P408i-a SR Gen10 Controller | 1.0.0.64 (B) | 1.0.0.64 (B) | |
| 400 | HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions | cp034018.exe | HPE Smart Array P408i-p SR Gen10 Controller | 1.0.0.64 (B) | 1.0.0.64 (B) | |
| 401 | HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions | cp034018.exe | HPE Smart Array P816i-a SR Gen10 Controller | 1.0.0.64 (B) | 1.0.0.64 (B) | |
| 402 | HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions | cp034018.exe | HPE Smart Array E208e-p SR Gen10 Controller | 1.0.0.64 (B) | 1.0.0.64 (B) | |
| 403 | HPE Smart Array SR Event | cp034018.exe | HPE Smart Array | 1.0.0.64 (B) | 1.0.0.64 (B) | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| | Notification Service for Windows Server 64-bit Editions | | E208i-p SR Gen10 Controller | | | |
| 404 | HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions | cp034018.exe | HPE Smart Array E208i-a SR Gen10 Controller | 1.0.0.64 (B) | 1.0.0.64 (B) | |

6.2.22 Software - Storage Fibre Channel

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-----------------------------------|--------|
| 405 | Emulex Fibre Channel driver component for VMware vSphere 6.0 | cp035925.zip | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.600.0.0.2 768847 | 新規追加 |
| 406 | Emulex Fibre Channel driver component for VMware vSphere 6.0 | cp035925.zip | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.600.0.0.2 768847 | 新規追加 |
| 407 | Emulex Fibre Channel driver component for VMware vSphere 6.0 | cp035925.zip | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.600.0.0.2 768847 | 新規追加 |
| 408 | Emulex Fibre Channel driver component for VMware vSphere 6.0 | cp035925.zip | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.600.0.0.2 768847 | 新規追加 |
| 409 | Emulex Fibre Channel driver component for VMware vSphere 6.5 | cp035926.zip | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.650.0.0.4 598673 | 新規追加 |
| 410 | Emulex Fibre Channel driver component for VMware vSphere 6.5 | cp035926.zip | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.650.0.0.4 598673 | 新規追加 |
| 411 | Emulex Fibre Channel driver component for VMware vSphere 6.5 | cp035926.zip | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.650.0.0.4 598673 | 新規追加 |
| 412 | Emulex Fibre Channel driver component for VMware vSphere 6.5 | cp035926.zip | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 11.4.329.0-10 EM.650.0.0.4 598673 | 新規追加 |
| 413 | QLogic Fibre Channel driver component for VMware vSphere 6.0 | cp035928.zip | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 414 | QLogic Fibre Channel driver component for VMware vSphere 6.0 | cp035928.zip | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 415 | QLogic Fibre Channel driver component for VMware vSphere 6.0 | cp035928.zip | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|---------------------------------|--------|
| | | | Adapter | | | |
| 416 | QLogic Fibre Channel driver component for VMware vSphere 6.0 | cp035928.zip | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 417 | QLogic Fibre Channel driver component for VMware vSphere 6.5 | cp035929.zip | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 418 | QLogic Fibre Channel driver component for VMware vSphere 6.5 | cp035929.zip | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 419 | QLogic Fibre Channel driver component for VMware vSphere 6.5 | cp035929.zip | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |
| 420 | QLogic Fibre Channel driver component for VMware vSphere 6.5 | cp035929.zip | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 2018.09.01 | 2.1.73.0-10E M.600.0.0.27 68847 | 新規追加 |

6.2.23 Software - Storage Fibre Channel HBA

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|-----------------------------|---|-----------------|-------------------------|--------|
| 421 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 422 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 423 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 424 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 425 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 426 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 427 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre | 3.3-5 (b) | 3.3-5 (b) | 更新 |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|---|---|-----------------|-------------------------|--------|
| | | | Channel Host Bus Adapter | | | |
| 428 | Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64) | fibreutils-3.3-5.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 3.3-5 (b) | 3.3-5 (b) | 更新 |
| 429 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel6.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 430 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel6.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 431 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel6.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 432 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel6.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 433 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel7.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 434 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel7.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 435 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel7.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 436 | HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server | HP-CNA-FC-Emulex-Enablement-Kit-11.4.334.2-1.rhel7.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 11.4.334.2 | 11.4.334.2 | |
| 437 | HPE Emulex Smart SAN Enablement Kit for Linux | hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 1.0.0.0-4 (b) | 1.0.0.0-4 (b) | |
| 438 | HPE Emulex Smart SAN Enablement Kit for Linux | hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 1.0.0.0-4 (b) | 1.0.0.0-4 (b) | |
| 439 | HPE Emulex Smart SAN Enablement Kit for Linux | hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 1.0.0.0-4 (b) | 1.0.0.0-4 (b) | |
| 440 | HPE Emulex Smart SAN Enablement Kit for Linux | hpe-emulex-smartsan-enablement-kit-1.0.0.0-4 | HPE StoreFabric SN1600E 32Gb | 1.0.0.0-4 (b) | 1.0.0.0-4 (b) | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|--|---|-----------------|-------------------------|--------|
| | | .x86_64.rpm | Single Port Fibre Channel Host Bus Adapter | | | |
| 441 | HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033240.exe | HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | 1.0.0.1 (f) | 1.0.0.1 (f) | |
| 442 | HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033240.exe | HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | 1.0.0.1 (f) | 1.0.0.1 (f) | |
| 443 | HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033240.exe | HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | 1.0.0.1 (f) | 1.0.0.1 (f) | |
| 444 | HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033240.exe | HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | 1.0.0.1 (f) | 1.0.0.1 (f) | |
| 445 | HPE QLogic Fibre Channel Enablement Kit for Linux | HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 6.0.0.0-4 (e) | 6.0.0.0-4 (e) | |
| 446 | HPE QLogic Fibre Channel Enablement Kit for Linux | HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 6.0.0.0-4 (e) | 6.0.0.0-4 (e) | |
| 447 | HPE QLogic Fibre Channel Enablement Kit for Linux | HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 6.0.0.0-4 (e) | 6.0.0.0-4 (e) | |
| 448 | HPE QLogic Fibre Channel Enablement Kit for Linux | HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 6.0.0.0-4 (e) | 6.0.0.0-4 (e) | |
| 449 | HPE QLogic Smart SAN enablement kit for Linux | hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | 3.3-3 (b) | 3.3-3 (b) | |
| 450 | HPE QLogic Smart SAN enablement kit for Linux | hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 3.3-3 (b) | 3.3-3 (b) | |
| 451 | HPE QLogic Smart SAN enablement kit for Linux | hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 3.3-3 (b) | 3.3-3 (b) | |
| 452 | HPE QLogic Smart SAN enablement kit for Linux | hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 3.3-3 (b) | 3.3-3 (b) | |
| 453 | HPE QLogic Smart SAN | cp033239.exe | HPE StoreFabric | 1.0.0.1 (e) | 1.0.0.1 (e) | |

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|--|------------------|---|-----------------|-------------------------|--------|
| | Enablement Kit for Windows 64 bit operating systems | | SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | | | |
| 454 | HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033239.exe | HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | 1.0.0.1 (e) | 1.0.0.1 (e) | |
| 455 | HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033239.exe | HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 1.0.0.1 (e) | 1.0.0.1 (e) | |
| 456 | HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems | cp033239.exe | HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter | 1.0.0.1 (e) | 1.0.0.1 (e) | |

6.2.24 Software - System Management

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|-------------------------------------|--------|-----------------|-------------------------|--------|
| 457 | Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server | amsd-1.3.1-2954.17.rhel6.x86_64.rpm | - | 1.3.1 | 1.3.1 | 更新 |
| 458 | Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server | amsd-1.3.1-2954.23.rhel7.x86_64.rpm | - | 1.3.1 | 1.3.1 | 更新 |
| 459 | Agentless Management Service for Windows X64 | cp034101.exe | - | 1.30.0.0 | 1.30.0.0 | |
| 460 | NVMe Drive Eject NMI Fix for Intel Xeon Processor Scalable Family for Windows | cp033116.exe | - | 1.1.0.0 (B) | 1.1.0.0 (B) | |
| 461 | Smart Storage Administrator (SSA) CLI for Windows 64-bit | cp034625.exe | - | 3.30.14.0 | 3.30.14.0 | |
| 462 | Smart Storage Administrator (SSA) for Windows 64-bit | cp034624.exe | - | 3.30.14.0 | 3.30.14.0 | |
| 463 | Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit | cp034626.exe | - | 3.30.14.0 | 3.30.14.0 | |

6.2.25 Utility - Tools

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version | Update |
|-----|---|------------------|--------|-----------------|-------------------------|--------|
| 464 | HPE Utilities Bundle Smart Component for ESXi 6.0 | cp036210.zip | - | 2018.09.01 | 2018.09.01 | 新規追加 |
| 465 | HPE Utilities Bundle Smart Component for ESXi 6.5 | cp036188.zip | - | 2018.09.01 | 2018.09.01 | 新規追加 |

6.3 パッケージの変更内容

Online ROM Flash Component for Linux - OEM System ROM U34

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Addressed an issue where systems configured with NVDIMM-N Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Enhancements

None

Online ROM Flash Component for Linux - System ROM U30

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an

attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides

mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Addressed an issue where systems configured with NVDIMM-N Memory or Scalable Persistent Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - System ROM U32

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

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Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

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This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Addressed an issue where systems configured with NVDIMM-N Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Linux - System ROM U41

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These

vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - OEM System ROM U34

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT

vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing

speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Addressed an issue where systems configured with NVDIMM-N Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Enhancements

None

Online ROM Flash Component for Windows x64 - System ROM U30

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security

vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This revision of the System ROM includes the latest revision of the Intel microcode which provides mitigation for the Rogue Register Read (also known as Variant 3a) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3640. Systems with microprocessors utilizing speculative execution and that perform speculative reads of system registers may allow unauthorized disclosure of system parameters to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

This firmware version includes additional fixes (since version 1.40) for an issue where systems may experience a 389-Unexpected Shutdown and Restart, logged in the iLO Integrated Management Log (IML). This issue is not unique to HPE servers.

Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated

Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Addressed an issue where systems configured with NVDIMM-N Memory or Scalable Persistent Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - System ROM U32

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

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Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

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Addressed an issue where systems configured with NVDIMM-N Memory may experience a loss of persistent data during a system crash event that would cause a fatal processor error condition (IERR). This issue is not unique to HPE servers.

