

HP Storage Operations Manager

Software Version: 10.00

Windows® and Linux® operating systems

Reference Pages

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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.

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HP Storage Operations Manager CLI Reference Page

User Commands	Administrator Commands	File Formats
ovjbosspath ovjrepath ovstatus somdiscoveryconfigexportimport somwindowsAgentlessDiscovery somnodegroupsexportimport somstorage-tiersexportimport somproviderlist sompolicymappings somadddiscoveryrange somagentlesshostcreator somhostcontainerconfigexportimport somreleaseprovider somrollbackprovider somstaleelements somsetcmduserpw	ovaddobj ovdelobj ovjboss ovseerror ovspmd ovstart ovstop sombackupembdb somchangedbpw somchangeembdbpw somchangesyspw somofficialfqdn somresetembdb somsetofficialfqdn somrestoreembdb somdataexportconfig somdatatransfercertconfig somshrgrantcertrequest somlicensemanager ovc	customProperties

Name

ovjbosspath.ovpl — script to determine where jboss is installed

SYNOPSIS

ovjbosspath.ovpl

DESCRIPTION

ovjbosspath.ovpl is a command used by scripts to determine where jboss is used. jboss is the underlying application architecture used by ovjboss. Although ovjboss knows where jboss resides, jboss requires that certain program files (jar files) be located in underlying directories of jboss. Because other Java applications require access to these files, this provides a standard method for retrieving the base directory path.

ovjbosspath.ovpl is used to eliminate hard-coded paths in other applications.

Parameters

None.

EXAMPLES

On Windows with the installation in the directory C:\Program Files(x86)\HP OpenView, running C:\Program Files(x86)\HP OpenView\bin\ovjbosspath.ovpl returns the following:

```
C:/Program Files(x86)/HP OpenView/se
```

This enables other applications to find jar files that exist under this directory structure, such as the following:

```
C:/Program Files(x86)/HP OpenView/se/lib/nms-licensing-api.jar
```

AUTHOR

ovjbosspath.ovpl was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

ovjrepath.ovpl — script to determine the version of JDK to use

SYNOPSIS

ovjrepath.ovpl

DESCRIPTION

ovjrepath.ovpl is a command used by scripts to determine the version of the JDK to use. Given multiple products being installed on the system, there can be multiple JDK versions installed. These versions are not guaranteed to be compatible with NetHP Jupiter. This script encapsulates this problem by ensuring the correct JDK is being used.

NOTE: Jupiter replaces JDKs from time to time. This script enables other scripts to use the new JDK without being changed.

Parameters

None.

EXAMPLES

On Windows with the installation in the directory C:\Program Files\HP OpenView, running C:\Program Files\HP OpenView\bin\ovjrepath.ovpl returns the following:

```
C:/Program Files/HP OpenView/nonOV/jdk/b
```

This enables scripts that others are writing to use the correct JDK.

AUTHOR

ovjrepath.ovpl was developed by Hewlett-Packard Company.

FILES

```
$InstallDir/nonOV/jdk
```

Directory where JDKs are installed.

[Return to Reference Pages Index](#)

Name

ovstatus — report status of HP Storage Operations Manager managed processes

SYNOPSIS

```
ovstatus [ [-c] [-d] [-v] [managed_process_names...]]
```

DESCRIPTION

`ovstatus` reports the current status of the HP Storage Operations Manager managed processes. `ovstatus` sends a status request (`OVS_REQ_STATUS`) to the process management process (UNIX operating system) or service (Windows operating system), `ovspmd`. If called with one or more *managed_process_name* arguments, it reports the status for the designated managed processes. If called with no arguments, it reports the status of all managed processes that have been added to the HP Storage Operations Manager startup file (SUF), including `ovspmd` itself.

Unlike `ovstart`, `ovstatus` does *not* start `ovspmd` if it is not already running.

The managed processes are configured by `ovaddobj` from information in Local Registration Files (see `lrf(4)`). A managed process is named by the first field in the LRF describing it.

Parameters

`ovstatus` recognizes the option described below. The first argument that is not an option, and any succeeding arguments, are interpreted as names of managed processes for which to report status, and are passed to `ovspmd` in the status request.

-c

Output one status line for each managed process.

-d

Report the important stages in its processing, including contacting and sending the status request to `ovspmd`, and closing the communication channel.

-v

Print verbose messages from managed processes. In particular, this option displays the verbose message from `ovuispmd` describing all current `ovw` sessions.

