

# HPE Workload Aware Security Version 1.3.0 for Linux Troubleshooting guide

### **Abstract**

This guide provides the troubleshooting tips for the installation, setup, and different operation of HPE Workload Aware Security for Linux (WASL) product.

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# Troubleshooting SMS Setup

Use the menu driven command /opt/hpe/wasl/sms/tools/wasl sms.sh -setup to set up WASL SMS product. Errors during setup are displayed on the console as the output of this command.

For more information about uninstalling and installing the WASL SMS product, see the WASL Install and Setup guide.

NOTE: If you uninstall WASL SMS, all the data related to any previous SMS installation will be lost.

Following are some of the errors and possible ways to make the WASL setup work.

### Setup fails during importing of signed certificate.

### **Symptom**

Setup fails while importing a signed certificate.

#### Action

Check the permission and ownership of the path, and the certificates before importing. waslsms user must have access to the certificates. After fixing any issues with permissions, run the /opt/hpe/ was1/sms/tools/was1 sms.sh -setup cert command to import the signed certificate again.

### Setup fails with Couchbase Error: Generic network failure message.

### **Symptom**

Setup fails with Couchbase Error: Generic network failure message.

### Cause

This message might appear if Couchbase Server is not running.

### Action

- 1. Run the service couchbase-server status command to check if couchbase-server service is up and running.
- 2. If the service is not running, start the service by running the service couchbase-server start
- 3. Perform the WASL SMS setup after starting the couchbase-server service successfully.

## Setup fails with Unsupported encryption algorithm, Or Unsupported pbkdf algorithm, Or Unsupported RSA key size message

### **Symptom**

Setup fails with one of the following messages:

- Unsupported encryption algorithm
- Unsupported pbkdf algorithm or
- Unsupported RSA key size

### Cause

The errors usually occur if you try to override the following parameters with a wrong value in the custom setupConfig.js file:

- setupConfig.sym.alg
- setupConfig.sym.pbkdf
- setupConfig.rsa.keysize or
- setupConfig.rsa.key enc alg

- The default setup parameter of WASL SMS is available in the <code>/opt/hpe/wasl/sms/config/</code> default setupConfig.js file and works for most of the cases.
- These parameters can be overridden in /opt/hpe/wasl/sms/config/custom setupConfig.js custom setup configuration file before initiating WASL SMS setup.
- · Verify if you have overridden a parameter in the custom setup configuration file. Ensure that these values are correct.

# Troubleshooting SMS startup and run

You can start WASL SMS by using the command:

```
service hpe-wasl-sms start
```

The service hpe-wasl-sms start command will internally call /opt/hpe/wasl/sms/tools/wasl sms.sh -start [-use stash file] command to start WASL SMS.

# SMS fails to start and the wasl\_sms.log file contains Master password may be incorrect message

### **Symptom**

SMS fails to start and was1 sms.log file contains Master password may be incorrect message.

#### Cause

You might be providing an incorrect password while starting SMS.

### **Action**

**1.** If you are starting SMS from command line, ensure that you provide the right master password, at the prompt.

```
# ./wasl_sms.sh -start
Enter the master password: ********
```

For more information, see the /var/log/hpe\_wasl\_sms/wasl\_sms.log file.

2. If you have forgotten the master password, but a recovery password was configured during the setup, run the script /opt/hpe/wasl/sms/tools/wasl\_sms.sh -reset\_password to reset the master password.

# SMS fails to start with, Exception during certificates processing message

### Symptom

SMS fails to start with, Exception during certificates processing message.

### Cause

The certificate is used by SMS to start the WEB service and enable HTTPS connections. And this certificate might not be available.

### Action

To overcome this issue, set up the SMS certificates by running the command /opt/hpe/wasl/sms/ tools/wasl sms.sh -setup cert before starting SMS.

## SMS fails to start and the wasl sms.log file contains parameter in config.js set to an invalid value message

### Symptom

SMS fails to start and the wasl sms.log file contains parameter in config.js set to an invalid value message.

#### Cause

The errors usually occur if you try to override the SMS parameters like config.web.secure protocol, config.web.ciphers, and others with a wrong value.

