HP System Management Homepage for OpenVMS V2.0
Release Notes

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1 HP SMH for OpenVMS

HP System Management Homepage (HP SMH) for OpenVMS is a web-based interface that consolidates and simplifies single system management of HP servers running OpenVMS, HP-UX, Linux, and Microsoft Windows operating systems. It aggregates and displays data collected from web agents.

HP SMH enables system administrators to view in-depth hardware configuration and status data, performance metrics, and system thresholds using a single, easy to use interface.

Product Documentation

The following are the other documents available for HP SMH:

- *HP System Management Homepage Installation Guide* This document provides information about installing and getting started using HP SMH.

- *HP System Management Homepage Help System* The help system provides a complete set of documentation for using, maintaining, and troubleshooting HP SMH. To access the help system, go to the **Help** menu in the HP SMH application.

Features

This section addresses the following topics:

- Features in HP SMH V2.0-20 Patch Release
- Features in HP SMH V2.0
- Features from Insight Management Agents V3.4-2

Features in HP SMH V2.0-20 Patch Release

System Health

- **Support for Settable Threshold Temperatures on Blade Systems**   HP SMH now supports reading the settable threshold temperatures on HP Integrity servers through the Intelligent Platform Management Interface (IPMI). You need not specify the threshold temperature using the SMH$WARNING_TEMP logical name.

Others

- **Support for SMH Recovery During Installation Disk Migration**   When migrating to a new installation disk within the same system due to a disk failure or a backup restoration, HP SMH on the new disk can be used directly without having to reinstall it.

Features in HP SMH V2.0

Storage

- **Support for LSI SAS 1068X Controllers**   HP SMH supports the display of physical disks and logical units that are attached to the LSI SAS 1068X controllers on OpenVMS V8.3 and later.

  HP SMH GUI displays the following information:
  — Physical disks connected to the controller
  — Details of the physical disks, such as SAS Address, model, status
  — Logical unit details and their status
  — Associations between physical disks, hot spares and the logical unit

  HP SMH also raises Traps if the status of the physical disk or logical unit changes. For example, a Trap is raised when a physical disk is removed. Similarly, Traps are also raised when the status of a logical unit changes.

Security

- **Configurable SNMP Non-Public READ Community**   HP SMH for OpenVMS removes the restriction present in HP Insight Management Agents for SNMP Read community name "public". To use any configured SNMP community, change the SNMP read and write community entry in the SMH$SPECIFIC:[CONF]SNMPCOMMUNITY_CONFIG.DAT file and restart HP SMH.

  NOTE: The SNMP community names are case sensitive.

Others

- **Installation of HP SMH on Disk other than System Disk**   HP SMH for OpenVMS can be installed either on the system disk or any other disk, by using the /DESTINATION qualifier.

  NOTE: Ensure that the disk on which HP SMH is installed is an ODS-5 disk.

  For more information, see the **HP System Management Homepage Installation Guide**.

- **Consistent Display/GUI**   HP SMH for OpenVMS supports a consistent display/GUI that is similar to Windows or Linux HP SMH implementations. HP SMH is based on standard apache web server (HP Secure Web Server) and enables the use of latest web server capabilities, such as rendering PHP (Hypertext Preprocessor) pages and JavaScript/CGI files.

Features from Insight Management Agents V3.4-2

Storage

- **Supports Smart Array (CPQIDA) SNMP Agent**   HP SMH provides support for Smart Array (CPQIDA) SNMP agent on OpenVMS systems. The CPQIDA SNMP agent monitors SA6402, SA6404, and P400 controllers and the associated disks on Integrity servers. Smart Arrays are also supported on OpenVMS Alpha servers, for monitoring SA5300A and SA6400A controllers and the associated disks.

- **Generates Additional Storage Traps**   HP SMH for OpenVMS supports the generation of additional storage Traps when a Storage Disk is mounted or unmounted.

Security

- **OpenVMS Account Login and OS Authentication**   HP SMH for OpenVMS uses OpenVMS user accounts for login security, instead of the built-in accounts. The user name and password are authenticated against the OpenVMS account database, which increases the security of the system. Anonymous access is disabled by default.