RETURN VALUE

`ovstatus` normally exits with the status 0 (zero). It returns a non-zero status only if there is a system problem, such as `ovspmd` not running.

DIAGNOSTICS

`ovstatus` reports certain command-line errors (in particular, too many arguments) and system errors. The messages are prefixed with `ovstatus:`, and are intended to be self-explanatory. `ovstatus` also outputs error messages received from `ovspmd`. These messages are prefixed with `ovspmd:`. `ovstatus` ignores unrecognized options.

`ovstatus` reports the known state of all `OVS_WELL_BEHAVED` and `OVS_NON_WELL_BEHAVED` processes. `OVS_DAEMON` processes run outside of `ovspmd` control. They report a PID, a state of `unknown`, and a final message of `Does not communicate with ovspmd`, as `ovspmd` cannot track these processes.

Note that `ovspmd` can process multiple requests (`ovstart`, `ovstop`, or `ovstatus`) at a time. If any of these commands is being handled, the new request will be queued by type until the previous command has completed.

AUTHOR

`ovstatus` was developed by the Hewlett-Packard Company.

FILES

The environment variables below represent universal pathnames that are established according to your shell and platform requirements. See the `nm.envvars` reference page (or the UNIX manpage) for information about using environment variables for the following files:

Windows: `%HPSOM_BIN%\ovstatus`

Windows: `%HPSOM_BIN%\ovspmd`

UNIX: `$HPSOM_BIN/ovstatus`

UNIX: `$HPSOM_BIN/ovspmd`

EXTERNAL INFLUENCES

Environmental Variables

`$LANG` provides a default value if the internationalization variables, `LC_ALL`, `LC_CTYPE`, and `LC_MESSAGES` are unset, null, or invalid.

If `$LANG` is unset, null, or invalid, the default value of `C` (or `English_UnitedStates.1252` on Windows) is used.

`LC_ALL` (or `$LANG`) determines the locale of all other processes started by `ovspmd`.

`LC_CTYPE` determines the interpretation of text as single and/or multi-byte characters, the classification of

characters as printable, and the characters matched by character class expressions in regular expressions.

`LC_MESSAGES` determines the language in which messages are displayed.

SEE ALSO

[ovstart](#), [ovstop](#), [ovaddobj](#), [ovdelobj](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

somdiscoveryconfigexportimport — Export and import of configuration

SYNOPSIS

```
somdiscoveryconfigexportimport.ovpl
```

DESCRIPTION

Information that is used to discover storage elements and nodes in a network can be reused for another storage network without having to manually enter the information. The network administrator can either import the pre-configured discovery settings to configure a new setup or import the discovery configuration settings from an XML file that is populated offline. The Discovery settings in the Configuration workspace enables you to specify the IP addresses and user credentials to be used while discovering storage elements and nodes in the network. These settings can be imported as an XML file from an existing setup to override the current configuration settings. The passwords are exported as encrypted strings within the XML file. You can use the command line interface tool to run the import command.

1. Log on to the HP Storage Operations Manager management server as root or administrator.
2. Go to the following directory:

On Windows: `HPSOM_InstallDir\bin`
On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows: `somdiscoveryconfigexportimport.ovpl -import C:\DiscoverySettings.xml`
On Linux: `./somdiscoveryconfigexportimport.ovpl -import /tmp/DiscoverySettings.xml`

where `C:\DiscoverySettings.xml` is the complete path of the XML file that is imported.

The import tool displays the following warning message: "By Importing this Discovery Settings file, you will lose all existing Discovery Configuration and settings. To save existing data, type 'no' and press enter to cancel this import. Use '-export' flag to save existing configurations. If you are sure, type 'yes' and press enter to proceed."

4. Enter Yes to import.

The import tool displays the following message after importing the settings: "Discovery IP Address Import Results: Total number of records found:xxx Imported yyy records successfully Import of zzz records failed"

Note: If incorrect IP addresses are found in the XML file are ignored by the import tool. Details of the IP addresses that are not imported can be found in the log file. The import continues for the remaining IP addresses.

You can also import an XML settings file with clear text passwords. To do this, the "ENCRYPTED" attribute in the `XML_Element_Config_Discovery_IP_Address` tag should be false.

When you make changes to the XML manually, ensure that special characters in the comments fields must be replaced with their string equivalents. Below is the conversion list:

Use "<" instead of "<"

Use "&" in place of "&"

Use """ in place of ""

Use ">" in place of ">"

Use ">" in place of ">"

Note that only a maximum of 253 characters are allowed for the comments. Any text beyond 253 characters will be trimmed off.