#### Action

- The default setup parameter of WASL SMS is available in the /opt/hpe/wasl/sms/config/ default setupConfig.js file and works for most of the cases.
- These parameters can be overridden in /opt/hpe/wasl/sms/config/custom setupConfig.js custom setup configuration file before initiating the WASL SMS setup.
- Verify if you have overridden a parameter in the custom setup configuration file. Ensure that these values are correct.

### WASL SMS fails to start or fails during system reboot

### Symptom

WASL SMS fails to start when you start it using the start command service hpe-wasl-sms start or it fails during system reboot.

### Solution 1

### Cause

The start command requires the stash file to be available at /opt/hpe/wasl/sms/data/stashfile. The file must be owned by waslsms user group. This file will not be created, if you have chosen not to do so during WASL SMS setup.

### Action

1. To create the file, run the command /opt/hpe/wasl/sms/tools/wasl sms.sh create stash file

This command requires you to enter the master password, to store this password in the stashfile.

2. To reset the master password, run the /opt/hpe/wasl/sms/tools/wasl sms.sh reset password command.

You must have the old master password or the recovery password, to be able to reset the master password.

#### Solution 2

### Action

Usually no message is displayed on the console when WASL SMS is started using "service hpe-wasl-sms start" command. Most of these messages get redirected to following files:

- /var/log/hpe wasl sms/wasl sms daemon.log
- /var/log/hpe wasl sms/wasl sms.log
- /var/log/boot.msg
- 1. Review the contents of the log files and troubleshoot the issue based on the other troubleshooting tips of this section.

## SMS fails to start with Couchbase Server is not running message

### **Symptom**

SMS fails to start with Couchbase Server is not running message.

### **Action**

- 1. Run the service couchbase-server status command to check if couchbase-server service is up and running.
- 2. If the service is not running, start the service by running the service couchbase-server start command.
- 3. Start WASL SMS after starting the couchbase-server service successfully.

### SMS fails to start, with Couchbase Server bucket 'wasl sms bucket' is not accessible at cluster URL <cluster-url> message

### **Symptom**

SMS fails to start, with Couchbase Server bucket 'wasl sms bucket' is not accessible at cluster URL <cluster-url> message.

### Cause

- · The couchbase-server service might not be running or
- The Couchbase Server might not be listening to the configured port number

### Action

- 1. To check if couchbase-server service is up and running, run the service couchbase-server status command.
- 2. If the service is running, run the command netstat -an | grep <configured-port-number> to check if the Couchbase Server is listening to the port number in the configuration parameter config.db.cluster url in either /opt/hpe/wasl/sms/config/auto-gen/ setup config.js or /opt/hpe/wasl/sms/config/custom config.js files.
- 3. If the Couchbase Server is not listening to the configured port number, find the port number to which Couchbase Server is listening to.
- 4. Configure that port number to which the Couchbase Server is listening to in the configuration parameter config.db.cluster url in custom config.js file.

### WASL SMS runs for some time and then stops.

### **Symptom**

WASL SMS runs for some time and then stops.

### Cause

The couchbase-server service might have stopped running.

### Action

- 1. Run the command service couchbase-server status to verify if the couchbase-server service is up and running.
- 2. If the service is not running, start the service by running the command service couchbaseserver start.
- 3. Start WASL SMS, after starting the couchbase-server service successfully.

### SMS fails to stop

### **Symptom**

SMS sometimes fails to stop.

### Cause

When SMS has been started using the systemct1 start command, stopping the process using the wasl sms.sh script might fail.

#### Action

It is recommended that you use either systematl or the wasl sms.sh script exclusively for both starting and stopping SMS.

# Troubleshooting SMS password reset

You can run the command <code>/opt/hpe/wasl/sms/tools/wasl\_sms.sh -reset\_password</code> to reset the SMS password. You will need either the master password or recovery password to reset any password. If the stash file <code>(/opt/hpe/wasl/sms/data/stashfile)</code> is configured during WASL SMS setup, then the master password in this file will be used.

