

HA8000V シリーズ

Service Pack for HA8000V (SPH)

Version 5.00 26

Readme

2020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。
- (7) マニュアル『HA8000V シリーズ 重要事項および読替ガイド』には、各種マニュアルをご覧いただく際、事前にご理解いただくべき内容を記載しています。こちらも合わせてご参照ください。マニュアルは『ドキュメントポータル』の「マニュアル > サーバ」-「HA8000V シリーズ」より参照いただけます。

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
2019年4月	初版
2019年6月	6.2 誤記訂正
2020年4月	5.3 (2), 5.7.4 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/DL20 Gen10
- HA8000V/DL360 Gen10
- HA8000V/DL380 Gen10
- HA8000V/DL580 Gen10
- HA8000V/ML30 Gen10
- HA8000V/ML350 Gen10

3.2 適用 OS

- Microsoft® Windows Server® 2019
- Microsoft® Windows Server® 2016
- Microsoft® Windows Server® 2012 R2
- Red Hat® Enterprise Linux® Server 7.6
- Red Hat® Enterprise Linux® Server 7.5
- Red Hat® Enterprise Linux® Server 6.10
- Red Hat® Enterprise Linux® Server 6.9
- VMware vSphere® ESXi™ 6.7
- 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

(1) 追加サポート機種及びOS

- 追加サポート機種

なし

- 追加サポートOS

➤ Red Hat® Enterprise Linux® Server 7.6

(2) 追加サポートデバイス

なし

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

(1) ファームウェア/ドライバの依存関係について

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。

(2) 適用バージョンについて

SUM を使用して更新作業を行う場合、適用対象として自動選択されるものは、新規にインストールされるもの、および SPH 収録バージョンが適用済みバージョンより新しいものとなります。

ネットワークアダプタ及びファイバーチャネルホストバスアダプタは、SPH 収録のドライバ/ファームウェアの組み合わせでご使用いただくことを推奨しています。適用済みバージョンが SPH 収録済みバージョンより新しい場合、該当コンポーネントが適用対象として自動選択されません。その場合、以下の手順で対象コンポーネントを手動で選択し、適用してください。

【手動適用方法】

SUM を起動し、「展開サマリー(Deployment summary)」画面で、「コンポーネントの選択状態」が「選択」表示(※)となっているコンポーネントを確認し、ネットワークアダプタファームウェアまたは、ファイバーチャネルホストバスアダプタのファームウェアの場合は、当該コンポーネントを選択(※)して、“展開(Deploy)”ボタンを押してください。

※：コンポーネントが選択されると、「コンポーネントの選択状態」が、「選択済み」もしくは「強制」と表示されます。

【注意】

デバイスによっては、適用バージョンに関して、個別にアドバイザリが発行されている場合があります。本ファームウェアの適用に当たっては、アドバイザリを参照してください。

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 2012 R2	4.4.0.0	cp035137.exe
iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019	4.4.0.0 (B)	cp035140.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の scripts ディレクトリ下に下記の 3 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-AsrSettings.ps1

Set-AsrPreTimeoutNMI.ps1

Set-AsrTimeout.ps1

5.5.2 ASRの確認方法

Windows の PowerShell より Get-AsrSettings.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-AsrSettings.ps1
```

```
Active : True
```

```
EnablePreTimeoutNMI : True
```

```
InstanceName : PCI\VEN_103C&DEV_3306&SUBSYS_00E41590&REV_074&154b2d14&0&00E4_0
```

```
TimeoutInMinutes : 0
```

```
PSComputerName :
```

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-AsrSettings.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 VMware をご使用にあたっての注意事項

5.7.1 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

エアを適用頂く必要があります。

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。(VMware バージョンと利用可能な SPH 及び展開モードについては、[「Service Pack for HA8000V 補足資料\(Readme\)」](#)の『サポートモデル/OS 一覧』を参照ください。)

【リモートオンライン 展開モードを使用する場合】

本モードでは、ファームウェアに加えてドライバのアップデートも可能です。

事前に「iSUT」のインストール及び ESXi ホストに対する設定が必要です。

「iSUT」が未インストールの場合、『5.7.2 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。ESXi ホストに対しては、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。

【オフライン 展開モードを使用する場合】

SPH の iso イメージを格納した媒体をサーバに取り付け、媒体よりサーバをブートします。

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。

5.7.2 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	cp035737.zip	sut-esxi6.0-offline-bundle-2.4.0.0-45.zip

2	VMware vSphere® ESXi™ 6.5	cp035739.zip	sut-esxi6.5-offline-bundle-2.4.0.0-36.zip
3	VMware vSphere® ESXi™ 6.7	cp035738.zip	sut-esxi6.7-offline-bundle-2.4.0.0-31.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
```

5.7.3 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	Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター	net-ixgbe	ixgben
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	igb	igbn
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	i40e	i40en
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。

【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。

5.7.4 QLogic 製ファイバーチャネルホストバスアダプターご使用にあたっての注意事項

VMware 環境において、QLogic 製ファイバーチャネルホストバスアダプターの特定のドライバパラメータを設定している状態で SPH に収録されているドライバにアップデートすると、アダプターが認識できなくなります。

特に、SAN ブートパスに使用しているアダプターで本現象が発生した場合、OS が起動できなくなり、回復にはバックアップからのリストアが必要となります。本 SPH を用いたドライバのアップデート前に、予めパラメータ変更を行ってからドライバをアップデートしてください。

なお、デフォルトではパラメータは設定されておらず、本現象は発生しません。

パラメータ変更方法等、詳細は「日立アドバンストサーバ HA8000V シリーズ」の「製品に関する重要なお知らせ」掲載の「VMware 環境において QLogic 製ファイバーチャネルホストバスアダプターのドライバをアップデート後アダプターが認識できなくなる現象について(管理番号：CRI-2020-0005)」を参照してください。

5.8 SUM オフライン展開モードご使用時の注意事項

SPH の ISO イメージを、iLO 仮想メディアデバイスにマウントして SUM のオフライン展開モードご使用の場合、iLO の『ネットワークインターフェイス設定』が『共有ネットワークポート』構成となっていると、SUM の起動途中でエラーになることがあります。

iLO の『ネットワークインターフェイス設定』を『共有ネットワークポート』構成でご使用の場合、ISO イメージを書き込んだ媒体をご用意いただき、内蔵もしくは USB 接続の DVD ドライブを使用して SUM のオフライン展開モードを起動してください。

【注意】

DL20/ML30 では、iLO の『ネットワークインターフェイス設定』のデフォルト設定が『共有ネットワークポート』となっています。SUM オフライン展開モードご使用時は、SPH ISO イメージを書き込んだ媒体から起動してください。

5.9 RHEL 環境における QLogic 製ファイバーチャネルホストバスアダプターのドライバとファームウェアについて

QLogic 製ファイバーチャネルホストバスアダプターを RHEL7.5、RHEL6.9/6.10 上でご使用になる場合、SPH5.00 に収録されているドライバとファームウェアの組合せで、リンクダウンが発生した場合にパス冗長化ソフトウェアによるパス交替が出来ない等の問題が発生する可能性があります。

詳細は「[日立アドバンストサーバ HA8000V シリーズ](#)」の「製品に関する重要なお知らせ」を参照してください。

RHEL7.5、RHEL6.9/6.10 をご使用になる場合は、下表のドライバとファームウェアを「[日立アドバンストサーバ HA8000V シリーズ](#)」の「ドライバ・ファームウェア・ユーティリティ」のページからダウンロードしてご使用願います。

形名(*1)	製品名	ドライババージョン	ファームウェアバージョン
TQ-C□□-P9D93A	SN1100Q 16Gb Single Port ファイバーチャネル ホスト バス アダプター	RHEL7.5 : 8.08.00.08.07.5_k1	01.70.85
TQ-C□□-P9D94A	SN1100Q 16Gb Dual Port ファイバーチャネル ホスト バス アダプター	RHEL6.9/6.10 : 8.08.00.08.06.0_k1	
TQ-C□□-P9M75A	SN1600Q 32Gb 1port ファイバーチャネル ホスト バス アダプター	RHEL7.5 : 8.08.00.08.07.5_k1	01.70.85

TQ-C□□-P9M76A	SN1600Q 32Gb 2port ファイバーチャネル ホスト バス アダプター	RHEL6.9/6.10 : 8.08.00.08.06.0_k1	
---------------	---	--------------------------------------	--

(*1) : □には製品構成などにより異なった英数字が入ります。

5.10 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をご使用になる場合、下表の SPH5.00 に収録されているファームウェアバージョンは、ダウングレードには対応しておりません。

形名(*1) or 搭載システム装置	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+ ネットワークアダプター	10.4.3
TQ-N□□-727055-B21	Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター	
HA8000V / ML350 Gen10 オンボード NIC	Ethernet 1Gb 4-port 369i ネットワークアダプター	1.2028.0

(*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。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 - PCIe NVMe Storage Disk](#)
- [Firmware - Power Management](#)
- [Firmware - SAS Storage Disk](#)
- [Firmware - SATA Storage Disk](#)
- [Firmware - Storage Controller](#)
- [Firmware - Storage Fibre Channel](#)
- [Firmware – System](#)
- [Software - Lights-Out Management](#)
- [Software - Management](#)
- [Software - Network](#)
- [Software - Storage Controller](#)
- [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 2.4.0 for ESXi 6.0	cp035737.zip	-	2019.03.00	6.0.0.2.4.0.0-55	更新
2	Integrated Smart Update Tools 2.4.0 for ESXi 6.5	cp035739.zip	-	2019.03.00	6.5.0.2.4.0.0-42	更新
3	Integrated Smart Update Tools 2.4.0 for ESXi 6.7	cp035738.zip	-	2019.03.00	6.7.0.2.4.0-33	更新
4	Integrated Smart Update Tools for Linux x64	sut-2.4.0-61.linux.x86_64.rpm	-	2.4.0.0	2.4.0-61.linux	更新
5	Integrated Smart Update Tools for Windows x64	cp035075.exe	-	2.4.0.0	2.4.0.0	更新

6.2.2 BIOS - System ROM

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
6	Online ROM Flash Component for Linux - OEM System ROM U34	firmware-system-oem-u34-2.00_2019_02_02-1.1.x86_64.rpm	System BIOS - U34	2.00_02-02-2019	v2.00 (02/02/2019)	更新
7	Online ROM Flash Component for Linux - System ROM U30	firmware-system-oem-u30-2.00_2019_02_02-1.1.x86_64.rpm	System BIOS - U30	2.00_02-02-2019	v2.00 (02/02/2019)	更新
8	Online ROM Flash Component for Linux - System ROM U32	firmware-system-oem-u32-2.00_2019_02_02-1.1.x86_64.rpm	System BIOS - U32	2.00_02-02-2019	v2.00 (02/02/2019)	更新
9	Online ROM Flash Component for Linux - System ROM U41	firmware-system-oem-u41-2.00_2019_02_02-1.1.x86_64.rpm	System BIOS - U41	2.00_02-02-2019	v2.00 (02/02/2019)	更新
10	Online ROM Flash Component for Linux - System ROM U43	firmware-system-oem-u43-1.20_2019_02_02-1.1.x86_64.rpm	System BIOS - U43	1.20_02-02-2019	v1.20 (02/02/2019)	更新
11	Online ROM Flash Component for Linux - System ROM U44	firmware-system-oem-u44-1.20_2019_02_02-1.1.x86_64.rpm	System BIOS - U44	1.20_02-02-2019	v1.20 (02/02/2019)	更新
12	Online ROM Flash Component for Windows x64 - OEM System ROM U34	cp036685.exe	System BIOS - U34	2.00_02-02-2019	v2.00 (02/02/2019)	更新
13	Online ROM Flash Component for Windows x64 - System ROM U30	cp036072.exe	System BIOS - U30	2.00_02-02-2019	v2.00 (02/02/2019)	更新
14	Online ROM Flash Component for Windows x64 - System ROM U32	cp036070.exe	System BIOS - U32	2.00_02-02-2019	v2.00 (02/02/2019)	更新
15	Online ROM Flash Component for Windows x64 - System ROM U41	cp036007.exe	System BIOS - U41	2.00_02-02-2019	v2.00 (02/02/2019)	更新
16	Online ROM Flash Component for Windows x64 - System ROM U43	cp037525.exe	System BIOS - U43	1.20_02-02-2019	v1.20 (02/02/2019)	更新
17	Online ROM Flash Component for Windows x64 - System ROM U44	cp037482.exe	System BIOS - U44	1.20_02-02-2019	v1.20 (02/02/2019)	更新
18	ROM Flash Firmware Package - System ROM U30	OEM.U30_2.00_02_02_2019.fwpkg	System BIOS - U30	2.00_02-02-2019	v2.00 (02/02/2019)	更新
19	ROM Flash Firmware Package - System ROM U32	OEM.U32_2.00_02_02_2019.fwpkg	System BIOS - U32	2.00_02-02-2019	v2.00 (02/02/2019)	更新
20	ROM Flash Firmware Package - System ROM U34	OEM.U34_2.00_02_02_2019.fwpkg	System BIOS - U34	2.00_02-02-2019	v2.00 (02/02/2019)	更新
21	ROM Flash Firmware Package - System ROM U41	OEM.U41_2.00_02_02_2019.fwpkg	System BIOS - U41	2.00_02-02-2019	v2.00 (02/02/2019)	更新
22	ROM Flash Firmware Package - System ROM U43	OEM.U43_1.20_02_02_2019.fwpkg	System BIOS - U43	1.20_02-02-2019	v1.20 (02/02/2019)	更新
23	ROM Flash Firmware Package -	OEM.U44_1.20_02_02_	System BIOS - U44	1.20_02-02-	v1.20	更新

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
	System ROM U44	2019.fwpkg		2019	(02/02/2019)	

6.2.3 Driver – Chipset

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
24	Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 to Server 2019	cp035803.exe	-	10.1.17861.8101	10.1.17861.8101	更新

6.2.4 Driver – Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
25	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	214.0.0.0 (B)	214.0.0.0 (B)	更新
26	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 2-port 332T Adapter	214.0.0.0 (B)	214.0.0.0 (B)	更新
27	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331FLR Adapter	214.0.0.0 (B)	214.0.0.0 (B)	更新
28	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	214.0.0.0 (B)	214.0.0.0 (B)	更新
29	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331T Adapter	214.0.0.0 (B)	214.0.0.0 (B)	更新
30	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel6u10	更新
31	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel6u10	更新
32	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel6u10	更新
33	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel6u10	更新
34	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel6u10	更新
35	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel6u9	更新
36	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel6u9	更新
37	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel6u9	更新
38	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel6u9	更新
39	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel6u9	更新
40	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel7u5	更新

41	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel7u5	更新
42	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel7u5	更新
43	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel7u5	更新
44	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel7u5	更新
45	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel7u6	更新
46	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel7u6	更新
47	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel7u6	更新
48	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel7u6	更新
49	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel7u6	更新
50	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	
51	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	
52	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	
53	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	
54	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
55	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.14.8.0 (B)	12.14.8.0 (B)	新規追加
56	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.14.8.0 (B)	12.14.8.0 (B)	新規追加
57	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.14.8.0 (B)	12.14.8.0 (B)	新規追加
58	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
59	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
60	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
61	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.15.184.1	12.15.184.1	新規追加
62	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.15.184.1	12.15.184.1	新規追加

63	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.15.184.1	12.15.184.1	新規追加
64	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel6u10	更新
65	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u10	更新
66	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u10	更新
67	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel6u9	更新
68	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u9	更新
69	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u9	更新
70	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel7u5	更新
71	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u5	更新
72	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u5	更新
73	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel7u6	更新
74	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u6	更新
75	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u6	更新
76	HPE Intel i40ea Driver for Windows Server 2012 R2	cp036337.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.221.0	1.9.221.0	更新
77	HPE Intel i40ea Driver for Windows Server 2012 R2	cp036337.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.221.0	1.9.221.0	更新
78	HPE Intel i40ea Driver for Windows Server 2016	cp036338.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.221.0	1.9.221.0	更新
79	HPE Intel i40ea Driver for Windows Server 2016	cp036338.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.221.0	1.9.221.0	更新
80	HPE Intel i40ea Driver for Windows Server 2019	cp037752.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.230.0	1.9.230.0	新規追加
81	HPE Intel i40ea Driver for Windows Server 2019	cp037752.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.230.0	1.9.230.0	新規追加

82	HPE Intel i40eb Driver for Windows Server 2012 R2	cp036339.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.221.0	1.9.221.0	更新
83	HPE Intel i40eb Driver for Windows Server 2016	cp036340.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.221.0	1.9.221.0	更新
84	HPE Intel i40eb Driver for Windows Server 2019	cp037753.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.230.0	1.9.230.0	新規追加
85	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	更新
86	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	更新
87	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	更新
88	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	更新
89	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	更新
90	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	更新
91	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	更新
92	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	更新
93	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	更新
94	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel6u10	更新
95	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u10	更新
96	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u10	更新
97	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel6u9	更新
98	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u9	更新
99	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u9	更新
100	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel7u5	更新
101	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u5	更新

102	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u5	更新
103	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel7u6	更新
104	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u6	更新
105	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u6	更新
106	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	更新
107	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	更新
108	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	更新
109	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	更新
110	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	更新
111	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	更新
112	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	更新
113	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	更新
114	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	更新
115	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	更新
116	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	更新
117	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	更新
118	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新
119	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新
120	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新
121	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新
122	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新

123	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	更新
124	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	更新
125	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	更新
126	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	更新
127	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel6u10	更新
128	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel6u10	更新
129	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel6u9	更新
130	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel6u9	更新
131	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel7u5	更新
132	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel7u5	更新
133	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel7u6	更新
134	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel7u6	更新
135	HPE Intel ixgben Driver for VMware vSphere 6.0	cp037707.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-1OEM.600.0.0.2768847	更新
136	HPE Intel ixgben Driver for VMware vSphere 6.0	cp037707.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-1OEM.600.0.0.2768847	更新
137	HPE Intel ixgben Driver for VMware vSphere 6.5	cp037708.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-1OEM.600.0.0.2768847	更新
138	HPE Intel ixgben Driver for VMware vSphere 6.5	cp037708.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-1OEM.600.0.0.2768847	更新
139	HPE Intel ixgben Driver for VMware vSphere 6.7	cp037709.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-1OEM.670.0.0.8169922	更新
140	HPE Intel ixgben Driver for VMware vSphere 6.7	cp037709.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-1OEM.670.0.0.8169922	更新
141	HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbev-4.5.1-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel6u10	更新
142	HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbev-4.5.1-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel6u10	更新
143	HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbev-4.5.1-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel6u9	更新
144	HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbev-4.5.1-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel6u9	更新

