# **HP Storage Operations Manager**

Software Version: 10.01 Windows<sup>®</sup> and Linux<sup>®</sup> operating systems

**Release Notes** 



Document Release Date: June 2015 Software Release Date: June 2015

### **Legal Notices**

#### Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

#### **Restricted Rights Legend**

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

### **Copyright Notice**

© Copyright 2015 Hewlett-Packard Development Company, L.P.

#### **Trademark Notices**

Adobe® is a trademark of Adobe Systems Incorporated.

AMD is a trademark of Advanced Micro Devices, Inc.

© 2012 Google Inc. All rights reserved. Google™ is a trademark of Google Inc.

Intel®, Intel® Itanium®, and Intel® Xeon® are trademarks of Intel Corporation in the U.S. and other countries.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, and Windows Server® are U.S. registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

Red Hat® is a registered trademark of Red Hat, Inc. in the United States and other countries.

UNIX<sup>®</sup> is a registered trademark of The Open Group.

#### **Oracle Technology** — Notice of Restricted Rights

Programs delivered subject to the DOD FAR Supplement are 'commercial computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, programs delivered subject to the Federal Acquisition Regulations are 'restricted computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software-Restricted Rights (June 1987). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

For the full Oracle license text, see the open\_source\_third\_party\_license\_agreements.pdf file in the license-agreements directory in the SOM product download file.

#### Acknowledgements

This product includes software developed by the Apache Software Foundation. (http://www.apache.org)

This product includes software developed by the Indiana University Extreme! Lab. (http://www.extreme.indiana.edu)

This product uses the j-Interop library to interoperate with COM servers. (http://www.j-interop.org)

### **Documentation Updates**

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

https://softwaresupport.hp.com

This site requires that you register for an HP Passport and sign in. To register for an HP Passport ID, go to:

https://hpp12.passport.hp.com/hppcf/createuser.do

Or click the **the Register** link at the top of the HP Software Support page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

### **Support**

Visit the HP Software Support Online web site at: https://softwaresupport.hp.com

This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support web site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

https://hpp12.passport.hp.com/hppcf/createuser.do

To find more information about access levels, go to:

#### https://softwaresupport.hp.com/web/softwaresupport/access-levels

HP Software Solutions Now accesses the HPSW Solution and Integration Portal Web site. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this Web site is http://h20230.www2.hp.com/sc/solutions/index.jsp

## Contents

4
5
6
9
10
11
13
13
13
16

# Storage Operations Manager Release Notes

for the Windows<sup>®</sup> and Linux<sup>®</sup> operating systems operating system.

Software version: 10.01

Publication date: June 2015

This document is an overview of the changes made to Storage Operations Manager (SOM). It contains important information that is not included in books or Help. You can find information about the following in this document:

"New Features in SOM 10.01" on the next page

"Installation " on page 10

"Open Defects" on page 13

"Enhancement Requests included in this release" on page 1

"Fixed Defects in this Release" on page 1

**Note:** This document is updated as new information becomes available. To check for recent updates, or to verify that you are using the most recent edition of a document, go to: https://softwaresupport.hp.com/group/softwaresupport

For more information, see "Documentation Updates" on page 3.

### **Support Matrix**

For information about the installation requirements and compatibility with other products, see the *SOM Support Matrix*.

The support matrix includes the following information:

Release Notes Storage Operations Manager Release Notes

- Requirements
  - Hardware
  - Operating System
  - Databases
  - Application Servers
  - Web Servers
  - Web Browsers and Plug-ins
- Compatibility
  - Languages
  - Internationalization Variances
  - Virtualization Products
  - High-Availability Products
  - HP Software Integrations
  - HP Software Coexistence
  - Other Software Coexistence
  - Performance and Sizing

### New Features in SOM 10.01

HP Storage Operations Manager 10.01 includes the following new features and enhancements:

- New dashboards
  - Storage Systems DTT Analytics
    Forecasts the number of days to threshold values for the capacity utilization (Raw Used, Actual Allocated, and Actual Used) of storage systems.
  - Storage Pools DTT Analytics
    Forecasts the number of days to threshold values for the capacity utilization (Actual Allocated, and Actual Used) of storage pools.
  - ThP Analytics for Virtual Servers
    Forecasts the number of datastores that are susceptible to an outage of physical disk space in a VMware virtual environment.
  - Storage Systems Unused Volumes Analytics
    Displays storage that can be reclaimed at storage system and volume levels.