Following passwords can be reset using the command /opt/hpe/wasl/sms/tools/wasl\_sms.sh - reset password:

- · Master password
- Recovery Password
- Couchbase cluster password
- · Couchbase bucket password

For any password reset operation, the Couchbase Server must be running. It should allow the connections to happen even if some of the data (like keys) will be encrypted using old password and stored on the Couchbase Server. This data must be decrypted and encrypted using new key.

The reset password also uses algorithms to perform encryption and hashing of keys with the new password. If any custom changes are done to the algorithm by changing the configuration files, <code>/opt/hpe/wasl/sms/config/custom\_config.js</code> or <code>/opt/hpe/wasl/sms/config/custom\_setupConfig.js</code>, then you must ensure that these changes are correct. Ensure that <code>config.sym.alg</code>, <code>config.sym.pbkdf</code>, <code>setupConfig.rsa.keysize</code>, <code>setupConfig.rsa.key</code> enc alg parameters are set to correct values.

# The password reset process does not terminate when you press ctrl-c

### **Symptom**

The password reset process does not terminate when you press ctrl-c at the password prompts.

### **Action**

It is recommended that you complete the password reset operation after it is initiated. Terminating the program might take the SMS data to an inconsistent state.

1. However, if you still want to terminate the process, log into a separate terminal and kill the process/sub process running the wasl sms.sh -reset password command.

# Reset password fails with ERROR: command: cluster-edit, ERROR: command: bucket-edit, Or ERROR: unable to bucket-edit messages

### **Symptom**

Reset password fails with one of the error messages:

```
• ERROR: command: cluster-edit
```

- ERROR: command: bucket-edit or
- ERROR: unable to bucket-edit

### Cause

This error might occur if the Couchbase Server is not up and running.

- 1. To check if couchbase-server service is up and running, run the service couchbase-server status command.
- 2. If the service is running, run the command netstat -an | grep <configured-port-number> to check if the Couchbase Server is listening to the port number in the configuration parameter config.db.cluster url in either /opt/hpe/wasl/sms/config/auto-gen/ setup config.js or /opt/hpe/wasl/sms/config/custom config.js files.
- 3. If the Couchbase Server is not listening to the configured port number, find the port number to which Couchbase Server is listening to.
- 4. Configure that port number to which the Couchbase Server is listening to in the configuration parameter config.db.cluster url in custom config.js file.

# Troubleshooting connection issues connecting WASL SMS through a browser

### Unable to connect to WASL SMS from browser

### **Symptom**

Unable to connect to WASL SMS from browser.

### Cause

There can be multiple reasons for not connecting to WASL SMS from a browser.

### **Action**

- 1. Check if the WASL SMS is up and running properly.
  Run ps -ef | grep -i wasl command on the SMS node and check if /opt/hpe/wasl/nodejs/usr/bin/node /opt/hpe/wasl/sms/server/server.js process is running.
- 2. If SMS is not up, start it.
- 3. Check if the port used by WASL SMS is not used by other application.

  Run netstat -anp | grep -I <port\_number> to identify the program that is listening on the SMS port. Ensure that this program is the /opt/hpe/wasl/nodejs/usr/bin/node program.
- **4.** Check if the Port number and the IP address on which WASL SMS is listening is not blocked by any firewall.

### Connection from a browser is not established with ERR\_SSL\_VERSION\_OR\_CIPHER\_MISMATCH error in the browser

### **Symptom**

Connection from a browser is not established with <code>ERR\_SSL\_VERSION\_OR\_CIPHER\_MISMATCH</code> error in the browser.

### Cause

SMS uses TLS 1.2 protocol and secure ciphers by default for SSL HTTPS connection handshake. In case the browser does not support the SSL protocol version or the ciphers, the connection with SMS fails. Enable other SSL protocol version and ciphers in SMS.

- Override the default config.web.ciphers=<valid-cipher> and config.web.secure\_protocol=<valid-protocols> in /opt/hpe/was1/sms/config/ custom config.js file.
- 2. Restart WASL SMS to change the SSL protocol and ciphers.

### Browser pages stalls with HPE Workload Aware Security for Linux is almost ready... message

### **Symptom**

Browser pages stalls with HPE Workload Aware Security for Linux is almost ready... message. This message usually appears after clicking the Restart button from the SMS Settings menu.