Parameters

`somdiscoveryconfigexportimport` recognizes the following options. Any unrecognized options are reported by a usage message.

`-export filePath`

Exports the discovery configurations to the given file

`-import filePath`

Imports the discovery configurations from the given file

`-filepassword password`

Password for the file

Attributes

The attributes of the `XML_Element_Config_Discovery_IP_Address` XML tag are listed below.

`ip`

IP address of the element or node to be discovered.

`USER`

User name entered in the Discovery Credentials page.

`COMMENT`

Comment entered in the Discovery IP Addresses page.

`PASSWD`

Encrypted password for the user credential entered in the Discovery Credentials page.

DC_NAME

Name of the user credential entered in the Discovery Credentials page and used to discover the IP address.

ENCRYPTED

Specifies whether the password is encrypted. This is true for an exported XML file. This is false if the XML file is manually coded and the user enters a clear text password.

TENANT_NAME

Name of the Tenant that is associated with the IP address. If this value is blank, the default Tenant is associated. If the Tenant that is specified does not exist, a new Tenant is created and associated with the IP address.

SG_NAME

Name of the Security Group that is associated with the Tenant. If this value is blank, the default Security Group is associated. If the Security Group that is specified does not exist, a new Security Group is created and associated with the Tenant.

AUTHOR

somdiscoveryconfigexportimport was developed by Hewlett-Packard Company.

SEE ALSO

[Return to Reference Pages Index](#)

Name

somwindowsAgentlessDiscovery — Windows Agentless Discovery Configuration

SYNOPSIS

somwindowsAgentlessDiscovery.ovpl

DESCRIPTION

Discovery using Windows Agentless Configuration requires WMI to be enabled on the Windows Nodes. somwindowsAgentlessDiscovery.ovpl script allows the user auto configure the WMI on Windows Nodes so that Windows Node discovery can be performed. This script is valid for execution on Windows Platform.

1. Log on to the Jupitermanagement server as administrator.
2. Go to the following directory:

On Windows: SEi_InstallDir\bin

3. Run the following command:

On Windows: somwindowsAgentlessDiscovery.ovpl -i

Parameters

somwindowsAgentlessDiscovery recognizes the following options. Any unrecognised options are reported by a usage message.

-i

Enable WMI on Windows Host and queue the host for auto discovery.

AUTHOR

somwindowsAgentlessDiscovery was developed by Hewlett-Packard Company.

SEE ALSO

[Return to Reference Pages Index](#)

Name

somnodegroupsconfigexportimport — Export and import of configurations

SYNOPSIS

somnodegroupsconfigexportimport.ovpl

DESCRIPTION

This utility can be used to export/import the node groups configurations from one HP Storage Operations Manager server to another HP Storage Operations Manager server OR from a SE classic server to a HP Storage Operations Manager server. If you are importing node groups configuration in a HP Storage Operations Manager server, prior to the import, you must perform the discovery and data collection for all the elements which were present in the server from where the node groups configurations were exported.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows:

To export node groups configuration :

```
somnodegroupsconfigexportimport.ovpl -export C:\temp\NodeGroupsSettings.xml
```

To import node groups configuration :

```
somnodegroupsconfigexportimport.ovpl -import C:\temp\NodeGroupsSettings.xml
```

Where, `C:\temp\NodeGroupsSettings.xml` is the complete path of the XML file that is being used for node groups configuration import/export.

On Linux:

To export node groups configuration :

```
./somnodegroupsconfigexportimport.ovpl -export /tmp/NodeGroupsSettings.xml
```

To import node groups configuration :

```
./somnodegroupsconfigexportimport.ovpl -import /tmp/NodeGroupsSettings.xml
```

Where, `/tmp/NodeGroupsSettings.xml` is the complete path of the XML file that is being used for node groups configuration import/export.

If you are importing node groups configurations, the import tool displays the following warning message:

By Importing this Node Groups file, you will lose all existing Node Group Configurations. To save existing data, type 'no' and press enter to cancel this import. Use '-export' flag to save existing configurations. If you are sure, type 'yes' and press enter to proceed.

If you are exporting the node groups configurations, the export tool doesn't ask for any information and displays the following message after the export is done.

Exported {number_of_nodegroups} node groups successfully Successfully exported the node groups settings to {complete_file_path}

4. Enter 'yes' to import.

The import tool displays the following message after importing the settings:

Total number of node groups found: {number_of_nodegroups} Imported {number_of_nodegroups} node groups successfully

Note: If some of the elements which are associated with the node groups are not discovered on a given server where node groups import is being done, the import utility will display a warning message stating, "IMPORTANT : Not able to find element by cim path:{cim_instance_path}. Skipping the element and continuing with finding the next element". This means the element is not discovered on the target server, but the node group will be imported and the highlighted element will not be added to the node group.

