Hewlett Packard Enterprise

Red Hat Enterprise Linux 7.8

Supplement for Service Pack for ProLiant 2020.03.2

Release Notes

Published December 2020

Legal and notice information

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Document History:

Released	Description
April 2020	Initial Version
December 2020	SPP version updated from 2020.03.0 to 2020.03.2 which got released to address BootHole vulnerability issue fix

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Overview

A Service Pack for ProLiant (SPP) Supplement is a bundle containing software and/or firmware components with SUM as the deployment tool. It may include support for a new operating system update or functionality that is not included in the SPP but works with the components in the SPP. The software and firmware included in the Supplement will provide support for functionality that is required outside a normal SPP release cycle. Supplements allow HPE to deliver support when it is needed so customers do not have to wait on a full SPP's availability.

Each SPP Supplement's version number will match the version of its corresponding SPP. Supplement Release Notes will be available and will include information on the components in the bundle. If the Supplement's contents include Linux components, the components will also be available on the Linux Software Delivery Repository (SDR).
Once released, the functionality of the SPP Supplement contents is included in the next available SPP.

Hot Fixes associated with an SPP may work with an SPP Supplement. Please review the Hot Fix to verify if it has support for the operating system that is supported in the Supplement. For more information on SPP Hot Fixes, please see the SPP Release Notes located on the **SPP Information Library page**.

This is the Red Hat Enterprise Linux (RHEL) 7.8 Supplement for Service Pack for ProLiant 2020.03.2.

For more information on which servers are supported with RHEL 7.8, please visit our OS Support Site at: **https://www.hpe.com/servers/ossupport**.

Product Name	Comment
Red Hat Enterprise Linux 7.8 **Supplement for Service Pack for ProLiant 2020.03.2**	**Bundle containing software components** **Filename: supspp-2020.03.rhel7.8.en.tar.gz**

Update recommendation

Optional - Users should update to this version if their system is affected by one of the documented fixes or if there is a desire to utilize any of the enhanced functionality provided by this version.

Alignment

Service Pack for ProLiant 2020.03.2

Summary of Changes

Important Notes

When the terms, Supplement, Service Pack for ProLiant or SPP are used throughout this document, they refer to all of the deliverables in the Table in the Overview Section unless explicitly stated.

⚠ **Before deploying any components to a system, be sure that a recent backup of the system is available in the event the deployment procedure fails.**

Release Summary

The summary of this Red Hat Enterprise Linux (RHEL) 7.8 Supplement for Service Pack for ProLiant release is:

Added support for Red Hat Enterprise Linux 7.8

Drivers either found in this March or delivered with the RHEL7.8 distribution can be used. However, the drivers found in the initial release of the distribution may not contain all of the HPE value added features that are available in the Supplement. These features will be added in a future SPP release.

This Supplement corresponds with SPP 2020.03.2.

All components delivered in this Supplement to the Service Pack for ProLiant (SPP) are tested together and meet the dependencies of the other components in the Service Pack for ProLiant.

Systems using software and firmware components delivered with the following products should be able to easily migrate to the components in this supplement:

Product	Version
Service Pack for ProLiant	**2020.03.2** **2019.12.2** **2019.09.1**

Prerequisites

Running SUM on Linux

⚠ **Before deploying software updates on a target system, be sure that a recent backup of the target system is available in the event the deployment procedure fails.**

To successfully deploy SUM on remote target systems based on a Linux operating system, the following must be available:

- libcrypt.so
- libcrypt.so.1
- /usr/lib/libqlsdm.so
- /usr/lib64/libqlsdm-x86_64.so
- /lib/cim/libqlsdm.so
- /usr/lib/libemsdm.so
- /usr/lib64/libemsdm.so
- /lib/cim/libemsdm.so

- /usr/lib/bfahbaapi.so
- /usr/lib64/bfahbaapi.so
- /lib/cim/bfahbaapi.so
- linux-vdso.so.1
- /lib64/libcrypt.so.1
- /lib64/libpthread.so.0
- /lib64/libz.so.1
- /lib64/libdl.so.2
- /lib64/librt.so.1
- /usr/lib64/libstdc++.so.6
- /lib64/libm.so.6
- /lib64/libgcc_s.so.1
- /lib64/libc.so.6
- /lib64/ld-linux-x86-64.so.2

Deployment Instructions

The Supplement is designed for use after the operating system is installed. This enables the updating of drivers, and the installation of HPE utilities (such as Health and iLO drivers), and agents (Server, NIC, and Storage).