### Cause

The browser stalls due to caching issues.

#### Action

- 1. Click the User icon on the browser to logout of SMS.
- 2. Log in into SMS again to display the SMS pages properly.

### Browser shows that the SMS certificate has expired

### Symptom

Browser shows that the SMS certificate has expired.

- 1. Check the certificate that is provided on the browser.
- 2. If the certificate has expired, check the Date/time on the SMS node (use the date command) and set it correctly.
- 3. Check the Date/time on the system from which you are browsing to SMS node and set it correctly if it is not correct.
- 4. If the issue persists, either regenerate the SMS certificate or import a new signed certificate to SMS using /opt/hpe/wasl/sms/tools/wasl sms.sh -setup cert command.

# Troubleshooting Workload Management and Operation

# Workload registration, editing, or operation displays Failed to connect to the node message

### **Symptom**

Workload registration, editing, or operation fails with Failed to connect to the node message.

### Cause

This problem occurs if SMS is unable to SSH to the node with the credentials provided.

### **Action**

- 1. Ensure that the SSH daemon service is running on the node and the service is reachable from the SMS node.
- 2. Also ensure the user name and password provided during workload registration is correct.
- 3. If the credentials are different, edit the workload and provide the correct username and passwords.

# Workload registration, editing, and deploying a policy displays Failed to perform the operation on the remote node message

### **Symptom**

Workload registration, editing, and deploying a policy displays Failed to perform the operation on the remote node message. Status indicates that the problem exists while creating a directory or changing to specific directory.

### **Action**

Check if the user provided in the <code>Host Username</code> during workload registration has a proper home directory. And if appropriate write permission is assigned to this directory.

# SAP HANA workload registration/editing displays SAP HANA python client not found message.

### **Symptom**

SAP HANA workload registration/editing displays SAP HANA python client not found message.

### Cause

WASL SAP HANA packages uses SAP HANA client, HDB\_CLIENT provided with SAP HANA database to connect to SAP HANA database. This problem can arise if the HDB\_CLIENT package is not installed.

#### Action

- 1. Verify if the Python PyDBAPI file /usr/sap/hdbclient/hdbcli/dbapi.py is available to confirm if SAP HANA Client - HDB CLIENT is installed on the SAP HANA node.
- 2. Install this package if it is not available...
- 3. Alternatively, WASL can also use the SAP HANA's <SID>adm OS user account (<SID> is the system identifier of SAP HANA), which does not require SAP HANA Client - HDB CLIENT to be installed. For more information, see the "Add or Register Workload" section in the WASL User Guide.

## Operations on SAP HANA (workload registration and editing) displays SAP HANA DB User does not have privileges message

### Symptom

Operations on SAP HANA (workload registration and editing) display SAP HANA DB User does not have privileges message.

### Action

- 1. Check the privileges of the SAP HANA DB Username that is provided to the SAP HANA workload element.
- 2. Ensure that this user has the correct privileges on the SAP HANA systems. For more information about the required privileges, see Add or Register Workload section in the WASL User Guide.

### SAP HANA workload registration/editing/operation displays Could not connect to SAP HANA DATABASE. SSL key store cannot be found message

### **Symptom**

SAP HANA workload registration/editing/operation displays Could not connect to SAP HANA DATABASE. SSL key store cannot be found message.

### Cause

SAP HANA can mandate SSL only connections to its database by using the sslenforce parameter in its global.ini file. In such cases, WASL requires SSL certificates that are signed by the SAP HANA server certificates to connect to SAP HANA. This process is automatically done during the WASL HANA node installation.

The error message occurs if the certificates for WASL are not generated properly or it has expired.

### Action

- 1. You can regenerate the certificates again by editing the workload and selecting Install Packages option and save the workload from SMS.
- 2. Alternatively, you can run the /opt/hpe/wasl/core/bin/wasl-setup -waslhanauser cert gen --sidadm=<sid>adm command to set up the certificates on the end SAP HANA node. For more information, see the WASL Install and Setup Guide.