145	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel7u5	更新
146	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel7u5	更新
147	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel7u6	更新
148	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel7u6	更新
149	HPE Intel ixS Driver for Windows Server 2012 R2	cp037943.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	3.14.132.0	3.14.132.0	更新
150	HPE Intel ixS Driver for Windows Server 2012 R2	cp037943.exe	HPE Ethernet 10Gb 2-port 562T Adapter	3.14.132.0	3.14.132.0	更新
151	HPE Intel ixS Driver for Windows Server 2016	cp037945.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.1.131.0	4.1.131.0	更新
152	HPE Intel ixS Driver for Windows Server 2016	cp037945.exe	HPE Ethernet 10Gb 2-port 562T Adapter	4.1.131.0	4.1.131.0	更新
153	HPE Intel ixS Driver for Windows Server 2019	cp037755.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.1.143.0	4.1.143.0	新規追加
154	HPE Intel ixS Driver for Windows Server 2019	cp037755.exe	HPE Ethernet 10Gb 2-port 562T Adapter	4.1.143.0	4.1.143.0	新規追加
155	HPE Intel v40e Driver for Windows Server 2012 R2	cp036342.exe	-	1.5.86.2	1.5.86.2	更新
156	HPE Intel v40e Driver for Windows Server 2016	cp036343.exe	-	1.5.86.2	1.5.86.2	更新
157	HPE Intel v40e Driver for Windows Server 2019	cp037756.exe	-	1.6.215.0	1.6.215.0	新規追加
158	HPE Intel vxN Driver for Windows Server 2012 R2	cp032568.exe	-	1.0.16.1	1.0.16.1	
159	HPE Intel vxN Driver for Windows Server 2016	cp037390.exe	-	2.0.210.0 (C)	2.0.210.0 (C)	
160	HPE Intel vxN Driver for Windows Server 2019	cp037758.exe	-	2.1.138.0	2.1.138.0	新規追加
161	HPE Intel vxs Driver for Windows Server 2012 R2	cp037942.exe	-	1.2.131.0	1.2.131.0	新規追加
162	HPE Intel vxs Driver for Windows Server 2016	cp037941.exe	-	2.1.133.0	2.1.133.0	新規追加
163	HPE Intel vxs Driver for Windows Server 2019	cp037944.exe	-	2.1.138.0	2.1.138.0	新規追加
164	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	更新
165	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	更新
166	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	更新
167	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	更新

168	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	更新
169	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	更新
170	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	新規追加
171	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	新規追加
172	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	新規追加
173	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	新規追加
174	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	新規追加
175	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	新規追加
176	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	新規追加
177	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	新規追加
178	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	新規追加
179	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	更新
180	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	更新
181	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	更新
182	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	更新

183	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	更新
184	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	更新
185	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	新規追加
186	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	新規追加
187	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	新規追加
188	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	新規追加
189	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	新規追加
190	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	新規追加
191	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.5	4.5	新規追加
192	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.5	4.5	新規追加
193	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.5	4.5	新規追加
194	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.5	4.5	新規追加
195	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.5	4.5	新規追加
196	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.5	4.5	新規追加
197	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel6u10	更新
198	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel6u9	更新

199	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel7u5	更新
200	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel7u6	更新
201	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions	cp035071.exe	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.37.0	8.37.37.0	更新
202	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.0	cp035084.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-10E M.600.0.0.27 68847	新規追加
203	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.5	cp035085.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-10E M.650.0.0.45 98673	新規追加
204	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.7	cp036789.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-10E M.670.0.0.81 69922	新規追加
205	HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 10	qlgc-libqedr-8.37.0.0-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.0.0-1	8.37.0.0-1.rhel6u10	更新
206	HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 9	qlgc-libqedr-8.37.0.0-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.0.0-1	8.37.0.0-1.rhel6u9	更新
207	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	2.713.70.v60.6-10EM.600.0.0.2494585	更新
208	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	2.713.70.v60.6-10EM.600.0.0.2494585	更新
209	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	2.713.70.v60.6-10EM.600.0.0.2494585	更新
210	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	更新
211	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	更新
212	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	更新
213	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	更新
214	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	更新
215	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	更新
216	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel6u10	更新
217	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel6u10	更新
218	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel6u10	更新
219	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel6u9	更新
220	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel6u9	更新

221	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel6u9	更新
222	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel7u5	更新
223	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel7u5	更新
224	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel7u5	更新
225	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel7u6	更新
226	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel7u6	更新
227	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel7u6	更新
228	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.13.161.0	7.13.161.0	更新
229	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HP Ethernet 10Gb 2-port 530T Adapter	7.13.161.0	7.13.161.0	更新
230	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.13.161.0	7.13.161.0	更新
231	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	新規追加
232	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	新規追加
233	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	新規追加
234	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	新規追加
235	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	新規追加
236	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	新規追加
237	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	新規追加
238	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	新規追加
239	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE InfiniBand EDR/Ethernet	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	新規追加

			100Gb 2-port 841QSFP28 Adapter		68847	
240	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.16.13.5-10E M.650.0.0.45 98673	新規追加
241	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.16.13.5-10E M.650.0.0.45 98673	新規追加
242	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.16.13.5-10E M.650.0.0.45 98673	新規追加
243	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	新規追加
244	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	新規追加
245	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	新規追加

6.2.5 Driver – Storage

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
246	HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp036435.exe	-	106.12.4.0	106.12.4.0	更新

6.2.6 Driver – Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
247	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.4-065.rhel6u10.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel6u10	更新
248	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.4-065.rhel6u10.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel6u10	更新
249	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.4-065.rhel6u10.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel6u10	更新
250	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.4-065.rhel6u10.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel6u10	更新
251	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.4-065.rhel6u10.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel6u10	更新

268	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.4-065.rhel7u6.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel7u6	更新
269	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.4-065.rhel7u6.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel7u6	更新
270	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.4-065.rhel7u6.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.2.4-065	1.2.4-065.rhel7u6	更新
271	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
272	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
273	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
274	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
275	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
276	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp037193.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.600.0.0.2 768847	更新
277	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
278	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
279	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
280	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
281	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
282	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp037194.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.650.0.0.4 598673	更新
283	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新

284	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新
285	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新
286	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新
287	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新
288	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp037195.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.03.12	1.0.3.2035-10 EM.670.0.0.8 169922	更新
289	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array P408i-a SR Gen10 Controller	106.84.2.64	106.84.2.64	更新
290	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array P408i-p SR Gen10 Controller	106.84.2.64	106.84.2.64	更新
291	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array P816i-a SR Gen10 Controller	106.84.2.64	106.84.2.64	更新
292	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array E208e-p SR Gen10 Controller	106.84.2.64	106.84.2.64	更新
293	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array E208i-a SR Gen10 Controller	106.84.2.64	106.84.2.64	更新
294	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp037197.exe	HPE Smart Array E208i-p SR Gen10 Controller	106.84.2.64	106.84.2.64	更新

6.2.7 Driver - Storage Fibre Channel and Fibre Channel over Ethernet

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
295	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	更新
296	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	更新

297	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	更新
298	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	更新
299	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	新規追加
300	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	新規追加
301	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	新規追加
302	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	新規追加
303	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
304	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
305	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
306	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
307	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
308	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
309	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新

310	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
311	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
312	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
313	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
314	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	更新
315	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_k10-1.rhel6.u10.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u10	更新
316	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_k10-1.rhel6.u10.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u10	更新
317	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_k10-1.rhel6.u10.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u10	更新
318	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_k10-1.rhel6.u10.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u10	更新
319	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_k10-1.rhel6.u9.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u9	更新
320	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_k10-1.rhel6.u9.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u9	更新
321	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_k10-1.rhel6.u9.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u9	更新
322	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_k10-1.rhel6.u9.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6.u9	更新

323	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-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	更新
324	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-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	更新
325	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-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	更新
326	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-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	更新
327	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-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	更新
328	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-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	更新
329	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-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	更新
330	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-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	更新
331	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	更新
332	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	更新
333	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	更新
334	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	更新
335	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_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	更新

336	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_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	更新
337	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_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	更新
338	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_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	更新
339	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	更新
340	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	更新
341	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	更新
342	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	更新
343	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	更新
344	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	更新
345	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	更新
346	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	更新

6.2.8 Driver - System Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
347	iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2	cp035137.exe	-	4.4.0.0	4.4.0.0	
348	iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019	cp035140.exe	-	4.4.0.0 (B)	4.4.0.0 (B)	

349	iLO 5 Channel Interface Driver for Windows Server 2012 R2	cp034070.exe	-	4.3.0.0	4.3.0.0	
350	iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019	cp035112.exe	-	4.3.0.0 (B)	4.3.0.0 (B)	

6.2.9 Driver – Video

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
351	Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2	cp033123.exe	-	9.15.1.184 (B)	9.15.1.184 (B)	
352	Matrox G200eH3 Video Controller Driver for Windows Server 2016 and Server 2019	cp035106.exe	-	9.15.1.218	9.15.1.218	

6.2.10 Firmware - Lights-Out Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
353	Language Pack - Japanese	cp038997.exe	Integrated Lights-Out 5 Language Pack	1.40 (a)	1.40	更新
354	Language Pack - Japanese	firmware-lpk-ilo-1.40-1.1.x86_64.rpm	Integrated Lights-Out 5 Language Pack	1.40 (a)	1.40	更新
355	Online ROM Flash Component for Linux - iLO 5	firmware-ilo5-1.40-1.1.x86_64.rpm	Integrated Lights-Out 5 Firmware	1.40	1.40	更新
356	Online ROM Flash Component for Windows x64 - iLO 5	cp038842.exe	Integrated Lights-Out 5 Firmware	1.40	1.40	更新
357	Online ROM Flash Firmware Package - iLO 5	ilo5_140.fwpkg	Integrated Lights-Out 5 Firmware	1.40	1.40	更新

6.2.11 Firmware – Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
358	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	2.23.10	20.14.54	更新
359	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	2.23.10	20.14.54	更新
360	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	2.23.10	20.14.54	更新
361	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	2.23.10	20.14.54	更新
362	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	2.23.10	20.14.54	更新
363	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	1.24.8	20.14.54	更新
364	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 2-port 332T Adapter	1.24.8	20.14.54	更新
365	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331FLR Adapter	1.24.8	20.14.54	更新

366	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331T Adapter	1.24.8	20.14.54	更新
367	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	1.24.8	20.14.54	更新
368	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	5.1.4.0	20.14.54	更新
369	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 2-port 332T Adapter	5.1.4.0	20.14.54	更新
370	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331FLR Adapter	5.1.4.0	20.14.54	更新
371	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331T Adapter	5.1.4.0	20.14.54	更新
372	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	5.1.4.0	20.14.54	更新
373	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	1.17.17 (B)	1.2028.0	更新
374	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	1.17.17 (B)	1.2028.0	更新
375	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	1.17.17 (B)	1.2028.0	更新
376	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	1.17.17 (B)	1.2028.0	更新
377	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.17.17 (B)	10.4.3	更新
378	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	1.17.17 (B)	10.4.4	更新
379	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.17.17 (B)	10.4.3	更新
380	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	1.17.17 (B)	10.4.4	更新
381	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 1Gb 4-port 369i Adapter	3.10.16	1.2028.0	更新
382	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 2-port 361T Adapter	3.10.16	1.2028.0	更新
383	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	3.10.16	1.2028.0	更新
384	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 4-port 366T Adapter	3.10.16	1.2028.0	更新
385	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.10.16	10.4.3	更新
386	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	3.10.16	10.4.4	更新

387	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.10.16	10.4.3	更新
388	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562T Adapter	3.10.16	10.4.4	更新
389	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 1Gb 4-port 369i Adapter	5.1.4.0	1.2028.0	更新
390	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 2-port 361T Adapter	5.1.4.0	1.2028.0	更新
391	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	5.1.4.0	1.2028.0	更新
392	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 4-port 366T Adapter	5.1.4.0	1.2028.0	更新
393	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	5.1.4.0	10.4.3	更新
394	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.1.4.0	10.4.4	更新
395	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	5.1.4.0	10.4.3	更新
396	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562T Adapter	5.1.4.0	10.4.4	更新
397	HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-flq-1.6.27-1.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	1.6.27	8.37.29	更新
398	HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware	CP035082.zip	HPE Ethernet 10Gb 2-port 521T Adapter	4.9.27	8.37.29	新規追加
399	HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035083.exe	HPE Ethernet 10Gb 2-port 521T Adapter	5.1.4.0	8.37.29	更新
400	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2.24.15	7.17.71	更新
401	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	2.24.15	7.17.71	更新
402	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2.24.15	7.17.71	更新
403	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	1.24.16	7.17.71	更新
404	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HP Ethernet 10Gb 2-port 530T Adapter	1.24.16	7.17.71	更新
405	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	1.24.16	7.17.71	更新
406	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HP Ethernet 10Gb 2-port 530SFP+ Adapter	5.1.4.0	7.17.71	更新
407	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HP Ethernet 10Gb 2-port 530T Adapter	5.1.4.0	7.17.71	更新

408	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	5.1.4.0	7.17.71	更新
409	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox Ethernet only adapters	CP038791.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.9 (A)	14.23.8052	新規追加
410	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox Ethernet only adapters	CP038791.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.9 (A)	14.23.8036	新規追加
411	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.0	CP036745.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.5	16.24.1000	新規追加
412	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters	CP038792.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.4 (A)	14.23.8036	新規追加
413	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters	CP038792.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.4 (A)	14.23.8052	新規追加
414	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.5	CP036746.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.4	16.24.1000	新規追加
415	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters	CP038793.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.0 (A)	14.23.8052	新規追加
416	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters	CP038793.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.0 (A)	14.23.8036	新規追加
417	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.7	CP035249.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.0	16.24.1000	新規追加
418	Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters	firmware-nic-mellanox-ethernet-only-1.0.9-2.1.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.9 (A)	14.23.8052	更新
419	Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters	firmware-nic-mellanox-ethernet-only-1.0.9-2.1.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.9 (A)	14.23.8036	更新
420	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-connectx4-1.0.5-1.1.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.5	16.24.1000	更新
421	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters	cp038794.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.0.9 (A)	14.23.8052	更新
422	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only	cp038794.exe	HPE Ethernet 25Gb 2-port 640SFP28	1.0.0.9 (A)	14.23.8036	更新

	adapters		Adapter			
423	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Windows x86_64 platform	cp036747.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.0.5	16.24.1000	更新

6.2.12 Firmware - PCIe NVMe Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
424	Supplemental Update / Online ROM Flash Component for Linux (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives	firmware-hdd-8e8ddc5265-HPK1-2.1.x86_64.rpm	MT006400KWHAE	HPK1 (B)	HPK1	新規追加

6.2.13 Firmware - Power Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
425	Online Flash for Windows x64 - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	cp038067.exe	Innovation Engine (IE) Firmware	0.2.0.11	0.2.0.11	新規追加
426	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	
427	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	
428	ROM Flash Firmware Package - Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers	PICGen10_1.0.4s.fwpkg	Gen10 Power Management Controller Firmware	1.0.4	1.0.4	

6.2.14 Firmware - SAS Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
429	Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives	CP037949.zip	EG000600JWEBH	HPD4	HPD4	更新
430	Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives	CP037949.zip	EG000300JWEBF	HPD4	HPD4	更新
431	Online ROM Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives	CP037555.zip	EG002400JWJNT	HPD2	HPD2	更新

432	Online ROM Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	CP037049.zip	EG1200JEMDA	HPD6 (D)	HPD6	更新
433	Online ROM Flash Component for VMware ESXi - EG1800JEMDB Drives	CP037052.zip	EG1800JEMDB	HPD5 (C)	HPD5	更新
434	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP037055.zip	EH000300JWCPK	HPD3 (D)	HPD3	更新
435	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP037055.zip	EH000600JWCPL	HPD3 (D)	HPD3	更新
436	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP037055.zip	EH000900JWCPN	HPD3 (D)	HPD3	更新
437	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	EO000400JWDKP	HPD1 (D)	HPD1	更新
438	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	EO000800JWDKQ	HPD1 (D)	HPD1	更新
439	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	EO001600JWDKR	HPD1 (D)	HPD1	更新
440	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	MO000400JWDK U	HPD1 (D)	HPD1	更新

441	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	MO000800JWDK V	HPD1 (D)	HPD1	更新
442	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	MO001600JWDLA	HPD1 (D)	HPD1	更新
443	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP037060.zip	MO003200JWDLB	HPD1 (D)	HPD1	更新
444	Online ROM Flash Component for VMware ESXi - MB012000JWDFD Drives	CP037064.zip	MB012000JWDFD	HPD2 (B)	HPD2	新規追加
445	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB1000JVYZL	HPD3	HPD3	更新
446	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB2000JVYZN	HPD3	HPD3	更新
447	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB4000JVYZQ	HPD3	HPD3	更新
448	Online ROM Flash Component for VMware ESXi - MB6000JVYYV Drives	CP037072.zip	MB6000JVYYV	HPD2 (D)	HPD2	更新
449	Online ROM Flash Component for VMware ESXi - MB8000JFECQ Drives	CP037073.zip	MB8000JFECQ	HPD7 (C)	HPD7	更新
450	Online ROM Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives	CP037074.zip	MM2000JEFRC	HPD8 (C)	HPD8	更新
451	Online ROM Flash Component for VMware ESXi - MM1000JFJTH Drives	CP037075.zip	MM1000JFJTH	HPD3 (C)	HPD3	更新
452	Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives	cp037953.exe	EG000600JWEBH	HPD4	HPD4	更新
453	Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives	cp037953.exe	EG000300JWEBF	HPD4	HPD4	更新