Using the SPP Supplement and its corresponding SPP on a supported Linux operating system. Enables the choice of either standard Linux installation tools (YUM/Zypper) or HPE management tools (SUM/OneView) to do the following:

- Use the software and firmware provided in the Supplement and the SPP.
- Use the firmware provided in the SPP and get the software from the Software Delivery Repository at https://downloads.linux.hpe.com/SDR.
- Use the firmware and software utilities provided in the SPP and get the drivers from the operating system distro.

When appropriate for any given deployment, components can be combined into a single ISO using SUM custom baseline or applied as separate packages.

Note: Gen10 iLO 5 Linux and iLO 5 nodes only -to manage the iLO Repository, select the iLO Repository Options tab. (When running SUM in GUI mode).
To upload selected components to the iLO Repository and create an install set, select Save Components as an Install set on iLO Repository. SUM automatically creates a default name and description, but you can edit the name and description for the install set. You can use this install set to roll back the server components at a future time. The name and description are **limited to 63 characters**, and the only special characters allowed are - and _.

Component Release Notes

Driver - Storage Controller
Software - Lights-Out Management
Software - Storage Fibre Channel HBA
Software - System Management

Driver - Storage Controller Top

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 1.2.10-179 **(Recommended)**
Filename: kmod-hpdsa-1.2.10-179.rhel7u7.x86_64.compsig; kmod-hpdsa-1.2.10-179.rhel7u7.x86_64.rpm; kmod-hpdsa-1.2.10-179.rhel7u8.x86_64.compsig; kmod-hpdsa-1.2.10-179.rhel7u8.x86_64.rpm

Enhancements

Add support for Red Hat Enterprise Linux 7 Update 8

HPE ProLiant Gen10 and Gen10Plus Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 1.2.14-010 **(Recommended)**
Filename: kmod-smartpqi-1.2.14-010.rhel7u8.x86_64.compsig; kmod-smartpqi-1.2.14-010.rhel7u8.x86_64.rpm

Important Note!

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Enhancements

Add support for Red Hat Enterprise Linux 7 update 8

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux7 (64-bit) supported by this binary rpm are:
3.10.0-957.el7- Red Hat Enterprise Linux 7 Update 6 (64-bit) and future errata kernels for update 6.

HPE ProLiant Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 3.4.20-191 **(Recommended)**
Filename: kmod-hpsa-3.4.20-191.rhel7u7.x86_64.compsig; kmod-hpsa-3.4.20-191.rhel7u7.x86_64.rpm; kmod-hpsa-3.4.20-191.rhel7u8.x86_64.compsig; kmod-hpsa-3.4.20-191.rhel7u8.x86_64.rpm

Enhancements

Add support for Red Hat Enterprise Linux 7 Update 8

Software - Lights-Out Management Top

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)
Version: 5.5.0-0 **(Recommended)**
Filename: hponcfg-5.5.0-0.x86_64.compsig; hponcfg-5.5.0-0.x86_64.rpm

Prerequisites

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later
- Integrated Lights-Out 5 firmware v1.20 or later

The management interface driver and management agents must be installed on the server.

For iLO 5, openssl v1.0.x or later is required in addition to above packages.
Customers who manually compile and install openssl or intentionally relocate /usr/bin/openssl, need to set PATH environment variable to direct HPONCFG to the right/intended openssl.

Fixes

Updated the OpenSSL API calls to support Host's OpenSSL FIPS mode.

Software - Storage Fibre Channel HBA

Top

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)
Version: 4.1-1 (b) **(Optional)**
Filename: fibreutils-4.1-1_rhel.x86_64.compsig; fibreutils-4.1-1_rhel.x86_64.rpm

Prerequisites

- Requires the following packages to be installed: glibc libgcc libstdc++ bash perl

Fixes

Fiixed adpater_info code to display correct Vendor name instead of Unknown

Enhancements

This package supports only Red Hat Enterprise Linux (RHEL) Distros

Supported Devices and Features

Supports the following:

- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter
- HP QMH2672 16GB FC HBA for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-port 8Gb Fibre Channel Host Bus Adapter
- HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 2-port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4-port 16Gb Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric CN1200E 10Gb Converged Network Adapter

HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server
Version: 12.4.256.0 **(Recommended)**
Filename: HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel7.x86_64.compsig; HP-CNA-FC-Emulex-Enablement-Kit-12.4.256.0-1.rhel7.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

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

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

To obtain the guide:

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

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

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

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

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

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

To obtain the guide:

1. Go to http://www.hpe.com/support/manuals
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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

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

Enhancements

Updated to version 12.4.256.0

Supported Devices and Features

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

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex Smart SAN Enablement Kit for Linux
Version: 1.0.0.0-4 (e) **(Optional)**
Filename: hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.compsig; hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm

Important Note!

The Smart SAN enablement kit will not execute when an operating system has only the inbox fibre channel driver installed. An out of box (OOB) fibre channel driver is needed to utilize Smart SAN functionality. If any OOB driver is installed, the enablement kit will pre-enable/disable Smart SAN functionality for future use. It can then be activated once a Smart SAN enabled OOB driver is installed (see Prerequisite Notes) and after a reboot has occured.

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

Prerequisites

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

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

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

Linux FC Driver Kit for HPE Branded Emulex FC HBAs and mezz cards, version 11.1.183.21(minimum version supported) for RedHat 7, RedHat 8 and Novell SUSE 12, SUSE 15

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added support to SLES15SP1

Updated to version 1.0.0.0-4

Supported Devices and Features

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

8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter

LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Emulex(BRCM) Fibre Channel Over Ethernet Enablement Kit for Red Hat Enterprise Linux 7 Server
Version: 12.0.1264.0 **(Recommended)**
Filename: HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1264.0-1.rhel7.x86_64.compsig; HP-CNA-FC-Broadcom-Enablement-Kit-12.0.1264.0-1.rhel7.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

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

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

To obtain the guide:

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

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

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

Prerequisites

The target environment must have the libHBAAPI Package installed prior to the installation of the enablement kit. (If not already present, the libHBAAPI Package can be obtained from the operating system installation media.)

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

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

To obtain the guide:

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

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

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

Enhancements

Updated to version: 12.0.1264.0

Supported Devices and Features

This component is supported on following Emulex Converged Network Adapters:

XE100 Series:

- HPE StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE QLogic Fibre Channel Enablement Kit for Linux
Version: 6.0.0.0-11 (b) **(Optional)**
Filename: HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-11.noarch.compsig; HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-11.noarch.rpm

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapters Release Notes

Prerequisites

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

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

Fixes

Fixed the following:

- Non-Volatile Memory Express (NVME) targets not seen when Non-Volatile Memory Express (NVME) Id and Subsys Id are different
- Apps initialization delay seen with N_Port ID Virtualization (NPIV) ports

- Apps issues seen with Non-Volatile Memory Express (NVME) target in Red Hat Enterprise Linux (RHEL)
- Apps issues seen with Non-Volatile Memory Express (NVME) target in N_Port ID Virtualization (NPIV) configuration
- BSG interface fails if /tmp is mounted with tmpfs on shared memory

Enhancements

Updated the kit to version 6.0.0.0-11

Added support for the following:

- Red Hat Enterprise Linux 8 (RHEL 8) and SuSE Linux Enterprise Server 15 Service Pack 1 (SLES15SP1)
- Allow SDGetActiveRegions Application Interface (API) for Gen 6 Fibre Channel Host Bus Adapters
- Restrict application features for Non-Volatile Memory Express (NVME) targets
- Add Non-Volatile Random-Access Memory (NVRAM) parameter to select Fibre Channel Protocol (FCP) or Non Volatile Memory Express (NVME) targets

Supported Devices and Features

This version of the enablement kit supports the following devices:

Gen 4 Fibre Channel Host Bus Adapter:

- HPE 81Q PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

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

Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

HPE QLogic Smart SAN enablement kit for Linux
Version: 3.3-3 (h) **(Optional)**
Filename: hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64. compsig; hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm

Important Note!

To obtain the 3PAR Smart SAN User Guide to go the Storage Information Library at the following link:

Storage Information Library

(http://www.hpe.com/info/storage/docs/)

By default, **HP 3PAR Storage** is selected under

Products and Solutions.

Prerequisites

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

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

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. The driver is available on the HPE.com website at www.hpe.com.

