Red Hat Enterprise Linux 7.9
Supplement for Service Pack for ProLiant 2020.09.0
Release Notes

November 2020
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Document History:

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<th>Released</th>
<th>Description</th>
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<tr>
<td>November 2020</td>
<td>Final Version</td>
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Overview

A Service Pack for ProLiant (SPP) Supplement is a bundle containing software and/or firmware components with Smart Update Manager (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 SPP may work with 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) 7.9 Supplement for Service Pack for ProLiant 2020.09.0.

For more information on which servers are supported with RHEL 7.9, please visit our OS Support Site at: https://www.hpe.com/servers/ossupport.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Comment</th>
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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 2020.09.0

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) 7.9 Supplement for Service Pack for ProLiant release is:

Added support for Red Hat Enterprise Linux 7.9

Drivers either found in this October or delivered with the RHEL7.9 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 2020.09.0.

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:

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
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</thead>
<tbody>
<tr>
<td>Service Pack for ProLiant</td>
<td>2020.09.0</td>
</tr>
<tr>
<td></td>
<td>2020.03.0</td>
</tr>
<tr>
<td></td>
<td>2019.12.0</td>
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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
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**

Release Notes for RHEL 7.9 Supplement for Service Pack for ProLiant, v2020.09.0

**Driver - Storage Controller**

**Software - Lights-Out Management**

**Software - Storage Fibre Channel HBA**

**Software - System Management**

**Driver - Storage Controller**

HPE Dynamic Smart Array B140i SATA RAID Controller Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 1.2.10-184 *(Recommended)*
Filename: kmod-hpdsa-1.2.10-184.rhel7u8.x86_64.compsig; kmod-hpdsa-1.2.10-184.rhel7u8.x86_64.rpm; kmod-hpdsa-1.2.10-184.rhel7u9.x86_64.compsig; kmod-hpdsa-1.2.10-184.rhel7u9.x86_64.rpm

**Enhancements**

Add support for Red Hat Enterprise Linux 7 Update 9

HPE ProLiant Gen10 and Gen10Plus Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)
Version: 1.2.16-040 *(Recommended)*
Filename: kmod-smartpqi-1.2.16-040.rhel7u8.x86_64.compsig; kmod-smartpqi-1.2.16-040.rhel7u8.x86_64.rpm; kmod-smartpqi-1.2.16-040.rhel7u9.x86_64.compsig; kmod-smartpqi-1.2.16-040.rhel7u9.x86_64.rpm

**Enhancements**

Add support for Red Hat Linux Enterprise 7 Update 9

**Supported Devices and Features**

**SUPPORTED KERNELS:**
The kernels of Red Hat Enterprise Linux 7 (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: 3.4.20-202 *(Recommended)*
Filename: kmod-hpsa-3.4.20-202.rhel7u8.x86_64.compsig; kmod-hpsa-3.4.20-202.rhel7u8.x86_64.rpm; kmod-hpsa-3.4.20-202.rhel7u9.x86_64.compsig; kmod-hpsa-3.4.20-202.rhel7u9.x86_64.rpm

**Enhancements**

Add support for Red Hat Enterprise Linux 7 Update 9

**Software - Lights-Out Management**

HPE Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)
Version: 5.6.0-0 *(Optional)*
Filename: hponcfg-5.6.0-0.x86_64.compsig; hponcfg-5.6.0-0.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**

Fixed an issue where HPONCFG was not able to detect openssl library when multiple 64-bit openssl installed.

**Enhancements**

Updated product name to HPE Lights-Out Online Configuration Utility for Linux (AMD64/EM64T).

