Hewlett Packard
Enterprise

Red Hat Enterprise Linux 7.3 Supplement for Service Pack for ProLiant 2016.10.0 Release Notes

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Legal and notice information

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Overview

A Service Pack for ProLiant (SPP) Supplement is a bundle containing software and/or firmware components with HP 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 HP 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. You must 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 Supplement is the Red Hat Enterprise Linux (RHEL) 7.3 Supplement for Service Pack for ProLiant 2016.10.0 and provides RHEL 7.3 support for HPE ProLiant products. It is a RHEL 7.3 only release and is designed to work with SPP 2016.10.0.

For more information on which servers are supported with RHEL 7.3, please visit our OS Support Site at: **http://www.hpe.com/servers/ossupport**.

Product Name	Comment
Red Hat Enterprise Linux 7.3 **Supplement for Service Pack for ProLiant 2016.10.0**	**Bundle containing software components** **Filename: supspp-2016.10.0.rhel7.3.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.

Aligns With:

Service Pack for ProLiant 2016.10.0

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) 7.3 Supplement for Service Pack for ProLiant release is:

Added support for Red Hat Enterprise Linux 7.3.

You may choose to use the drivers delivered with the RHEL 7.3 distribution instead of those found in this Supplement. The initial release of the distribution drivers may not contain all of the HPE value added features at this time. These features will be added in a future release.

Compatibility

This Supplement corresponds with SPP 2016.10.0.

HP SUM and 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 SPP:

Product	Version
Service Pack for ProLiant	**2016.10.0** **2016.04.0** **2015.10.0**

Support

HPE supports each SPP version for 12 months. Customers may choose to update their SPP from an earlier version to this version as long as the earlier version is within its 12 month support period. This means that customers may directly update their SPP by

skipping intermediate releases within the 12 month support period. See the table in the Compatibility section for details on the components contained in earlier SPPs that can migrate to this SPP.

You can tell when your support period ends by the version number of the release. For example, if you have installed the content of SPP 2016.10.0 your support would end the last day of April, 2017 based on version 2016=year, 10= month, 0=full release id number. Sometimes it is necessary to release an SPP with a version that would have less than 12 months of support per the information noted above. In these cases, you can use the table below to see when the support period ends:

SPP Version	End of Support Period
2016.10.0	October 31, 2017
2016.04.0	April 30, 2017

The support period for this Supplement aligns with the support period with its corresponding SPP 2016.10.0.

Prerequisites

Running HP 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 HP 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 you install the operating system so that you can update drivers, install HPE utilities (such as Health and iLO drivers), and install agents (Server, NIC, and Storage).

You have a choice when using the SPP Supplement and its corresponding SPP on a supported Linux operating system:

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

If you decide to use the software and firmware provided in the Supplement and the SPP, you can follow these steps:

1. Download the SPP 2016.10.0 .iso file from the SPP download page, http://www.hpe.com/servers/spp/download if you want to update firmware and do not already have it locally. See the SPP 2016.10.0 Release Notes for more information on SPP deployment.
2. Download the appropriate Supplement from the SPP download page, http://www.hpe.com/servers/spp/download
3. Extract the contents of the SPP Supplement and SPP ISO (if needed) to a file share.
4. Determine how you want to access the data on the ISO – bootable USB key, mounted ISO, mounted DVD, etc. Use the appropriate tool to get the SPP ISO in the format you want to access it. The contents of the Supplement can be placed in any directory since the Supplement is a bundle and not an ISO.
5. Initiate deployment.
    - To initiate deployment, go directly to **HP SUM 7.6.0**. and launch it using the command: /hpsum
    - Follow the instructions on the screen.
        - On the Source Selection screen, set the directories where the contents of the Supplement and the SPP (if needed) as repositories from where to get the components to be installed.