  OpenVMS accounts are mapped to the HP SMH internal "administrator" and "user" accounts. The OpenVMS system administrator maps users to one of these accounts using the SMH$ADMIN rights identifiers.

- **Supports Secure Sockets Layer (SSL) and Certificates**   HP SMH for OpenVMS includes a secure HTTP server that uses Secure Sockets Layer (SSL) security for all communication between the OpenVMS server and the web browser. By default, a self-signed certificate is generated by HP SMH. However, for increased security, this certificate can be replaced by a certificate signed by a Certificate Authority.

Environmental

- **Displays Environmental Information (Temperature/Fan and Power Sensors) on Integrity Servers**   HP SMH displays information about temperature and fan sensors under the Environment link, and power sensor information under the Power Supply link on OpenVMS Integrity servers V8.2-1 or later, and on Rx1620, Rx2620, Rx4640, Rx7620, Rx7640, Rx8620, Rx8640, Rx3600, Rx6600, Rx2660, Integrity Superdome, and HP Blade servers.

NOTE: The environmental information is displayed only if the required sensors are present on the system.

NOTE: The environmental information is displayed four or five minutes after you start HP SMH on Integrity servers.

Utilization

- **Displays Non-Zero CPU Utilization**   HP SMH displays the CPU utilization as a non-zero value. If the utilization of the CPU goes below 1%, HP SMH displays the default value as 1%.

- **Supports Additional CPU Utilization Thresholds**   HP SMH for OpenVMS enables you to define thresholds on CPU utilization for time intervals of 1 minute, 5 minutes, 30 minutes, and 1 hour. If the CPU utilization for a time interval exceeds the threshold, an SNMP Trap is generated. Thresholds can be defined separately for each CPU.

- **Supports Falling Thresholds**   HP SMH for OpenVMS supports falling thresholds for file system utilization, CPU utilization, and physical memory utilization. To enable falling thresholds, select the "Enable Falling Thresholds" option on the page that displays file system, CPU utilization, and physical memory utilization data. Once this option is enabled,

SNMP Traps are generated whenever the utilization drops below the critical and warning thresholds.

> **NOTE:** Falling thresholds cannot be enabled or disabled for selected individual disks and CPUs. Enabling falling thresholds affects all thresholds on the corresponding page.

System Requirements

This section describes the minimum system requirements for OpenVMS systems to run HP SMH.

Supported Operating System Versions

HP SMH for OpenVMS is supported on the following operating systems:

- OpenVMS Integrity servers V8.2-1, V8.3, and V8.3-1H1
- OpenVMS Alpha V7.3-2, V8.2, and V8.3

Disk Requirement

HP SMH must be installed only on ODS-5 disks. To check if the disk is an ODS-5 disk, enter the following DCL command:

```
$Show Device <devicename> /FULL
```

You can run the installation from a non ODS-5 disk to a system that has ODS-5 disk by using the /Destination qualifier.

Software Requirements

The following software is required for HP SMH for OpenVMS:

- HP SSL V1.3
- HP Secure Web Server V2.1-1
- CSWS_PHP V1.3

The following patch kit is also required for HP SMH Patch V2.0-20:

- For OpenVMS V8.3 and V8.3-1H1 on HP Integrity servers, the patch kit VMS83I_IPMIAPI-V0100 and VMS831H1I_IPMIAPI-V0100 needs to be installed respectively. Please refer the HP SMH Installation guide for more details.

Supported TCP/IP Stacks

The following TCP/IP stacks are supported by HP SMH for OpenVMS:

- TCP/IP V5.4-15 or later
- MultiNet V5.2 or later
- TCPware V5.7-2 with DRIVERS_V572P100 patch

> **IMPORTANT:** For users of HP SMH on MultiNet and TCPware stack.
>
> The dependency product for HP SMH, HP Secure WEB Server (CSWS/Apache) is supported only on HP TCP/IP stack. Hence support for HP SMH on MultiNet and TCPware stack is limited to HP SMH application problems which are not CSWS/Apache related.