Parameters

`somnodegroupsconfigexportimport` recognizes the following options. Any unrecognised options are reported by a usage message.

`-export filePath`

Exports the node groups configurations to the given file

`-import filePath`

Imports the node groups configurations from the given file

AUTHOR

`somnodegroupsconfigexportimport` was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somstoragetiersconfigexportimport — Export and import of configurations

SYNOPSIS

somstoragetiersconfigexportimport.ovpl

DESCRIPTION

This utility can be used to export/import the storage tiers configurations from one HP Storage Operations Manager server to another HP Storage Operations Manager server OR from a SE classic server to a HP Storage Operations Manager server. If you are importing storage tiers configuration in a HP Storage Operations Manager server, prior to the import, you must perform the discovery and data collection for all the elements which were present in the server from where the storage tiers configurations were exported.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows:

To export storage tiers configuration :

```
somstoragetiersconfigexportimport.ovpl -export C:\temp\StorageTiersSettings.xml
```

To import storage tiers configuration :

```
somstoragetiersconfigexportimport.ovpl -import C:\temp\StorageTiersSettings.xml
```

Where, `C:\temp\StorageTiersSettings.xml` is the complete path of the XML file that is being used for storage tiers configuration import/export.

On Linux:

To export storage tiers configuration :

```
./somstoragetiersconfigexportimport.ovpl -export /tmp/StorageTiersSettings.xml
```

To import storage tiers configuration :

```
./somstoragetiersconfigexportimport.ovpl -import /tmp/StorageTiersSettings.xml
```

Where, `/tmp/StorageTiersSettings.xml` is the complete path of the XML file that is being used for storage tiers configuration import/export.

If you are importing storage tiers configurations, the import tool displays the following warning message:

By Importing this storage tiers file, you will lose all existing Node Group Configurations. To save existing data, type 'no' and press enter to cancel this import. Use '-export' flag to save existing configurations. If you are sure, type 'yes' and press enter to proceed.

If you are exporting the storage tiers configurations, the export tool doesn't ask for any information and displays the following message after the export is done.

Exported {number_of_storagetiers} storage tiers successfully Successfully exported the storage tiers settings to {complete_file_path}

4. Enter 'yes' to import.

The import tool displays the following message after importing the settings:

Total number of storage tiers found: {number_of_storagetiers} Imported {number_of_storagetiers} storage tiers successfully

Note: If some of the elements which are associated with the storage tiers are not discovered on a given server where storage tiers import is being done, the import utility will display a warning message stating, "IMPORTANT : Not able to find element by cim path:{cim_instance_path}. Skipping the element and continuing with finding the next element". This means the element is not discovered on the target server, but the node group will be imported and the highlighted element will not be added to the node group.

Parameters

`somstoragetiersconfigexportimport` recognizes the following options. Any unrecognised options are reported by a usage message.

`-export filePath`

Exports the storage tiers configurations to the given file

`-import filePath`

Imports the storage tiers configurations from the given file

AUTHOR

`somstoragetiersconfigexportimport` was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somproviderlist — Lists all providers in the SOM system

SYNOPSIS

```
somproviderlist.ovpl
```

DESCRIPTION

This utility is used to list all the providers in the system.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows:

To list all the providers in the system :

```
somproviderlist.ovpl -all
```

To list all active providers in the system :

```
somproviderlist.ovpl -active
```

On Linux:

To list all inactive providers in the system :

```
somproviderlist.ovpl -inact
```

If you are running the command `somproviderlist.ovpl -all`, it will list all the providers on the system in the screen.

Parameters

`somproviderlist` recognizes the following options. Any unrecognised options are reported by a usage message.

`-all`

Lists both the active and inactive providers in the system

-active

Lists all the active providers in the system

-inact

Lists all the inactive providers in the system

AUTHOR

somproviderlist was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

sompolicymappings — This displays all the policymappings to the element and the next schedule time for the elements

SYNOPSIS

```
sompolicymappings.ovpl
```

DESCRIPTION

This CLI displays the policy mappings to the element and the next schedule time for the elements. A CSV file is generated with the details of element, the policy it belongs to and the next schedule.