Component Release Notes

Release Notes for Red Hat Enterprise Linux 7.3 Supplement for HP Service Pack for ProLiant, v2016.10.0

Driver - Storage Controller

Driver - Storage Fibre Channel and Fibre Channel Over Ethernet

Software - Lights-Out Management

Software - Storage Fibre Channel HBA

Software - System Management

Driver - Storage Controller

HPE Dynamic Smart Array B120i/B320i SATA RAID Controller Driver for Red Hat Enterprise Linux 7 (AMD64/EM64T)

Version: 1.2.16-102 **(Recommended)**

Filename: kmod-hpvsa-1.2.16-102.rhel7u0.x86_64.rpm; kmod-hpvsa-1.2.16-102.rhel7u1.x86_64.rpm; kmod-hpvsa-1.2.16-102.rhel7u2.x86_64.rpm; kmod-hpvsa-1.2.16-102.rhel7u3.x86_64.rpm

Enhancements

Improved Performance levels.

Added support for Red Hat Enterprise Linux 7 Update 3.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 (AMD64/EM64T) supported by this binary rpm are:
3.10.0-123.el7 - Red Hat Enterprise Linux 7 (AMD64/EM64T) and future errata kernels.
3.10.0-229.el7 - Red Hat Enterprise Linux 7 Update 1 (AMD64/EM64T) and future errata kernels for update 1.
3.10.0-327.el7 - Red Hat Enterprise Linux 7 Update 2 (AMD64/EM64T) and future errata kernels for update 2.
3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (AMD64/EM64T) and future errata kernels for update 3.

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for Red Hat Enterprise Linux 7 (AMD64/EM64T)

Version: 1.2.10-114 **(Recommended)**

Filename: kmod-hpdsa-1.2.10-114.rhel7u0.x86_64.rpm; kmod-hpdsa-1.2.10-114.rhel7u1.x86_64.rpm; kmod-hpdsa-1.2.10-114.rhel7u2.x86_64.rpm; kmod-hpdsa-1.2.10-114.rhel7u3.x86_64.rpm

Enhancements

Added support for Red Hat Enterprise Linux 7 Update 3.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 (AMD64/EM64T) supported by this binary rpm are:
3.10.0-123.el7 - Red Hat Enterprise Linux 7 (AMD64/EM64T) and future errata kernels.
3.10.0-229.el7 - Red Hat Enterprise Linux 7 Update 1 (AMD64/EM64T) and future errata kernels for update 1.
3.10.0-327.el7 - Red Hat Enterprise Linux 7 Update 2 (AMD64/EM64T) and future errata kernels for update 2.
3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (AMD64/EM64T) and future errata kernels for update 3.

HPE H2xx SAS/SATA Host Bus Adapter Driver for Red Hat Enterprise Linux 7 (AMD64/EM64T)

Version: 15.10.05.00-3 **(Recommended)**

Filename: kmod-mpt2sas-15.10.04.00-4.rhel7u0.x86_64.rpm; kmod-mpt2sas-15.10.04.00-4.rhel7u1.x86_64.rpm; kmod-mpt2sas-15.10.04.00-8.rhel7u2.x86_64.rpm; kmod-mpt2sas-15.10.05.00-3.rhel7u3.x86_64.rpm

Enhancements

Added support for Red Hat Enterprise Linux 7 Update 3.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 (AMD64/EM64T) supported by this binary rpm are:
3.10.0-123.el7 - Red Hat Enterprise Linux 7 (AMD64/EM64T) and future errata kernels.
3.10.0-229.el7 - Red Hat Enterprise Linux 7 Update 1 (AMD64/EM64T) and future errata kernels for update 1.
3.10.0-327.el7 - Red Hat Enterprise Linux 7 Update 2 (AMD64/EM64T) and future errata kernels for update 2.

3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (AMD64/EM64T) and future errata kernels for update 3.

HPE ProLiant Smart Array Controller (AMD64/EM64T) Driver for Red Hat Enterprise Linux 7 (AMD64/EM64T)

Version: 3.4.16-148 **(Recommended)**

Filename: kmod-hpsa-3.4.16-148.rhel7u0.x86_64.rpm; kmod-hpsa-3.4.16-148.rhel7u1.x86_64.rpm; kmod-hpsa-3.4.16-148.rhel7u2.x86_64.rpm; kmod-hpsa-3.4.16-148.rhel7u3.x86_64.rpm

Enhancements

Added support for Red Hat Enterprise Linux 7 Update 3.