454	Online ROM Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives	cp037554.exe	EG002400JWJNT	HPD2	HPD2	更新
455	Online ROM Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	cp037254.exe	EG1200JEMDA	HPD6 (C)	HPD6	更新
456	Online ROM Flash Component for Windows (x64) - EG1800JEMDB Drives	cp037256.exe	EG1800JEMDB	HPD5 (B)	HPD5	更新
457	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp037259.exe	EH000300JWCPK	HPD3 (C)	HPD3	更新
458	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp037259.exe	EH000600JWCPL	HPD3 (C)	HPD3	更新
459	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp037259.exe	EH000900JWCPN	HPD3 (C)	HPD3	更新
460	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	EO000400JWDKP	HPD1 (C)	HPD1	更新
461	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	EO000800JWDKQ	HPD1 (C)	HPD1	更新
462	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	EO001600JWDKR	HPD1 (C)	HPD1	更新
463	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	MO000400JWDK U	HPD1 (C)	HPD1	更新

464	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	MO000800JWDK V	HPD1 (C)	HPD1	更新
465	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	MO001600JWDLA	HPD1 (C)	HPD1	更新
466	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp037263.exe	MO003200JWDLB	HPD1 (C)	HPD1	更新
467	Online ROM Flash Component for Windows (x64) - MB012000JWDFD Drives	cp037309.exe	MB012000JWDFD	HPD2 (B)	HPD2	新規追加
468	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB1000JVYZL	HPD3	HPD3	更新
469	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB2000JVYZN	HPD3	HPD3	更新
470	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB4000JVYZQ	HPD3	HPD3	更新
471	Online ROM Flash Component for Windows (x64) - MB6000JVYYV Drives	cp037290.exe	MB6000JVYYV	HPD2 (C)	HPD2	更新
472	Online ROM Flash Component for Windows (x64) - MB8000JFECQ Drives	cp037291.exe	MB8000JFECQ	HPD7 (B)	HPD7	更新
473	Online ROM Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives	cp037295.exe	MM2000JEFRC	HPD8 (B)	HPD8	更新
474	Online ROM Flash Component for Windows (x64) - MM1000JFJTH Drives	cp037296.exe	MM1000JFJTH	HPD3 (B)	HPD3	更新
475	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives	firmware-hdd-aa9e289524-HPD4-1.1.x86_64.rpm	EG000600JWEBH	HPD4	HPD4	更新
476	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives	firmware-hdd-aa9e289524-HPD4-1.1.x86_64.rpm	EG000300JWEBF	HPD4	HPD4	更新

477	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives	firmware-hdd-b1c9eaf74c-HPD2-1.1.x86_64.rpm	EG002400JWJNT	HPD2	HPD2	更新
478	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	firmware-hdd-ac3fda26eb-HPD6-4.1.x86_64.rpm	EG1200JEMDA	HPD6 (D)	HPD6	更新
479	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEMDB Drives	firmware-hdd-0a38b25661-HPD5-3.1.x86_64.rpm	EG1800JEMDB	HPD5 (C)	HPD5	更新
480	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD3-3.1.x86_64.rpm	EH000900JWCPN	HPD3 (C)	HPD3	更新
481	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD3-3.1.x86_64.rpm	EH000600JWCPL	HPD3 (C)	HPD3	更新
482	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD3-3.1.x86_64.rpm	EH000300JWCPK	HPD3 (C)	HPD3	更新
483	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	EO000400JWDKP	HPD1 (C)	HPD1	更新
484	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	EO000800JWDKQ	HPD1 (C)	HPD1	更新
485	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	EO001600JWDKR	HPD1 (C)	HPD1	更新
486	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	MO000400JWDKU	HPD1 (C)	HPD1	更新

487	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	MO000800JWDKV	HPD1 (C)	HPD1	更新
488	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	MO001600JWDLA	HPD1 (C)	HPD1	更新
489	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD1-3.1.x86_64.rpm	MO003200JWDLB	HPD1 (C)	HPD1	更新
490	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000JWDFD Drives	firmware-hdd-aaf1014ede-HPD2-2.1.x86_64.rpm	MB012000JWDFD	HPD2 (B)	HPD2	新規追加
491	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-1.1.x86_64.rpm	MB1000JVYZL	HPD3	HPD3	更新
492	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-1.1.x86_64.rpm	MB2000JVYZN	HPD3	HPD3	更新
493	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-1.1.x86_64.rpm	MB4000JVYZQ	HPD3	HPD3	更新
494	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JVYV Drives	firmware-hdd-0595c2a887-HPD2-3.1.x86_64.rpm	MB6000JVYV	HPD2 (C)	HPD2	更新
495	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives	firmware-hdd-252770cdda-HPD7-2.1.x86_64.rpm	MB8000JFECQ	HPD7 (B)	HPD7	更新
496	Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives	firmware-hdd-b04257b77b-HPD8-2.1.x86_64.rpm	MM2000JEFRC	HPD8 (B)	HPD8	更新
497	Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives	firmware-hdd-fa46c607d6-HPD3-2.1.x86_64.rpm	MM1000JFJTH	HPD3 (B)	HPD3	更新

6.2.15 Firmware - SATA Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
498	Online ROM Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives	CP036234.zip	MB001000GWFGF	HPG3 (C)	HPG3	更新
499	Online ROM Flash Component for VMware ESXi - MB012000GWDFE Drives	CP037063.zip	MB012000GWDFE	HPG2 (B)	HPG2	新規追加
500	Online ROM Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	CP036240.zip	MB4000GVYZK	HPG4 (D)	HPG4	更新
501	Online ROM Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives	CP038002.zip	MM2000GEFRA	HPG8 (C)	HPG8	更新
502	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000240GWFLU	HPGB (B)	HPGB	新規追加
503	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000480GWFLV	HPGB (B)	HPGB	新規追加
504	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	VR000480GWFMD	HPGB (B)	HPGB	新規追加
505	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000960GWFMA	HPGB (B)	HPGB	新規追加
506	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	VR000960GWFME	HPGB (B)	HPGB	新規追加

507	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	VK000240GWEZB	HPGB (B)	HPGB	新規追加
508	Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives	cp037264.exe	MB001000GWCBC	HPG4 (E)	HPG4	更新
509	Online ROM Flash Component for Windows (x64) - MB001000GFWFK and MB002000GFWFL Drives	cp037265.exe	MB002000GFWFL	HPG4 (E)	HPG4	更新
510	Online ROM Flash Component for Windows (x64) - MB002000GWFGE and MB001000GWFGE Drives	cp037266.exe	MB001000GWFGE	HPG3 (C)	HPG3	更新
511	Online ROM Flash Component for Windows (x64) - MB012000GWDFE Drives	cp037310.exe	MB012000GWDFE	HPG2 (B)	HPG2	新規追加
512	Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	cp037273.exe	MB4000GVYZK	HPG4 (E)	HPG4	更新
513	Online ROM Flash Component for Windows (x64) - MB8000GFECR Drives	cp036957.exe	MB8000GFECR	HPG6	HPG6	更新
514	Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives	cp037293.exe	MM2000GEFRA	HPG8 (C)	HPG8	更新
515	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000240GWFLU	HPGB (B)	HPGB	新規追加
516	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000480GWFLV	HPGB (B)	HPGB	新規追加
517	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	VR000480GWFMD	HPGB (B)	HPGB	新規追加

518	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000960GWFMA	HPGB (B)	HPGB	新規追加
519	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	VR000960GWFME	HPGB (B)	HPGB	新規追加
520	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	VK000240GWEZB	HPGB (B)	HPGB	新規追加
521	Supplemental Update / Online ROM Flash Component for ESXi - MB001000GWCB and MB002000GWCB Drives	CP036232.zip	MB001000GWCB	HPG4 (D)	HPG4	更新
522	Supplemental Update / Online ROM Flash Component for ESXi - MB001000GFWK and MB002000GFWL Drives	CP036233.zip	MB002000GFWL	HPG4 (D)	HPG4	更新
523	Supplemental Update / Online ROM Flash Component for ESXi - MB8000GFECR Drives	CP036956.zip	MB8000GFECR	HPG6	HPG6	更新
524	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWCB and MB002000GWCB Drives	firmware-hdd-68b12e54d2-HPG4-5.1.x86_64.rpm	MB001000GWCB	HPG4 (E)	HPG4	更新
525	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GFWK and MB002000GFWL Drives	firmware-hdd-bfc4af697b-HPG4-5.1.x86_64.rpm	MB002000GFWL	HPG4 (E)	HPG4	更新
526	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives	firmware-hdd-0b575b5895-HPG3-3.1.x86_64.rpm	MB001000GWFG	HPG3 (C)	HPG3	更新
527	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000GWDFE Drives	firmware-hdd-059b8654a6-HPG2-2.1.x86_64.rpm	MB012000GWDF	HPG2 (B)	HPG2	新規追加
528	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	firmware-hdd-0a7010918e-HPG4-5.1.x86_64.rpm	MB4000GVYZK	HPG4 (E)	HPG4	更新
529	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives	firmware-hdd-6d922fc9a8-HPG6-1.1.x86_64.rpm	MB8000GFECR	HPG6	HPG6	更新
530	Supplemental Update / Online	firmware-hdd-ec908c36	MM2000GEFRA	HPG8 (C)	HPG8	更新

	ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives	50-HPG8-3.1.x86_64.rpm				
531	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-2.1.x86_64.rpm	MR000240GWFLU	HPGB (B)	HPGB	新規追加
532	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-2.1.x86_64.rpm	MR000480GWFLV	HPGB (B)	HPGB	新規追加
533	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-2.1.x86_64.rpm	VR000480GWFMD	HPGB (B)	HPGB	新規追加
534	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-2.1.x86_64.rpm	MR000960GWFMA	HPGB (B)	HPGB	新規追加
535	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-2.1.x86_64.rpm	VR000960GWFME	HPGB (B)	HPGB	新規追加
536	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-2.1.x86_64.rpm	VK000240GWEZB	HPGB (B)	HPGB	新規追加

6.2.16 Firmware - Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
537	Online ROM Flash Component for VMware ESXi – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	CP037229.zip	HPE 12Gb SAS Expander Card	4.21	4.21	
538	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array P816i-a SR Gen10 Controller	1.98	1.98	更新
539	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array P408i-a SR Gen10 Controller	1.98	1.98	更新
540	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array P408i-p SR Gen10 Controller	1.98	1.98	更新
541	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array E208e-p SR Gen10 Controller	1.98	1.98	更新
542	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array E208i-p SR Gen10 Controller	1.98	1.98	更新
543	Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	CP037173.zip	HPE Smart Array E208i-a SR Gen10 Controller	1.98	1.98	更新
544	Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	cp037678.exe	HPE 12Gb SAS Expander Card	4.21 (B)	4.21	

545	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array P816i-a SR Gen10 Controller	1.98	1.98	更新
546	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array P408i-a SR Gen10 Controller	1.98	1.98	更新
547	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array P408i-p SR Gen10 Controller	1.98	1.98	更新
548	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array E208e-p SR Gen10 Controller	1.98	1.98	更新
549	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array E208i-p SR Gen10 Controller	1.98	1.98	更新
550	Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	cp037175.exe	HPE Smart Array E208i-a SR Gen10 Controller	1.98	1.98	更新
551	Supplemental Update / Online ROM Flash Component for Linux (x64) – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	firmware-smartarray-2d e15b6882-4.21-1.1.x86_64.rpm	HPE 12Gb SAS Expander Card	4.21	4.21	
552	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7 c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.98	1.98	更新

553	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.98	1.98	更新
554	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.98	1.98	更新
555	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.98	1.98	更新
556	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.98	1.98	更新
557	Supplemental Update / Online ROM Flash Component for Linux (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10	firmware-smartarray-f7c07bdbbd-1.98-1.1.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.98	1.98	更新

6.2.17 Firmware - Storage Fibre Channel

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
558	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.01-1.29.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
559	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.01-1.29.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
560	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.01-1.29.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新

561	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.01-1.29.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
562	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
563	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
564	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
565	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
566	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
567	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
568	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
569	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
570	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
571	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
572	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
573	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新

574	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
575	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
576	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
577	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	更新
578	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.01-1.11.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
579	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.01-1.11.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
580	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.01-1.11.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
581	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.01-1.11.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
582	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035770.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
583	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035770.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
584	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035770.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
585	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035770.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
586	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035771.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新

587	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035771.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
588	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035771.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
589	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035771.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
590	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035772.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
591	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035772.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
592	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035772.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
593	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035772.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
594	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp035774.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
595	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp035774.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
596	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp035774.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新
597	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp035774.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	01.71.03	更新

6.2.18 Firmware – System

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
598	Firmware Package - Gen10 NVMe Backplane PIC Firmware	ISS_NVMe_BP_PIC_flashV1B20.fwpkg	NVMe Backplane PIC	1.20	1.20	
599	Online Flash Component for Linux - Gen10 NVMe Backplane PIC Firmware	firmware-nvmebackplane-gen10-1.20-5.1.x86_64.rpm	NVMe Backplane PIC	1.20 (E)	1.20	

600	Online Flash Component for Windows x64 - Gen10 NVMe Backplane PIC Firmware	cp037722.exe	NVMe Backplane PIC	1.20 (D)	1.20	
601	Online Flash for Linux - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	firmware-ie-0.2.0.11-1.1.x86_64.rpm	Innovation Engine (IE) Firmware	0.2.0.11	0.2.0.11	新規追加
602	Online Flash for Linux - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	firmware-sps-04.01.04.251-1.1.x86_64.rpm	Server Platform Services (SPS) Firmware	04.01.04.251	04.01.04.251	新規追加
603	Online Flash for Windows x64 - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	cp038059.exe	Server Platform Services (SPS) Firmware	04.01.04.251	04.01.04.251	新規追加
604	Online ROM Flash Component for Windows x64 - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	cp037497.exe	Server Platform Services (SPS) Firmware for Intel C242 and C...	05.00.03.107	05.00.03.107	新規追加
605	Online ROM Flash for Linux - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	firmware-u43u44sps-05.00.03.107-1.1.x86_64.rpm	Server Platform Services (SPS) Firmware for Intel C242 and C...	05.00.03.107	05.00.03.107	新規追加
606	ROM Flash Firmware Package - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	OEM.IEGen10_0.2.0.11.fwpkg	Innovation Engine (IE) Universal Image	0.2.0.11	0.2.0.11	新規追加
607	ROM Flash Firmware Package - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	OEM.SPSGen10_04.01.04.251.fwpkg	Server Platform Services (SPS) Firmware	04.01.04.251	4.1.4.251	新規追加
608	ROM Flash Firmware Package - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	U43U44SPS_05.00.03.107.fwpkg	Server Platform Services (SPS) Firmware	05.00.03.107	5.0.3.107	新規追加

6.2.19 Software - Lights-Out Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
609	HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)	hponcfg-5.4.0-0.x86_64.rpm	-	5.4.0-0	5.4.0-0	
610	HP Lights-Out Online Configuration Utility for Windows x64 Editions	cp037416.exe	-	5.3.0.0	5.3.0.0	更新

6.2.20 Software - Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
611	HPE Management Bundle Smart Component for ESXi 6.0	cp037185.zip	-	2019.03.01	2019.03.01	更新
612	HPE Management Bundle Smart Component for ESXi 6.5	cp037186.zip	-	2019.03.01	2019.03.01	更新
613	HPE Management Bundle Smart Component for ESXi 6.7	cp037187.zip	-	2019.03.01	2019.03.01	更新

6.2.21 Software - Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
614	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 2-port 361T Adapter	2018.09.00	0.6-4.3	
615	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2018.09.00	0.6-4.3	
616	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 4-port 366T Adapter	2018.09.00	0.6-4.3	
617	HPE Intel esx-provider for VMware	cp035296.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2018.09.00	0.6-4.3	
618	HPE Intel esx-provider for VMware	cp035296.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2018.09.00	0.6-4.3	

6.2.22 Software - Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
619	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array P408i-a SR Gen10 Controller	1.2.1.64	1.2.1.64	更新
620	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array P408i-p SR Gen10 Controller	1.2.1.64	1.2.1.64	更新
621	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array P816i-a SR Gen10 Controller	1.2.1.64	1.2.1.64	更新
622	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array E208e-p SR Gen10 Controller	1.2.1.64	1.2.1.64	更新
623	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array E208i-p SR Gen10 Controller	1.2.1.64	1.2.1.64	更新
624	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp037793.exe	HPE Smart Array E208i-a SR Gen10 Controller	1.2.1.64	1.2.1.64	更新

6.2.23 Software - Storage Fibre Channel

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
625	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	更新

626	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	更新
627	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	更新
628	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	更新
629	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.650.0.0.4 598673	更新
630	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.650.0.0.4 598673	更新
631	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.650.0.0.4 598673	更新
632	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.650.0.0.4 598673	更新
633	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	更新
634	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	更新
635	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	更新
636	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	更新
637	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
638	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新

639	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
640	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
641	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
642	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
643	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
644	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	更新
645	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	更新
646	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	更新
647	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	更新
648	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	更新

6.2.24 Software - Storage Fibre Channel HBA

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
649	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 (c)	3.3-5	更新
650	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 (c)	3.3-5	更新

651	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 (c)	3.3-5	更新
652	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 (c)	3.3-5	更新
653	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 (c)	3.3-5	更新
654	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 (c)	3.3-5	更新
655	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 Channel Host Bus Adapter	3.3-5 (c)	3.3-5	更新
656	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 (c)	3.3-5	更新
657	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	更新
658	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	更新
659	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	更新
660	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	更新
661	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	更新
662	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	更新
663	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	更新

664	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	更新
665	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 (c)	1.0.0.0-4	
666	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 (c)	1.0.0.0-4	
667	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 (c)	1.0.0.0-4	
668	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 Single Port Fibre Channel Host Bus Adapter	1.0.0.0-4 (c)	1.0.0.0-4	
669	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	更新
670	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	更新
671	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	更新
672	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	更新
673	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	更新
674	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	更新
675	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	更新
676	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	更新

677	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 (d)	3.3-3	更新
678	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 (d)	3.3-3	更新
679	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 (d)	3.3-3	更新
680	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 (d)	3.3-3	更新
681	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	更新
682	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	更新
683	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	更新
684	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	更新

6.2.25 Software - System Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
685	Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server	amsd-1.4.0-3066.59.rhel6.x86_64.rpm	-	1.4.0	1.4.0-3066.59.rhel6	更新
686	Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server	amsd-1.4.0-3066.82.rhel7.x86_64.rpm	-	1.4.0	1.4.0-3066.82.rhel7	更新
687	Agentless Management Service for Windows X64	cp036094.exe	-	1.40.0.0	1.40.0.0	更新
688	NVMe Drive Eject NMI Fix for Intel Xeon Processor Scalable Family for Windows	cp034635.exe	-	1.1.0.0 (C)	1.1.0.0 (C)	
689	Smart Storage Administrator (SSA) CLI for Linux 64-bit	ssacli-3.40-3.0.x86_64.rpm	-	3.40.3.0	3.40-3.0	更新
690	Smart Storage Administrator (SSA) CLI for Windows 64-bit	cp036452.exe	-	3.40.3.0	3.40.3.0	更新
691	Smart Storage Administrator (SSA) for Linux 64-bit	ssa-3.40-3.0.x86_64.rpm	-	3.40.3.0	3.40-3.0	更新
692	Smart Storage Administrator (SSA) for Windows 64-bit	cp036451.exe	-	3.40.3.0	3.40.3.0	更新

693	Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Linux 64-bit	ssaducli-3.40-3.0.x86_64.rpm	-	3.40.3.0	3.40-3.0	更新
694	Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit	cp036453.exe	-	3.40.3.0	3.40.3.0	更新

6.2.26 Utility - Tools

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
695	HPE Utilities Bundle Smart Component for ESXi 6.0	cp037188.zip	-	2019.03.01	2019.03.01	更新
696	HPE Utilities Bundle Smart Component for ESXi 6.5	cp037189.zip	-	2019.03.01	2019.03.01	更新
697	HPE Utilities Bundle Smart Component for ESXi 6.7	cp037190.zip	-	2019.03.01	2019.03.01	更新

6.3 パッケージの変更内容

Online ROM Flash Component for Linux - OEM System ROM U34

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735,
CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181,
CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system

reset when the system is configured in UEFI Boot Mode.

- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Linux - System ROM U30

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform

Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:

CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.

These security vulnerabilities are not unique to Hitachi servers.

- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Linux - System ROM U32

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset

option in the iLO Remote Console and Media - Virtual Media settings.

- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Linux - System ROM U41

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides

mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:

CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.

These security vulnerabilities are not unique to Hitachi servers.

- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Linux - System ROM U43

Version: 1.20_02-02-2019 (Optional)

Enhancements/New Features

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB

storage device for migration to another server.

- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20_01_28_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Online ROM Flash Component for Linux - System ROM U44

Version: 1.20_02-02-2019 (Optional)

Enhancements/New Features

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using a Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20_01_28_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red

Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.

- Addressed an issue where a USB KVM may not function properly after a system reboot.

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

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735,
CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181,
CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode.

This issue does not impact systems in UEFI Boot Mode.

- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Windows x64 - System ROM U30

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.

- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
 CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
 These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Windows x64 - System ROM U32

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735,
CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181,
CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly

execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.

- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Windows x64 - System ROM U41

Version: 2.00_02-02-2019 (Optional)

Enhancements/New Features

- Added support for Intel Xeon Scalable Performance 3200, 4200, 5200, 6200 and 8200 series processors.
- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Added a new BIOS/Platform Configuration (RBSU) Opportunistic Self Refresh menu to Memory Options. This option can be enabled to reduce idle system power usage, but the system may incur additional memory latency.
- Added a new BIOS/Platform Configuration (RBSU) Memory Controller Interleaving menu to Memory Options. This option can be used to disable memory controller interleaving which may provide more balanced memory performance when a system is configured in an unbalanced memory configuration.
- Added a new BIOS/Platform Configuration (RBSU) for dual bifurcation (quadfurcation) of PCIe Adapters to the Advanced PCIe Configuration Options. This option will allow a x16 PCIe device to be bifurcated into four x4 devices. This option would only be used for PCIe Adapters that support this level of bifurcation.
- Updated the system thermal logic to support the latest GPU adapters.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- This system ROM contains the latest Intel microcode that addresses an issue where the system may experience an Uncorrected Machine Check Exception in Bank 0 with Status containing 000F0150. This update may not address all Bank 0 machine check events with a Status containing 000F0150 but should be used before any other further service actions for issues resulting in this Integrated Management Log (IML) entry. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Known Issues

- This revision of the System ROM may result in a VMware PSOD (crash) when a system is configured with Intel Trusted eXecution Technology (TXT) enabled and the Trusted Platform Module (TPM) in TPM 1.2 Mode. This issue is only seen in certain memory configurations.

Online ROM Flash Component for Windows x64 - System ROM U43

Version: 1.20_02-02-2019 (Optional)

Enhancements/New Features

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20_01_28_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.

- Addressed an issue where a USB KVM may not function properly after a system reboot.

Online ROM Flash Component for Windows x64 - System ROM U44

Version: 1.20_02-02-2019 (Optional)

Enhancements/New Features

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- Updated the language translations (non-English modes) for System Utilities.
- Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Problems Fixed

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release:
CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183.
These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20_01_28_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected

after an operating system reboot.

- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 to Server 2019

Version: 10.1.17861.8101 (Optional)

Enhancements

Add support for device ACPI\INTL0000, "Intel(R) address translation DSM interface".

HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions

Version: 214.0.0.0 (B) (Optional)

Important Note!

HPE recommends the firmware provided in HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Enhancements

This driver inf file is updated to sync with latest device support list.

Supported Devices and Features

This driver supports the following network adapters:

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

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

Version: 3.137y-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64, version 2.23.10 or later, for use with these drivers.

Fixes

This product fixes an issue of `vunmap()` `BUG_ON()` triggered from `tg3_free_consistent()`.

This product now prevents scheduling while running atomic splat.

Supported Devices and Features

These drivers support the following network adapters:

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

- o HP Ethernet 1Gb 4-port 331FLR Adapter
- o HP Ethernet 1Gb 4-port 331T Adapter
- o HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HP Ethernet 1Gb 2-port 332T Adapter

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

Version: 3.137y-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86_64, version 2.23.10 or later, for use with these drivers.

Fixes

This product fixes an issue of `vunmap()` `BUG_ON()` triggered from `tg3_free_consistent()`.
This product now prevents scheduling while running atomic splat.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 1Gb 4-port 331i Adapter (22BE)
- o HP Ethernet 1Gb 4-port 331FLR Adapter
- o HP Ethernet 1Gb 4-port 331T Adapter
- o HP Ethernet 1Gb 2-port 332i Adapter (22E8)
- o HP Ethernet 1Gb 2-port 332T Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 2.7.12-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product fixes an issue with restoring all VF -d config on a VF reset.

This product fixes an issue with mirror rule via VF -d.

This product fixes an issue with VFD handler function prototypes.

This product fixes the issue of assuming hardware is at default settings.

This product fixes an issue of not re-initializing properly in the case of a CORE reset following a PF reset timeout.

This product fixes an issue where an unknown NMI is received and the kernel crashes when adding/removing a VF to namespace repeatedly.

This product fixes an issue where running 'ifconfig ethX mtu 2000' causes a physical link down and fails to auto-recover when 'ethtool --set-priv-flags eth2 link-down-on-close on' is set.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

This product now provides the allow_untagged VF -d attribute.

This product now has a helper function to validate a vf based on the vf id.

This product now has a macro for checking if prog_attached exists.

This product now provides client register/unregister to prevent vsi.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 2.7.12-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product fixes an issue with restoring all VF -d config on a VF reset.

This product fixes an issue with mirror rule via VF -d.

This product fixes an issue with VFD handler function prototypes.

This product fixes the issue of assuming hardware is at default settings.

This product fixes an issue of not re-initializing properly in the case of a CORE reset following a PF reset timeout.

This product fixes an issue where an unknown NMI is received and the kernel crashes when adding/removing a VF to namespace repeatedly.

This product fixes an issue where running 'ifconfig ethX mtu 2000' causes a physical link down and fails to auto-recover when 'ethtool --set-priv-flags eth2 link-down-on-close on' is set.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

This product now supports Red Hat Enterprise Linux 7 Update 6.

This product now provides the allow_untagged VF -d attribute.

This product now has a helper function to validate a vf based on the vf id.

This product now has a macro for checking if prog_attached exists.

This product now provides client register/unregister to prevent vsi.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40ea Driver for Windows Server 2012 R2

Version: 1.9.221.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This product corrects an issue which prevents recovery of RDMA connections.

This product corrects a Windows Stop Error (BSOD) seen when RSS and the driver verifier are both enabled.

This product corrects an issue which results in a failure to correctly set up ROCEv2 connections.

This product corrects an issue which results in a BSOD in systems with more than 256 cores.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This product supports the following network adapters:

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

HPE Intel i40ea Driver for Windows Server 2016

Version: 1.9.221.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This product corrects an issue which prevents recovery of RDMA connections.

This product corrects a Windows Stop Error (BSOD) seen when RSS and the driver verifier are both enabled.

This product corrects an issue which results in a failure to correctly set up ROCEv2 connections.

This product corrects an issue which results in a BSOD in systems with more than 256 cores.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This product supports the following network adapters:

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

HPE Intel i40eb Driver for Windows Server 2012 R2

Version: 1.9.221.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This product corrects an issue which prevents recovery of RDMA connections.

This product corrects a Windows Stop Error (BSOD) seen when RSS and the driver verifier are both enabled.

This product corrects an issue which results in a failure to correctly set up ROCEv2 connections.

This product corrects an issue which results in a BSOD in systems with more than 256 cores.

This product corrects an issue which results in connectivity loss if the device was only allocated 1 interrupt.

This product corrects an issue which results in a BSOD during shutdown if the device was only allocated 1 interrupt.

This product corrects an issue which results in a BSOD during RDMA traffic when the system has high memory utilization.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter

HPE Intel i40eb Driver for Windows Server 2016

Version: 1.9.221.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This product corrects an issue which prevents recovery of RDMA connections.

This product corrects a Windows Stop Error (BSOD) seen when RSS and the driver verifier are both enabled.

This product corrects an issue which results in a failure to correctly set up ROCEv2 connections.

This product corrects an issue which results in a BSOD in systems with more than 256 cores.

This product corrects an issue which results in connectivity loss if the device was only allocated 1

interrupt.

This product corrects an issue which results in a BSOD during shutdown if the device was only allocated 1 interrupt.

This product corrects an issue which results in a BSOD during RDMA traffic when the system has high memory utilization.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter

HPE Intel i40en Driver for VMware vSphere 6.0

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product address an issue with handling Malicious Driver Detection (MDD) events.

This product fixes an issue where SR-IOV cannot be enabled via Web Client when the driver fails to load all PFs.

Enhancements

This product now provides support for VLAN Tag Stripping Control for VF drivers.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40en Driver for VMware vSphere 6.5

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product address an issue with handling Malicious Driver Detection (MDD) events.

This product fixes an issue where SR-IOV cannot be enabled via Web Client when the driver fails to load all PFs.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

This product now provides support for VLAN Tag Stripping Control for VF drivers.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40en Driver for VMware vSphere 6.7

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product address an issue with handling Malicious Driver Detection (MDD) events.

This product fixes an issue where SR-IOV cannot be enabled via Web Client when the driver fails to load all PFs.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

This product now provides support for VLAN Tag Stripping Control for VF drivers.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 3.6.15-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product addresses a version number bump issue.

This product addresses an issue where the i40e handler of VIRTCHNL_OP_ENABLE_QUEUES does not use rx_queues/tx_queues correctly.

This product addresses an issue where there is no Ethtool Stats Counter for rx_packets or tx_packets available.

This product addresses an issue where the Flow Director ATR doesn't switch properly when a side band SCTP rule is created.

This product addresses an issue where the VF port vlan is set with a wrong qos value and the CFI bit is incorrectly set.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 3.6.15-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product addresses a version number bump issue.

This product addresses an issue where the i40e handler of VIRTCHNL_OP_ENABLE_QUEUES does not use rx_queues/tx_queues correctly.

This product addresses an issue where there is no Ethtool Stats Counter for rx_packets or tx_packets available.

This product addresses an issue where the Flow Director ATR doesn't switch properly when a side band SCTP rule is created.

This product addresses an issue where the VF port vlan is set with a wrong qos value and the CFI bit is incorrectly set.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

This product now supports Red Hat Linux 7 Update 6.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 1Gb 4-port 369i Adapter
- o HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- o HPE Ethernet 10Gb 2-port 562SFP+ Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 5.3.5.22-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product addresses a driver crash with ethtool command.

This product fixes an issue with Klocwork hits.

Supported Devices and Features

These drivers support the following Intel network adapters:

- o HP Ethernet 1Gb 2-port 361T Adapter
- o HP Ethernet 1Gb 4-port 366FLR Adapter
- o HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 5.3.5.22-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Fixes

This product addresses a driver crash with ethtool command.

This product fixes an issue with Klocwork hits.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

Supported Devices and Features

These drivers support the following Intel network adapters:

- o HP Ethernet 1Gb 2-port 361T Adapter
- o HP Ethernet 1Gb 4-port 366FLR Adapter
- o HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.0

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product addresses a driver status reporting issue which results in 3rd party management tools not detecting the driver being loaded.

Enhancements

This product adds support for receive/transmit hang detection and recovery procedures.

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 1Gb 2-port 361T Adapter
- o HP Ethernet 1Gb 4-port 366FLR Adapter
- o HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.5

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product addresses a driver status reporting issue which results in 3rd party management tools not detecting the driver being loaded.

This product now correctly loads on the 16th port of a 16-port device.

Enhancements

This product adds support for receive/transmit hang detection and recovery procedures.

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 1Gb 2-port 361T Adapter

- o HP Ethernet 1Gb 4-port 366FLR Adapter
- o HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel igbn Driver for VMware vSphere 6.7

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product addresses a driver status reporting issue which results in 3rd party management tools not detecting the driver being loaded.

Enhancements

This product adds support for receive/transmit hang detection and recovery procedures.

Supported Devices and Features

These drivers support the following network adapters:

- o HP Ethernet 1Gb 2-port 361T Adapter
- o HP Ethernet 1Gb 4-port 366FLR Adapter
- o HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 5.5.2-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Enhancements

This product is updated to maintain compatibility with firmware version 1.17.x.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 5.5.2-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

This product is updated to maintain compatibility with firmware version 1.17.x.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgben Driver for VMware vSphere 6.0

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product corrects a problem where excessive logging of an issue “(unsupported) Device 10fb does not support flow control autoneg” crashes the vCenter.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgben Driver for VMware vSphere 6.5

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product corrects a problem where excessive logging of an issue “(unsupported) Device 10fb does not

support flow control autoneg” crashes the vCenter.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgben Driver for VMware vSphere 6.7

Version: 2019.03.11 (Optional)

Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxx.xml file.

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.10.16 or later, for use with this driver.

Fixes

This product corrects a problem where excessive logging of an issue “(unsupported) Device 10fb does not support flow control autoneg” crashes the vCenter.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 4.5.1-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Enhancements

This product is updated to maintain compatibility with firmware version 1.17.x.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixgbev Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 4.5.1-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Linux x86_64, version 1.17.17 or later, for use with these drivers.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

This product is updated to maintain compatibility with firmware version 1.17.x.

Supported Devices and Features

These drivers support the following network adapters:

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

HPE Intel ixs Driver for Windows Server 2012 R2

Version: 3.14.132.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in incorrect counters when LSO is enabled.

This driver corrects an issue which results in spurious event log messages during firmware recovery.

Enhancements

The virtual driver for the supported devices has been moved into a separate component: HPE Intel vxs Driver for Windows Server 2012 R2.

Supported Devices and Features

This driver supports the following network adapters:

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

HPE Intel ixs Driver for Windows Server 2016

Version: 4.1.131.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Fixes

This driver corrects an issue which results in incorrect counters when LSO is enabled.

This driver corrects an issue which results in spurious event log messages during firmware recovery.

Enhancements

The virtual driver for the supported devices has been moved into a separate component: HPE Intel vxs Driver for Windows Server 2016.

Supported Devices and Features

This driver supports the following network adapters:

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

HPE Intel v40e Driver for Windows Server 2012 R2

Version: 1.5.86.2 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.9.221.0 or later.

Fixes

TBD

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

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

This product supports the following HPE Intel i40eb network adapters:

HPE Intel v40e Driver for Windows Server 2016

Version: 1.5.86.2 (Optional)

Important Note!

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with this driver.

Prerequisites

This driver requires host driver version 1.9.221.0 or later.

Fixes

TBD

Supported Devices and Features

This product supports the following HPE Intel i40ea network adapters:

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

This product supports the following HPE Intel i40eb network adapters:

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2

Version: 2.0.19824.0 (Optional)

Fixes

This driver corrects an issue where the driver is reported as hung when heavy receive and send UDP multicast traffic is detected.

The driver corrects an issue that causes the driver to load with a yellow bang on machines with more than 256 cores.

The driver corrects an issue where the RoCE connection fails as a result of an incorrect GID when the Universal/Local (U/L) bit in the MAC is set to 1.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- o HPE Infiniband EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter

HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016

Version: 2.0.19824.0 (Optional)

Fixes

This driver corrects an issue where the driver is reported as hung when heavy receive and send UDP multicast traffic is detected.

The driver corrects an issue that causes the driver to load with a yellow bang on machines with more than 256 cores.

The driver corrects an issue where the RoCE connection fails as a result of an incorrect GID when the Universal/Local (U/L) bit in the MAC is set to 1.

Supported Devices and Features

This driver supports the following network adapters:

- o HPE Ethernet 25Gb 2-port 640SFP28 Adapter
- o 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: 4.4 (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 4.4:

- o Removed the following prints on server shutdown: "mlx5_core 0005:81:00.1:

```
mlx5_enter_error_state:96:(pid1): start mlx5_core 0005:81:00.1: mlx-5_enter_error_state:109:(pid1):  
end"
```

- o When bringing mlx4/mlx5 devices up or down, a call trace in "nvme_rdma_remove_one" or "nvmet_rdma_remove_one" occurred occasionally.

Enhancements

Changes and new features in HPE Mellanox RoCE driver version 4.4:

- o Added support for additional Operating Systems:

- * Red Hat Enterprise Linux 6 Update 10

- * Red Hat Enterprise Linux 7 Update 5

- * SuSE Linux Enterprise Server 15

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 QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 6 x86_64

Version: 8.37.31.0-2 (Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.6.26 or later, for use with these drivers.

Fixes

This product fixes an issue where qed_reg_read_test messages appear while flashing firmware.