## SAP HANA workload registration/editing displays WASL library for HANA not found, please install the library message.

### **Symptom**

SAP HANA workload registration/editing displays WASL library for HANA not found, please install the library message.

### Cause

The WASL HANA node packages might not be installed.

#### Action

- 1. Check the license that you have obtained for using WASL. WASL HANA-related packages are shipped only with the advanced license.
- 2. Reinstall the WASL Node packages again with all the packages. For more information, see WASL Install and Setup Guide.

## Operations on SAP HANA (workload registration and editing) displays Could not connect to SAP HANA database message

### **Symptom**

Operations on SAP HANA (workload registration and editing) displays Could not connect to SAP HANA database message.

- 1. Verify the details provided while registering the SAP HANA workload element.
- 2. Verify if SAP HANA is running on the end node.

### SAP HANA workload registration/editing/operation displays Validate of SAP HANA hardening failed message

### Symptom

SAP HANA workload registration/editing/operation displays Validate of SAP HANA hardening failed message.

#### Action

View the log file /var/opt/hpe/wasl/core/log/hana/hanalog.txt on the end node to identify the issue.

## SAP HANA workload registration/editing displays SSL Certificate generation for user was lhanauser failed message.

### Symptom

SAP HANA workload registration/editing displays SSL Certificate generation for user washhanauser failed message. This message is displayed in the additional details section of the status.

### Action

1. Verify the System ID entered while registering the workload:

```
chown: invalid user: '<sid>adm'
 sudo: unknown user: <sid>adm
sudo: unable to initialize policy plugin
```

2. Correct the System ID and register or edit the workload again.

## Evaluation or remediation of workload displays Policy does not exist: <profile name> status

### **Symptom**

Evaluation or remediation of workload displays Policy does not exist: profile name> status.

### Cause

User might have deleted the policy files inadvertently on end node or changed the permissions of the policy directories.

#### Action

Undeploy the policy and redeploying it again.

### Workload registration, editing, or operation displays Failed to encrypt password message

### **Symptom**

Workload registration, editing, or operation displays Failed to encrypt password message.

### Cause

During workload registration, the passwords of the workload are encrypted before storing into the database. The error message occurs if any custom changes were made to the algorithm that is used to encrypt the passwords.

### **Action**

Check if config.sym.alg and config.sym.pbkdfg parameters are overridden in the custom configuration file: /opt/hpe/wasl/sms/config/custom config.js and if their values are correct.

### Workload operations displays error message and workload goes into an Unknown or Offline state

### Symptom

Workload operations display error message and workload goes into an Unknown or Offline state. You cannot perform any other operation except for Edit or Disable workload after the error occurs.

#### Cause

Workload can go into **Unknown** or **Offline** state for various reasons, such as.

The end node going down or losing the connection to the end node while the operation is in progress.

### Action

After end node is active and reachable to the SMS system, edit the workload containing this node and save the workload. Editing the workload enables all the operations such as Evaluate, Remediate, Rollback, Reset, and others on the workload again.

## Workload Operation displays Lock request timed out. Another instance of WASL seems to be running message.

### **Symptom**

Workload Operation displays Lock request timed out. Another instance of WASL seems to be running message.

#### Cause

This issue occurs rarely and happens on the workload where many policies are deployed. All these policies are either evaluated or remediated in one go. Some of the workload operation might time out.

WASL ensures that only one of the WASL operations is in progress on a Node at a time. The rest of the operations are made to wait. The other operations wait until the specific WASL operation completes running or the timeout value is reached. The timeout is set through the parameter HARDENING LOCK TIMEOUT on the end Node. The value of the HARDENING LOCK TIMEOUT parameter is set to 3600 seconds (20 minutes) by default in the /opt/hpe/wasl/core/config/ default config.py file on end Node.

### Action

You can override this value by setting the HARDENING LOCK TIMEOUT =<new timeout in seconds> in /opt/hpe/wasl/core/config/user config.py file on the end node to avoid the error.

### How to the enable debug option on the end node

### **Symptom**

Enabling the debug option on end node.

### Action

Edit the /opt/hpe/wasl/core/config/user config.py file and set the log level to DEBUG option, to enable debugging on end node.