Known Issues:

None

Online ROM Flash Component for Windows x64 - System ROM U41

Version: 1.42_06-20-2018(Critical)

Important Notes:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

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Firmware Dependencies:

None

Problems Fixed:

This revision of the System ROM includes the latest revision of the Intel microcode which, in combination with operating system and hypervisor updates, provides mitigation for the L1 Terminal Fault – OS/SMM (CVE-2018-3620) and L1 Terminal Fault – VMM (CVE-2018-3646) security vulnerabilities. These vulnerabilities may allow unauthorized disclosure of information residing in the L1 data cache to an attacker with local user access via a side-channel analysis. These security vulnerabilities are not unique to HPE servers and impact any servers utilizing impacted processors. Note that this server is NOT vulnerable to L1 Terminal Fault – SGX (CVE-2018-3615), also known as Foreshadow, because this server does NOT support SGX.

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with operating system updates, provides mitigation for the Speculative Store Bypass (also known as Variant 4) security vulnerability. A Medium level CVE has been assigned to this issue with ID CVE-2018-3639. Systems with microprocessors utilizing speculative execution and speculative execution of memory reads before the addresses of all prior memory writes are known may allow unauthorized disclosure of information to an attacker with local user access via a side-channel analysis. This security vulnerability is not unique to HPE servers and impacts any systems utilizing impacted processors.

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Addressed an issue where systems may log an erroneous Bank 4 Machine Check to the iLO Integrated Management Log (IML) on a system reset event. In most cases, this error can safely be ignored. This issue is not unique to HPE servers.

Known Issues:

None

Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 and Server 2016

Version: 10.1.2.86 (B)(Optional)

Fixes

Corrected a potential installation failure that could occur when Windows Device Guard is enabled.

HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions

Version: 212.0.0.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in a Windows Stop Error (0x133) when the system is operating in a heavily stressed environment.

Enhancements

The component installer for this package is now digitally signed.

Supported Devices and Features

This driver supports the following network adapters:

HP Ethernet 1Gb 4-port 331i Adapter (22BE)

HPE Ethernet 1Gb 4-port 331FLR Adapter

HPE Ethernet 1Gb 4-port 331T Adapter

HPE Ethernet 1Gb 2-port 332T Adapter

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

Version: 3.137w-3(Optional)

Important Note!

HPE recommends the firmware provided in HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64, version 2.21.58 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

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 332T Adapter

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

Version: 3.137w-3(Optional)

Important Note!

HPE recommends the firmware provided in HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64, version 2.21.58 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

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 332T Adapter

HPE Intel E1R Driver for Windows Server 2016

Version: 12.15.184.0 (B)(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.0.4 or later, for use with this driver.

Enhancements

Some of the devices supported by this product have been rebranded.

Supported Devices and Features

This driver supports the following HPE Intel E1R network adapters:

HPE Ethernet 1Gb 2-port 361T Adapter

HPE Ethernet 1Gb 4-port 366i Communication Board

HPE Ethernet 1Gb 4-port 366FLR Adapter

HPE Ethernet 1Gb 4-port 366T Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 2.4.6.1-7(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter

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

HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 2.4.6.1-7(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter
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: 1.8.94.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in a Windows Stop Error (BSOD) when the system is operating in a heavily stressed iSCSI environment.

Supported Devices and Features

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

HPE Intel i40ea Driver for Windows Server 2016

Version: 1.8.94.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in a Windows Stop Error (BSOD) when the system is operating in a heavily stressed iSCSI environment.

Supported Devices and Features

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

HPE Intel i40eb Driver for Windows Server 2012 R2

Version: 1.8.94.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in a Stop Error (0x133) when the system is operating in a heavily stressed environment.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter

HPE Intel i40eb Driver for Windows Server 2016

Version: 1.8.94.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in a Stop Error (0x133) when the system is operating in a heavily stressed environment.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter

HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 3.5.6.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter

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: 3.5.6.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64,

version 1.15.56or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

This product supports the following network adapters:

HPE Ethernet 1Gb 4-port 369i Adapter

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 x86_64

Version: 5.3.5.15-7(Recommended)

Important Note!

HPE recommends the firmware provided inHPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following Intel network adapters:

HP Ethernet 1Gb 2-port 361T Adapter

HP Ethernet 1Gb 4-port 366FLR Adapter

HPE Ethernet 1Gb 4-port 366i Communication Board

HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 5.3.5.15-7(Recommended)

Important Note!

HPE recommends the firmware provided inHPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following Intel network adapters:

HP Ethernet 1Gb 2-port 361T Adapter

HP Ethernet 1Gb 4-port 366FLR Adapter

HPE Ethernet 1Gb 4-port 366i Communication Board

HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 5.3.5.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 5.3.5.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 4.3.3.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 4.3.3.1-8(Recommended)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.15.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixS Driver for Windows Server 2012 R2

Version: 3.14.75.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.2.2 or later, for use with this driver.

Enhancements

This driver is updated to maintain compatibility with latest NDIS drivers.

Supported Devices and Features

This driver supports the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel ixS Driver for Windows Server 2016

Version: 4.1.74.0(Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.2.2 or later, for use with this driver.

Enhancements

This driver is updated to maintain compatibility with latest NDIS drivers.

Supported Devices and Features

This driver supports the following network adapters:

HPE Ethernet 10Gb 2-port 562FLR-T Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2

Version: 1.90.19216.0(Optional)

Fixes

This driver corrects an issue that results in a firmware hang during virtual machine migration in SR-IOV mode or upon host driver restart.

This driver addresses certification issues that occur when running ConnectX-4 Lx at 25Gb/s link speed.

This driver corrects an issue which results in a system crash (BSOD) when network traffic is switched from a single receive queue (RQ) to RSS.

This driver corrects an issue which results in system crash (BSOD) when using iSCSI boot with IPoIB under Windows Server 2016.

This driver corrects an issue which results in system crash (BSOD) when sending packets with the *TransmitBuffers" parameter set to a value that is not a power of 2.

This driver corrects an issue which results in IP configuration being reset after uninstalling the driver.

This driver corrects an issue which results in the device reporting more than the supported number of schedule queues.

This driver addresses an issue which results in loss of connectivity when the firmware is upgraded to a version newer than 12/14/16.21.2010 without the driver being upgraded first.

Enhancements

This driver now supports the following network adapters:

HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter

Supported Devices and Features

This driver supports the following network adapters:

HPE Ethernet 25Gb 2-port 640SFP28 Adapter

HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016

Version: 1.90.19216.0(Optional)

Fixes

This driver corrects an issue that results in a firmware hang during virtual machine migration in SR-IOV mode or upon host driver restart.

This driver addresses certification issues that occur when running ConnectX-4 Lx at 25Gb/s link speed.

This driver corrects an issue which results in a system crash (BSOD) when network traffic is switched from a single receive queue (RQ) to RSS.

This driver corrects an issue which results in system crash (BSOD) when using iSCSI boot with IPoIB under Windows Server 2016.

This driver corrects an issue which results in system crash (BSOD) when sending packets with the *TransmitBuffers" parameter set to a value that is not a power of 2.

This driver corrects an issue which results in IP configuration being reset after uninstalling the driver.

This driver corrects an issue which results in the device reporting more than the supported number of schedule queues.

This driver addresses an issue which results in loss of a connectivity when the firmware is upgraded to a version newer than 12/14/16.21.2010 without the driver being upgraded first.

Enhancements

This driver now supports the following network adapters:

HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter

Supported Devices and Features

This driver supports the following network adapters:

HPE Ethernet 25Gb 2-port 640SFP28 Adapter

HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)

Version: 4.3(Recommended)

Important Note!

Mellanox Ethernet + RoCE Linux driver (mlnx-ofa_kernel RPMs) supports only Ethernet mode of operation for HPE Mellanox adapters. For customers requiring complete InfiniBand functionality or "InfiniBand + Ethernet" modes of operation on the same node, install MLNX-OFED drivers from "Mellanox OFED VPI Drivers and Utilities" Linux Software Delivery Repository (https://downloads.linux.hpe.com/SDR/project/mlnx_ofed/).

Fixes

The following issues have been fixed in version 4.3:

Sending Work Requests (WRs) with multiple entries where the first entry was less than 18 bytes used to fail.

When the interface was down, ethtool counters ceased to increase. As a result, RoCE traffic counters were not always incremented.

Compilation errors of MLNX_OFED over kernel when CONFIG_PTP_1588_CLOCK parameter was not set. System used to hang when trying to allocate multiple device memory buffers from different processes simultaneously.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.3:

For ConnectX-5 adapters, added support for the following multi-packet Work Requests related verbs for control path:

ibv_exp_query_device

ibv_exp_create_srq

Added support for the following new features:

RDMA atomic commands offload so that when an RDMA write operation is issued, the payload indicates

which atomic operation to perform, instead of being written to the Memory Region (MR).

Out of box RoCE LAG support for Red Hat Enterprise Linux 7 Update 2 and Red Hat Enterprise Linux 6 Update 9.

A new counter rx_steer_missed_packets which provides the number of packets that were received by the NIC, yet were discarded/dropped since they did not match any flow in the NIC steering flow table.

Ability for SR-IOV counter rx_dropped to count the number of packets that were dropped while vport was down.

RSYNC feature to ensure correct ordering of memory operations between the GPU and HCA.

Triggering software reset for firmware/driver recovery. When fatal errors occur, firmware can be reset and driver reloaded.

Option to retrieve the Hardware timestamp when polling for completions from a completion queue that is attached to a multi-packet RQ (Striding RQ).

The following advanced burst control parameters:

max_burst_sz - for indicating the maximal burst size of packets

typical_pkt_sz - for improving the accuracy of the rate limiter

Removed support for Virtual MAC feature.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 6 Update 9 (x86_64) supported by this binary rpm are:

2.6.32-696.el6 - (x86_64) and future update kernels.

HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 4 (x86_64)

Version: 4.3(Recommended)

Important Note!

Mellanox Ethernet + RoCE Linux driver (mlnx-ofa_kernel RPMs) supports only Ethernet mode of operation for HPE Mellanox adapters. For customers requiring complete InfiniBand functionality or "InfiniBand + Ethernet" modes of operation on the same node, install MLNX-OFED drivers from "Mellanox OFED VPI Drivers and Utilities" Linux Software Delivery Repository (https://downloads.linux.hpe.com/SDR/project/mlnx_ofed/).

Fixes

The following issues have been fixed in version 4.3:

Sending Work Requests (WRs) with multiple entries where the first entry was less than 18 bytes used to fail.

When the interface was down, ethtool counters ceased to increase. As a result, RoCE traffic counters were not always incremented.

Compilation errors of MLNX_OFED over kernel when CONFIG_PTP_1588_CLOCK parameter was not set.