1. Log on to the HP Storage Operations Manager management server as root or administrator.
2. Go to the following directory:

On Windows: HPSOM_InstallDir\bin
On Linux: /opt/OV/bin

3. Run the following command:

On Windows: sompolicymappings.ovpl -all
On Linux: ./sompolicymappings.ovpl -all

Parameters

sompolicymappings recognizes the following options. Any unrecognised options are reported by a usage message.

-all

Prints the policy mapping details to a CSV file

AUTHOR

sompolicymappings was developed by Hewlett-Packard Company.

SEE ALSO

[Return to Reference Pages Index](#)

Name

somadddiscoveryrange — Script to discover elements based on IP address or IP range.

SYNOPSIS

somadddiscoveryrange.ovpl

DESCRIPTION

This script is used to discover elements based on IP address, IP addresses contained in a file or based on range of IP addresses provided as lower limit and higher limit.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows and Linux:

To discover based on IP address

```
somadddiscoveryrange.ovpl -i < IP Address > -n < Name > -U < IP Username > -P  
< IP Password >
```

To discover based on IP range

```
somadddiscoveryrange.ovpl -l < lower IP Address > -m < higher IP Address > -n <  
Name > -U < IP Range Username > -P < IP Range Password >
```

To discover based on IP range file

```
somadddiscoveryrange.ovpl -f < IP Range File >
```

To disable data export for Inventory data:

```
somdataexportconfig.ovpl -disable -dataset Inventory
```

To enable data export for Statistics data:

```
somdataexportconfig.ovpl -enable -dataset Statistics
```

To disable data export for Statistics data:

```
somdataexportconfig.ovpl -disable -dataset Statistics
```

To list the current configuration:

somdataexportconfig.ovpl -listconfig

While enabling or disabling data export the tool displays a warning message (the message while enabling data export for ALL data would be like the following message):

WARNING: This would enable data export for dataset 'ALL'.

Is it OK to continue? [n]

Enter 'y' to enable.

The data export configuration tool displays the following message after enabling the data export:

Enabling data export for dataset 'ALL'

If you are listing the current configuration the export tool does not ask for any information and displays the following message (This is for the case when the data export is enabled for ALL. This message would change as per the current configuration).

Remote Server : ALL

Inventory Export : ENABLED

Statistics Export : ENABLED

Parameters

somdataexportconfig recognizes the following options. Any unrecognised options are reported by a usage message.

-silent

Enables or Disables the data export without prompting the user for confirmation.

-enable

Enables the data export for the specified data set or for ALL if the data set is not specified.

-disable

Disables the data export for the specified data set or for ALL if the data set is not specified.

-dataset

Specifies the data set for which the data export has to be enabled or disabled. It can be either ALL or Inventory or Statistics. The default value is ALL.

-listconfig

Lists the current data export configuration.

AUTHOR

somdataexportconfig was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somagentlesshostcreator — To create a host by providing a list of WWNs to add or a list of WWNs to delete.

SYNOPSIS

```
somagentlesshostcreator.ovpl [-hostName <host_Name>] [-addPortWWNs <WWNs to be added>] [-deletePortWWNs <WWNs to be deleted>] [-dns <Host DNS Name>] [-ip <Host IP Address>] [-os <Host OS>] [-version <Host OS Version>] [-csvFile <CSVFile Path>] [-xmlFile <XML File Path>]
```

DESCRIPTION

There are WWNs that are connected to the switch ports collected by SOM, and not associated with any host or storage ports that have been collected so far. The user can group these WWNs and associate them with a new or already created host. This script is used to create the host by providing a hostname, a list of WWNs to add and a list of WWNs to delete.

1. Log on to the HP Storage Operations Manager management server as root or administrator.
2. Go to the following directory:

On Windows: HPSOM_InstallDir\bin

On Linux: /opt/OV/bin

3. Run the following command:

```
On Windows and Linux : somagentlesshostcreator.ovpl -hostName host_name -addPortWWNs 210000e08b116a0f,200200051e031405 -deletePortWWNs 210000e08b1b74e9
```

where host_name is the new host name 210000e08b116a0f,200200051e031405 are the WWNs which are to be added to the host 210000e08b1b74e9 is the WWNs which is to be deleted from the host

Parameters

somagentlesshostcreator recognizes the following options. Any unrecognized options are reported by a usage message.