This product addresses connection drops observed in RoCE traffic when neither roce1 nor roce2 TLVs are defined on an Arista switch.

This product fixes an issue where the FCoE initiator does not login to a switch once the system comes up from hibernation.

This product addresses a one time system crash seen while disabling/enabling NDIS devices.

This product fixes an issue where packets with incorrect checksums are dropped.

This product fixes an issue where the recovery process with active VFs leads to a deadlock.

This product fixes an issue where LACP TX packets from a VF bond are dropped with tx_error_drop.

This product fixes an issue where ethtool statistics are corrupted when the interface is down.

This product fixes an issue where the scan command cannot be executed when the target ID is 8 or more.

This product fixes an issue where qedf_initiate_abts crashes when accessing a stale io_req.

This product fixes an L4 iSCSI BFS LUN detection failure.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64

Version: 8.37.31.0-2 (Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64, version 1.6.26 or later, for use with these drivers.

Fixes

This product fixes an issue where qed_reg_read_test messages appear while flashing firmware.

This product addresses connection drops observed in RoCE traffic when neither roce1 nor roce2 TLVs are defined on an Arista switch.

This product fixes an issue where the FCoE initiator does not login to a switch once the system comes up from hibernation.

This product addresses a one time system crash seen while disabling/enabling NDIS devices.

This product fixes an issue where packets with incorrect checksums are dropped.

This product fixes an issue where the recovery process with active VFs leads to a deadlock.

This product fixes an issue where LACP TX packets from a VF bond are dropped with tx_error_drop.

This product fixes an issue where ethtool statistics are corrupted when the interface is down.

This product fixes an issue where the scan command cannot be executed when the target ID is 8 or more.

This product fixes an issue where qedf_initiate_abts crashes when accessing a stale io_req.

This product fixes an L4 iSCSI BFS LUN detection failure.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions

Version: 8.37.37.0 (Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with these drivers.

Fixes

This driver corrects an issue which results in a pause flood when bringing up all ports.

This driver corrects an issue which results in a connection drop while using the iWARP protocol.

This driver addresses a system crash in Windows Server 2019 which occurs during chipset driver installation.

This driver corrects an issue where no FCoE npiv devices are enumerated.

This driver corrects an issue which prevents storage devices from enumerating on systems with more than 256 cores.

This driver corrects an issue which results in an incorrect processor being selected for queue affinity with RSSv2.

This driver corrects an issue which the FCoE initiator does not login to the switch after the system comes up from hibernation.

This driver corrects an issue where the value of "lovQueuePairsInUse" is greater than "lovQueuePairCount" in Get-vmswitch cmdlet output.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 10

Version: 8.37.0.0-1 (Optional)

Prerequisites

HPE QLogic FastLinQ 10/25/50GbE Drivers for Red Hat Enterprise Linux 6 x86_64, version 8.20.4.0-1 or later, must be installed before installing this product.

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

Enhancements

This product is updated to maintain compatibility with RoCE driver (qedr) version 8.37.25.x.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 9

Version: 8.37.0.0-1 (Optional)

Prerequisites

HPE QLogic FastLinQ 10/25/50GbE Drivers for Red Hat Enterprise Linux 6 x86_64, version 8.20.4.0-1 or later, must be installed before installing this product.

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

Enhancements

This product is updated to maintain compatibility with RoCE driver (qedr) version 8.37.25.x.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for VMware, version 1.24.16 or later, for use with this driver.

Enhancements

This product adds support for VLAN modes.

Supported Devices and Features

These drivers support the following network adapters:

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

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

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for VMware, version 1.24.16 or later, for use with this driver.

Fixes

This product addresses excessive logging to vmkernel logs.

Supported Devices and Features

These drivers support the following network adapters:

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

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

Version: 2019.03.11 (Optional)

Important Note!

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

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for VMware, version 1.24.16 or later, for use with this driver.

Fixes

This product addresses excessive logging to vmkernel logs.

Supported Devices and Features

These drivers support the following network adapters:

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

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

Version: 7.14.54-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64, version 2.24.15 or later, for use with these drivers.

Fixes

This product fixes an issue where VP-LAG shows down due to a STAG value of 0.

This product addresses a kernel panic seen with Rx function hash config on a disabled port.

Supported Devices and Features

These drivers support the following network adapters:

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

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

Version: 7.14.54-1 (Optional)

Important Note!

HPE recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64, version 2.24.15 or later, for use with these drivers.

Fixes

This product fixes an issue where VP-LAG shows down due to a STAG value of 0.

This product addresses a kernel panic seen with Rx function hash config on a disabled port.

Enhancements

This product now supports Red Hat Enterprise Linux 7 Update 6.

Supported Devices and Features

These drivers support the following network adapters:

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

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

Version: 7.13.161.0 (Optional)

Important Note!

HP recommends the firmware provided in HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.1.4.0 or later, for use with these drivers.

Fixes

This driver corrects an issue where warning event identifier 61 is logged after starting the OS.

This driver corrects an issue where Get-netadapterVMQ output shows the number of receive queues as 0.

This driver addresses a system crash which occurs during an iSCSI session recovery.

Supported Devices and Features

This driver supports the following network adapters:

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

HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019

Version: 106.12.4.0 (Recommended)

Enhancements

Added support for AMD.

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

Version: 1.2.4-065 (Recommended)

Fixes

Fixes the following issues:

- o Kernel panic may occur during device discovery state.

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.

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

Version: 1.2.4-065 (Recommended)

Fixes

Fixes the following issues:

- o Kernel panic may occur during device discovery state.
- o System could stop responding after a Logical Volume access failure

Enhancements

- o Added support for Red Hat Enterprise Linux 7.6

Supported Devices and Features

SUPPORTED KERNELS:

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

- 3.10.0-862.el7- Red Hat Enterprise Linux 7 Update 5 (64-bit) and future errata kernels for update 5.
- 3.10.0-957.el7- Red Hat Enterprise Linux 7 Update 6 (64-bit) and future errata kernels for update 6.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).

Version: 2019.03.12 (Recommended)

Important Note!

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

Fixes

Fixes the following issues

- o While in multipath, driver could go offline when the active path is removed.
- o Incorrect SAS address is displayed under multipath information for MSA attached arrays.
- o Disk might become unresponsive after a vSphere Quick Boot.
- o Driver unload could failed after an expander device is removed.
- o PSOD could be observe while performing a hard drive hot remove/re-insert.
- o PSOD might occur after lockup followed by an ESXI shell reboot.
- o Crash dump might not be generated in a NUMA machine.
- o While performing array creation and deletion a PSOD could be observe after two controller lockup.
- o Drivers could go offline during running time when DMA memory is not available

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).

Version: 2019.03.12 (Recommended)

Important Note!

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

Fixes

Fixes the following issues

- o While in multipath, driver could go offline when the active path is removed.
- o Incorrect SAS address is displayed under multipath information for MSA attached arrays.
- o Disk might become unresponsive after a vSphere Quick Boot.
- o Driver unload could failed after an expander device is removed.
- o PSOD could be observe while performing a hard drive hot remove/re-insert.
- o PSOD might occur after lockup followed by an ESXI shell reboot.
- o Crash dump might not be generated in a NUMA machine.
- o While performing array creation and deletion a PSOD could be observe after two controller lockup.
- o Drivers could go offline during running time when DMA memory is not available

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).

Version: 2019.03.12 (Recommended)

Important Note!

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

Fixes

Fixes the following issues

- o While in multipath, driver could go offline when the active path is removed.
- o Incorrect SAS address is displayed under multipath information for MSA attached arrays.
- o Disk might become unresponsive after a vSphere Quick Boot.
- o Driver unload could failed after an expander device is removed.
- o PSOD could be observe while performing a hard drive hot remove/re-insert.
- o PSOD might occur after lockup followed by an ESXI shell reboot.
- o Crash dump might not be generated in a NUMA machine.
- o While performing array creation and deletion a PSOD could be observe after two controller lockup.
- o Drivers could go offline during running time when DMA memory is not available

HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019

Version: 106.84.2.64 (Recommended)

Fixes

- o Improved integration with Smart Update Manager

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

Version: 12.0.318.0 (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 12.0.318.0

Added the following support:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

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:

- o HPE StoreFabric SN1200E 16Gb 2P FC HBA
- o HPE StoreFabric SN1200E 16Gb 1P FC HBA

- o HPE StoreFabric SN1600E 32Gb 2p FC HBA
- o 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: 9.2.9.22 (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

Fixed the following:

- o Build environment using QSpectre compiler switch
- o Request FDMI Data Change from drivers
- o fcinfo /diag, and continual busy status failures.
- o QLogic Windows ql2300.cat file is missing the OS attribute for Windows 2012R2

Enhancements

Added support for following:

- o Added OEM IDs and friendly names
 - o Updated RISC FW to version 8.08.01
 - o Added qlservice for W2K19 Universal Driver Changes
 - o Added PID addressing mode support for ElsPasThru when used to send Echo to switch
- Updated the driver to version 9.2.9.22

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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

Version: 9.2.9.22 (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

Fixed the following:

- o Build environment using QSpectre compiler switch
- o Request FDMI Data Change from drivers
- o fcinfo /diag, and continual busy status failures.

Enhancements

Added support for following:

- o Added OEM IDs and friendly names
- o Updated RISC FW to version 8.08.01
- o Added qlservice for W2K19 Universal Driver Changes
- o Added PID addressing mode support for ElSPasThru when used to send Echo to switch
Driver version 9.2.9.22

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019

Version: 9.2.9.22 (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

Fixed the following:

- o Build environment using QSpectre compiler switch
- o Request FDMI Data Change from drivers
- o fcinfo /diag, and continual busy status failures.

Enhancements

Added support for following:

- o Added OEM IDs and friendly names
- o Updated RISC FW to version 8.08.01
- o Added qlservice for W2K19 Universal Driver Changes
- o Added PID addressing mode support for ElSPasThru when used to send Echo to switch
Driver version 9.2.9.22

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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-k10 (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

Fixed the following:

- o Snoop inquiry response atleast 168 bytes to determine proprietary DIF
- o Disable standard DIF for arrays advertising proprietary DIF.
- o Reset PROTECT bit only in standard INQUIRY response.
- o Check if the INQ response buffer is > 170 (instead of >=).
- o Fix invalid offset reference of inquiry response data.
- o set ql2xenabledif_tgt enabled by default.
- o Parameterize ql2xenabledif_tgt (defaulted to zero).
- o Mark DIF errors from target as re-tryable errors.
- o Do not turn off T10 DIF on a port reset.
- o Enable T10 DIF for reads as well.

Enhancements

Added support for following:

- o Implement LUN level DIF for 3PAR array.

Updated to version 8.08.00.08.06.0-k10

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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

Version: 12.0.346.15 (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.

To obtain the guide:

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

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

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new

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

Enhancements

Updated to driver version 12.0.346.15

Added support to the following:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

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: 10.01.00.33.07.6-k2 (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

Fixed the following:

- o Snoop inquiry response atleast 168 bytes to determine proprietary DIF
- o Disable standard DIF for arrays advertising proprietary DIF.
- o Reset PROTECT bit only in standard INQUIRY response.
- o Check if the INQ response buffer is > 170 (instead of >=).
- o Fix invalid offset reference of inquiry response data.
- o set ql2xenabledif_tgt enabled by default.
- o Parameterize ql2xenabledif_tgt (defaulted to zero).
- o Mark DIF errors from target as re-tryable errors.
- o Do not turn off T10 DIF on a port reset.
- o Enable T10 DIF for reads as well.

Enhancements

Added support for following:

- o Implement LUN level DIF for 3PAR array.

Initial driver for RedHat Enterprise Linux Server 7 update 6 version 10.01.00.33.07.6-k2

RedHat Enterprise Linux Server 7 update 5 version 8.08.00.08.07.5-k10

Supported Devices and Features

This driver supports the following HPE adapters:

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

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

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

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

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

Version: 12.0.346.15 (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.

To obtain the guide:

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

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

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

Enhancements

Updated to driver version 12.0.346.15

Added support to the following:

- o Added support for Red Hat Enterprise Linux 7 update 6 (RHEL7.6).
- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

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

Language Pack - Japanese

Version: 1.40 (a) (Optional)

Fixes

Various translation fixes

Enhancements

N/A

Language Pack - Japanese

Version: 1.40 (a) (Optional)

Prerequisites

Requires iLO 5 firmware version 1.10 or higher

Fixes

Various translation fixes

Enhancements

N/A

Online ROM Flash Component for Linux - iLO 5

Version: 1.40 (Recommended)

Enhancements

List your enhancements here.

Online ROM Flash Component for Windows x64 - iLO 5

Version: 1.40 (Recommended)

Enhancements

List your enhancements here.

Online ROM Flash Firmware Package - iLO 5

Version: 1.40 (Recommended)

Enhancements

List your enhancements here.

HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.23.10 (Optional)

Important Note!

HPE recommends HPE Broadcom tg3 Ethernet Drivers, versions 3.137y 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

This product corrects an issue where the component fails to update adapter firmware when running on ESXi 6.7.

This product corrects an issue where an incorrect device (Network Controller) name is displayed in the RBSU.

Supported Devices and Features

This product supports the following network adapters:

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

HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware

Version: 1.24.8 (Optional)

Important Note!

HPE recommends HP Broadcom tg3 Ethernet Drivers for VMware, versions 2015.10.01, for use with this firmware.

This software package contains combo image v20.14.54 with the following firmware versions:

NIC

Boot Code Version

PXE Version

NCSI Version

UEFI Version

CCM Version

HP Ethernet 1Gb 2-port 330i Adapter (22BD)

2.1

20.14.0

1.5.01

20.14.6

214.0.166.0

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

HP Ethernet 1Gb 4-port 331FLR Adapter

HP Ethernet 1Gb 4-port 331T Adapter

1.46

20.14.0

1.5.01

20.14.6

214.0.166.0

HP Ethernet 1Gb 2-port 332i Adapter (22E8)

HP Ethernet 1Gb 2-port 332T Adapter

1.4

20.14.0

1.5.01

20.14.6

214.0.166.0

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 on SLES15 where the component fails to update adapter firmware with secure boot enabled.

This product corrects an issue where an incorrect device (Network Controller) name is displayed in the RBSU.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 5.1.4.0 (Optional)

Important Note!

HPE recommends HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions, version 214.0.0.0(B) or later, for use with this firmware.

Prerequisites

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

Fixes

This product corrects an issue where an incorrect device (Network Controller) name is displayed in the RBSU.

Supported Devices and Features

This product supports the following network adapters:

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

HPE Intel Online Firmware Upgrade Utility for Linux x86_64

Version: 1.17.17 (B) (Optional)

Important Note!

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

- o HPE Intel igb Drivers for Linux, versions 5.3.5.22 or later
- o HPE Intel ixgbe Drivers for Linux , versions 5.5.2 or later
- o HPE Intel i40e Drivers for Linux, versions 2.7.12 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 failure to update adapter firmware on a system running SUSE Linux Enterprise Server 15.

This product corrects an issue where the name for the HP Ethernet 1Gb 4-port 366FLR Adapter is displayed incorrectly in the network boot options.

This product corrects an issue where the HPE Ethernet 10Gb 2-port 562FLR-T Adapter can be awakened when the NIC WOL setting is disabled.

This product corrects an issue where system hangs when booting from the PXE boot menu.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This package supports the following network adapters:

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

HPE Intel Online Firmware Upgrade Utility for VMware

Version: 3.10.16 (Optional)

Important Note!

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

- o HPE Intel igbn Drivers for VMware, versions 2019.03.11
- o HPE Intel ixgben Drivers for VMware, versions 2019.03.11
- o HPE Intel i40en Drivers for VMware, versions 2019.03.11

This software package contains the following firmware versions for the below listed supported network adapters:

NIC

EEPROM/NVM Version

OROM Version

Single NVM Version

HP Ethernet 1Gb 2-port 361i Adapter

80000CD5

1.2028.0

N/A
HP Ethernet 1Gb 2-port 361T Adapter
80000F91
1.2028.0
N/A
HP Ethernet 1Gb 2-port 363i Adapter
80000D00
1.2028.0
N/A
HPE Ethernet 1Gb 4-port 366i Communication Board
80000EBF
1.2028.0
N/A
HP Ethernet 1Gb 4-port 366i Adapter
8E+28
1.2028.0
N/A
HP Ethernet 1Gb 4-port 366FLR Adapter
80000F44
1.2028.0
N/A
HP Ethernet 1Gb 4-port 366T Adapter
8E+85
1.2028.0
N/A
HPE Ethernet 1Gb 2-port 368i Adapter
80001669
1.2028.0
N/A
HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
80001668
1.2028.0
N/A
HPE Ethernet 1Gb 4-port 369i Adapter
8000166A
1.2028.0
N/A
HP Ethernet 10Gb 2-port 560FLB Adapter
800008F0
1.2028.0
N/A

HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter

80000838

1.2028.0

N/A

HP Ethernet 10Gb 2-port 560M Adapter

8000083D

1.2028.0

N/A

HPE Ethernet 10Gb 2-port 560SFP+ Adapter

80000835

1.2028.0

N/A

HPE Ethernet 10Gb 2-port 568i Adapter

8000166B

1.2028.0

N/A

HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter

80001668

1.2028.0

N/A

HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

80001668

1.2028.0

N/A

HPE Ethernet 10Gb 2-port 563i Adapter

800035C0

1.1375.0

N/A

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

80004005

1.2028.0

10.4.3

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

80000D96

1.2028.0

10.4.4

HPE Ethernet 10Gb 2-port 562SFP+ Adapter

80004004

1.2028.0

10.4.3

HPE Ethernet 10Gb 2-port 562T Adapter

80000D95

1.2028.0

10.4.4

HPE Synergy 4610C 10/25Gb Ethernet Adapter

800040F9

1.2028.0

10.4.7

The combo image v1.2028.0 includes: Boot Agent: 1GbE - v1.5.86, 10GbE - v2.4.32, 40GbE - v1.1.02 & UEFI Drivers: 1GbE - v8.6.06, 10GbE - v7.1.06, 40GbE - v3.4.06

The combo image v1.1375.0 includes: Boot Agent: 1GbE - v1.5.72, 10GbE - v2.3.46, 40GbE - v1.0.21 & UEFI Drivers: 1GbE - v6.9.13, 10GbE - v5.0.20, 40GbE - v1.5.14

Single NVM Version is new firmware format which represent an unified version in place of the previously used EEPROM/NVM Version or OROM version.