System used to hang when trying to allocate multiple device memory buffers from different processes simultaneously.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.3:

For ConnectX-5 adapters, added support for the following multi-packet Work Requests related verbs for control path:

ibv_exp_query_device

ibv_exp_create_srq

Added support for the following new features:

RDMA atomic commands offload so that when an RDMA write operation is issued, the payload indicates which atomic operation to perform, instead of being written to the Memory Region (MR).

Out of box RoCE LAG support for Red Hat Enterprise Linux 7 Update 2 and Red Hat Enterprise Linux 6 Update 9.

A new counter rx_steer_missed_packets which provides the number of packets that were received by the NIC, yet were discarded/dropped since they did not match any flow in the NIC steering flow table.

Ability for SR-IOV counter rx_dropped to count the number of packets that were dropped while vport was down.

RSYNC feature to ensure correct ordering of memory operations between the GPU and HCA.

Triggering software reset for firmware/driver recovery. When fatal errors occur, firmware can be reset and driver reloaded.

Option to retrieve the Hardware timestamp when polling for completions from a completion queue that is attached to a multi-packet RQ (Striding RQ).

The following advanced burst control parameters:

max_burst_sz - for indicating the maximal burst size of packets

typical_pkt_sz - for improving the accuracy of the rate limiter

Removed support for Virtual MAC feature.

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 7 Update 4 (x86_64) supported by this binary rpm are:

3.10.0-693.el7- (x86_64) and future update kernels.

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

Version: 7.14.48-1(Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64, version 2.22.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HP Ethernet 10Gb 2-port 530SFP+ Adapter

HP Ethernet 10Gb 2-port 530T Adapter
HP Ethernet 10Gb 2-port 533FLR-T Adapter

HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 7.14.48-1(Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64, version 2.22.56 or later, for use with these drivers.

Fixes

This product provides the Retpoline fix for the Spectre and Meltdown issues.

Supported Devices and Features

These drivers support the following network adapters:

HP Ethernet 10Gb 2-port 530SFP+ Adapter
HP Ethernet 10Gb 2-port 530T Adapter
HP Ethernet 10Gb 2-port 533FLR-T Adapter

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

Version: 7.13.145.0(Optional)

Important Note!

HP recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.3.0 or later, for use with these drivers.

Fixes

This driver corrects an issue which results in a "MissingPFDriver" message appearing in Get-NetAdapterSriov command output.

Supported Devices and Features

This driver supports the following network adapters:

HP Ethernet 10Gb 2-port 530SFP+ Adapter
HP Ethernet 10Gb 2-port 530T Adapter
HP Ethernet 10Gb 2-port 533FLR-T Adapter

HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2 and Windows Server 2016

Version: 100.8.0.0(Recommended)

Fixes

After a Media Exchange Event, such as drive replacement, when a system reboot occurred and an uninitialized variable existed in the RAID stack code, a stable RAID volume might fail. This issue is resolved with Windows SmartDQ driver version 100.8.0.0.

HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)

Version: 1.1.4-133 (A)(Recommended)

Fixes

Address the Linux Spectre Variant 2 Vulnerability Issue

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 6 (64-bit) supported by this driver rpm are:

2.6.32-696.el6 - Red Hat Enterprise Linux 6 Update 9(64-bit) and future errata kernels for update 9.

2.6.32-754 - Red Hat Enterprise Linux 6 Update 10(64-bit) and future errata kernels for update 10.

HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)

Version: 1.1.4-133 (A)(Recommended)

Fixes

Address the Linux Spectre Variant 2 Vulnerability Issue

Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux7 (64-bit) supported by this binary rpmpare:

3.10.0-693.el7- Red Hat Enterprise Linux 7 Update 4 (64-bit) and future errata kernels for update 4.

3.10.0-862.el7- Red Hat Enterprise Linux 7 Update 5 (64-bit) and future errata kernels for update 5.

HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2 and Windows Server 2016

Version: 100.62.0.64(Recommended)

Fixes

Windows 2016 fails cluster validation test.

Windows "Removal Policy" incorrectly set to TRUE.

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016

Version: 11.4.334.7(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

Enhancements

Updated to driver version 11.4.334.7

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:

```
elxdrv-fc-version.exe /q2 extract=2
```

The extracted files are located:

```
C:\Users\Administrator\Documents\Emulex\Drivers\FC-version
```

Each kit folder has subsequent architecture folders with subsequent OS folders. For example,

```
C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2012
```

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2

Version: 9.2.8.20(Recommended)

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

Fixes

This driver version resolves the following :

Switch name server entry, Port Symbols are displayed with dots at the end
Non-descriptive Device name in Windows
Request_Driver_Plogi(Port Login) Retry Delay
Unexpected behavior of FC(Fibre Channel) speed - When transfer sizes above 8MB(MegaByte) are attempted, performance drops to almost zero by making mixed mode (I/O Control Block type 6 and 7) default and used IOCB (I/O Control Block) type 6 when IO(Input Output) size > 128K (> 0x20 segments)

Enhancements

Updated the driver to version 9.2.8.20
Added support for the following:
Added ABTS (Abort Sequence) handling for passthru (pass through) ELS (Extended Link Services) to prevent FW (firmware) resource leak
Updated RISC(Reduced Instruction Set Computer) FW (Firmware) to version 8.07.00 for 8G Adapters
Driver always responds to RDP (Read Diagnostic Parameter) with full payload (new version of FW (firmware) will split it into multiple frames if there is no login session)
Added new DPORT (Destination Port) diagnostic API (Application Program Interface) interface to return detailed codes
Removed Echo only restriction for ELS (Extended Link Services) pass through
Added GFO (Get Fabric Object) and LUN (Logical Unit) level QoS (Quality of Service) support
Added ELS (Extended Link Services) passthru (pass through) interface

Supported Devices and Features

This driver supports the following HPE adapters:
HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016

Version: 9.2.8.20(Recommended)

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:
<http://www.hpe.com/storage/spock/>

Fixes

This driver version resolves the following :
Switch name server entry, Port Symbols are displayed with dots at the end
Non-descriptive Device name in Windows

Request_Driver_Plogi(Port Login) Retry Delay

Unexpected behavior of FC(Fibre Channel) speed - When transfer sizes above 8MB(MegaByte) are attempted, performance drops to almost zero by making mixed mode (I/O Control Block type 6 and 7) default and used IOCB (I/O Control Block) type 6 when IO(Input Output) size > 128K (> 0x20 segments)

Enhancements

Updated the driver to version 9.2.8.20

Added support for the following:

Added ABTS (Abort Sequence) handling for passthru (pass through) ELS (Extended Link Services) to prevent FW (firmware) resource leak

Updated RISC(Reduced Instruction Set Computer) FW (Firmware) to version 8.07.00 for 8G Adapters
Driver always responds to RDP (Read Diagnostic Parameter) with full payload (new version of FW (firmware) will split it into multiple frames if there is no login session)

Added new DPORT (Destination Port) diagnostic API (Application Program Interface) interface to return detailed codes

Removed Echo only restriction for ELS (Extended Link Services) pass through

Added GFO (Get Fabric Object) and LUN (Logical Unit) level QoS (Quality of Service) support

Added ELS (Extended Link Services) passthru (pass through) interface

Supported Devices and Features

This driver supports the following HPE adapters:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters

Version: 8.08.00.08.06.0-k1(Recommended)

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:

Spectra Meltdown warning messages during driver update/installation.

Enhancements

Updated to version 8.08.00.08.06.0-k1

Supported Devices and Features

This driver supports the following HPE adapters:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters

Version: 11.4.334.26(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Fixes

This driver version resolves the following:

Spectra Meltdown warning messages during driver update/installation.

Enhancements

Updated to driver version 11.4.334.26

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

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 FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters

Version: 8.08.00.08.07.5-k1(Recommended)

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:

Spectra Meltdown warning messages during driver update/installation.

Enhancements

Updated driver to version 8.08.00.08.07.5-k1

Supported Devices and Features

This driver supports the following HPE adapters:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter

Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters

Version: 11.4.334.26(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Fixes

This driver version resolves the following:

Spectra Meltdown warning messages during driver update/installation.

Enhancements

Updated to driver version 11.4.334.26

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

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

iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2

Version: 4.2.0.0 (B)(Optional)

Important Note!

Installing the iLO 5 Channel Interface Driver, version 4.1.0.0 or earlier, will overwrite this driver. To avoid the overwrite, use version 4.1.0.0(B) or later of the iLO 5 Channel Interface Driver.

Enhancements

Added support for the HPE ProLiant DL325 Gen10.

iLO 5 Automatic Server Recovery Driver for Windows Server 2016

Version: 4.2.0.0 (B)(Optional)

Important Note!

Installing the iLO 5 Channel Interface Driver, version 4.1.0.0 or earlier, will overwrite this driver. To avoid the overwrite, use version 4.1.0.0(B) or later of the iLO 5 Channel Interface Driver.

Enhancements

Added support for the HPE ProLiant DL325 Gen10.

iLO 5 Channel Interface Driver for Windows Server 2012 R2

Version: 4.3.0.0(Optional)

Enhancements

Enabled message-signaled interrupts to avoid interrupt sharing with the Universal Serial Bus controller in iLO 5.

Added support for the HPE ProLiant DL325 Gen10.

iLO 5 Channel Interface Driver for Windows Server 2016

Version: 4.3.0.0(Optional)

Enhancements

Enabled message-signaled interrupts to avoid interrupt sharing with the Universal Serial Bus controller in iLO 5.

Added support for the HPE ProLiant DL325 Gen10.

Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2

Version: 9.15.1.184 (B)(Optional)

Enhancements

Added support for the HPE ProLiant DL325 Gen10.

Matrox G200eH3 Video Controller Driver for Windows Server 2016

Version: 9.15.1.184 (B)(Optional)

Enhancements

Added support for the HPE ProLiant DL325 Gen10.

Language Pack - Japanese

Version: 1.30(Recommended)

Enhancements

N/A

Language Pack - Japanese

Version: 1.30(Optional)

Prerequisites

Requires iLO 5firmware version 1.10 or higher

Enhancements

N/A

Online ROM Flash Component for Linux - iLO 5

Version: 1.35(Recommended)

Fixes

iLO 5 v1.35release

Online ROM Flash Component for Windows x64 - iLO 5

Version: 1.35(Recommended)

Fixes

iLO 5 v1.35release

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.21.58(Optional)

Important Note!

HPE recommends HPE Broadcom tg3 Ethernet Drivers, versions 3.137w-3 or later, for use with this firmware.