-hostName *host Name*

Host Name provided by user

-addPortWWNs *comman separated WWNs*

These WWNs are added to the host

-deletePortWWNs*comman separated WWNs*

These WWNs which are to be deleted from the host

-dnsHost DNS Name

Host DNS Name

-ipHost IP Address

This specifies the IP address of the host

-osHost OS

This specifies the OS of the host

-versionHost Version

This specifies the version of the host

-csvFilefilePath

The CSV file will be used to create hosts. If provided, other parameters will be ignored

-xmlFilefilePath

The xml file will be used to create hosts. If provided, other parameters will be ignored

EXAMPLES

Using manual WWNs to add or delete. Here either of addPortWWNs or deletePortWWNs has to be provided

```
somagentlesshostcreator.ovpl -hostName host_name -addPortWWNs  
210000e08b116a0f,200200051e031405 -deletePortWWNs 210000e08b1b74e9
```

You will see following messages

```
Successfully created the host:hostname if the host did not exist earlier
```

```
Successfully edited the host:hostname if the host existed earlier
```

Providing the parameters in CSV file

```
somagentlesshostcreator.ovpl -csvFile C:\CSV_File.csv
```

You will see following messages

```
Successfully created the host:hostName1
```

Providing the parameters in XML file

```
somagentlesshostcreator.ovpl -xmlFile C:\XML_File.csv
```

You will see following messages

```
Successfully created the host:host1
```

AUTHOR

somagentlesshostcreator was developed by Hewlett-Packard Company.

SEE ALSO

[Return to Reference Pages Index](#)

Name

somhostcontainerconfigexportimport — Script to import or export hosts contained in a host container.

SYNOPSIS

```
somhostcontainerconfigexportimport.ovpl
```

DESCRIPTION

This script can be used to import or export hosts configuration from or to a host container in Storage Operations Manager.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: HPSOM_INSTALL_DIR\bin

On Linux: /opt/OV/bin

3. Run the following command:

On Windows and Linux:

To export the hosts configuration

```
somhostcontainerconfigexportimport.ovpl -export < complete path to file >
```

To import the hosts configuration

```
somhostcontainerconfigexportimport.ovpl -import < complete path to file >
```

Parameters

somhostcontainerconfigexportimport recognizes the following options. Any unrecognised options are reported by a usage message.

-exportfilePath

Export the hosts configuration to the given file.

-importfilePath

Imports the hosts configuration from the given file.

AUTHOR

sohostcontainerconfigexportimport was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somreleaseprovider — Configuration utility to release an off cycle device bundle (provider).

SYNOPSIS

```
somreleaseprovider.ovpl
```

DESCRIPTION

This utility is used to do an off cycle release of a device bundle (provider) . The command runs on a zip file which contains the metadata about the device bundle to be deployed . The SOM server needs to be restarted for the changes to take effect.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows and Linux:

To deploy the provider:

```
somreleaseprovider.ovpl -f {zip_file_with_full_path}
```

After the command is run and the provider is deployed successfully, it will automatically ask for user confirmation for restarting the server as shown below:

```
Server must be restarted in order for the changes to take effect. If you do not wish to restart the server now, type 'no' and press enter else type 'yes' and press enter to proceed.Enter your option  
- yes
```

The server will be restarted after this and the changes will take effect.

Parameters

`somreleaseprovider` recognizes the following options. Any unrecognised options are reported by a usage message.

```
-f zipfilePath
```

Reads the metadata for the device bundle from the given zip file.

AUTHOR

somreleaseprovider was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somrollbackprovider — To rollback the release an off cycle device bundle (provider).

SYNOPSIS

somrollbackprovider.ovpl

DESCRIPTION

This utility is used to roll back the off cycle device bundle (provider) already deployed. The SOM server needs to be restarted for the changes to take effect.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows and Linux:

To see information regarding rollback of the provider:

```
somrollbackprovider.ovpl -name {bundle_name}
```

where {bundle_name} is the name of the bundle for which rollback information is to be displayed.

To perform rollback of the provider :

```
somrollbackprovider.ovpl -name {bundle_name} -rollback
```

where {bundle_name} is the name of the bundle to rollback.

To perform rollback of the provider to the factory version:

```
somrollbackprovider.ovpl -name {bundle_name} -rollbacktoFactory
```

where {bundle_name} is the name of the bundle to rollback to factory version.

After the command is run and the provider is rolled back, it will automatically ask for user confirmation for restarting the server as shown below:

Server must be restarted in order for the changes to take effect. If you do not wish to restart the server now, type 'no' and press enter else type 'yes' and press enter to proceed. Enter your option
- yes

The server will be restarted after this and the changes will take effect.

Parameters

`somrollbackprovider` recognizes the following options. Any unrecognised options are reported by a usage message.

`-name {bundle name}`

Displays information regarding rollback of the Bundle.