UCMDB integration

Integration of SOM with HP Universal CMDB to facilitate change management and impact analysis of storage infrastructure. For more information, see the *SOM HP Universal CMDB Integration Guide* available in the UCMDB integration package.

For the UCMDB integration package, log on to the SOM HP Live Network web site (https://hpln.hp.com/group/storage-operations-manager-som) with your HP Passport credentials.

Additional device support

To use the new features for devices, install the required device bundle. The device bundle Readme file contains instructions to install or uninstall a device bundle and device-specific content.

Download a device bundle from the SOM HP Live Network web site (https://hpln.hp.com/group/storage-operations-manager-som) with your HP Passport credentials.

- Brocade AG device support and performance
- Performance packs for XP/HDS, VMAX, and NetApp 7-mode and C-mode
- Performance pack for ESX servers
- EMC Symmetrix VMAX Fully Automated Storage Tiering (FAST) Virtual Pools (VP)
- Support for HP-UX without a (Common Information Model) CIM extension installed on the remote host
- Support for Solaris with a CIM extension installed on the remote host
- Localized help in Japanese and Simplified Chinese is available from the SOM console when SOM is running in either Japanese or Chinese.
- Support for the SOM console running in the Google Chrome browser. For more information, see "Web Browsers and Plug-ins" in the *SOM Support Matrix*.
- Improved import of a discovery configuration file Importing a discovery configuration results in a merge with the existing configuration therefore retaining earlier settings.
- Migration from a Storage Essentials configuration to SOM For more information, see the SOM HP Storage Essentials Configuration Migration Guide.

- Enhanced monitoring group configuration
  The Create Monitoring Group option provides a way to select multiple performance collectors at a time during monitoring group creation.
- REST API support

The Rest API integrates SOM with third-party applications such as UCMDB. The API presents SOM inventory data in XML or JSON format. User authentication and X.509 certificate -based security is embedded in the REST API framework.

Reports

To access the new reports in this release, install the required SOM content pack for HP Service Health Reporter (SHR). The *Storage Resource Management Reports Guide* contains instructions to install or uninstall a pack and information about its reports.

Download a SOM content pack from the SOM HP Live Network web site (https://hpln.hp.com/group/storage-operations-manager-som) with your HP Passport credentials.

The following new connectivity report and content packs (for performance reports) are available with SOM 10.01:

- HP Storage Operations Manager Content Pack for NetApp 7-Mode Performance Statistics
- HP Storage Operations Manager Content Pack for HP XP and HDS Performance Statistics
- HP Storage Operations Manager Content Pack for EMC VMAX Performance Statistics
- NAS Dependency Report HP Storage Operations Manager Content Pack for End-to-End Connectivity

The following content packs are available with SOM 10.00:

- *HP Storage Operations Management Common Content Pack*
- HP Storage Operations Management Content Pack for End-to-End Connectivity
- HP Storage Operations Management Content Pack for Switches
- HP Storage Operations Management Content Pack for Hosts
- *HP Storage Operations Management Content Pack for Storage Systems*
- HP Storage Operations Management Content Pack for HP 3PAR Performance Statistics
- HP Storage Operations Management Content Pack for HP EVA Performance Statistics

- HP Storage Operations Management Content Pack for EMC CLARiiON and VNX Performance Statistics
- HP Storage Operations Management Content Pack for EMC DMX Performance Statistics

### About SOM 10.00

HP Storage Operations Manager (SOM) 10.00 is a new offering for storage resource management. Key benefits of SOM include:

- Heterogeneous device support with enablement for device and reporting updates between releases. For the supported devices, see the *SOM Device Support Matrix*.
- A rich set of environment capacity dashboards for easy visualization of your current storage availability.
- Topology views that highlight the connectivity in your storage network.
- Optimized storage device discovery and data collection with an appropriate default configuration.
- A high-performance HTML5 user interface that runs in modern web browsers.
- Simplified deployment: SOM is customer installable and configurable for quick time-to-value.
- Low cost of ownership with the embedded Postgres database that scales to support many environments.
- High performance enterprise reporting with the bundled HP Service Health Reporter.
- High scale: Each SOM management server can manage a large number of storage devices. For specific numbers, see the SOM Support Matrix.

## Installation

The *SOM Interactive Installation Guide* available at the root of the product installation media provides instructions to install SOM 10.00.

Product updates and enhancements are delivered with the SOM 10.01 patch. You must install SOM 10.00 before you install SOM 10.01. Instructions to install SOM 10.01 are available with the patch at https://softwaresupport.hp.com.