Prerequisites

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (ifup ethX or ifconfig ethX up) before firmware can be updated.

Fixes

N/A

Enhancements

This product now supports SUSE Linux Enterprise Server 15.

Supported Devices and Features

This product supports the following network adapters:

HP Ethernet 1Gb 4-port 331i Adapter (22BE)

HPE Ethernet 1Gb 4-port 331FLR Adapter

HPE Ethernet 1Gb 4-port 331T Adapter

HPE Ethernet 1Gb 2-port 332T Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.1.3.0(Optional)

Important Note!

HPE recommends HPE Broadcom 1Gb Driver for Windows Server x64 Editions, version 212.0.0.0 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses an issue where the NIC Serial Number for the HPE Ethernet 1Gb 4-port 331FLR Adapter is not displayed in AHS.

The firmware in this product addresses an issue where the "Reboot Required" icon is not highlighted after a NIC firmware update (via System Utilities->Embedded Application->Firmware Update) completes.

Supported Devices and Features

This product supports the following network adapters:

HP Ethernet 1Gb 4-port 331i Adapter (22BE)

HPE Ethernet 1Gb 4-port 331FLR Adapter

HPE Ethernet 1Gb 4-port 331T Adapter

HPE Ethernet 1Gb 2-port 332T Adapter

HPE Intel Online Firmware Upgrade Utility for Linux x86_64

Version: 1.15.56(Optional)

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 5.3.5.15 or later

HPE Intel ixgbe Drivers for Linux, versions 5.3.5.1 or later

HPE Intel i40e Drivers for Linux, versions 2.4.6.1 or later

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

N/A

Enhancements

This product now supports SUSE Linux Enterprise Server 15.

Supported Devices and Features

This package supports the following network adapters:

HP Ethernet 1Gb 2-port 361T Adapter

HP Ethernet 1Gb 4-port 366FLR Adapter

HPE Ethernet 1Gb 4-port 366i Communication Board

HP Ethernet 1Gb 4-port 366T Adapter

HPE Ethernet 1Gb 4-port 369i Adapter

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

HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Ethernet 10Gb 2-port 562T Adapter

HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.1.3.0(Optional)

Important Note!

HPE recommends at least one of the following, as appropriate for your device, for use with this firmware:

HPE Intel E1R Driver for Windows Server 2012, versions 12.14.8.0 or later

HPE Intel E1R Driver for Windows Server 2016, version 12.15.184.0(B) or later

HPE Intel ixn Driver for Windows Server 2012, versions 3.14.76.0 or later

HPE Intel ixn Driver for Windows Server 2016, version 4.1.74.0 or later

HPE Intel ixs Driver for Windows Server 2012 R2, version 3.14.75.0 or later
HPE Intel ixs Driver for Windows Server 2016, version 4.1.74.0 or later
HPE Intel ixt Driver for Windows Server 2012, versions 3.14.76.0 or later
HPE Intel ixt Driver for Windows Server 2016, version 4.1.74.0 or later
HPE Intel i40ea Driver for Windows, versions 1.8.94.0 or later
HPE Intel i40eb Driver for Windows, versions 1.8.94.0 or later

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product addresses a NIC VLAN ID issue seen in the NIC Human Interface Infrastructure (HII) menu when operating in UEFI mode.

This product addresses a teaming issue where the HPE Ethernet 10Gb 2-port 561T Adapter still shows connected on the switch after the NIC has been disabled.

This product addresses a link issue and a PXE issue seen with the HPE Ethernet 10Gb 2-port 560FLB Adapter.

This product addresses a WOL issue seen with the HPE Ethernet 1Gb 4-port 366T Adapter.

Supported Devices and Features

This package supports the following network adapters:

HP Ethernet 1Gb 2-port 361T Adapter
HP Ethernet 1Gb 4-port 366FLR Adapter
HPE Ethernet 1Gb 4-port 366i Communication Board
HP Ethernet 1Gb 4-port 366T Adapter
HPE Ethernet 1Gb 4-port 369i Adapter
HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
HPE Ethernet 10Gb 2-port 562SFP+ Adapter
HPE Ethernet 10Gb 2-port 562T Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.22.56(Optional)

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for Linux, versions 7.14.48-2 or later, for use with the firmware in this package.

Prerequisites

This package requires the appropriate driver for your network adapter be installed and all Ethernet ports brought up (ifup ethX or ifconfig ethX up) before firmware can be updated.

Enhancements

This product now supports SUSE Linux Enterprise Server 15.

Supported Devices and Features

This product supports the following network adapters:

HP Ethernet 10Gb 2-port 530SFP+ Adapter

HP Ethernet 10Gb 2-port 530T Adapter

HP Ethernet 10Gb 2-port 533FLR-T Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.1.3.0(Optional)

Important Note!

HPE recommends HPE QLogic NX210/20GbE Multifunction Drivers for Windows Server x64 Editions, version 7.13.145.0 or later, for use with this firmware.

Prerequisites

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

Fixes

This product corrects an issue where users may see an error message when they attempt to restore the adapter's configuration settings to defaults by pressing F7 under the 'System Utilities->System Configuration' menu.

Supported Devices and Features

This product supports the following network adapters:

HP Ethernet 10Gb 2-port 530SFP+ Adapter

HP Ethernet 10Gb 2-port 530T Adapter

HP Ethernet 10Gb 2-port 533FLR-T Adapter

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters

Version: 1.0.8 (A)(Recommended)

Important Note!

Known Issues for FW version 2.42.5000 :

Enabling/disabling cq_timestamp using mlxconfig is not supported.

In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LED will not be active while the ETH link is in an idle mode.

In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.

Downgrade to previous GA requires server reboot. Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. Reboot the server.

On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/driver utilities that read the GUID via device firmware (e.g., using ibstat). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC

address. For all driver/firmware/software purposes, the latter value should be used.

SBR should be asserted for a minimum of 50 milliseconds for the ConnectX®-3 adapters

On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed

RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.

In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.

When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.

MFT tools might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.

Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module

Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).

PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV

Bloom filter is currently not supported.

Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3

RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3

RM#VPD read-only fields are writable.

Increasing SymbolErrorCounter When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly

Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.

CQ and EQ cannot be configured to different stride sizes.

ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.

RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.

Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.

RDP over IPv6 is currently not functional.

Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule"

Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.

The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.

56GbE link is not raised when using 100GbE optic cables.

When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in `mlx-4_en_get_drvinfo()` that is called from asynchronous event handler.

832298:When running `ibdump`, loopback traffic is mirroring into the kernel driver.

AHS reports wrong MTU size

RM#846523: MAC address that are set from the OS using `ifconfig` are not reflected in the OCBB buffer.

Known Issues for FW version 14.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

Health counter increases every 50ms instead of 10ms.

mlxconfig tool presents all possible expansion ROM images instead of presenting only the existing images.

An ethernet multicast loopback packet is not counted (even if it is not local loopback packets) when running the nic_receive_steering_discard command.

When a dual-port VHCA sends RoCE packets on its non-native port, and the packet arrives to its affiliated vport FDB, a mismatch might happen on the rules that match the packet source vport.

Known Issues for FW version 12.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

On rare occasions, retransmissions/packet loss under signature can cause error reporting and terminate the connection.

Health counter increases every 50ms instead of 10ms.

mlxconfig tool presents all possible expansion ROM images, instead of presenting only the existing images.

An Ethernet multicast loopback packet is not counted (even if it is not a local loopback packet) when running the nic_receive_steering_discard command.

When a dual-port VHCA sends a RoCE packet on its non-native port. and the packet arrives to its affiliated vport FDB, a mismatch might happen on the rules that match the packet source vport.

During DC CNAK stress tests, DC CNAK timeout (CNAK drops) might occur.

Known Issues for FW version 16.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

Health counter increases every 50ms instead of 10ms.

Prerequisites

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.

12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).

Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

Fixes

Fixes submitted in version 2.42.5000 :

ThePortRcvPkts counter was prevented from being cleared after resetting it..

SystemTime Out on the configuration cycle of the VFs when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.

The server hung and resulted in NMI (Non-maskable interrupt) when running "mlxftop -d mt4103_pci_cr0" while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.

In flow_steering, BMC could not receive a ping over IPV6 after running bmc_reboot.

While closing the HCA (Host Channel Adapters), RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.

The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.

ibdump could not capture all MADs packets.

Link could not go up after reboot.

A rare issue caused the PCIe configuration cycle that arrived during the time of sw_reset to generate 2 completions.

NC-SI (Network Controller Sideband Interface) did not work when adding the disable_stat-ic_steering_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

Fixes submitted in version 14.22.1414 :

A temperature normalization function calculation issue. Now the cable gain that is not pure integer is taken into account was fixed.

An issue related to the parser of object 0x8 in ASN that caused different structure in response was fixed.

Added the option to avoid unintentionally powering off the backplane port cage upon reboot when in standby mode.

An issue that caused the driver to return a wrong logical OR of the 2 physical ports, when querying the vport state when the LAG was enabled was fixed.

Increased the Full Wire Speed (FWS) threshold value to improve EDR link results.

An issue that resulted in "Destroy LAG" command failure if a VFs received an FLR while its affinity QPs were open.

When RoCE Dual Port mode is enabled, tcpdump is not functional on the 2nd port.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

779799-B21 (HPEthernet 10G 2-port 546FLR-SFP+ Adapter)

779793-B21 (HPEthernet 10G 2-port 546SFP+ Adapter)

New features and changes in version 2.42.5000:

Added support for the following features:

TLV: CX3_GLOBAL_CONF to enable/disable timestamp on incoming packets through mlxconfig configuration.

User MAC configuration.

Automatically collecting mstdump before driver reset.

to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.

Enhanced the debug ability for command timeout cases.

Added a new field to "set port" command which notifies the firmware what is the user_mtu size.

Firmware for the following devices are updated to 14.22.1414:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

New features and changes in version 14.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow: Software detection of a fatal error, automatic creations of an mstdump file for future

debug by the software, and resetting of the device.

Steering Discard Packet Counters:The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow in dual port devices to 20 VFs

in single port devices to 58 VFs

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering:mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

vport Mirroring:Packets are mirrored based on certain mirroring policy. The policy is set using the “set FTE command” that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event:Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP's creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Firmware for the following device is updated to 12.22.1414:

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

New features and changes in version 12.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow:Software detection of a fatal error, automatic creations of an mstdump file for future debug by the software, and resetting of the device.

