Red Hat Enterprise Linux 8.2

Supplement for Service Pack for ProLiant 2020.03.2

Release Notes

December 2020

Legal and notice information

Document History:

Released	Description
June 2020	Initial Version
December 2020	SPP versions updated from 2020.03.0 to 2020.03.2 2019.12.0 to 2019.12.2 2019.09.0 to 2019.09.1 which got released to address BootHole vulnerability issue fix

Table of Contents

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) 8.2 Supplement for Service Pack for ProLiant 2020.03.2.

For more information on which servers are supported with RHEL 8.2, please visit our OS Support Site at: **https://www.hpe.com/servers/ossupport**.

Product Name	Comment
Red Hat Enterprise Linux 8.2 Supplement for Service Pack for ProLiant 2020.03.0	Bundle containing software components Filename: supspp-2020.03.rhel8.2.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) 8.2 Supplement for Service Pack for ProLiant release is:

Added support for Red Hat Enterprise Linux 8.2

Drivers either found in this March or delivered with the RHEL 8.2 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.

Component Release Notes

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

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:

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

     o 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**

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:

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

Gen 5 Fibre Channel Host Bus Adapter:

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

Gen 6 Fibre Channel Host Bus Adapter:

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

Gen 7 Fibre Channel Host Bus Adapter:

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

Software - System Management	

Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 8 Server
Version: 2.1.1 **(Recommended)**
Filename: amsd-2.1.1-1412.2.rhel8.x86_64.compsig; amsd-2.1.1-1412.2.rhel8.x86_64.rpm

Prerequisites

- o   **amsd only supported on HPE Gen10 Servers.**
- o   **amsd provides information to the iLO 5 service providing SNMP support.**
- o   **Requirements:**
  - ▪   Minimum iLO 5 Firmware Version = 1.1
  - ▪   Minimum supported OS Versions = Red Hat Enterprise Linux 8

Fixes

Fixed the following items:

- o   The ahslog service in the HPE Agentless Management Service (iLO 5)(amsd) for Linux may segfault during system start-up. While this occurs, the user can see the "Failed to start Active Health Service Logger" message from the systemctl. Review Customer Advisory a00099165en_us for additional details.
- o   Addresses the stability of the communication of iLo. Customers may experience the failure of inquiry in some conditions like heavy loading in the iLo, and heavy traffic between the iLo and OS.

HPE ProLiant Agentless Management Service for Red Hat Enterprise Linux 8 Server
Version: 2.10.0 **(Optional)**
Filename: hp-ams-2.10.0-861.5.rhel8.x86_64.rpm

Prerequisites

- o   **hp-ams supported on HP ProLiant Gen8 and Gen9 Servers.**
- o   **hp-ams provides information to the HP iLO 4 service providing SNMP support.**
- o   **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.**

o **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 the following item:

o 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 8 Server
Version: 10.9.1 **(Recommended)**
Filename: hp-snmp-agents-10.91-670.5.rhel8.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:

- o the hp-snmp-agents service version 10.9.0 on an HPE ProLiant Gen9 Server or an HPE Synergy Gen9 Compute Node may experience a segfault after installation or restart of the hp-snmp-agents service. cmahostd or cmapeerd process will be killed after the segfault. Pleaer review customer advisory a00098957en_us for additional details.
- o The OS version reported by hp-snmp-agents reported a mismatch with the newer Linux OS distros. i.e., "SUSE Linux Enterprise Server 12" v.s "SUSE Linux Enterprise Server 12 SP5"

HPE System Health Application and Command Line Utilities for Red Hat Enterprise Linux 8 Server
Version: 10.9.1 **(Optional)**
Filename: hp-health-10.91-1878.11.rhel8.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

Initial support for Red Hat Enterprise Linux 8 Server

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:

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

- o RHEL 8
- o SLES15 SP1

Known limitations

Linux System Management Homepage install fail on Red hat Enterprise Linux 8.x operating system. before install the Linux System Management Homepage on Red hat Enterprise Linux 8.x operating system, install libnsl package in Red hat Enterprise Linux 8.x operating system which delivers the libnsl.so.1 file.

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