Prerequisites

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

Fixes

This product corrects an issue where the name for the HP Ethernet 1Gb 4-port 366FLR Adapter is displayed incorrectly in the network boot options.

This product corrects an issue where the HPE Ethernet 10Gb 2-port 562FLR-T Adapter can be awakened when the NIC WOL setting is disabled.

This product corrects an issue where system hangs when booting from the PXE boot menu.

Enhancements

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This package supports the following network adapters:

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

HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions

Version: 5.1.4.0 (Optional)

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 the name for the HP Ethernet 1Gb 4-port 366FLR Adapter is displayed incorrectly in the network boot options.

This product corrects an issue where the HPE Ethernet 10Gb 2-port 562FLR-T Adapter can be awakened when the NIC WOL setting is disabled.

This product corrects an issue where system hangs when booting from the PXE boot menu.

Enhancements

This product now supports Windows Server 2019.

This product now supports the HPE Synergy 4610C 10/25Gb Ethernet Adapter.

Supported Devices and Features

This package supports the following network adapters:

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

HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64

Version: 1.6.27 (Optional)

Important Note!

HPE recommends HPE QLogic FastLinQ 10/25/50GbE Drivers for Linux, versions 8.37.31.0-2 or later, for use with the firmware in this product.

Prerequisites

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

Fixes

This product corrects an issue where the WWPN information is missing in an adapter's FCoE configuration menu (under 'System Utilities'-'>'System Configuration' menu).

This product corrects an issue where server hangs during POST when a network adapter is connected to the HPE Synergy 20Gb Interconnect Link Module.

This product corrects an issue where the initiator does not stay logged into the target in an FCoE connection.

This product corrects an issue where the link status continues to show as UP on the switch side even after a network adapter is disabled in the OS.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

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

Version: 5.1.4.0 (Optional)

Important Note!

HPE recommends HPE QLogic FastLinQ 10/25/50GbE Driver for Windows Server x64 Editions, versions 8.37.37.0 or later, for use with the firmware in this product.

Prerequisites

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

Fixes

This product corrects an issue where the WWPN information is missing in an adapter's FCoE configuration menu (under 'System Utilities'-'>'System Configuration' menu).

This product corrects an issue where server hangs during POST when a network adapter is connected to the HPE Synergy 20Gb Interconnect Link Module.

This product corrects an issue where the initiator does not stay logged into the target in an FCoE connection.

This product corrects an issue where the link status continues to show as UP on the switch side even after a network adapter is disabled in the OS.

Supported Devices and Features

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port 521T Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64

Version: 2.24.15 (Optional)

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for Linux, versions 7.14.54-1 or later, for use with the firmware in this package.

Prerequisites

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

Fixes

This product corrects an issue where a server does not boot via a network adapter in Legacy BIOS Mode.

This product corrects an issue where a server, across repeated reboots, is unable to boot into iSCSI LUN.

This product corrects an issue where a firmware update performed in UEFI fails when multiple adapters are connected to the system.

Supported Devices and Features

This product supports the following network adapters:

- o HP Ethernet 10Gb 2-port 530SFP+ Adapter

- o HP Ethernet 10Gb 2-port 530T Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for VMware

Version: 1.24.16 (Optional)

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for VMware, versions 2019.03.11 or later, for use with this firmware.

This software package contains combo image v7.17.71 with the following firmware versions:

NIC

Boot Code Version

PXE Version

UEFI Version

iSCSI Version

FCoE Version

CCM Version

L2 Version

HP Ethernet 10Gb 2-port 530SFP+ Adapter

HP Ethernet 10Gb 2-port 530T Adapter

7.15.56

7.14.13

8.3.3

n/a

n/a

7.14.4

7.12.25

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

HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter

HP FlexFabric 10Gb 2-port 534M Adapter

HP FlexFabric 10Gb 2-port 536FLB Adapter

HPE FlexFabric 10Gb 4-port 536FLR-T Adapter

HP FlexFabric 20Gb 2-port 630FLB Adapter

HP FlexFabric 20Gb 2-port 630M Adapter

HP StoreFabric CN1100R Dual Port Converged Network Adapter

HPE StoreFabric CN1100R-T Converged Network Adapter

HPE Synergy 3820C 10/20Gb Converged Network Adapter

HPE Synergy 2820C 10Gb Converged Network Adapter

7.15.56

7.14.13

8.3.3

7.14.0

7.14.3

7.14.4

7.12.25

Prerequisites

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

Fixes

This product corrects an issue where a server does not boot via a network adapter in Legacy BIOS Mode.

This product corrects an issue where a server, across repeated reboots, is unable to boot into iSCSI LUN.

This product corrects an issue where a firmware update performed in UEFI fails when multiple adapters are connected to the system.

This product addresses an issue where a temporary link down issue occurs.

This product addresses an issue with firmware version 7.17.19 where, after a firmware update, the IPL order is reset.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 5.1.4.0 (Optional)

Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for Windows Server x64 Editions, version 7.13.161.0 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 a server does not boot via a network adapter in Legacy BIOS Mode.

This product corrects an issue where a server, across repeated reboots, is unable to boot into iSCSI LUN.

This product corrects an issue where a firmware update performed in UEFI fails when multiple adapters are connected to the system.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 1.0.9 (A) (Recommended)

Important Note!

Known Issues for FW version 2.42.5044 :

- o When using the QSFP module RTX320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
- o Enabling/disabling cq_timestamp using mlxconfig is not supported.
- o In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LES will not be active while the ETH link is in an idle mode.
- o In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
- o 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.
- o 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.
- o SBR should be asserted for a minimum of 50 milliseconds for the ConnectX -3 adapters
- o On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed
- o RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
- o In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- o 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.
- o 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.
- o Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module
- o Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- o PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV
- o Bloom filter is currently not supported.
- o Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3 o RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3

- o RM#VDP read-only fields are writable.
 - o Increasing SymbolErrorCounter When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly
 - o Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.
 - o CQ and EQ cannot be configured to different stride sizes.
 - o ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
 - o 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.
 - o Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
 - o RDP over IPv6 is currently not functional.
 - o Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to “push to that rule”
 - o Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
 - o The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
 - o 56GbE link is not raised when using 100GbE optic cables.
 - o When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx-4_en_get_drvinfo() that is called from asynchronous event handler.
 - o 832298:When running ibdump, loopback traffic is mirroring into the kernel driver.
 - o AHS reports wrong MTU size
 - o RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer
- Known Issues for FW version 12.23.8036, 14.23.8036 and 16.23.8036 :
- o The maximum “read” size of MTRC_STDB is limited to 272 Bytes.
 - o FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
 - o Encapsulation / Decapsulation support in steering has the following limitations:
 - * Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
 - * Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
 - * Encapsulation / Decapsulation per device support:
- NIC FDB
- ConnectX-4 encap NO YES non MH
 decap NO NO
- ConnectX-4 Lx encap NO YES non MH
 decap NO YES
- ConnectX-5 encap YES YES
 decap YES YES

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 2.42.5044 :

- o Fixed an issue that prevented the firmware from detecting a link_down event thus preventing the IB bond interface from going to a failover mode

Fixes submitted in version 12.23.8036 :

- o Fixed a Phase-Locked Loop(PLL) tuning issue by improving the tx_clk_phase lock mechanism.
- o The Link Layer Discovery Protocol(LLDP): Removed management MAC 0 address once a new address is received
- o Set the Port ID to be the MAC of the port

Fixes submitted in version 14.23.8052:

- o The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.23.8036 :

- o Fixed an Active Health System(AHS) packet over PCIe interface issue

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

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

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

Firmware for the following device is updated to 12.23.8036 :

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

Firmware for the following devices are updated to 14.23.8052 :

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

Firmware for the following devices are updated to 14.23.8036 :

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

Firmware for the following device is updated to 16.23.8036 :

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

New features and changes in version 12.23.8036 , 14.23.8036 and 16.23.8036 :

- o Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- o Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- o Added support for Management Component Transport Protocol (MCTP) over PCI.
- o Added support for Event Description Addendum 2.6.4.

Supported Devices and Features

HPE Part Number
Mellanox Ethernet Only Adapters
PSID
779793-B21
HP Ethernet 10Gb 2-port 546SFP+ Adapter
HP_1200111023
779799-B21
HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter
HP_2240110004
817749-B21
HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
HP_2690110034
817753-B21
HPE Ethernet 25Gb 2-port 640SFP28 Adapter
HP_2420110034
868779-B21
HPE Synergy 6410C 25/50Gb Ethernet Adapter
HPE0000000006
874253-B21
HPE Ethernet 100Gb 1-port 842QSFP28 Adapter
HPE0000000014

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: 1.0.5 (Recommended)

Important Note!

Known Issues in firmware 12.24.1000 and 16.24.1000:

- o vport_tc and para_vport_tc are not supported in this version.
- o Executing the update_lid command while the IB port sniffer utility is active can stop the utility.
- o Initializing a function while the IB port sniffer utility is active can stop the utility.
- o While using e-switch vport sVLAN stripping, the RX steering values on the sVLAN might not be accurate.
- o FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
- o Encapsulation / Decapsulation support in steering has the following limitations:
 - * Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active.
 - * Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported.
 - * Encapsulation / Decapsulation per device support:

NIC FDB

ConnectX-4 encap NO YES non MH

decap NO NO

ConnectX-4 Lx encap NO YES non MH

decap NO YES

ConnectX-5 encap YES YES

decap YES YES

Known Issues in firmware 16.24.1000:

- o In the case of multi-destinations transmission where the last destination is set to encapsulation & wire, the packet for the last destination will not be send.
- o When modifying the TTL in the NIC RX, the CQE checksum is not recalculated automatically. The limitation is indicated by the `ttl_checksum_correction` bit. If the `ttl_checksum_correction=0`, the capability is not functioning properly.
- o When getting an inline scatter CQE on IB striding RQ, the stride index in the CQE will be zero.
- o RoCE DC is not supported in LAG mode.

Fixes

Fixes in version 12.24.1000 and 16.24.1000:

- o `mlxconfig` tool reported all possible expansion ROM images, instead of presenting only the existing images.
 - o Modifying VMQoS rate limiter parameters during traffic caused transmission failure.
 - o Aligned the default tuning type in PHY TEST MODE to the device protocol.
 - o When a device is operating in Safe Mode state, and the user issues the `mlxfwreset` command, the device might fail to come-up correctly after the reset.
- Note: Do not run `mlxfwreset` when operating in a Safe Mode state.
- o Fixed an issue related to PCIe "Surprise link down" event reporting capability.
 - o Fixed an issue that resulted in the link partner experiencing false active linkup when plugging in a base-T cable to a closed port.

Fixes in version 12.24.1000:

- o Fixed an issue that caused the `max_qp_retry_freq_exceeded` counter (including a CQE with error syndrome 0x97, and the QP moving to error state) to be activated only after exceeding the NIC Vport context `max_qp_retry_limit`, and not when reaching it.

Fixes in version 16.24.1000:

- o PCIe bifurcation issue.
- o Deadlock in RX related to the "send-invalidate" flow, resulted in RX getting stuck.
- o Rare errors in RX that resulted in double completion.

Enhancements

Firmware for the following devices are updated to 12.24.1000:

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

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

Firmware for the following devices are updated to 16.24.1000:

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

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

Changes and New features in firmware version 12.24.1000 and 16.24.1000:

o Added support for the following:

* An additional layer (Layer 3) of packet processing at the hypervisor level that enables adding and removing protocol headers (e.g., the MAC address is removed during encapsulation, and added during decapsulation) for the encapsulated traffic.

* Transmission histogram counter set as part of the Ethernet extended group counters.

* TX steering rule on flow_table_metadata in WQE Ethernet segment.

* Added L3 encapsulation/decapsulation support in the reformat context allocation.

* L3 encapsulation removes L2 headers and adds generic L3 tunnel encapsulation.

* L3 decapsulation removes the generic L3 tunnel decapsulation and L2 header.

* Flow steering header modification (header rewrite) for IPv4 TTL header for loopback traffic (VF-VF/VF-PF).

Note: TTL modification for traffic from the network is currently not supported.

* Requester QP packet based on E2E credits mode. The new flow control supports HCA-to-switch RDMA traffic packet-based End-2-End.

* IPoIB non-default Partition Keys (PKeys). Now the PKey values can be modified in the PKey table without the need of recreating the IPoIB (underlay) QPs.

* [Beta] SR-IOV in Multi-Host/Socket-Direct.

* QUERY_DRIVER_VERSION command. This command allows the PF driver to query its VFs driver version which was set by the SET_DRIVER_VERSION command.

* New diagnostic counters to evaluate the number of ICMC hits and misses for particular resources.

o Enabled the hardware to generate an event upon counter incrementation, in order to reduce an overhead from the software from reading rarely updated counters such as error counters.

o Enabled NOIDNIC connectivity to the network through the e-switch and not directly to the physical port.

o Enabled setting the QP and the Mkey values by the software upon these resources creation.

o Enabled advanced PCIe atomic operations. The HCA will perform PCIe atomic operations as a requestor towards the host memory when receiving compatible atomic messages from the network, and according to the configuration of NV_SW_OFFLOAD_CONFIG pci_atomic_mode field and the PCI AtomicOp Requester Enable bit in the Device Control 2 register.

o Enabled TTL modification in the Rx NIC steering. When modifying the TTL in the Rx NIC, the CQE checksum will not recalculated automatically.

Note: TTL modification in the FDB for traffic from the network is currently not supported.

o Enabled a single TIR destination from the FDB.

o Changed the WRED default mode to OFF for Multi-Host adapter cards.

o [Developers only] Moved the fast teardown HCA cap bit to offset 0x1c.4:1.

o Enabled Virtual Functions to read QPDPM/QPDP/QPTS.

o Multi PCI RDMA IB: This capability enables the user to expose two PCI/IB devices per network port.

o Reduced firmware's memory consumption to increase the supported number of VFs per PF to up to 100.

o Shutting Down RDMA QPs with Excessive Retransmissions is a mechanism used to detect excessive retransmissions for an RC connection, and to close the connection in response to it. If the number of retransmissions due to a Local Ack Timeout, NAK-Sequence Error, or Implied NAK, during a specified period, exceeds the specified threshold, the QP will be handled as if the IB spec defined Retry Count was exceeded.

New features in firmware version 12.24.1000:

o Enabled e-switch steering rule in the NIC without matching it with the Directional MACs (DMAC) protocol. Now the rule is only according to the MC/UC bit.

o The IB Sniffer utility provides the user the ability to capture the e-switch traffic directly to a hypervisor queue.

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

* in dual port devices to: 0-21, 33-45 VFs (22-32 VFs has single TC)

* in single port devices to: 0-64 VFs

New features in firmware version 16.24.1000:

o Enabled QoS ETS for systems with 64 VFs to better allocate bandwidth in the NIC.

o Enabled TTL modification for received packets.

o Mirrors the traffic from/to one VF to a dedicate admin VF for monitoring and traffic analysis. Note that in this process packets are duplicated and different packet modifications apply to different duplications.

o Enabled TTL modification in the Rx NIC steering. When modifying the TTL in the Rx NIC, the CQE checksum will not recalculated automatically.

Note: TTL modification in the FDB for traffic from the network is currently not supported.

o Added support for Dynamically Connected Transport (DC) in RoCE in ConnectX-5 adapter cards.

o Enabled Rx mini-CQE compressed format for striding RQ.

o Enabled TX steering rule on the application meta-data from the WQE. This functionality implements meta-data Reg A steering and meta-data Reg A and Reg B rewriting.

o Added MPLS over UDP and MPLS over GRE protocols for tunneling offload/steering match criteria.

Supported Devices and Features

HPE Part Number

Device Name

PSID

825110-B21

HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter

HP_2180110032

825111-B21

HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter

HP_2190110032

872726-B21

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

HPE0000000009

879482-B21

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

Version: 1.0.0.9 (A) (Recommended)

Important Note!

Known Issues for FW version 2.42.5044 :

- o When using the QSFP module RTX320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
- o Enabling/disabling cq_timestamp using mlxconfig is not supported.
- o In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LES will not be active while the ETH link is in an idle mode.
- o In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.
- o 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.
- o 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.
- o SBR should be asserted for a minimum of 50 milliseconds for the ConnectX -3 adapters
- o On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed
- o RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
- o In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- o 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.
- o 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.
- o Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module
- o Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- o PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV
- o Bloom filter is currently not supported.
- o Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
- o RM#DMFS should not be enabled when working with InfiniBand on MLNX_OFED-2.0.3
- o RM#VPD read-only fields are writable.
- o Increasing SymbolErrorCounter When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly
- o Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in

communication loss.

- o CQ and EQ cannot be configured to different stride sizes.
 - o ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
 - o 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.
 - o Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
 - o RDP over IPv6 is currently not functional.
 - o Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to “push to that rule”
 - o Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
 - o The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
 - o 56GbE link is not raised when using 100GbE optic cables.
 - o When working with MLNX_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in `mlx-4_en_get_drvinfo()` that is called from asynchronous event handler.
 - o 832298:When running `ibdump`, loopback traffic is mirroring into the kernel driver.
 - o AHS reports wrong MTU size
 - o RM#846523: MAC address that are set from the OS using `ifconfig` are not reflected in the OCBB buffer
- Known Issues for FW version 12.23.8036, 14.23.8036 and 16.23.8036 :
- o The maximum “read” size of `MTRC_STDB` is limited to 272 Bytes.
 - o FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
 - o Encapsulation / Decapsulation support in steering has the following limitations:
 - * Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
 - * Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
 - * Encapsulation / Decapsulation per device support:
- NIC FDB
- | | | | |
|---------------------|-----|-----|--------|
| ConnectX-4 encap | NO | YES | non MH |
| decap | NO | NO | |
| ConnectX-4 Lx encap | NO | YES | non MH |
| decap | NO | YES | |
| ConnectX-5 encap | YES | YES | |
| decap | YES | YES | |

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 2.42.5044 :

- o Fixed an issue that prevented the firmware from detecting a link_down event thus preventing the IB bond interface from going to a failover mode

Fixes submitted in version 12.23.8036 :

- o Fixed a Phase-Locked Loop(PLL) tuning issue by improving the tx_clk_phase lock mechanism.
- o The Link Layer Discovery Protocol(LLDP): Removed management MAC 0 address once a new address is received
- o Set the Port ID to be the MAC of the port

Fixes submitted in version 14.23.8052:

- o The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.23.8036 :

- o Fixed an Active Health System(AHS) packet over PCIe interface issue

Enhancements

Firmware for the following devices are updated to 2.42.5044 :

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

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

Firmware for the following device is updated to 12.23.8036 :

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

Firmware for the following devices are updated to 14.23.8052 :

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

Firmware for the following devices are updated to 14.23.8036 :

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

Firmware for the following device is updated to 16.23.8036 :

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

New features and changes in version 12.23.8036 , 14.23.8036 and 16.23.8036 :

- o Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- o Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- o Added support for Management Component Transport Protocol (MCTP) over PCI.
- o Added support for Event Description Addendum 2.6.4.