Steering Discard Packet Counters:The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow in dual port devices to 20 VFs

in single port devices to 58 VFs

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering:mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

vport Mirroring:Packets are mirrored based on certain mirroring policy. The policy is set using the “set FTE command” that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event:Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP's creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Firmware for the following device is updated to 16.22.1414:

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 16.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow: Software detection of a fatal error, automatic creations of an mstdump file for future debug by the software, and resetting of the device.

Steering Discard Packet Counters: The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering: mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

Added support for Push/Pop VLAN, new FLOW TABLE ENTRY actions. These new actions are used by the driver to implement Q-in-Q functionality.

Packet Pacing in ConnectX-5 adapter cards.

vport Mirroring: Packets are mirrored based on certain mirroring policy. The policy is set using the "set FTE command" that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event: Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP's creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Supported Devices and Features

HPE Part Number

779793-B21

779799-B21

817749-B21

817753-B21

868779-B21

874253-B21

Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Linux x86_64 platform

Version: 1.0.4(Recommended)

Important Note!

Known Issues in firmware version 12.22.4030 and 16.22.4030:

The maximum “read” size of MTRC_STDB is limited by 272 Bytes.

Using vl_arb_high or vl_arb_low simultaneously might cause unexpected behavior in QoS functionality.

Prerequisites

Due to significant firmware changes, the devices mentioned in the table below must be upgraded to the prerequisite version first, then programmed to version 16.22.0194 and onwards.

16.22.0194 is the first secure firmware for HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter (879482-B21). Once this device is upgraded to firmware 16.22.0194, downgrade is not allowed.
InfiniBand Card Type

Fixes

Fixes in firmware version 12.22.4030 and 16.22.4030:

In rare cases, where the width of the receiver's electrical eye is narrow, the link might raise with BER lower than 10^{-12} .

LRO timeout configuration is now taken from the TLV configuration instead of the static defined values.

Added a filter to ignore module temperature reads below -40C and above 125C.

Closed the vport as part of the fast teardown flow, to prevent Ack to be sent without been scatter to memory.

A rare scenario where the PERST# de-assertion arrived at a specific critical time period was handled.

Temperature normalization function calculation issue. Now the cable gain that is not pure integer is taken into account.

The parser of object 0x8 in ASN that caused different structure in response.

An issue that caused MSIX interrupt lost while the HCA performed an FLR was handled.

An issue that caused a race condition between the firmware boot process and the MSIX access from the PCIe, which resulted in lost writes into the MSIX vector was fixed.

Enhancements

Firmware for the following devices are updated to 12.22.4030:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)

825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

New features and changes in version 12.22.4030:

AS Notify: AS Notify enables IBM's Power CPU architecture to boost performance by allowing the hardware to issue light weight “interrupts” to replace the traditional MSI interrupts.

Dump Me Now (DMN): Dump Me Now (DMN) generated dumps and traces from various components that are crucial for offline debugging. Once an issue is discovered, the dumps can provide useful information about the NIC's state at the time of the failure

Added support for DSCP mapping on QP RTS2RTS.

Port Enable:When set, the device supports emulating link down for all the associated functions using “ICMD_SET_VIRTUAL_PARAMETERS - Set Device Virtual Parameters”.

mlxfwreset:Reduced and accelerated the mlxfwreset loading time of the firmware update flow.

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow:
in dual port devices to 20 VFs

in single port devices to 64 VFs

Extended the retry counter (extended_retry_count) to up to 255 instead of 7.

Firmware for the following devices are updated to 16.22.4030:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)

872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb2-port 841QSFP28 Adapter)

New features and changes in version16.22.4030:

AS Notify:AS Notify enables IBM’s Power CPU architecture to boost performance by allowing the hardware to issue light weight “interrupts” to replace the traditional MSI interrupts.

Dump Me Now (DMN):Dump Me Now (DMN) generated dumps and traces from various components that are crucial for offline debugging. Once an issue is discovered, the dumps can provide useful information about the NIC’s state at the time of the failure

Added support for DSCP mapping on QP RTS2RTS.

Port Enable:When set, the device supports emulating link down for all the associated functions using “ICMD_SET_VIRTUAL_PARAMETERS - Set Device Virtual Parameters”.

mlxfwreset:Reduced and accelerated the mlxfwreset loading time of the firmware update flow.

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow:
in dual port devices to 20 VFs

in single port devices to 64 VFs

Extended the retry counter (extended_retry_count) to up to 255 instead of 7.

Added support for striding RQ in InfiniBand.

QoS "Rate Limit":Added support to limit the transmission rate of individual InfiniBand port Service Levels.

This capability is configurable through a new vendor-specific MAD (QosConfigSL).

Supported Devices and Features

HPE Part Number

825110-B21

825111-B21

872726-B21

879482-B21

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters

Version: 1.0.0.8 (B)(Recommended)

Important Note!

Known Issues for FW version 2.42.5000 :

Enabling/disabling cq_timestamp using mlxconfig is not supported.

In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LES will not be active while the ETH link is in an idle mode.

In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.

Downgrade to previous GA requires server reboot. Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. Reboot the server.

On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/driver utilities that read the GUID via device firmware (e.g., using ibstat). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value should be used.

SBR should be asserted for a minimum of 50 milliseconds for the ConnectX®-3 adapters

On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed

RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.

In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.

When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.

MFT tools might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.

Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module

Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).

PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV

Bloom filter is currently not supported.

Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3

RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3

RM#VPD read-only fields are writable.

Increasing SymbolErrorCounter When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly

Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.

CQ and EQ cannot be configured to different stride sizes.

ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.

RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.

Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.

RDP over IPv6 is currently not functional.

Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule"

Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port

causes the second port to disappear as well.

The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.

56GbE link is not raised when using 100GbE optic cables.

When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in `mlx-4_en_get_drvinfo()` that is called from asynchronous event handler.

832298:When running `ibdump`, loopback traffic is mirroring into the kernel driver.

AHS reports wrong MTU size

RM#846523: MAC address that are set from the OS using `ifconfig` are not reflected in the OCBB buffer.

Known Issues for FW version14.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

Health counter increases every 50ms instead of 10ms.

`mlxconfig` tool presents all possible expansion ROM images instead of presenting only the existing images.

An ethernet multicast loopback packet is not counted (even if it is not local loopback packets)when running the `nic_receive_steering_discard` command.

When a dual-port VHCA sends RoCE packets on its non-native port, and the packet arrives to its affiliated vport FDB, a mismatch might happen on the rules that match the packet source vport.

Known Issues for FW version12.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

On rare occasions, retransmissions/packet loss under signature can cause error reporting and terminate the connection.

Health counter increases every 50ms instead of 10ms.

`mlxconfig` tool presents all possible expansion ROM images, instead of presenting only the existing images.

An Ethernet multicast loopback packet is not counted (even if it is not a local loopback packet) when running the `nic_receive_steering_discard` command.

When a dual-port VHCA sends a RoCE packet on its non-native port. and the packet arrives to its affiliated vport FDB, a mismatch might happen on the rules that match the packet source vport.

During DC CNAK stress tests, DC CNAK timeout (CNAK drops) might occur.

Known Issues for FW version16.22.1414 :

Setting a negative temperature with the hook results in a wrong sensor state report when running the PLDM sensor reading command.

Health counter increases every 50ms instead of 10ms.

Prerequisites

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.

12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).

Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

Fixes

Fixes submitted in version 2.42.5000 :

ThePortRcvPkts counter was prevented from being cleared after resetting it..

SystemTime Out on the configuration cycle of the VFs when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.

The server hung and resulted in NMI (Non-maskable interrupt) when run-ning “mlxftop -d mt4103_pci_cr0” while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.

In flow_steering, BMC could not receive a ping over IPV6 after running bmc_reboot.

While closing the HCA (Host Channel Adapters), RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.

The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.

ibdump could not capture all MADs packets.

Link could not go up after reboot.

A rare issue caused the PCIe configuration cycle that arrived during the time of sw_reset to generate 2 completions.

NC-SI (Network Controller Sideband Interface) did not work when adding the disable_stat-ic_steering_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

Fixes submitted in version 14.22.1414 :

A temperature normalization function calculation issue. Now the cable gain that is not pure integer is taken into account was fixed.

An issue related to the parser of object 0x8 in ASN that caused different structure in response was fixed.

Added the option to avoid unintentionally powering off the backplane port cage upon reboot when in standby mode.

An issue that caused the driver to return a wrong logical OR of the 2 physical ports, when querying the vport state when the LAG was enabled was fixed.

Increased the Full Wire Speed (FWS) threshold value to improve EDR link results.

An issue that resulted in “Destroy LAG” command failure if a VFs received an FLR while its affinity QPs were open.

When RoCE Dual Port mode is enabled, tcpdump is not functional on the 2nd port.

Enhancements

Firmware for the following devices are updated to 2.42.5000:

779799-B21 (HPEthernet 10G 2-port 546FLR-SFP+ Adapter)

779793-B21 (HPEthernet 10G 2-port 546SFP+ Adapter)

New features and changes in version 2.42.5000:

Added support for the following features:

TLV: CX3_GLOBAL_CONF to enable/disable timestamp on incoming packets through mlxconfig configuration.

User MAC configuration.

Automatically collecting mstdump before driver reset.

to detect DEAD_IRISC (plastic) from TPT (iron) and raise an assert.

Enhanced the debug ability for command timeout cases.

Added a new field to "set port" command which notifies the firmware what is the user_mtu size.

Firmware for the following devices are updated to 14.22.1414:

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

New features and changes in version 14.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow:Software detection of a fatal error, automatic creations of an mstdump file for future debug by the software, and resetting of the device.

Steering Discard Packet Counters:The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow in dual port devices to 20 VFs

in single port devices to 58 VFs

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering:mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

vport Mirroring:Packets are mirrored based on certain mirroring policy. The policy is set using the "set FTE command" that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event:Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP's creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Firmware for the following device is updated to 12.22.1414:

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

New features and changes in version 12.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow:Software detection of a fatal error, automatic creations of an mstdump file for future debug by the software, and resetting of the device.

Steering Discard Packet Counters:The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Virtual Functions (VF):Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow in dual port devices to 20 VFs

in single port devices to 58 VFs

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering:mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

vport Mirroring:Packets are mirrored based on certain mirroring policy. The policy is set using the “set FTE command” that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event:Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP’s creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Firmware for the following device is updated to 16.22.1414:

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

New features and changes in version 16.22.1414:

Transition from 4MB to 7M Firmware Image Banks.

Software Reset Flow:Software detection of a fatal error, automatic creations of an mstdump file for future debug by the software, and resetting of the device.

Steering Discard Packet Counters:The following counters were added to count the discard packets (per vport)

nic_receive_steering_discard

receive_discard_vport_down

transmit_discard_vport_down

Increased the Pause Frame Duration and the XOFF Resend Time to the maximum value defined by the specification.