- Red Hat Enterprise Linux 6 Server (x86-64) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.06.0-k1
- Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs, version 8.07.00.42.07.0-k1
- SUSE Linux Enterprise Server 11 (AMD64/EM64T) FCoE/FC Driver Kit for HPE Qlogic CNAs, HBAs and mezzanine HBAs, version 8.07.00.42.11.3-k
- SUSE Linux Enterprise Server 12 FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs version 8.07.00.42.12.0-k1

However, if a Smart SAN enabled driver is not installed at execution time, the component will land the enablement kit files for future use after the driver has been installed.

Enhancements

Added Support to RHEL8 and SLES15SP1

Updated to version 3.3-3

Supported Devices and Features

This enablement kit is supported on the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

- HPE 81Q PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

Gen 6 Fibre Channel Host Bus Adapter:

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

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

Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

Software - System Management Top

HPE MegaRAID Storage Administrator (HPE MRSA) for Linux 64-bit
Version: 3.113.0.0 **(Optional)**
Filename: HPE_Linux_64_readme.txt; MRStorageAdministrator-003.113.000.000-00.x86_64.rpm; MRStorageAdministrator-003.113.000.000-00.x86_64_part1.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part2.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part3.compsig; MRStorageAdministrator-003.113.000.000-00.x86_64_part4.compsig

Important Note!

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Prerequisites

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Enhancements

- Initial Release

HPE MegaRAID Storage Administrator StorCLI for Linux 64-bit
Version: 1.25.12 **(Optional)**
Filename: LINUX_Readme.txt; storcli-1.25.12-1.noarch.compsig; storcli-1.25.12-1.noarch.rpm

Enhancements

- Added support for the Apollo 4510 system

HPE ProLiant Agentless Management Service for Red Hat Enterprise Linux 7 Server
Version: 2.10.0 **(Optional)**
Filename: hp-ams-2.10.0-861.6.rhel7.x86_64.rpm

Prerequisites

- **hp-ams supported on HP ProLiant Gen8 and Gen9 Servers.**
- **hp-ams provides information to the HP iLO 4 service providing SNMP support.**
- **SNMP PASS-THRU on the HP iLO 4 MUST be disabled, and SNMP should be configured on the HP iLO 4. The HP iLO 4 may need to be reset after changing these settings.**
- **Requirements:**
  - Minimum HP iLO 4 Firmware Version = 1.05
  - Minimum supported OS Versions = Red Hat Enterprise Linux 5.6, Red Hat Enterprise Linux 6.0, Red Hat Enterprise Linux 7.0, Red Hat Enterprise Linux 8.0, SUSE Linux Enterprise Server 10 SP4, SUSE Linux Enterprise Server 11 SP1, SUSE Linux Enterprise Server 12, SUSE Linux Enterprise Server 15

Fixes

Fixed the following item:

- When the kernel was started with the command line parameter "pv6.disable=1", amsHelper would experience memory leaks eventually causing performance degradation on the server.

HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit
Version: 4.17.6.0 **(Optional)**
Filename: ssacli-4.17-6.0.x86_64.compsig; ssacli-4.17-6.0.x86_64.rpm; ssacli-4.17-6.0.x86_64.txt

Important Note!

HPE SSACLI will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACUCLI scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Fixes

Split Mirror Primary Array's Acceleration Mode displays an invalid message that indicates caching can be enabled or disabled for each individual logical drive even if the array does not contain a logical drive that can have caching enabled.

HPE Smart Storage Administrator (HPE SSA) for Linux 64-bit
Version: 4.17.6.0 **(Optional)**
Filename: ssa-4.17-6.0.x86_64.compsig; ssa-4.17-6.0.x86_64.rpm; ssa-4.17-6.0.x86_64.txt

Important Note!

HPE SSA replaces the existing HP Array Configuration Utility, or ACU, with an updated design and will deliver new features and functionality for various Smart Storage initiatives as they come online. HPE Smart Array Advanced Pack 1.0 and 2.0 features are now part of the baseline features of HPE SSA, with the appropriate firmware.

HPE SSA will allow you to configure and manage your storage as before, but now with additional features, abilities, and supported devices. Existing ACU scripts should only need to make minimal changes such as calling the appropriate binary or executable in order to maintain compatibility.