Supported Devices and Features

HPE Part Number

Mellanox Ethernet Only Adapters

PSID

779793-B21
HP Ethernet 10Gb 2-port 546SFP+ Adapter
HP_1200111023
779799-B21
HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter
HP_2240110004
817749-B21
HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter
HP_2690110034
817753-B21
HPE Ethernet 25Gb 2-port 640SFP28 Adapter
HP_2420110034
868779-B21
HPE Synergy 6410C 25/50Gb Ethernet Adapter
HPE0000000006
874253-B21
HPE Ethernet 100Gb 1-port 842QSFP28 Adapter
HPE0000000014

**Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode)
ConnectX4 and ConnectX5 devices on Windows x86_64 platform**

Version: 1.0.0.5 (Recommended)

Important Note!

Known Issues in firmware 12.24.1000 and 16.24.1000:

- o vport_tc and para_vport_tc are not supported in this version.
- o Executing the update_lid command while the IB port sniffer utility is active can stop the utility.
- o Initializing a function while the IB port sniffer utility is active can stop the utility.
- o While using e-switch vport sVLAN stripping, the RX steering values on the sVLAN might not be accurate.
- o FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
- o Encapsulation / Decapsulation support in steering has the following limitations:
 - * Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active.
 - * Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported.
 - * Encapsulation / Decapsulation per device support:
NIC FDB
ConnectX-4 encap NO YES non MH
decap NO NO
ConnectX-4 Lx encap NO YES non MH
decap NO YES

ConnectX-5 encap YES YES

decap YES YES

Known Issues in firmware 16.24.1000:

- o In the case of multi-destinations transmission where the last destination is set to encapsulation & wire, the packet for the last destination will not be send.
- o When modifying the TTL in the NIC RX, the CQE checksum is not recalculated automatically. The limitation is indicated by the `ttl_checksum_correction` bit. If the `ttl_checksum_correction=0`, the capability is not functioning properly.
- o When getting an inline scatter CQE on IB striding RQ, the stride index in the CQE will be zero.
- o RoCE DC is not supported in LAG mode.

Fixes

Fixes in version 12.24.1000 and 16.24.1000:

- o `mlxconfig` tool reported all possible expansion ROM images, instead of presenting only the existing images.
- o Modifying VMQoS rate limiter parameters during traffic caused transmission failure.
- o Aligned the default tuning type in PHY TEST MODE to the device protocol.
- o When a device is operating in Safe Mode state, and the user issues the `mlxfwreset` command, the device might fail to come-up correctly after the reset.
Note: Do not run `mlxfwreset` when operating in a Safe Mode state.
- o Fixed an issue related to PCIe "Surprise link down" event reporting capability.
- o Fixed an issue that resulted in the link partner experiencing false active linkup when plugging in a base-T cable to a closed port.

Fixes in version 12.24.1000:

- o Fixed an issue that caused the `max_qp_retry_freq_exceeded` counter (including a CQE with error syndrome 0x97, and the QP moving to error state) to be activated only after exceeding the NIC Vport context `max_qp_retry_limit`, and not when reaching it.

Fixes in version 16.24.1000:

- o PCIe bifurcation issue.
- o Deadlock in RX related to the "send-invalidate" flow, resulted in RX getting stuck.
- o Rare errors in RX that resulted in double completion.

Enhancements

Firmware for the following devices are updated to 12.24.1000:

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

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

Firmware for the following devices are updated to 16.24.1000:

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

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

Changes and New features in firmware version 12.24.1000 and 16.24.1000:

o Added support for the following:

* An additional layer (Layer 3) of packet processing at the hypervisor level that enables adding and removing protocol headers (e.g., the MAC address is removed during encapsulation, and added during decapsulation) for the encapsulated traffic.

* Transmission histogram counter set as part of the Ethernet extended group counters.

* TX steering rule on flow_table_metadata in WQE Ethernet segment.

* Added L3 encapsulation/decapsulation support in the reformat context allocation.

* L3 encapsulation removes L2 headers and adds generic L3 tunnel encapsulation.

* L3 decapsulation removes the generic L3 tunnel decapsulation and L2 header.

* Flow steering header modification (header rewrite) for IPv4 TTL header for loopback traffic (VF-VF/VF-PF).

Note: TTL modification for traffic from the network is currently not supported.

* Requester QP packet based on E2E credits mode. The new flow control supports HCA-to-switch RDMA traffic packet-based End-2-End.

* IPoIB non-default Partition Keys (PKeys). Now the PKey values can be modified in the PKey table without the need of recreating the IPoIB (underlay) QPs.

* [Beta] SR-IOV in Multi-Host/Socket-Direct.

* QUERY_DRIVER_VERSION command. This command allows the PF driver to query its VFs driver version which was set by the SET_DRIVER_VERSION command.

* New diagnostic counters to evaluate the number of ICMC hits and misses for particular resources.

o Enabled the hardware to generate an event upon counter incrementation, in order to reduce an overhead from the software from reading rarely updated counters such as error counters.

o Enabled NOIDNIC connectivity to the network through the e-switch and not directly to the physical port.

o Enabled setting the QP and the Mkey values by the software upon these resources creation.

o Enabled advanced PCIe atomic operations. The HCA will perform PCIe atomic operations as a requestor towards the host memory when receiving compatible atomic messages from the network, and according to the configuration of NV_SW_OFFLOAD_CONFIG pci_atomic_mode field and the PCI AtomicOp Requester Enable bit in the Device Control 2 register.

o Enabled TTL modification in the Rx NIC steering. When modifying the TTL in the Rx NIC, the CQE checksum will not recalculated automatically.

Note: TTL modification in the FDB for traffic from the network is currently not supported.

o Enabled a single TIR destination from the FDB.

o Changed the WRED default mode to OFF for Multi-Host adapter cards.

o [Developers only] Moved the fast teardown HCA cap bit to offset 0x1c.4:1.

o Enabled Virtual Functions to read QPDPM/QPDP/QPTS.

o Multi PCI RDMA IB: This capability enables the user to expose two PCI/IB devices per network port.

o Reduced firmware's memory consumption to increase the supported number of VFs per PF to up to 100.

o Shutting Down RDMA QPs with Excessive Retransmissions is a mechanism used to detect excessive retransmissions for an RC connection, and to close the connection in response to it. If the number of retransmissions due to a Local Ack Timeout, NAK-Sequence Error, or Implied NAK, during a specified period, exceeds the specified threshold, the QP will be handled as if the IB spec defined Retry Count was

exceeded.

New features in firmware version 12.24.1000:

- o Enabled e-switch steering rule in the NIC without matching it with the Directional MACs (DMAC) protocol. Now the rule is only according to the MC/UC bit.

- o The IB Sniffer utility provides the user the ability to capture the e-switch traffic directly to a hypervisor queue.

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

- * in dual port devices to: 0-21, 33-45 VFs (22-32 VFs has single TC)

- * in single port devices to: 0-64 VFs

New features in firmware version 16.24.1000:

- o Enabled QoS ETS for systems with 64 VFs to better allocate bandwidth in the NIC.

- o Enabled TTL modification for received packets.

- o Mirrors the traffic from/to one VF to a dedicate admin VF for monitoring and traffic analysis. Note that in this process packets are duplicated and different packet modifications apply to different duplications.

- o Enabled TTL modification in the Rx NIC steering. When modifying the TTL in the Rx NIC, the CQE checksum will not recalculated automatically.

Note: TTL modification in the FDB for traffic from the network is currently not supported.

- o Added support for Dynamically Connected Transport (DC) in RoCE in ConnectX-5 adapter cards.

- o Enabled Rx mini-CQE compressed format for striding RQ.

- o Enabled TX steering rule on the application meta-data from the WQE. This functionality implements meta-data Reg A steering and meta-data Reg A and Reg B rewriting.

- o Added MPLS over UDP and MPLS over GRE protocols for tunneling offload/steering match criteria.

Supported Devices and Features

HPE Part Number

Device Name

PSID

825110-B21

HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter

HP_2180110032

825111-B21

HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter

HP_2190110032

872726-B21

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

HPE0000000009

879482-B21

HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter

HPE0000000022

Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives

Version: HPD4 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware adds a feature that will periodically assess the health of the writer element of the head by verifying the data after a write operation to ensure more robust data integrity.
- o When performing format on drives with marginal servo flaws, it takes too long to format or format fails with 03/31 reported across the interface on subsequent commands. This firmware includes a change that moves the servo flaw characterization retries earlier in the sequence of format.

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives

Version: HPD2 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware includes a fix for an issue where a drive could become format corrupt after a power cycle if write commands were being executed before the power loss.

Online ROM Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD8 (C) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - MM1000JFJTH Drives

Version: HPD3 (C) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives

Version: HPD6 (D) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.

- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - EG1800JEMDB Drives

Version: HPD5 (C) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives

Version: HPD3 (D) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline

update using the Service Pack for Proliant and Smart Update Manager

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

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

Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - MB6000JVYV Drives

Version: HPD2 (D) (Recommended)

Important Note!

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

o In AHCI configuration only offline flashing is supported.

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

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

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

Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - MB8000JFECQ Drives

Version: HPD7 (C) (Recommended)

Important Note!

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

o In AHCI configuration only offline flashing is supported.

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

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

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

Added support for VMware 6.7 Update1.

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

Version: HPD4 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware adds a feature that will periodically assess the health of the writer element of the head by verifying the data after a write operation to ensure more robust data integrity.
- o When performing format on drives with marginal servo flaws, it takes too long to format or format fails with 03/31 reported across the interface on subsequent commands. This firmware includes a change that moves the servo flaw characterization retries earlier in the sequence of format.

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD2 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware includes a fix for an issue where a drive could become format corrupt after a power cycle if write commands were being executed before the power loss.

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD6 (C) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD5 (B) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD3 (C) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MB6000JVYV Drives

Version: HPD2 (C) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD7 (B) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

Enhancements

- o Added support for Windows Server 2019.

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

Version: HPD8 (B) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

- o Added support for Windows Server 2019.

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

Version: HPD3 (B) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

- o Added support for Windows Server 2019.

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

Version: HPD4 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware adds a feature that will periodically assess the health of the writer element of the head by verifying the data after a write operation to ensure more robust data integrity.
- o When performing format on drives with marginal servo flaws, it takes too long to format or format fails with 03/31 reported across the interface on subsequent commands. This firmware includes a change that moves the servo flaw characterization retries earlier in the sequence of format.

Enhancements

- o Added support for SLES15.

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

Version: HPD2 (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager.

Fixes

- o This firmware includes a fix for an issue where a drive could become format corrupt after a power cycle if write commands were being executed before the power loss.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives

Version: HPD8 (B) (Optional)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

- o Added support for SLES15.

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

Version: HPD6 (D) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for SLES15.

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

Version: HPD5 (C) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

Enhancements

- o Added support for SLES15.

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

Version: HPD3 (C) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JVYYV Drives

Version: HPD2 (C) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware contains a change to prevent occasional command completion times in the 4-5 second window when command is received just as the drive is transitioning from active to Idle A.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives

Version: HPD7 (B) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives

Version: HPD3 (B) (Optional)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

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

- o Added support for SLES15.

Online ROM Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (C) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware has a change that allows the drive to meet the requirements for Azure Stack certification.
- o Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives

Version: HPG4 (D) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o Firmware version HPG4 prevents the occurrence of a rare issue which could lead to slow drive performance. This issue has the potential to impact all drives in configurations where the drives might be allowed to be idle for greater than 1 second.

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Online ROM Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (C) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware updates the drive to indicate NDU compliance.

Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG4 (E) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware corrects a potential issue where the data in the reserved tracks is not properly updated, eliminating the risk of a drive not finishing the boot process on power up.
- o Other maintenance fixes and updates are also included with the new firmware.

Enhancements

- o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MB001000GWFVK and MB002000GWFVL Drives

Version: HPG4 (E) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

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

- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware corrects a potential issue where the data in the reserved tracks is not properly updated, eliminating the risk of a drive not finishing the boot process on power up. This firmware is also designed to prevent any previous firmware revisions to be loaded onto the drive, once the HPG4 firmware is downloaded. Other maintenance fixes and updates are also included with the new firmware.

Enhancements

- o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (C) (Optional)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

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

- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware has a change that allows the drive to meet the requirements for Azure Stack certification.

- o Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

- o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives

Version: HPG4 (E) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline

update using the Service Pack for Proliant and Smart Update Manager

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

o Firmware version HPG4 prevents the occurrence of a rare issue which could lead to slow drive performance. This issue has the potential to impact all drives in configurations where the drives might be allowed to be idle for greater than 1 second.

Enhancements

o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MB8000GFECR Drives

Version: HPG6 (Recommended)

Important Note!

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

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

Fixes

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

Enhancements

o Added support for Windows Server 2019.

Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives

Version: HPG8 (C) (Recommended)

Important Note!

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

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

o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

o This firmware updates the drive to indicate NDU compliance.

Enhancements

- o Added support for Windows Server 2019.

Supplemental Update / Online ROM Flash Component for ESXi - MB001000GWCBC and MB002000GWCBD

Drives

Version: HPG4 (D) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

Problems Fixed:

- o This firmware corrects a potential issue where the data in the reserved tracks is not properly updated, eliminating the risk of a drive not finishing the boot process on power up.
- o Other maintenance fixes and updates are also included with the new firmware.
- o Online firmware update fails when drives are connected behind AHCI controller.

Enhancements

- Added support for HPE Smart Array P824i-p MR Gen10 Controller.
- Added support for VMware 6.7 Update1.

Supplemental Update / Online ROM Flash Component for ESXi - MB001000GFWFK and MB002000GFWFL

Drives

Version: HPG4 (D) (Recommended)

Important Note!

- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o In AHCI configuration only offline flashing is supported.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C)

(D) etc.,

Fixes

o This firmware corrects a potential issue where the data in the reserved tracks is not properly updated, eliminating the risk of a drive not finishing the boot process on power up. This firmware is also designed to prevent any previous firmware revisions to be loaded onto the drive, once the HPG4 firmware is downloaded. Other maintenance fixes and updates are also included with the new firmware.

Enhancements

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

Added support for VMware 6.7 Update1.

Supplemental Update / Online ROM Flash Component for ESXi - MB8000GFECR Drives

Version: HPG6 (Recommended)

Important Note!

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

o In AHCI configuration only offline flashing is supported.

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

Fixes

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

Enhancements

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

Added support for VMware 6.7 Update1.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG4 (E) (Recommended)

Important Note!

o

o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

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

- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GFWFK and MB002000GFWFL Drives

Version: HPG4 (E) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware corrects a potential issue where the data in the reserved tracks is not properly updated, eliminating the risk of a drive not finishing the boot process on power up. This firmware is also designed to prevent any previous firmware revisions to be loaded onto the drive, once the HPG4 firmware is downloaded. Other maintenance fixes and updates are also included with the new firmware.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives

Version: HPG3 (C) (Optional)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware has a change that allows the drive to meet the requirements for Azure Stack certification.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives

Version: HPG4 (E) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o Firmware version HPG4 prevents the occurrence of a rare issue which could lead to slow drive performance. This issue has the potential to impact all drives in configurations where the drives might be allowed to be idle for greater than 1 second.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives

Version: HPG6 (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware includes a fix for slow performance during sequential write workloads with small queue

depth.

Enhancements

- o Added support for SLES15.

Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA

Drives

Version: HPG8 (C) (Recommended)

Important Note!

- o
- o Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- o Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for Proliant and Smart Update Manager
- o Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.,

Fixes

- o This firmware updates the drive to indicate NDU compliance.

Enhancements

- o Added support for SLES15.

Online ROM Flash Component for Windows (x64) - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10

Version: 1.98 (Recommended)

Fixes

Fixes the following issues:

- o Controller could stop responding with a 0x1A91 message during active path failure
- o Controller could stop responding during I/O processing and Smart Cache flush process
- o When predictive spare rebuild is triggered on Smart Cache, the rebuilding process could failed to start.
- o Data could become corrupted when a SATA drive overruns a data transfer
- o controller memory corruption could occur when the response to an Identify Device command (IDD) is received from a drive
- o Communication between the host system and a RAID5/6 volume could potentially failed after an I/O timeout on one of the drives in the array.
- o System could stop responding with a 0x1E30 message when discovering an ATA locked drive
- o Controller could stop responding during a drive sanitize operation

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)

Version: 2019.03.01 (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)

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

o Added duration support for the Link Cable Beacon command.This avoids situations in which the blinking

of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

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 VMware vSphere 6.5

Version: 2019.03.01 (Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

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

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

To obtain the guide:

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

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

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

Prerequisites

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

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

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter (HBA) Light Emitting Diode (LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

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 VMware vSphere 6.7

Version: 2019.03.01 (Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

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

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

To obtain the guide:

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

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

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

(OOB) drivers.

Prerequisites

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

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

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter (HBA) Light Emitting Diode (LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

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 VMware vSphere 6.0

Version: 2019.03.01 (Recommended)

Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

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

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

To obtain the guide:

1. Go to <http://www.hpe.com/support/manuals>

2. Using the HPE model number as your guide, enter the adapter model number in the Search products

box, and then click >>.

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

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

Prerequisites

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

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

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter (HBA) Light Emitting Diode (LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

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 R2/2016/2019 x64

Version: 2019.03.01 (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/>

Enhancements

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter (HBA) Light Emitting Diode (LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

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: 2019.03.01 (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

Firmware:

- o Fix regression where the firmware returned Time Out error code under heavy load.