Supported Devices and Features

SUPPORTED KERNELS:
The kernels of Red Hat Enterprise Linux 7 (AMD64/EM64T) supported by this binary rpm are:
3.10.0-123.el7 - Red Hat Enterprise Linux 7 (AMD64/EM64T) and future errata kernels.
3.10.0-229.el7 - Red Hat Enterprise Linux 7 Update 1 (AMD64/EM64T) and future errata kernels for update 1.
3.10.0-327.el7 - Red Hat Enterprise Linux 7 Update 2 (AMD64/EM64T) and future errata kernels for update 2.
3.10.0-514.el7- Red Hat Enterprise Linux 7 Update 3 (AMD64/EM64T) and future errata kernels for update 3.

Driver - Storage Fibre Channel and Fibre Channel Over Ethernet

Red Hat Enterprise Linux 7 Server FCoE/FC Driver Kit for HPE QLogic CNAs, HBAs and mezzanine HBAs and CNAs

Version: 8.07.00.34.07.0-k1 (b) **(Recommended)**

Filename: kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-1.rhel7u3.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-3.rhel7u1.x86_64.rpm; kmod-qlgc-qla2xxx-8.07.00.34.07.0_k1-3.rhel7u2.x86_64.rpm

Important Note!

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

Note: The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

Prerequisites

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

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

Fixes

This driver version resolves the following:

- corrected issue where scsi status was getting overwritten.
- set relogin flag when failed to queue login requests.
- set echo test mailbox command option bit15 correctly.
- corrected FDMI vendor port state value.
- corrected warnings reported by static checker.
- race condition in handling rport deletion during recovery.

Enhancements

Driver version 8.07.00.34.07.0-k1

Added support for Red Hat Enterprise Linux 7 Server update 3.

Added support for Private link statistics counters.

Added support for the following devices:

- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This driver supports the following adapters:

- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Software - Lights-Out Management

HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)

Version: 4.6.0-0 **(Optional)**

Filename: hponcfg-4.6.0-0.x86_64.rpm

Prerequisites

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 2 firmware v1.00 or later
- Integrated Lights-Out 3 firmware v1.00 or later
- Integrated Lights-Out 4 firmware v1.00 or later

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

Fixes

HPONCFG displays an appropriate error message with -w option when LOCK_CONFIGURATION is enabled.

Software - Storage Fibre Channel HBA

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux (x86_64)

Version: 3.3-1 (B) **(Optional)**

Filename: fibreutils-3.3-1.x86_64.rpm

Prerequisites

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

Enhancements

General update.

HP Fibre Channel Enablement Kit for Linux - QLogic BR-Series

Version: 5.0.0.0 (D) **(Recommended)**

Filename: HP-FC-Brocade-Enablement-Kit-5.0.0.0-3.x86_64.rpm

Important Note!

Release Notes:
HP StorageWorks Brocade Fibre Channel Host Bus Adapters Release Notes

Enhancements

Added support for Red Hat Enterprise Linux 7 operating system

Supported Devices and Features

- HP 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter
- HP 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter
- Brocade 804 8Gb Fibre Channel HBA for c-Class BladeSystem

HPE Emulex Smart SAN Enablement Kit for Linux

Version: 1.0.0.0-2 **(Optional)**

Filename: hpe-emulex-smartsan-enablement-kit-1.0.0.0-2.noarch.rpm

Important Note!

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

Storage Information Library

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

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

Products and Solutions.

Prerequisites

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

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

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

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

Enhancements

Added support for the HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

Supported Devices and Features

- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

HPE Fibre Channel Enablement Kit for Linux - QLogic

Version: 6.0.0.0-2 **(Recommended)**

Filename: HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-2.noarch.rpm

Important Note!

Release Notes:
HPE StoreFabric QLogic Adapters Release Notes

Enhancements

Updated the kit to version 6.0.0.0-2

Added support for the following devices:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter

Supported Devices and Features

This version of Enablement kit supports following Devices:

- HP FC1142SR 4Gb PCIe Host Bus Adapter
- HP FC1242SR 4Gb PCIe DC Host Bus Adapter
- HP 81Q PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- QLogic QMH2562 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- QLogic QMH2462 4Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16Gb PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb FC HBA for c-Class BladeSystem
- HP FlexFabric 10Gb 2-port 526FLR-SFP+ Adapter
- HP CN1000Q Dual Port Converged Network Adapter
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE Synergy 3830C 16G Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE StoreFabric SN1100Q 16Gb 2P FC HBA
- HPE StoreFabric SN1100Q 16Gb 1P FC HBA

HPE Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server - Emulex

Version: 11.1.183.22 **(Recommended)**

Filename: HP-CNA-FC-Emulex-Enablement-Kit-11.1.183.22-1.rhel7.x86_64.rpm

Important Note!