You can find the log in subdirectories of /var/opt/hpe/wasl/core/log/.

### SAP HANA workload evaluation or remediation failed after OS security policy remediation

### **Symptom**

SAP HANA workload evaluation or remediation failed after OS security policy remediation with "Failed to connect to the node, ensure that user credentials are correct. Please retry the operation and if the problem persists, contact the WASL Administrator." message.

#### Cause

According to Center for Internet Security (CIS) policy, the UNIX user's account password expires after 90 days and the account gets locked. Consequently, the Host Username details used while registering the SAP HANA workload also gets expired.

- 1. SSH login to the target node and change the user password.
- **2.** Log in to HPE WASL Security Management Station.
- 3. Click Workloads and click the required workload.
- 4. Click Edit and click the pencil icon to change the workload.

- **5.** Type the new **Host Password** for the workload.
- 6. Click **OK** and **Save** the workload.

### Workload evaluation or remediation fails

### **Symptom**

Workload evaluation or remediation fails with "sudo: no tty present and no askpass program specified" message.

### Cause

When the same workload is registered with multiple user details, the system overwrites the previous content of /etc/sudoers.d/waslcore\_install file.

### **Action**

Hewlett Packard Enterprise does not recommend to register the same workload with different users.

- 1. Log in to HPE WASL Security Management Station.
- 2. Click Workloads and click the required workload.
- 3. Click Edit and click the pencil icon to change the workload.
- 4. Type the Host Username and Host Password for the workload.
- 5. Click **OK** and **Save** the workload.

# **Troubleshooting User Management**

### Unable to delete users from SMS

### **Symptom**

Unable to delete users from SMS.

### Cause

SMS does not allow users who have already logged in or whose passwords have been reset, from being deleted. You cannot delete users for auditing purposes, so that all the activities done by this user can be mapped back.

### **Action**

If required, you can de-activate a user from SMS.

# **Troubleshooting Policy Management**

### Import or copy of policy fails

### **Symptom**

Import or copy of policy fails.

#### Action

- If you are importing a policy, check if the policy is having the correct format and size as requested in the policy import screen.
- The names of archived directory, XCCDF file, JSON file, and the resultant archive file must be the same.
- The naming conventions of the profiles inside the XCCDF file must comply with xccdf\_[^\_] +profile.+ syntax as per XCCDF 1.2 Specification.
- JSON file must follow the guidelines mentioned in the documentation.
- The size of the upload file must be less than 100MB and must be a .TAR.GZ or .ZIP file.
- For both importing and copying a policy, verify the disk space on the partition holding /var/opt/hpe directory on SMS node. Ensure that there is sufficient space left on this partition.
- If you are importing a policy, ensure that the profiles inside the XCCDF file getting imported has unique title, not matching with any policies on SMS. The profile title is used to uniquely identify the policy in SMS.

### Policy reload fails

### Symptom

Policy reload fails.

### **Action**

- 1. Check the syntax of the tailoring XML file which you are trying to reload and correct any issues.
- 2. Also, check the ownership and permission of the tailoring file.

The tailoring XML file must be owned by waslsms user and group. The file must be writable/readable by owner and group user.

### Unable to delete a policy

### **Symptom**

Unable to delete a policy.

### Cause

- The default policies shipped with WASL cannot be deleted.
- The policies defined by user can be deleted before it is deployed on any workload.
- After the user-defined policy is deployed on any workload, then that policy cannot be deleted. It can only be disabled.
- · You are prevented from deleting the policies for auditing purposes.

### **Action**

Ensure that you are not deleting the default policies or the policies deployed on a workload.

# Troubleshooting **Activity** page

# Scrolling down the activity pages takes much time and usually shows an in progress icon for a long duration

### **Symptom**

Scrolling down the activity pages takes much time and usually shows an in progress icon for a long duration

### Cause

This issue can occur if a browser event to load more data was missed by the client.

- 1. You can try to scroll up and scroll down again in order to trigger this event again. In most cases, you should be able to see more activities getting loaded.
- 2. In case you are interested in activities for a specific duration, you can apply the **From Date** and **To Date** filter, to get the activities displayed quickly.
- 3. You can also apply other filters based on the requirement.