PCI Relax Ordering:mlxconfig configuration can now enable or disable forced PCI relaxed ordering in mkey_context.

Added support for Push/Pop VLAN, new FLOW TABLE ENTRY actions. These new actions are used by the driver to implement Q-in-Q functionality.

Packet Pacing in ConnectX-5 adapter cards.

vport Mirroring:Packets are mirrored based on certain mirroring policy. The policy is set using the “set FTE command” that supports forward action in the ACL tables (ingress/egress).

Resiliency: Special Error Event:Added support for 10GBaseT modules connected to a QSFP cage.

Accelerated QP’s creation time.

SR-IOV default routing mode is now LID based. The configuration change is available via mlxconfig tool.

Added PXE and UEFI to additional ConnectX-4 Lx adapter cards. ConnectX-4 Lx now holds PXE, x86-UEFI and Arm-UEFI.

Supported Devices and Features

HPE Part Number

779793-B21

779799-B21

817749-B21

817753-B21

868779-B21

874253-B21

Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode)

ConnectX4 and ConnectX5 devices on Windows x86_64 platform

Version: 1.0.0.4 (A)(Recommended)

Important Note!

Known Issues in firmware version 12.22.4030 and 16.22.4030:

The maximum "read" size of MTRC_STDB is limited by 272 Bytes.

Using vl_arb_high or vl_arb_low simultaneously might cause unexpected behavior in QoS functionality.

Prerequisites

Due to significant firmware changes, the devices mentioned in the table below must be upgraded to the prerequisite version first, then programmed to version 16.22.0194 and onwards.

16.22.0194 is the first secure firmware for HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter (879482-B21). Once this device is upgraded to firmware 16.22.0194, downgrade is not allowed.
InfiniBand Card Type

Fixes

Fixes in firmware version 12.22.4030 and 16.22.4030:

In rare cases, where the width of the receiver's electrical eye is narrow, the link might raise with BER lower than 10^{-12} .

LRO timeout configuration is now taken from the TLV configuration instead of the static defined values.

Added a filter to ignore module temperature reads below -40C and above 125C.

Closed the vport as part of the fast teardown flow, to prevent Ack to be sent without been scatter to memory.

A rare scenario where the PERST# de-assertion arrived at a specific critical time period was handled.

Temperature normalization function calculation issue. Now the cable gain that is not pure integer is taken into account.

The parser of object 0x8 in ASN that caused different structure in response.

An issue that caused MSIX interrupt lost while the HCA performed an FLR was handled.

An issue that caused a race condition between the firmware boot process and the MSIX access from the PCIe, which resulted in lost writes into the MSIX vector was fixed.

Enhancements

Firmware for the following devices are updated to 12.22.4030:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter)

825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

New features and changes in version 12.22.4030:

AS Notify: AS Notify enables IBM's Power CPU architecture to boost performance by allowing the hardware to issue light weight "interrupts" to replace the traditional MSI interrupts.

Dump Me Now (DMN): Dump Me Now (DMN) generated dumps and traces from various components that are crucial for offline debugging. Once an issue is discovered, the dumps can provide useful information about the NIC's state at the time of the failure

Added support for DSCP mapping on QP RTS2RTS.

Port Enable: When set, the device supports emulating link down for all the associated functions using "ICMD_SET_VIRTUAL_PARAMETERS - Set Device Virtual Parameters".

mlxfwreset: Reduced and accelerated the mlxfwreset loading time of the firmware update flow.

Virtual Functions (VF): Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow:

in dual port devices to 20 VFs

in single port devices to 64 VFs

Extended the retry counter (extended_retry_count) to up to 255 instead of 7.

Firmware for the following devices are updated to 16.22.4030:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter)

872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

New features and changes in version 16.22.4030:

AS Notify: AS Notify enables IBM's Power CPU architecture to boost performance by allowing the hardware to issue light weight "interrupts" to replace the traditional MSI interrupts.

Dump Me Now (DMN): Dump Me Now (DMN) generated dumps and traces from various components that are crucial for offline debugging. Once an issue is discovered, the dumps can provide useful information about the NIC's state at the time of the failure

Added support for DSCP mapping on QP RTS2RTS.

Port Enable: When set, the device supports emulating link down for all the associated functions using "ICMD_SET_VIRTUAL_PARAMETERS - Set Device Virtual Parameters".

mlxfwreset: Reduced and accelerated the mlxfwreset loading time of the firmware update flow.

Virtual Functions (VF): Increased the number of VFs that can work with full VMQoS (8 TC) per PFs as follow:

in dual port devices to 20 VFs

in single port devices to 64 VFs

Extended the retry counter (extended_retry_count) to up to 255 instead of 7.

Added support for striding RQ in InfiniBand.

QoS "Rate Limit": Added support to limit the transmission rate of individual InfiniBand port Service Levels.

This capability is configurable through a new vendor-specific MAD (QosConfigSL).

Supported Devices and Features

HPE Part Number

825110-B21

825111-B21

872726-B21

879482-B21

Online ROM Flash for Linux - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors

Version: 1.0.4(Optional)

Enhancements

Version 1.0.4

Online ROM Flash for Windows x64 - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors

Version: 1.0.4(Optional)

Enhancements

Version 1.0.4

Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives

Version: HPD3 (B)(Recommended)

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

Added FW binary unencrypted

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD1(Recommended)

Important Note!

Online firmware flashing of drives attached to aSmart Array controller running in Zero Memory (ZM) mode

or aProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager

Fixes

This firmware includes a fix for an issue that could cause timeout errors during certain sequential write corner cases. There is also a fix for slow response time during random write workloads.

Enhancements

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives

Version: HPD6 (B)(Recommended)

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(B).

Fixes

Added FW binary unencrypted

Enhancements

Added support for Windows Server 2016 Device Guard.

Added support for SmartRAID 3154-8e RAID controller.

Online ROM Flash Component for Windows (x64) - EG1800JEMDB Drives

Version: HPD5(Recommended)

Fixes

This firmware includes a fix for slow performance during sequential write workloads with small queue depth.

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives

Version: HPD3 (B)(Recommended)

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

Added FW binary unencrypted

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDLA and MO003200JWDLB Drives

Version: HPD1 (B)(Recommended)

Important Note!

Online firmware flashing of drives attached to aSmart Array controller running in Zero Memory (ZM) mode or aProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliantand Smart Update Manager

Customers who already installed firmware version HPD1 do not need to update to HPD1(B).

Enhancements

- Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives

Version: HPD2 (B)(Recommended)

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).

Enhancements

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - MB6000JVYYV Drives

Version: HPD2 (B)(Recommended)

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).

Enhancements

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - MB8000JFECQ Drives

Version: HPD7(Recommended)

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

This firmware includes a fix for slow performance during sequential write workloads with small queue depth.

Enhancements

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD8(Optional)

Important Note!

Online firmware flashing of drives attached to aSmart Array controller running in Zero Memory (ZM) mode or aProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliantand Smart Update Manager.

Fixes

This firmware allows the drive to meet the requirements for Azure Stack certification.

This firmware contains a change to the reported drive serial number in VPD page 80. It will now report the same as is displayed on the drive label. Any removed characters are replaced with blank place holders so the log format will not be changed.

Enhancements

Added support for Windows Server 2016 Device Guard.

Online ROM Flash Component for Windows (x64) - MM1000JFJTH Drives

Version: HPD3(Optional)

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

This firmware allows the drive to meet the requirements for Azure Stack certification.

This firmware contains a change to the reported drive serial number in VPD page 80. It will now report the same as is displayed on the drive label. Any removed characters are replaced with blank place holders so the log format will not be changed.

Enhancements

- Added support for Windows Server 2016 Device Guard.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives

Version: HPD3 (B)(Recommended)

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

Added FW binary unencrypted

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD1(Recommended)

Fixes

This firmware includes a fix for an issue that could cause timeout errors during certain sequential write corner cases. There is also a fix for slow response time during random write workloads.

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) -

EO000400JWDKP,EO000800JWDKQ,EO001600JWDKR,MO000400JWDKU,MO000800JWDKV,MO001600JWDL A and MO003200JWDLB Drives

Version: HPD1 (B)(Recommended)

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

- Added support for HPE Smart Array P824i-p MR Gen10 controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRC and MM2000JEFRC**Drives**

Version: HPD8(Optional)

Important Note!

Online firmware flashing of drives attached to aSmart Array controller running in Zero Memory (ZM) mode or aProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

Fixes

This firmware allows the drive to meet the requirements for Azure Stack certification.

This firmware contains a change to the reported drive serial number in VPD page 80. It will now report the same as is displayed on the drive label. Any removed characters are replaced with blank place holders so the log format will not be changed.

Enhancements

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives

Version: HPD6 (C)(Recommended)

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

Added FW binary unencrypted

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEMDB Drives

Version: HPD5 (B)(Recommended)

Important Note!

Online firmware flashing of drives attached to aSmart Array controller running in Zero Memory (ZM) mode or aProLiant host bus adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSES would require an offline update using the Service Pack for ProLiant and Smart Update Manager

Customers who already installed firmware version HPD5 do not need to update to HPD5(B).

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives

Version: HPD3 (B)(Recommended)

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

Added FW binary unencrypted

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP, and MB4000JVYZQ Drives

Version: HPD2 (B)(Recommended)

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).

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JVYYV Drives

Version: HPD2 (B)(Recommended)

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).

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives

Version: HPD7(Recommended)

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

This firmware includes a fix for slow performance during sequential write workloads with small queue depth.

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives

Version: HPD3(Optional)

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

This firmware allows the drive to meet the requirements for Azure Stack certification.

This firmware contains a change to the reported drive serial number in VPD page 80. It will now report the same as is displayed on the drive label. Any removed characters are replaced with blank place holders so the log format will not be changed.

Enhancements

Added support for SmartRAID 3154-8e RAID controller.

Added support for HPE Smart Array P824i-p MR Gen10 Controller.

Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG4 (D)(Recommended)

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

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MB001000GFWFK and MB002000GFWFL Drives

Version: HPG4 (D)(Recommended)

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

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (B)(Optional)

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

This firmware has a change that allows the drive to meet the requirements for Azure Stack certification.

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MB006000GWBXQ and MB008000GWBYL Drives

Version: HPG6 (B)(Recommended)

Fixes

Corrects some internal diagnostic logging and reporting functions.

Streamlines internal buffer management.