`-name {bundle name} -rollback`

Performs the rollback of the Bundle.

`-name {bundle name} -rollbacktoFactory`

Performs the rollback of the Bundle to the Factory version.

AUTHOR

`somrollbackprovider` was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somstaleelements — Displays stale elements in the System . Elements are considered as stale if they are not collected even once within their freshness criteria.

SYNOPSIS

```
somstaleelements.ovpl
```

DESCRIPTION

The utility is used to display all the stale elements in a system. An element is considered stale if it is not collected even once with the freshness criteria defined in the Data Collection Policy for that element.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows/Linux:

To display all stale elements in SOM :

```
somstaleelements -all
```

After running this command , it writes out the output to a csv file by the name of SOMStaleElm-{dd-mm-yyyy_hhm}.csv as shown below .

Output written to CSV file `/opt/OV/bin/SOMStaleElm-24-1-2015_1254.csv`

Parameters

somstaleelements recognizes the following options. Any unrecognised options are reported by a usage message.

-all

Computes all the Stale Elements and writes them to an Excel file

AUTHOR

somstaleelements was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somsetcmduserpw.ovpl — set the account credentials to be used in place of the -u/-p options when executing scripts as this user.

SYNOPSIS

somsetcmduserpw.ovpl

DESCRIPTION

You can use `somsetcmduserpw.ovpl` to set the SOM account credentials to be used when executing any scripts normally requiring the `-u/-p` option. The user and password values will be used when scripts are executed by this user without the `-u/-p` command line arguments. NOTE: The UNIX user root should never run this command. The "root" user does not need to provide `-u/-p` by default.

To run this command, make sure you are logged into the system as the user that will be executing the command line scripts. These values are set on a per user basis.

Parameters

No supported parameters.

EXAMPLES

You may want to set up account username and password values to be used when executing command line scripts normally requiring the `-u/-p` option. This can be done to avoid specifying password information on the command line.

Usage is:

```
# somsetcmduserpw.ovpl
```

```
WARNING: This change will affect the credentials to be used in place
of the -u/-p command line options whenever this user executes
a script requiring these. Please ensure you are logged in as
the desired user before executing this script.
Executing this script will create/edit the .nnm/nnm.properties
file in the users home directory.
Would you like to continue? [n] y
```

Thank you!

```
Please provide the user name for the account.
user: myuser
Please provide a password for the user account.
password: mypass
enter password again: mypass
```

User/Password values stored successfully in `/home/user/.nnm/nnm.properties`

AUTHOR

somsetcmduserpw.ovpl was developed by Hewlett-Packard Company.

FILES

somsetcmduserpw.ovpl resides in INSTALL_DIR\bin directory.

[Return to Reference Pages Index](#)

Name

ovaddobj — object registration utility

SYNOPSIS

```
ovaddobj [ lrf-file ]
```

DESCRIPTION

ovaddobj is used to register object managers (i.e. agents) with the HP process management process ovspmd(1M).

Parameters

lrf-file

Specifies a Local Registration File (LRF), which must contain information about a single agent and the objects it manages.

Note

You must specify all objects managed by the agent in the same LRF. Running ovaddobj against an LRF containing additional objects managed by a previously registered object manager does *not add* those objects. Instead, it *replaces* the previously registered objects with the new objects.

EXAMPLES

```
ovaddobj mylrf
```

This registers the agent and all the objects described in the LRF *mylrf* into the HP Storage Operations Manager startup file.

AUTHOR

ovaddobj was developed by Hewlett-Packard Company.

SEE ALSO

[ovstatus](#), [ovstart](#), [ovstop](#), [ovdelobj](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

ovdelobj — object deregistration utility

SYNOPSIS

```
ovdelobj [ lrf-file ]
```

DESCRIPTION

ovdelobj is used to deregister the information for object managers (i.e. agents) from the HP process management process ovspmd(1M).

Parameters

lrf-file

Specifies a Local Registration File (LRF), which contains information about a single agent and the objects it manages.

EXAMPLES

```
ovdelobj mylrf
```

This deregisters the agent and all the objects described in the LRF `mylrf`.

AUTHOR

ovdelobj was developed by Hewlett-Packard Company.