# **Troubleshooting Setting changes**

### Changes to Maximum Password Length does not impact the password length in current password and for new user.

### **Symptom**

Changes to the Maximum Password Length parameter do not impact the password length in current password and for new user.

### Cause

The modified Maximum Password Length does not impact for the current session.

### **Action**

Restart the Management Station to kick in the change.

# Troubleshooting SMS Virtual Appliance

### Unable to lock or unlock the root account

### Symptom

Unable to lock or unlock the root account for SMS virtual appliance.

### Cause

When /etc/passwd.lock file exists in the SMS virtual appliance, the operation (lock or unlock the root account) fails to execute.

### **Action**

- 1. Log in to the SMS virtual appliance using wasladmin account.
- 2. Run sudo /bin/rm -f /etc/passwd.lock command to remove the /etc/passwd.lock file.

### Unable to perform SMS operations after login

### Symptom

Unable to perform SMS operations after logging in through the browser.

### Cause

The /var partition is 100% used and the SMS fails to write the data to the disk.

### **Action**

- 1. Log in to the SMS virtual appliance using the root account.
- **2.** Extend the disk space for /var partition.

For more details, see the "Extending the disk partitions" section in *HPE WASL Install and Setup Guide*.

# Troubleshooting SMS migration

### Missing stash file

### **Symptom**

The stash file is missing after SMS has been migrated or restored.

### Cause

If during the backup or restore process, an incorrect master password or recovery password was provided, the stash file is deleted.

### **Action**

Copy and restore the stash file from a known location.

## Websites

**General websites** 

**Hewlett Packard Enterprise Information Library** 

www.hpe.com/info/EIL

Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix

www.hpe.com/storage/spock

Storage white papers and analyst reports

www.hpe.com/storage/whitepapers

For additional websites, see **Support and other resources**.

# Support and other resources

### Accessing Hewlett Packard Enterprise Support

For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:

### http://www.hpe.com/info/assistance

To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:

### http://www.hpe.com/support/hpesc

### Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- · Operating system name and version
- · Firmware version
- Error messages
- · Product-specific reports and logs
- Add-on products or components
- · Third-party products or components

### Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.
- To download product updates:

**Hewlett Packard Enterprise Support Center** 

www.hpe.com/support/hpesc

**Hewlett Packard Enterprise Support Center: Software downloads** 

www.hpe.com/support/downloads

**Software Depot** 

www.hpe.com/support/softwaredepot

To subscribe to eNewsletters and alerts:

### www.hpe.com/support/e-updates

To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center More Information on Access to Support Materials page:

www.hpe.com/support/AccessToSupportMaterials

**IMPORTANT:** Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

### **Customer self repair**

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

http://www.hpe.com/support/selfrepair

### Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

**Remote support and Proactive Care information** 

**HPE Get Connected** 

www.hpe.com/services/getconnected

**HPE Proactive Care services** 

www.hpe.com/services/proactivecare

**HPE Proactive Care service: Supported products list** 

www.hpe.com/services/proactivecaresupportedproducts

HPE Proactive Care advanced service: Supported products list

www.hpe.com/services/proactivecareadvancedsupportedproducts

**Proactive Care customer information** 

**Proactive Care central** 

www.hpe.com/services/proactivecarecentral

Proactive Care service activation

www.hpe.com/services/proactivecarecentralgetstarted

### Warranty information

To view the warranty information for your product, see the links provided below:

**HPE ProLiant and IA-32 Servers and Options** 

www.hpe.com/support/ProLiantServers-Warranties

**HPE Enterprise and Cloudline Servers** 

www.hpe.com/support/EnterpriseServers-Warranties

**HPE Storage Products** 

www.hpe.com/support/Storage-Warranties

**HPE Networking Products** 

www.hpe.com/support/Networking-Warranties

### **Regulatory information**

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

### www.hpe.com/support/Safety-Compliance-EnterpriseProducts

### Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

### www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

### www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

### www.hpe.com/info/environment

### **Documentation feedback**

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (docsfeedback@hpe.com). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.