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives

Version: HPG4 (D)(Recommended)

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

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MB8000GFECR Drives

Version: HPG5 (C)(Recommended)

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

Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (B)(Recommended)

Fixes

This firmware updates the drive to indicate NDU compliance.

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWCBBC and MB002000GWCBBD Drives

Version: HPG4 (D)(Recommended)

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).

Enhancements

Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GFWFK and MB002000GFWFL Drives

Version: HPG4 (D)(Recommended)

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

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (B)(Optional)

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

This firmware has a change that allows the drive to meet the requirements for Azure Stack certification.

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB006000GWBXQ and MB008000GWBYL Drives

Version: HPG6 (B)(Recommended)

Fixes

Corrects some internal diagnostic logging and reporting functions.

Streamlines internal buffer management.

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives

Version: HPG4 (D)(Recommended)

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

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives

Version: HPG5 (C)(Recommended)

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

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (B)(Recommended)

Fixes

This firmware updates the drive to indicate NDU compliance.

Fixed the issue of Online firmware update fails when drives are connected behind AHCI controller.

Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 4.02 (B)(Optional)

Important Note!

Customers who already have firmware version 4.02 installed do not need to update to 4.02(B).

Power cycle / cold reboot is required if firmware is upgraded from version 1.31 or earlier.

Enhancements

Added HPE Digital Signature

Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10

Version: 1.65(Recommended)

Fixes

System might stop responding at POST and fail to load an OS. This issue is more likely to occur if System BIOS version is 1.40 or later. However, systems running older BIOS versions could experience this issue also.

Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10

Version: 1.65(Recommended)

Fixes

System might stop responding at POST and fail to load an OS. This issue is more likely to occur if System BIOS version is 1.40 or later. However, systems running older BIOS versions could experience this issue also.

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)

Version: 2018.09.02(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download>.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FC Driver Kit, reboot, and then install the Enablement Kit.

Additional requirements:

Environment must be running the syslog daemon for the flash engine to run

Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex Host Bus Adapters(HBAs)

Fixes

Fixed the following:

Fixed an issue where OneView profile data is lost during firmware upgrades from versions earlier than 11.4.x.x

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Added support to the following:

8G Standup and Mezzanine:

BIOS:

Fabric assigned Boot Target/Logical Unit (LUN) to Fabric Assigned World Wide Name (FAWWN)

Updated 16/32 Gb HBA/Mezzuniversal boot

Updated 16Gb HBA/Mezzuniversal boot

Updated 8Gb HBA/Mezzuniversal boot

Contains:

16/32 Gb HBA/Mezzuniversal boot 11.4.334.10

16 Gb HBA/Mezzuniversal boot 11.4.334.31

8 Gb standup/mezzfirmware 2.10X6

8 Gb standup/mezz universal boot image 11.40a13(11.4.305.0BIOS, 11.4.344.0UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016 x64

Version: 2018.09.02(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The HPE supplied Emulex driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download/>

Fixes

Fixed the following:

Fixed an issue where OneView profile data is lost during firmware upgrades from versions earlier than 11.4.x.x

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

Added support to the following:

8G Standup and Mezzanine:

BIOS:

Fabric assigned Boot Target/Logical Unit (LUN) to Fabric Assigned World Wide Name (FAWWN)

Updated 16/32 Gb HBA/Mezzuniversal boot

Updated 16Gb HBA/Mezzuniversal boot

Updated 8Gb HBA/Mezzuniversal boot

Contains:

16/32 Gb HBA/Mezzuniversal boot 11.4.334.10

16 Gb HBA/Mezzuniversal boot 11.4.334.31

8 Gb standup/mezzfirmware 2.10X6

8 Gb standup/mezz universal boot image 11.40a13(11.4.305.0BIOS, 11.4.344.0UEFI)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)

Version: 2018.09.01(Recommended)

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapter Release Notes

Prerequisites

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download>.

Fixes

Fixed the following

8Gb Standup & 8Gb Mezzanine

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

Legacy BIOS (Basic Input Output System) Selectable Boot

16Gb Standup & 16Gb Mezzanine

Firmware

Bring up up-link in 32G or 16G optical environment (FEC (Forward Error Correction) only) when connected with remote device that is not setting the SN bit to zero and TC bit to 1 at the same time during the speed negotiation phase and delays transmitting NOS during LQT phase.

Dropped FCP_CMD frame by a virtual port (VP index greater than 0) logged into the fabric via Fabric Login (FLOGI) while the primary adapter port (VP0) was disabled via Global VP (Virtual Port) Options bit 2 of Initialize Multi-ID Firmware MBC (0048h).

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

Fabric Assigned WWPN (World Wide Port Name), Fabric Assigned Boot Logical Unit (LUN), Legacy BIOS (Basic Input Output System) Selectable Boot.

16Gb/32Gb Standup

Firmware

Bring up up-link in 32G or 16G optical environment (FEC (Forward Error Correction) only) when connected with remote device that is not setting the SN bit to zero and TC bit to 1 at the same time during the speed negotiation phase and delays transmitting NOS during LQT phase.

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

FC (Fibre Channel) Tape, Fabric Assigned WWPN (World Wide Port Name), Fabric Assigned Boot LUN (Logical Unit), Legacy BIOS (Basic Input Output System) Selectable Boot.

Changed Legacy BIOS (Basic Input Output System) Selectable Boot HII (Human Interface Infrastructure) default to Enabled.

Enhancements

Added support for the following:

16Gb Standup & 16Gb Mezzanine

Power Loss calculation in D_port (Destination port) operation.

16Gb/32Gb Standup

Power Loss calculation in D_port (Destination port) operation.

Support maximum training timeout for 32Gbps data rate per FC-FS-4 (Fibre Channel Framing and Signaling) specification.

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

8 Gb HBA/Mezz

Package 3.77.08

Firmware 8.07.00

UEFI 6.64

BIOS 3.56

16 Gb HBA/Mezz

Package6.01.59
Firmware 8.07.16
UEFI6.63
BIOS 3.43
16/32 Gb
Package01.70.85
Firmware 8.07.18
UEFI6.47
BIOS 3.54

Supported Devices and Features

This firmware supports the following HPE adapters:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016 (x86_64)

Version: 2018.06.01(Recommended)

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download>.

Fixes

Fixed the following

8Gb Standup & 8Gb Mezzanine

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

Legacy BIOS (Basic Input Output System) Selectable Boot

16Gb Standup & 16Gb Mezzanine

Firmware

Bring up up-link in 32G or 16G optical environment (FEC (Forward Error Correction) only) when connected with remote device that is not setting the SN bit to zero and TC bit to 1 at the same time during the speed

negotiation phase and delays transmitting NOS during LQT phase.

Dropped FCP_CMD frame by a virtual port (VP index greater than 0) logged into the fabric via Fabric Login (FLOGI) while the primary adapter port (VP0) was disabled via Global VP (Virtual Port) Options bit 2 of Initialize Multi-ID Firmware MBC (0048h).

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

Fabric Assigned WWPN (World Wide Port Name), Fabric Assigned Boot Logical Unit (LUN), Legacy BIOS (Basic Input Output System) Selectable Boot.

16Gb/32Gb Standup

Firmware

Bring up up-link in 32G or 16G optical environment (FEC (Forward Error Correction) only) when connected with remote device that is not setting the SN bit to zero and TC bit to 1 at the same time during the speed negotiation phase and delays transmitting NOS during LQT phase.

UEFI

Firmware Management Protocol now supports flashing older Multiboot versions.

Firmware Management Protocol SetImage no longer displays dots on the screen.

The following HII (Human Interface Infrastructure) fields now require a reboot after value change:

FC (Fibre Channel) Tape, Fabric Assigned WWPN (World Wide Port Name), Fabric Assigned Boot LUN (Logical Unit), Legacy BIOS (Basic Input Output System) Selectable Boot.

Changed Legacy BIOS (Basic Input Output System) Selectable Boot HII (Human Interface Infrastructure) default to Enabled.

Enhancements

Added support for the following:

16Gb Standup & 16Gb Mezzanine

Power Loss calculation in D_port (Destination port) operation.

16Gb/32Gb Standup

Power Loss calculation in D_port (Destination port) operation.

Support maximum training timeout for 32Gbps data rate per FC-FS-4 (Fibre Channel Framing and Signaling) specification.

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

8 Gb HBA/Mezz

Package 3.77.08

Firmware 8.07.00

UEFI 6.64

BIOS 3.56

16 Gb HBA/Mezz

Package 6.01.59

Firmware 8.07.16

UEFI6.63
BIOS 3.43
16/32 Gb
Package01.70.85
Firmware 8.07.18
UEFI6.47
BIOS 3.54

Supported Devices and Features

This firmware supports the following HPE adapters:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Online Flash Component for Linux - Gen10 NVMe Backplane PIC Firmware

Version: 1.20 (D)(Optional)

Important Note!

Note: After running this component to update the NVMe Backplane PIC firmware, a server reboot is required for iLO to display the new NVMe Backplane PIC firmware version on iLO's Firmware Information page

Prerequisites

iLO 5 version 1.10 or later is required.

Fixes

Firmware Package version 1.20(D) addressed the following issue:

When using OneView, attempts to upgrade firmware from version 1.18 to 1.20 failed.

Note: If the target device was previously updated to firmware version 1.20, it is not necessary to apply firmware update 1.20(D).

Enhancements

The following support was added in version 1.20(C). No new features were added in version 1.20(D).

Added support for the HPE ProLiant XL270d Gen10 Server

Online Flash Component for Windows x64 - Gen10 NVMe Backplane PIC Firmware

Version: 1.20 (C)(Optional)

Important Note!

Note: After running this component to update the NVMe Backplane PIC firmware, a server reboot is required for iLO to display the new NVMe Backplane PIC firmware version on iLO's Firmware Information page

Prerequisites

iLO 5 version 1.10 or later is required.

Fixes

Firmware Package version 1.20(C) addressed the following issue:

When using OneView, attempts to upgrade firmware from version 1.18 to 1.20 failed.

Note: If the target device was previously updated to firmware version 1.20, it is not necessary to apply firmware update 1.20(C).

Enhancements

The following support was added in version 1.20(B). No new features were added in version 1.20(C).

Added support for the HPE ProLiant XL270d Gen10 Server

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)

Version: 5.3.0-0(Optional)

Prerequisites

This utility requires the following minimum firmware revisions:

Integrated Lights-Out 3 firmware v1.00 or later

Integrated Lights-Out4 firmware v1.00 or later

Integrated Lights-Out5 firmware v1.20 or later

The management interface driver and management agents must be installed on the server.

For iLO 5, openssl v1.0.x or later is required in addition to above packages.