Release Notes:
HPE StoreFabric Emulex Adapters Release Notes

Prerequisites

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

Enhancements

This kit, version 11.1.183.22, adds support for the following devices:

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

Supported Devices and Features

- HP NC553i 10Gb 2-port FlexFabric Converged Network Adapter
- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP CN1100E Dual Port Converged Network Adapter
- HP FlexFabric 10Gb 2-port 554M Adapter
- HP FlexFabric 10Gb 2-port 554FLR-SFP+ Adapter
- HP FlexFabric 10Gb 2-port 554FLB Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- Emulex LPe1205 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP FlexFabric 20Gb 2-port 650FLB Adapter
- HP FlexFabric 20Gb 2-port 650M Adapter
- HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE StoreFabric CN1200E-T 10GBASE-T Converged Network Adapter
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter
- HPE Synergy 3530C 16Gb Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb FC HBA
- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE QLogic Smart SAN enablement kit for Linux

Version: 3.3-1 **(Optional)**

Filename: hpe-qlogic-smartsan-enablement-kit-3.3-1.noarch.rpm

Important Note!

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

Storage Information Library

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

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

Products and Solutions.

Prerequisites

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

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

The HPE supplied fibre channel driver must be installed prior to this enablement kit component if you want to enable Smart SAN functionality. Use the appropriate driver included in the HP Service Pack for ProLiant 2016.04.0, which is available at www.hpe.com/servers/spp/download.

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

Enhancements

This is the initial release of a configurable component using the QLogic Smart SAN executable.

Supported Devices and Features

- HP 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HP StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

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Software - System Management

HPE ProLiant Agentless Management Service for Red Hat Enterprise Linux 7 Server

Version: 2.5.0 **(Optional)**

Filename: hp-ams-2.5.0-1969.33.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, SuSE Linux Enterprise Server 10 SP4, SuSE Linux Enterprise Server 11 SP1

Fixes

Fixed following issues:

- AMS now reflects correct numbering of SATA drives in SATA enclosures attached to SATA controllers.
- AMS now reflects correct enumeration of SATA drives and SATA controllers.
- AMS now generates traps when SATA drives are removed or inserted when connected to SATA controllers.
- AMS now updates proper cpqFcaMibCondition.
- AMS now generates traps for NVMe drives.
- AMS now sends proper value of cpqSiServerSystemId in cpqNic traps.
- No segfault occurs when hot plugging of PCI devices.

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit

Version: 2.60-18.0 **(Optional)**

Filename: ssacli-2.60-18.0.x86_64.rpm; ssacli-2.60-18.0.x86_64.txt

Important Note!

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

Enhancements

Support for:

Smart Array H240nr

Smart Array P240nr

Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator (HPE SSA) for Linux 64-bit

Version: 2.60-18.0 **(Optional)**

Filename: ssa-2.60-18.0.x86_64.rpm; ssa-2.60-18.0.x86_64.txt

Important Note!

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

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

Prerequisites

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

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

To invoke, enter the following at the command prompt:

ssa -local

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

Enhancements

Support for:

- Smart Array H240nr
- Smart Array P240nr
- Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit

Version: 2.60-18.0 **(Optional)**

Filename: ssaducli-2.60-18.0.x86_64.rpm; ssaducli-2.60-18.0.x86_64.txt

Important Note!

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

Enhancements

Support for:

- Smart Array H240nr
- Smart Array P240nr
- Smart Array P542D

Added Sanitize Erase for supporting controllers

Added ability to enable erase and stop erase on multiple drives

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HPE SNMP Agents for Red Hat Enterprise Linux 7 Server

Version: 10.5.0 **(Optional)**

Filename: hp-snmp-agents-10.50-2926.49.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

- SMH showing complete 'System ROM' version in System section.
- cmahostd handles nfs and autofs mount point to fix performance problem.