# **Mozilla Firefox Known Issues**

- By default, Firefox opens new windows in new tabs instead of new windows. This behavior can cause SOM to open windows that do not display in the foreground.
   To change the default setting, from the **Tools** > **Options** > **Tabs**, select the following check boxes:
  - Open new windows in a new tab instead
  - When I open a link in a new tab, switch to it immediately
- By default, Firefox limits the number of pop-up windows to 20. To change this limit, do the following:
  - a. Type about: config in the Firefox address bar.
  - b. From the Preference Name list, select **dom.popup\_maximum**, and double-click to modify the value.
  - c. Restart Firefox for the change to take effect.

**Note:** After opening and closing more than 50 forms in a single session, Firefox might start blocking pop-up windows, even if popups are enabled, which results in JavaScript errors. Increase dom.popup\_maximum to a number greater than 500 or restart the browser.

- Firefox tracks long running JavaScript operations and displays a warning message if it exceeds the timeout value. Complex map operations may exceed the maximum default of 5. To adjust the maximum time, do the following:
  - a. Type about: config in the Firefox address bar.
  - b. From the Preference Name list, select **dom.popup\_maximum**, and double-click to modify the value.

The value is in seconds. You can set it to zero for infinity, however this is not recommended.

- c. Restart Firefox for the change to take effect.
- Firefox enables the use of JavaScript by default. Disabling JavaScript requires a privacy extension. When signing in to the SOM console, if you see an error that JavaScript has been disabled, go to Tools > Add-ons > Extensions, and disable the extension that is disabling Javascript.

• If you created a user account but later deleted and recreated it, the Firefox auto-complete feature fills in the password field without notifying the user interface, causing the user account creation to fail. Change the password twice, or turn off form completion in Firefox.

# **Open Defects**

The reference number for each defect is the change request (QCCR) number. For more information about open defects, visit HP Software Support Online, or contact your HP Support representative directly.

The following is a known issue:

QCCR1G57882 - Nodes assigned to security groups are listed incorrectly in the Security Wizard.

### **SOM Console Known Issues**

The following known issues apply to SOM running in all supported languages.

Title: Nodes are listed incorrectly by the Security Wizard.

**Description:** The Security Wizard incorrectly shows nodes mapped to multiple security groups.

Workaround: Use the Security Groups Mappings view in the Security configuration workspace.

Title: SOM shows DTT values as 99999 for a few analytics metrics.

**Description:** When the capacity numbers do not change over time, HP Service Health Reporter (SHR) reports the metric value as 99999.

### **Localization and Globalization Known Issues**

The following known issues apply to SOM running in a non-English language.

**Title:** English text in the SOM installer.

**Description:** Some messages in the pre-installation checks are not localized.

**Title:** Date and time values are displayed in the English format not the local date and time format.

**Description:** Dates and times are not localized.

**Title:** Command-line output is in English.

**Description:** The SOM command line interface is not localized. While the commands can accept localized language inputs as parameter values, all command output is in English.

**Title:** English text in the localized product.

**Description:** The following text strings cannot be localized and are always shown in English:

- Java runtime exceptions such as "Unknown type"
- Device profile names
- The contents of the Description field for the properties of a data collection control.

Title: The SOM content pack installer is available in English and not in any other languages.

**Description:** The SOM reports have been localized into the same languages as the SOM management server software. The SOMcontent pack installer is not available in these languages.

**Workaround:** If the SOM reports have been localized to the locale of the SOM reporting server (the HP Service Health Reporter (SHR) system), the SOM content pack installer installs the SOM reports in that language. Otherwise, the SOM content pack installer installs the SOM reports in English.

**Title:** The SOM content pack uninstaller is available in English and not in any other languages.

**Description:** The SOM content pack uninstaller is not available in other languages.

**Workaround:** Regardless of report language, run the English language SOM content pack uninstaller to remove the SOM reports from the SOM reporting server.

**Title:** SOM report descriptions are in English.

**Description:** In SHR, the descriptions of reports delivered in the SOM content packs are not localized.

**Title:** Report prompts for raw measures are in English.

**Description:** When configuring the SOM performance statistics reports, the prompts and options for raw data measures are not localized.

**Title:** Graph labels are in English.

**Description:** Some labels on graphs in the SOM reports are not localized.

**Title:** Content pack tool tips are in English.

**Description:** The tool tips for SOM content packs in the SHR administration console are not localized.

Release Notes Open Defects

# We appreciate your feedback!

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

#### Feedback on Release Notes, June 2015 (Storage Operations Manager 10.01)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to storage-management-doc-feedback@hp.com.