Customers who manually compile and install openssl or intentionally relocate /usr/bin/openssl, need to set PATH environment variable to direct HPONCFG to the right/intended openssl.

Enhancements

Introduced support for iLO 5 v1.30.

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)

Version: 5.3.0-0 (A)(Optional)

Prerequisites

This utility requires the following minimum firmware revisions:

Integrated Lights-Out 3 firmware v1.00 or later

Integrated Lights-Out4 firmware v1.00 or later

Integrated Lights-Out5 firmware v1.20 or later

The management interface driver and management agents must be installed on the server.

For iLO 5, openssl v1.0.x or later is required in addition to above packages.

Customers who manually compile and install openssl or intentionally relocate /usr/bin/openssl, need to set PATH environment variable to direct HPONCFG to the right/intended openssl.

Enhancements

Introduced support for iLO 5 v1.35.

HP Lights-Out Online Configuration Utility for Windows x64 Editions

Version: 5.2.0.0(Recommended)

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-Out3 firmware v1.00 or later

Integrated Lights-Out4 firmware v1.00 or later

Integrated Lights-Out5 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.

Fixes

Fixed issue where IML and IEL logs were not cleared after doing iLO factory default.

Enhancements

Introduced support for iLO 5 v1.20 or later.

HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions

Version: 1.0.0.64 (B)(Recommended)

Enhancements

Added support for Microsoft Windows 10

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)

Version: 3.3-5(Optional)

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

Updated code for the following:

Emulex CNA Driver display due to split

Optrom version display

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)

Version: 3.3-5 (b)(Optional)

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

Updated code for the following:

Emulex CNA Driver display due to split

Optrom version display

HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server

Version: 11.4.334.2(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Updated to version 11.4.334.2

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server

Version: 11.4.334.2(Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>
2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

Enhancements

Added support to Red Hat Enterprise Linux 7u5

Updated to version 11.4.334.2

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Smart SAN Enablement Kit for Linux

Version: 1.0.0.0-4 (b)(Optional)

Important Note!

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(<http://www.hpe.com/info/storage/docs/>)

By default, HP 3PAR Storage is selected under Products and Solutions.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

Linux FC Driver Kit for HPE Branded Emulex FC HBAs and mezz cards, version 11.1.183.21, for Red Hat 6, Red Hat 7, and Novell SUSE 11, SUSE 12

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 1.0.0.0-4 (b)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

HPE StoreFabric SN1200E 16Gb 2P FC HBA

HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA

HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems

Version: 1.0.0.1 (f)(Optional)

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 occurred.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(<http://www.hpe.com/info/storage/docs/>)

By default, HP 3PAR Storage is selected under Products and Solutions.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver v11.1.145.16cp030886.exe

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 1.0.0.1 (f)

Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

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 Fibre Channel Enablement Kit for Linux

Version: 6.0.0.0-4 (d)(Optional)

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/>

Enhancements

Updated the kit to version 6.0.0.0-4

Supported Devices and Features

This version of the enablement kit supports the following devices:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Single PortFibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Dual PortFibre Channel Host Bus Adapter

HPE QLogic Fibre Channel Enablement Kit for Linux

Version: 6.0.0.0-4 (e)(Recommended)

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/>

Enhancements

Updated the kit to version 6.0.0.0-4

Supported Devices and Features

This version of the enablement kit supports the following devices:

HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter

HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Single PortFibre Channel Host Bus Adapter

HPE StoreFabric SN1600Q 32Gb Dual PortFibre Channel Host Bus Adapter

HPE QLogic Smart SAN enablement kit for Linux

Version: 3.3-3 (b)(Optional)

Important Note!

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:
Storage Information Library
(<http://www.hpe.com/info/storage/docs/>)
By default, HP 3PAR Storage is selected under
Products and Solutions.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:
<http://www.hpe.com/storage/spock/>
The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.
Red Hat Enterprise Linux 6 Server (x86-64) FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.06.0-k1
Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs, version 8.07.00.42.07.0-k1
SUSE Linux Enterprise Server 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.11.3-k
SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs version 8.07.00.42.12.0-k1
However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 3.3-3(b)

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:
HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems

Version: 1.0.0.1 (e)(Optional)

Important Note!

The Smart SAN enablement kit will not execute when an operating system has only the in-box 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 occurred.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library
(<http://www.hpe.com/info/storage/docs/>)
By default, HP 3PAR Storage is selected under
Products and Solutions.

Prerequisites

Please consult SPOCK for a list of supported configurations available at the following link:
<http://www.hpe.com/storage/spock/>
The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.
HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver v9.2.2.20, cp031252.exe
HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2 v9.2.2.20, cp031253.exe
HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2016 version 9.2.2.20, cp031251.exe
However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 1.0.0.1 (e)

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:
HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server

Version: 1.3.1 (Optional)

Prerequisites

amsd only supported on HPE ProLiant Gen10 Servers.
amsd provides information to the iLO 5 service providing SNMP support.
SNMP PASS-THRU on the iLO 5 MUST be disabled, and SNMP should be configured on the iLO 5. The iLO 5 may need to be reset after changing these settings.
Requirements:
Minimum iLO 5 Firmware Version = 1.1
Minimum supported OS Versions = Red Hat Enterprise Linux 6.9

Fixes

Fixed the following items:
Fix memory leaks

Use /etc/os-release as authoritative when present
Handle VLAN interfaces before regular interfaces
Fix some instances where 'signed char' should have been 'unsigned char'
Changed syslog() level of debug messages in smad from LOG_ERR to LOG_INFORM

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server

Version: 1.3.1(Optional)

Prerequisites

amsd only supported on HPE Gen10 Servers.

amsd provides information to the iLO 5 service providing SNMP support.

SNMP PASS-THRU on the iLO 5 MUST be disabled, and SNMP should be configured on the iLO 5. The iLO 5 may need to be reset after changing these settings.

Requirements:

Minimum iLO 5 Firmware Version = 1.1

Minimum supported OS Versions =Red Hat Enterprise Linux 7.3Errata 3.10.0.514.6.1

Fixes

Fixed the following items:

Fix memory leaks

Use /etc/os-release as authoritative when present

Handle VLAN interfaces before regular interfaces

Fix some instances where 'signed char' should have been 'unsigned char'

Changed syslog() level of debug messages in smad from LOG_ERR to LOG_INFORM

Agentless Management Service for Windows X64

Version: 1.30.0.0(Optional)

Important Note!

About installation and enablement of SMA service:

During AMS installation in interactive mode, there is pop up message to selectively install SMA.

If Yes is selected, SMA service will be installed and set to running state.

If No is selected, SMA service will be installed but the service is not enabled.

During AMS installation in silent mode, SMA is installed but the service is not enabled.

To enable SMA service at a later time, go to the following

folder:%ProgramFiles%\%OEM%\AMS\Service% (Typically c:\Program Files\OEM\AMS\Service)and execute "EnableSma.bat /f"

IMPORTANT: The SNMP service community name and permission must be also be setup.This is not done by "EnableSma.bat".

To disable SMA after it has been enabled, go the the following

folder:%ProgramFiles%\%OEM%\AMS\Service% (Typically c:\Program Files\OEM\AMS\Service)and execute "DisableSma.bat /f"

After installing Windows operating system, make sure all the latest Microsoft Updates are downloaded and installed (wuapp.exe can be launched to start the update process). If this is not done, a critical error may be reported in Windows Event Log, "The Agentless Management Service terminated unexpectedly."

AMS Control Panel Applet:

The AMS control panel applet UI is best displayed on the system when screen resolution is 1280 x 1024 pixels or higher and text size 100%.

Prerequisites

The Channel Interface Driver for Windows X64 must be installed prior to this component.

Microsoft SNMP Service must be enabled, if SMA (System Management Assistant) is enabled.

Fixes

AMS service no longer terminates unexpectedly if the server had more than 9 IPv6 addresses.

However, cpqNicLogMapIPv6Address OID will only return up to 9 IPv6 addresses.

Traps 1015, 1019, 1020 now have correct varbind info, consistent with MIB definitions.

When SMA (System Management Assistant) service is stopped or disabled, SMA will no longer respond to SNMP queries with outdated data.

Enhancements

Added support for the following IO devices:

Added the following enhancements to Control Panel Applet:

Up to 8 trap destinations are supported in SNMP tab, along with user configuration and SNMPv3 settings

SNMP tab is now fully functional if iLO5 encryption is set to High Security or FIPS mode

Button options are available to start, stop, enable or disable SMA service

GUI options are available to select time format and input the optional periodic test trap interval

Help content has expanded

SMA (System Management Assistant) service now supports all MIB OIDs and traps generated by iLO5 FW.

Added support for System Chassis Class of IML Events in Windows Event Log.

iSCSI MIB condition is now available in cpqHoMibHealthStatusArray.

AHS (Active Health System) NIC Link records now contain Interface Description string.

NVMe Drive Eject NMI Fix for Intel Xeon Processor Scalable Family for Windows

Version: 1.1.0.0 (B) (Optional)

Enhancements

Enabled deployment to iLO 5 nodes when used with Smart Update Manager version 8.2.0 or later.

Smart Storage Administrator (SSA) CLI for Windows 64-bit

Version: 3.30.14.0 (Recommended)

Important Note!

It is recommended to update to this 3.30.13.0 version of HPE Smart Storage Administrator if you update your system BIOS using the 2018.06 version of SPP. Any array created with the BIOS configuration utility

from the 2018.06 version of SPP will not be accessible with an older version of HPE Smart Storage Administrator.

Enhancements

Added the ability to enable or disable Drive Write Cache for configured and unconfigured drives

Smart Storage Administrator (SSA) for Windows 64-bit

Version: 3.30.14.0 (Recommended)

Important Note!

It is recommended to update to this 3.30.13.0 version of HPE Smart Storage Administrator if you update your system BIOS using the 2018.06 version of SPP. Any array created with the BIOS configuration utility from the 2018.06 version of SPP will not be accessible with an older version of HPE Smart Storage Administrator.

Enhancements

Added the ability to enable or disable Drive Write Cache for configured and unconfigured drives

Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit

Version: 3.30.14.0 (Recommended)

Important Note!

It is recommended to update to this 3.30.13.0 version of HPE Smart Storage Administrator if you update your system BIOS using the 2018.06 version of SPP. Any array created with the BIOS configuration utility from the 2018.06 version of SPP will not be accessible with an older version of HPE Smart Storage Administrator.

This stand alone version of the Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use Smart Storage Administrator (SSA).

Enhancements

Added the ability to enable or disable Drive Write Cache for configured and unconfigured drives