**Software - Storage Fibre Channel HBA**

Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux - Red Hat Enterprise Linux (RHEL)

Version: 4.1-1 (c) *(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

**Enhancements**

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

**Supported Devices and Features**

Supports the following:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84E 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Quad Port Fibre Channel Host Bus Adapter
- HPE LPe1605 16Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE 81Q 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE 84Q 8Gb Quad Port Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1000Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1100Q 16Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE CN1200E Dual Port Converged Network Adapter
- HPE CN1200E-T Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 2-port 556FLR-T Adapter
- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

Software - System Management
Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server
Version: 2.3.0 (Optional)
Filename: amsd-2.3.0-1451.49.rhel7.x86_64.compsig; amsd-2.3.0-1451.49.rhel7.x86_64.rpm

Prerequisites

- amsd only supported on HPE Gen10 Servers.
- amsd provides information to the iLO 5 service providing SNMP support.
- **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:

- The ahslog service in the HPE Agentless Management Service (iLO 5)(amsd) for Linux may segfault during system startup. 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.
- When customers set the kernel parameter to disable the ipv6 in RHEL, the memory usage of HPE Agentless Management Service (AMSD) is much more stable.
- Corrected the test trip cannot be generated with the test parameter in the HPE Agentless Management Service (AMSD).
- Addressed ahslog stability to allow service back when iLo restarts. Customers will no longer experience the service hang after the iLo reboot.
- Fiber options correctly delivers data in the reverse mode (SMA)

Enhancements

Enhancements included in this release:

- Support for the following new network controllers:
  - P10118-B21 HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
  - P22702-B21 HPE Ethernet 10/25Gb 2-port SFP28 QL41222HLCU Adapter
  - 874253-B21 HPE Ethernet 100Gb 1-port 842QSFP28 Adapter

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!

None

Prerequisites

None

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: 2.10.1 (Optional)
Filename: hp-ams-2.10.1-863.1.rhel7.x86_64.rpm

Prerequisites

- hp-ams supported on HPE ProLiant Gen8 and Gen9 Servers.
- hp-ams provides information to the HPE iLO 4 service providing SNMP support.
- SNMP PASS-THRU on the HPE iLO 4 MUST be disabled, and SNMP should be configured on the HPE iLO 4. The HPE iLO 4 may need to be reset after changing these settings.

Requirements:

- Minimum HPE 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 Items:

- Added the warning message for users to restart hp-ams service when iLo reset more than twice. This issue is documented in Customer Advisory a00099805en_us.
- When the server detects the physical network cable is plugged or unplugged, hp-ams will send out a trap to notify the administrator about the physical network status change.

HPE Smart Storage Administrator (HPE SSA) CLI for Linux 64-bit
Version: 4.21.7.0 (Optional)
Filename: ssacli-4.21-7.0.x86_64.compsig; ssacli-4.21-7.0.x86_64.rpm; ssacli-4.21-7.0.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

- ADU report does not capture Slotx log greater than 4GiB size if configured.

Enhancements

- Added support for HPE Smart Array S100i SR Gen10 Plus SW RAID
**Important Note!**

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

**Fixes**

ADU report does not capture Slotx log greater than 4GiB size if configured.

**Enhancements**

Added support for HPE Smart Array S100i SR Gen10 Plus SW RAID

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HPE Smart Storage Administrator Diagnostic Utility (HPE SSADU) CLI for Linux 64-bit
Version: 4.21.7.0 *(Optional)*
Filename: ssaducli-4.21-7.0.x86_64.compsig; ssaducli-4.21-7.0.x86_64.rpm; ssaducli-4.21-7.0.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**

ADU report does not capture Slotx log greater than 4GiB size if configured.

**Enhancements**

Added support for HPE Smart Array S100i SR Gen10 Plus SW RAID

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HPE SNMP Agents for Red Hat Enterprise Linux 7 Server
Version: 10.9.1 *(Recommended)*
Filename: hp-snmp-agents-10.91-670.4.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:

- 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. Please review customer advisory **a00098957en_us** for additional details.
- 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”

**Enhancements**

- Support for Red Hat Enterprise Linux 7.8

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

Version: 10.9.2 (**Optional**)
Filename: hp-health-10.92-8.8.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:

- When a customer queries the HPE Software Delivery Repository (SDR) site and experiences a failure `amsl` no longer exhibits a segfault.
- hp-health service will no longer crash in a non secure boot environment.

**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

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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