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

Added support for the following storage controllers:

- HPE Smart Array P240nr Controller
- HPE Smart HBA H240nr Controller
- HPE Smart Array P542D Controller

Added support for the following network adapters:

- HPE Synergy 3520C 10/20Gb Converged Network Adapter
- HPE FlexFabric 10Gb 2-port 556FLB Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HPE Ethernet 25Gb 4-port 620SFP28 Adapter
- HPE Ethernet 10Gb 2-port 563i Adapter

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 7 Server

Version: 10.5.0 **(Optional)**

Filename: hp-health-10.50-1826.40.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

- iLO reset doesn't affect running hp-health service.
- Fixed an issue where hp-health was consuming 100% CPU utilization on hpasmxld (iLO2).
- After modifying execution order of asr and hp-health service, hp-asrd runs properly.
- Fixed hp-health and iLO target connectivity issue.

- The hpasmcli command 'show server' now displays embedded NICs.

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

HPE System Management Homepage for Linux (AMD64/EM64T)

Version: 7.6.0-11 **(Recommended)**

Filename: hpsmh-7.6.0-11.x86_64.rpm

Important Note!

Version 7.6.0 will be the last SMH release. Though SMH 7.6.0 will be available in Gen10 Snap1 SPP, but it will only support Gen 8 and Gen 9 servers. Any future patch releases will be available, only on SMH web page. Please refer to HPE SMH Release Notes

Prerequisites

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

Fixes

- Proper handling of Single Sign-On requests and certificates, which are in bad format
- HPE Rebranding changes

Enhancements

- Updated the following components:
  - PHP to version 5.5.38
  - Curl to version 7.49.1
  - OpenSSL to version 1.0.2h
  - Libxml2 to version libxml2-2.9.4
- SSL Cipher Suite is set to TLSv1.2 as default
- Improved Security features [Please find more details in the Security Bulletin (ID: HPSBMU03653)]

HPE System Management Homepage Templates for Linux

Version: 10.5.0 **(Optional)**

Filename: hp-smh-templates-10.5.0-1462.26.noarch.rpm

Important Note!

The HP System Health Application and Insight Management Agents (hpasm) version 8.0.0 was split into three individual rpm packages:

- HP System Health Application and Command Line Utilities (hp-health) version 8.1.0
- HP SNMP Agents (hp-snmp-agents) version 8.1.0
- HP System Management Homepage Templates (hp-smh-templates) version 8.1.0

These three packages provide equivalent functionality as hpasm v8.0.0 and allow for more modular installation choices.

Prerequisites

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

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

Enhancements

Added support for new HPE ProLiant Gen9 Servers.

Insight Diagnostics Online Edition for Linux (x86-64)

Version: 10.60.2109 **(Recommended)**

Filename: hpdiags-10.60.2109-2176.linux.x86_64.rpm

Important Note!

The online version of Insight Diagnostics provides the same functionality as the Survey Utility for Windows and Linux and does not perform any hardware tests on the system. Although not required, it is recommended that you uninstall the current Survey Utility for Windows or Linux before beginning the installation of Insight Diagnostics Online Edition.

Prerequisites

The following component(s) are required for Insight Diagnostics Online Edition for Linux:

- System Management Homepage, version 7.0.0-12 or higher

The following component(s) are recommended for Insight Diagnostics Online Edition for Linux to make full use of its capabilities:

- System Health Application, version 9.0.0 or higher

You can install them by using the SPP or downloading them individually from HPE Support Center.

Fixes

- Translations fixes.
- Fixed a problem where saving the survey with a system with 124+ luns failed.
- Fixed a problem where the crontab entry from the Insight Diagnostics schedule feature was not removed when unistalled.

Enhancements

Addded support for P542D storage controller.
Added support for NVIDIA Tesla K40 XL 12Gb Module.
Support Wellsburg 6-Port SATA Controller.
Support for new Gen9 systems.

See the Service Pack for ProLiant Release Notes for more information.

See the Service Pack for ProLiant Server Support Guide for information on supported servers.