Prerequisites

The HPE Smart Storage Administrator for Linux requires the HPE System Management Homepage software to be installed on the server. If the HPE System Management Homepage software is not already installed on your server, please download it from HPE.com and install it before installing the HPE Smart Storage Administrator for Linux.

IMPORTANT UPDATE: HPE SSA (GUI) for Linux can now be run without requiring the HPE System Management Homepage. HPE SSA now supports a Local Application Mode for Linux. The HPE System Management Homepage is still supported, but no longer required to run the HPE SSA GUI.

To invoke, enter the following at the command prompt:

ssa -local

The command will start HP SSA in a new Firefox browser window. When the browser window is closed, HP SSA will automatically stop. This is only valid for the loopback interface, and not visible to external network connections.

Fixes

Split Mirror Primary Array's Acceleration Mode displays an invalid message that indicates caching can be enabled or disabled for each individual logical drive even if the array does not contain a logical drive that can have caching enabled.

HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit
Version: 4.17.6.0 **(Optional)**
Filename: ssaducli-4.17-6.0.x86_64.compsig; ssaducli-4.17-6.0.x86_64.rpm; ssaducli-4.17-6.0.x86_64.txt

Important Note!

This stand alone version of the HPE Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use HPE Smart Storage Administrator (HPE SSA).

Fixes

Split Mirror Primary Array's Acceleration Mode displays an invalid message that indicates caching can be enabled or disabled for each individual logical drive even if the array does not contain a logical drive that can have caching enabled.

HPE SNMP Agents for Red Hat Enterprise Linux 7 Server
Version: 10.9.0 **(Optional)**
Filename: hp-snmp-agents-10.90-2995.4.rhel7.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-snmp-agents type:

rpm –qp –-requires hp-snmp-agents-<version>.rpm

Fixes

Fixed the following items:

- OS version values corrected
- Incorrect OS names for new OS releases addressed

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 7 Server
Version: 10.9.0 **(Optional)**
Filename: hp-health-10.90-1873.8.rhel7.x86_64.rpm

Prerequisites

The hp-health and hp-snmp-agents run as 32 bit applications in the x86_64 environment. The Linux kernel 32 bit compatibility must be enabled (usual default for Linux) and the 32 bit compatibility libraries must be present.

To get the list of all dependency files for hp-health, type:

rpm –qp –requires hp-health-< version >.rpm

Fixes

Fixed the following items:

- Modified the loop initial values in hpasmcli from 2 to 0.
- Modifications to check the read and write variables to match RBSU in Legacy and UEFI mode
- Updated the hpasmcli check string to correctly report the impitool information.
- Remove the redundant serial embedded and com ports
- Addressed IML message size limitation from 36 to 212 bytes
- Support for hp-health in OS security boot
- Added supporting “quote mark” in SET NAME command

- Enabled to set PXE as boot first

HPE System Management Homepage for Linux (AMD64/EM64T)
Version: 7.6.5-3 **(Recommended)**
Filename: hpsmh-7.6.5-3.x86_64.rpm

Important Note!

SMH 7.6.0 & later versions, will support only Gen8 and Gen9 servers. Any future patch releases could be available, only on SMH web page. Please refer to HPE SMH Release Notes

Precautions for the user on Linux OS:

- Do not provide login access to the "hpsmh" user (created during installation) by editing the /etc/passwd file or any other means
- Do not add any user to the "hpsmh" group (created during installation)

Prerequisites

Before installing the SMH software, the RPM verifies that the required versions of Linux library dependencies are present. If any dependencies are not present, then a list of the missing dependencies is provided. The user must manually install all missing dependencies to satisfy the prerequisites before proceeding with the RPM installation.

Fixes

New OS Support

- RHEL 8
- SLES15 SP1

HPE System Management Homepage Templates for Linux
Version: 10.8.1 **(Optional)**
Filename: hp-smh-templates-10.8.1-1487.3.noarch.rpm

Prerequisites

The **hp-smh-templates** RPM install will fail, if all dependencies are not installed. The administrator can verify the list of dependencies required by running this command. If the repositories being used by yum or zypper, includes these dependencies, the installation tool will automatically retrieve them. However, if they are not present, the user must manually install them prior to proceeding with the RPM install.

To get the list of all dependency files for hp-smh-templates type:

rpm –qp –-requires hp-smh-templates-<version>.rpm

Fixes

Initial support for Red Hat Enterprise Linux 8 Server