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers

16Gb Standup & 16Gb Mezzanine

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers.

16Gb/32Gb Standup

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Corrected Driver Health string format on Gen10 servers.
- o Driver progress messages are no longer displayed on SuperDome servers.
- o Fixed QUIC (QUIC Protocol)
- o Removed 8G Speed and Loop Only Options from 5830C Adapter

Enhancements

Added support for the following:

16Gb/32Gb Standup

Firmware:

- o Add support for FC NVMe (Non-volatile memory express) ready
- o Support Link cable Beacon (LCB)
- BIOS:
 - o Added support for 5830C Secure flash
- UEFI:
 - o Added support for 5830C Secure flash
- Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.
 - o 8 Gb HBA/Mezz
 - * Package 3.79.02
 - * Firmware 8.08.01
 - * UEFI 6.66
 - * BIOS 3.56
 - o 16 Gb HBA/Mezz
 - * Package 6.01.79
 - * Firmware 8.08.203
 - * UEFI 6.65
 - * BIOS 3.43
 - o 16/32 Gb
 - * Package 1.71.03
 - * Firmware 8.08.204
 - * UEFI 6.51
 - * BIOS 3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0

Version: 2019.03.01 (Recommended)

Important Note!

HPE StoreFabric QLogic Adapter Release Notes

Prerequisites

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

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

The HPE supplied QLogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download/>

Fixes

Fixed the following

8Gb Standup & 8Gb Mezzanine

Firmware:

- o Fix regression where the firmware returned Time Out error code under heavy load.

UEFI

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers

16Gb Standup & 16Gb Mezzanine

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers.

16Gb/32Gb Standup

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Corrected Driver Health string format on Gen10 servers.
- o Driver progress messages are no longer displayed on SuperDome servers.
- o Fixed QUIC (QUIC Protocol)
- o Removed 8G Speed and Loop Only Options from 5830C Adapter

Enhancements

Added support for the following:

16Gb/32Gb Standup

Firmware:

- o Add support for FC NVMe (Non-volatile memory express) ready
- o Support Link cable Beacon (LCB)

BIOS:

- o Added support for 5830C Secure flash

UEFI:

- o Added support for 5830C Secure flash

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

o 8 Gb HBA/Mezz

* Package 3.79.02

* Firmware 8.08.01

* UEFI 6.66

* BIOS 3.56

o 16 Gb HBA/Mezz

* Package 6.01.79

- * Firmware 8.08.203
- * UEFI 6.65
- * BIOS 3.43
- o 16/32 Gb
- * Package 1.71.03
- * Firmware 8.08.204
- * UEFI 6.51
- * BIOS 3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5

Version: 2019.03.01 (Recommended)

Important Note!

HPE StoreFabric QLogic Adapter Release Notes

Prerequisites

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

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

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download/>

Fixes

Fixed the following

8Gb Standup & 8Gb Mezzanine

Firmware:

- o Fix regression where the firmware returned Time Out error code under heavy load.

UEFI

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Corrected Driver Health string format on Gen10 servers

16Gb Standup & 16Gb Mezzanine

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Corrected Driver Health string format on Gen10 servers.

16Gb/32Gb Standup

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Corrected Driver Health string format on Gen10 servers.

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Fixed QUIC (QUIC Protocol)

- o Removed 8G Speed and Loop Only Options from 5830C Adapter

Enhancements

Added support for the following:

16Gb/32Gb Standup

Firmware:

- o Add support for FC NVMe (Non-volatile memory express) ready

- o Support Link cable Beacon (LCB)

BIOS:

- o Added support for 5830C Secure flash

UEFI:

- o Added support for 5830C Secure flash

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- o 8 Gb HBA/Mezz

- * Package 3.79.02

- * Firmware 8.08.01

- * UEFI 6.66

- * BIOS 3.56

- o 16 Gb HBA/Mezz

- * Package 6.01.79

- * Firmware 8.08.203

- * UEFI 6.65

- * BIOS 3.43

- o 16/32 Gb

- * Package 1.71.03

- * Firmware 8.08.204

- * UEFI 6.51

- * BIOS 3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

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

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

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

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

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2019.03.01 (Recommended)

Important Note!

HPE StoreFabric QLogic Adapter Release Notes

Prerequisites

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

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

The HPE supplied QLogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download/>

Fixes

Fixed the following

8Gb Standup & 8Gb Mezzanine

Firmware:

- o Fix regression where the firmware returned Time Out error code under heavy load.

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Corrected Driver Health string format on Gen10 servers

16Gb Standup & 16Gb Mezzanine

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Corrected Driver Health string format on Gen10 servers.

16Gb/32Gb Standup

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Corrected Driver Health string format on Gen10 servers.

- o Driver progress messages are no longer displayed on SuperDome servers.

- o Fixed QUIC (QUIC Protocol)

- o Removed 8G Speed and Loop Only Options from 5830C Adapter

Enhancements

Added support for the following:

16Gb/32Gb Standup

Firmware:

- o Add support for FC NVMe (Non-volatile memory express) ready

- o Support Link cable Beacon (LCB)

BIOS:

- o Added support for 5830C Secure flash

UEFI:

- o Added support for 5830C Secure flash

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- o 8 Gb HBA/Mezz

- * Package 3.79.02

- * Firmware 8.08.01

- * UEFI 6.66

- * BIOS 3.56

- o 16 Gb HBA/Mezz

- * Package 6.01.79

- * Firmware 8.08.203

- * UEFI 6.65

- * BIOS 3.43

- o 16/32 Gb

- * Package 1.71.03

- * Firmware 8.08.204

- * UEFI 6.51

- * BIOS 3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

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

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

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

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

HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)

Version: 2019.03.01 (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

Firmware:

- o Fix regression where the firmware returned Time Out error code under heavy load.

UEFI

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers

16Gb Standup & 16Gb Mezzanine

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Driver progress messages are no longer displayed on SuperDome servers.
- o Corrected Driver Health string format on Gen10 servers.

16Gb/32Gb Standup

Firmware:

- o Fix unexpected behavior related to Diagnostic Port and Link Diagnostics operations (loopback, echo etc)

UEFI:

- o Corrected Driver Health string format on Gen10 servers.
- o Driver progress messages are no longer displayed on SuperDome servers.
- o Fixed QUIC (QUIC Protocol)
- o Removed 8G Speed and Loop Only Options from 5830C Adapter

Enhancements

Added support for the following:

16Gb/32Gb Standup

Firmware:

- o Add support for FC NVMe (Non-volatile memory express) ready
- o Support Link cable Beacon (LCB)

BIOS:

- o Added support for 5830C Secure flash

UEFI:

- o Added support for 5830C Secure flash

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

o 8 Gb HBA/Mezz

* Package 3.79.02

* Firmware 8.08.01

* UEFI 6.66

* BIOS 3.56

o 16 Gb HBA/Mezz

* Package 6.01.79

* Firmware 8.08.203

* UEFI 6.65

- * BIOS 3.43
- o 16/32 Gb
- * Package 1.71.03
- * Firmware 8.08.204
- * UEFI 6.51
- * BIOS 3.64

Supported Devices and Features

This firmware supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

HP Lights-Out Online Configuration Utility for Windows x64 Editions

Version: 5.3.0.0 (Optional)

Prerequisites

This utility requires the following minimum firmware revisions:

- o Integrated Lights-Out 5 firmware v1.30 or later

The management interface driver must be installed on the server.

Microsoft .Net Framework 2.0 or later is required to launch HPONCFG GUI.

Enhancements

Introduced support for CNSA security state from iLO5 v1.40 or later.

HPE Management Bundle Smart Component for ESXi 6.0

Version: 2019.03.01 (Recommended)

Fixes

WBEM Providers

- o Fixed false Solid State Disk Wear alert reported by the SmartArray WBEM provider

Agentless Management Service

- o Fixed reporting of HPE QLogic NX2 driver components in the cpqHoSwVer MIB to resolve blank Installed driver versions displayed in SUM

Enhancements

Agentless Management Service

- o Added support for cpqiscsi MIB

o Implement configurable CPU and Memory Usage periodic logging to the iLO AHS (Active Health System)

Log

HPE Management Bundle Smart Component for ESXi 6.5

Version: 2019.03.01 (Recommended)

Fixes

WBEM Providers

- o Fixed false Solid State Disk Wear alert reported by the SmartArray WBEM provider

Agentless Management Service

- o Fixed reporting of HPE QLogic NX2 driver components in the cpqHoSwVer MIB to resolve blank Installed driver versions displayed in SUM

Enhancements

Agentless Management Service

- o Added support for cpqiscsi MIB

- o Implement configurable CPU and Memory Usage periodic logging to the iLO AHS (Active Health System) Log

HPE Management Bundle Smart Component for ESXi 6.7

Version: 2019.03.01 (Recommended)

Fixes

WBEM Providers

- o Fixed false Solid State Disk Wear alert reported by the SmartArray WBEM provider

- o Fixed XML parser issues affecting online Firmware Update

Agentless Management Service

- o Fixed reporting of HPE QLogic NX2 driver components in the cpqHoSwVer MIB to resolve blank Installed driver versions displayed in SUM

Enhancements

Agentless Management Service

- o Added support for cpqiscsi MIB

- o Implement configurable CPU and Memory Usage periodic logging to the iLO AHS (Active Health System) Log

HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions

Version: 1.2.1.64 (Recommended)

Enhancements

- o Improved integration with Smart Update Manager

Emulex Fibre Channel driver component for VMware vSphere 6.0

Version: 2019.03.01 (Recommended)

Important Note!

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

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

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

To obtain the guide:

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

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

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

Prerequisites

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

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

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

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

To obtain the guide:

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

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

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

Enhancements

Updated to Driver version 11.4.329.0

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

Emulex Fibre Channel driver component for VMware vSphere 6.5

Version: 2019.03.01 (Recommended)

Important Note!

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

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

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

To obtain the guide:

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

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

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

Prerequisites

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

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

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

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

To obtain the guide:

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

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

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

Enhancements

Updated to Driver version 12.0.257.5

Added support to following:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

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

Emulex Fibre Channel driver component for VMware vSphere 6.7

Version: 2019.03.01 (Recommended)

Important Note!

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

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

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

To obtain the guide:

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

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

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

Prerequisites

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

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

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

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

To obtain the guide:

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

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

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

Enhancements

Updated to Driver version 12.0.257.5

Added support to following:

- o Added support for VMware vSphere 6.7 Update 1.
- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

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

QLogic Fibre Channel driver component for VMware vSphere 6.0

Version: 2019.03.01 (Recommended)

Important Note!

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

Prerequisites

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

Fixes

Fixed the following:

- o Sync up information registered to switch for FDMI across all drivers.
- o Continue with the logins in the scan loop despite seeing a login failure
- o Send the GFO command in a separate thread then the fabric discovery.
- o Eliminate the code to block I/O during small read operations of the flash.

- o Ensure the target ID assigned to the WWPN on the physical port is the same on the NPIV port

Enhancements

Driver version 2.1.81.0

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

QLogic Fibre Channel driver component for VMware vSphere 6.5

Version: 2019.03.01 (Recommended)

Important Note!

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

Prerequisites

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

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

Fixes

Fixed the following:

- o Sync up information registered to switch for FDMI across all drivers.
- o Continue with the logins in the scan loop despite seeing a login failure
- o Send the GFO command in a separate thread then the fabric discovery.
- o Eliminate the code to block I/O during small read operations of the flash.
- o Ensure the target ID assigned to the WWPN on the physical port is the same on the NPIV port

Enhancements

Driver version 2.1.81.0

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

QLogic Fibre Channel driver component for VMware vSphere 6.7

Version: 2019.03.01 (Recommended)

Important Note!

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

Prerequisites

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

Fixes

Fixed the following:

- o Sync up information registered to switch for FDMI across all drivers.
- o Continue with the logins in the scan loop despite seeing a login failure
- o Send the GFO command in a separate thread then the fabric discovery.
- o Eliminate the code to block I/O during small read operations of the flash.
- o Ensure the target ID assigned to the WWPN on the physical port is the same on the NPIV port

Enhancements

Driver version 3.1.16.0

Supported Devices and Features

This driver supports the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)

Version: 3.3-5 (c) (Optional)

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Enhancements

Added support for the following:

Supported Devices and Features

Supports the following:

- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter

- o HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter

HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems

Version: 1.0.0.1 (h) (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 v11.1.145.16 cp030886.exe

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added support for Microsoft Windows 2019 Server

Updated to version 1.0.0.1

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 Smart SAN enablement kit for Linux

Version: 3.3-3 (d) (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

Added Support to SuSE Linux Enterprise Server 15

Updated to version 3.3-3

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 (g) (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.

- o HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver v9.2.2.20, cp031252.exe
- o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2012 and 2012 R2 v9.2.2.20, cp031253.exe
- o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2016 version 9.2.2.20, cp031251.exe
- o HPE Storage Fibre Channel Adapter Kit for the QLogic Storport Driver for Windows Server 2019 version 9.2.9.22, cp037397.exe

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Updated to version 1.0.0.1

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:

- o HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- o HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server

Version: 1.4.0 (Optional)

Prerequisites

- o amsd only supported on HPE ProLiant Gen10 Servers.
- o amsd provides information to the iLO 5 service providing SNMP support.
- o 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.
- o Requirements:
 - * Minimum iLO 5 Firmware Version = 1.1
 - * Minimum supported OS Versions = Red Hat Enterprise Linux 6.9

Fixes

Fixed the following items:

- o All disks are opened RONLY to send ioctl()'s to get drive information.
- o Improved SATA channel determination for SATA drives.
- o Corrected errors for lost memory allocations.

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server

Version: 1.4.0 (Optional)

Prerequisites

- o amsd only supported on HPE Gen10 Servers.
- o amsd provides information to the iLO 5 service providing SNMP support.
- o 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.
- o Requirements:
 - * Minimum iLO 5 Firmware Version = 1.1
 - * Minimum supported OS Versions = Red Hat Enterprise Linux 7.3 Errata 3.10.0.514.6.1

Fixes

Fixed the following items:

- o All disks are opened RONLY to send ioctl()'s to get drive information.
- o Improved SATA channel determination for SATA drives.
- o Corrected errors for lost memory allocations.

Enhancements

Stability improvements when running Red Hat Enterprise Linux 7

Agentless Management Service for Windows X64

Version: 1.40.0.0 (Optional)

Important Note!

iLO Firmware Version:

- o This version of AMS has been tested with iLO 5 firmware version 1.40. It is recommended to install AMS 1.40 on systems with iLO 5 firmware 1.40.

About installation and enablement of SMA service:

- o 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.
- o During AMS installation in silent mode, SMA is installed but the service is not enabled.
- o 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"
- o IMPORTANT: The SNMP service community name and permission must also be setup. This is not done by "EnableSma.bat".

- o To disable SMA after it has been enabled, go to the following folder: %ProgramFiles%\%OEM%\AMS\Service\ (Typically c:\Program Files\%OEM%\AMS\Service) and execute "DisableSma.bat /f"
- o 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:
 - o 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

- o Fixed the issue of AMS terminating unexpectedly on module w2kmgams.dll. The Agentless Management Service may stop unexpectedly with the following error event logged in Windows Application Event Log: Event ID: 1000, Source: Application Error, Faulting Application Name: ams.exe, Faulting Module Name: w2kmgAMS.dll.
- o Fixed the issue of missing nechesar.sys in HPE Software inventory. iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019 (cp035140.exe) failed to install on Windows Server 2019 OS deployment using Smart Update tool in SPP v2018.11.0. Refer to the following Customer Advisories for details of the critical issues fixed in this release.
 - a00065356en_us (https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00065356en_us)
 - a00065641en_us (https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00065641en_us)

Enhancements

- o Added configurable polling interval option in the registry for Active Health System (AHS) logging of host CPU and Memory utilization:
 - * CPU and Memory utilization used to be logged to AHS every minute, thus potentially causing AHS storage to be full.
 - * CPU and Memory utilization is now logged to AHS once upon startup, but a registry key can be created to log more if needed.
 Registry key: HKLM\System\HPAMSAHS, Registry value: QuietPeriodInMinutes (DWORD), from 1 minute to 1440 minutes (i.e. 1 day).
- o Added configurable logging feature to generate log files on local host. The default log size will be 64MB, log level will be Informational(1) and file path: %ProgramFiles%\%OEM%\AMS\Logs. The optional log file size, path and level can be modified by changing the registry values at :
 - HKLM\SYSTEM\AMSLOGCFG
- o The AMS control panel applet is updated to support SNMP configurations with iLO CNSA encryption mode as well.

Smart Storage Administrator (SSA) CLI for Linux 64-bit

Version: 3.40.3.0 (Optional)

Enhancements

- o Supports Online Firmware Activation reporting

Smart Storage Administrator (SSA) CLI for Windows 64-bit

Version: 3.40.3.0 (Optional)

Enhancements

- o Supports Online Firmware Activation reporting

Smart Storage Administrator (SSA) for Linux 64-bit

Version: 3.40.3.0 (Optional)

Prerequisites

The Smart Storage Administrator for Linux requires the System Management Homepage software to be installed on the server. If the System Management Homepage software is not already installed on your server, please download it from HPE.com and install it before installing the Smart Storage Administrator for Linux.

IMPORTANT UPDATE: SSA (GUI) for Linux can now be run without requiring the System Management Homepage. SSA now supports a Local Application Mode for Linux. The System Management Homepage is still supported, but no longer required to run the SSA GUI.

To invoke, enter the following at the command prompt:

```
ssa -local
```

The command will start SSA in a new Firefox browser window. When the browser window is closed, SSA will automatically stop. This is only valid for the loopback interface, and not visible to external network connections.

Enhancements

- o Supports Online Firmware Activation reporting

Smart Storage Administrator (SSA) for Windows 64-bit

Version: 3.40.3.0 (Optional)

Enhancements

- o Supports Online Firmware Activation reporting

Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Linux 64-bit

Version: 3.40.3.0 (Optional)

Enhancements

- o Supports Online Firmware Activation reporting

Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit

Version: 3.40.3.0 (Optional)

Important Note!

This stand alone version of the Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use Smart Storage Administrator (SSA).

Enhancements

- o Supports Online Firmware Activation reporting