Supported Browsers

HP SMH for OpenVMS supports the following web browsers:

- Internet Explorer 6.x and 7.x
- HP Secure Web Browser V1.7-13 with the required Java plug-in

Problems Corrected

The following problems reported in HP SMH V2.0-17 are corrected in the HP SMH V2.0 patch release:

- HP SMH health agent uses a high amount of CPU or memory resources when the size of Operator Communications (OPCOM) log file, namely OPERATOR.LOG, is big. This issue is fixed in this release.
- On cell-based systems, when a redundant power supply fails, it results in the generation of 5-6 SNMP traps every minute. This SNMP trap bombardment issue is fixed in this release.
- On Integrity servers, HP SMH displays incorrect number of power sensors. This issue is fixed in this release.
- On Integrity servers that support iCAP, HP SMH reports CPUs with disabled iCAP cores as "degraded". This issue is fixed in this release. The status of a CPU containing a disabled iCAP core is now reported by HP SMH as "unknown", instead of "degraded".
- HP SMH fails to report information about fan and power supply, and the failure of any of these components does not generate SNMP traps. This issue is fixed in this release.
- Network MAC address of the system running HP SMH ending with 'F0' to 'FF' causes HP SMH to timeout. This issue is fixed in this release.

Following problems reported in HP Insight Management Agents V3.4-2 are corrected in HP SMH V2.0:

- Starting the WBEM$CPQHEALTH process of HP Insight Management Agents locks the OPERATOR.LOG file.
- Insight Management Agents Device Homepage URL cannot be accessed if the Language Settings of the web browser is not set to English. Currently with HP SMH, selecting any language option in the web browser will always display English.

Known Issues and Limitations

Environmental

- On Integrity servers, the number of temperature or fan units displayed are actually the sensors monitoring the entity, and not the physical entity itself.
- On Alpha servers GS, ES45, DS15 or later, the number of temperature, fan, or power units displayed are actually the sensors monitoring the entity, and not the physical entity itself.
- Temperature sensor readings are displayed incorrectly with HP SMH on OpenVMS Integrity server.
- Environmental information, such as temperature/fan sensors, is displayed as failed even if the physical entity is absent on Integrity servers.
- The environmental information is displayed four or five minutes after you start HP SMH on Integrity servers.

Login

- On HP SMH session time out a login page is displayed. Entering the correct login credentials in this login page will redisplay the same login page. Open a new browser and relogin again.
- A wrong SNMP read or write community in
  SMH$SPECIFIC:[CONF]SNMPCOMMUNITY_CONFIG.DAT displays blank page without the hardware details in the HP SMH home page.

TCPware/MultiNet Stack

- The MultiNet SNMP master process SNMP_AGENT sometimes terminate on shutting down HP SMH. Restart the MultiNet SNMP service before restarting HP SMH.
- Setting the Internet Explorer settings to a proxy might result in errors in the web page display.

LSI SAS 1068x Related

- The status of the physical disk that does not contribute to a logical unit is displayed as OK. A Trap is generated only if a new disk is inserted or an existing disk is removed. The error state of the physical disk is not detected.
- The SAS discovery is based on a poll approach, the poll interval being 30 seconds. If a disk operation is performed (such as manually removing a physical disk and placing it back in the same slot) within the poll interval, the changes are not reflected in the status of the physical disk or logical unit. In this case HP SMH does not generate a Trap.
- HP SMH does not generate Traps when logical units are created or deleted.

Others

- Firmware revision is not available on Integrity servers
- HP SMH supports only English language
- When a PKCS # 10 Certificate Request is created, the location of the file is wrongly displayed as `/apache$root/sslshare/req_cr.pem`. The correct location is `SMH$SPECIFIC:[SSLSHARE]req_cr.pem`.

HP Encourages Your Comments

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Send comments to either of the following addresses:

Internet: **openvmsdoc@hp.com**

Include the document title, manufacturing part number, and any comment, error found, or suggestion for improvement you have concerning this document.