FILES

See the `nmn.envvars` reference page (and the UNIX manpage) for information about using environment variables for the following file:

```
install_dir/bin/ovdelobj
```

SEE ALSO

[ovstatus](#), [ovstart](#), [ovstop](#), [ovaddobj](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

ovjboss — wrapper around the jboss Application Server

SYNOPSIS

ovjboss

DESCRIPTION

ovjboss is a service component that falls under the management of `ovspmd`. It uses properties files (`$data_dir/shared/nnm/conf/props/nms-support.properties`, `$data_dir/shared/nnm/conf/props/nms-jboss.properties`, and `$data_dir/shared/nnm/conf/props/ovjboss.jvmargs`) to pass arguments to the jboss application server. Each file contains documentation on how to change the settings it controls.

This command should be never be executed directly but it falls under the management of `ovspmd`. It will be started when running `ovstart` or `ovstart -c ovjboss`. To stop it either call `ovstop` or `ovstop -c ovjboss`. To see the status of internal services it monitors, call `ovstatus -v ovjboss`.

If there are problems starting `ovjboss`, one can look at the `ovjboss.log` and `jbosServer.log` log files and see if that might contain information to help solve the problem:

You must be logged on as `administrator` (Windows) or `root` (UNIX) user to run this command.

EXAMPLES

To start *HP Storage Operations Manager* including `ovjboss` run the following command:

```
$InstallDir/bin/ovstart
```

To only start `ovjboss` run the following command:

```
$InstallDir/bin/ovstart -c ovjboss
```

To find the status of services started by `ovjboss` run the following command:

```
$InstallDir/bin/ovstatus -v ovjboss
```

AUTHOR

ovjboss was developed by Hewlett-Packard Company.

FILES

`$data_dir/shared/nnm/conf/props/nms-jboss.properties`

Parameter file used by services started inside `ovjboss`.

`$data_dir/shared/nnm/conf/props/nms-support.properties`

Parameter file used by services started inside `ovjboss`.

`$data_dir/shared/nnm/conf/props/ovjboss.jvmargs`

Parameters passed to the JVM that jboss runs in

`$data_dir/nnm/conf/nms-local.properties`

Local configuration file, including Ports configuration

`$data_dir/log/nnm/jbossServer.log`

Log file containing exceptions (if any)

`$data_dir/log/nnm/ovjboss.log`

Log file containing stderr messages

SEE ALSO

`ovspmd`

`nms-local.properties`

[Return to Reference Pages Index](#)

Name

ovserror — Reports the most recently generated errors from the `ovspmd` process. The `ovserror` process is used internally by other processes, and should never be invoked by the user.

SYNOPSIS

`ovserror`

DESCRIPTION

`ovserror` reports the most recently generated errors from the `ovspmd` process. It takes no parameters.

RETURN VALUE

`ovserror` reports the most recently generated errors from the `ovspmd` process.

AUTHOR

`ovserror` was developed by Hewlett-Packard Company.

SEE ALSO

[ovstatus](#), [ovstart](#), [ovstop](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

ovspmd — HP Storage Operations Manager process management service

SYNOPSIS

```
ovspmd [ [install] [start] [stop] [remove] [-W] [-d] [-V] [-f startup_file] ]
```

DESCRIPTION

ovspmd manages the service processes that are part of HP Storage Operations Manager. It starts, stops, and reports status on these processes in response to requests from `ovstart`, `ovstop`, and `ovstatus`. `ovspmd` is normally started automatically by `ovstart`. On Windows, `ovspmd` is registered as a service. `ovspmd` registers under the service name HP OpenView Process Manager.

`ovstart` sends a request to `ovspmd` to start the object manager programs specified in the HP Storage Operations Manager startup file (SUF), by default `ovsuf`. HP Storage Operations Manager-managed processes are configured in a local registration file (LRF), and added to the SUF by `ovaddobj`. If you call `ovstart` with no arguments, `ovspmd` starts all managed processes configured to be started automatically (that is, with the initial start flag `OVS_YES_START` in the LRF).

`ovstop` sends a request to `ovspmd` to stop configured managed processes. If you call `ovstop` with no arguments, `ovspmd` stops all currently running managed processes, and then exits.

`ovstatus` sends a request to `ovspmd` to report the current running status of configured managed processes.

Managed processes are started by `ovspmd` as services (that is, in the background, with `stdin`, `stdout`, and `stderr` ignored).

Each managed process can be configured with a dependency list (that is, a list of other processes that must already be running before the process can be started successfully). `ovspmd` does not start a managed process until all the processes on which it depends have already initialized successfully. On startup, `ovspmd` verifies that no LRF-specified dependencies form a cycle. (An example of a cycle is `A -> B -> C -> A`.) These dependencies determine a relative sequencing for starting, as well as a reverse order for stopping.

`ovspmd` has a mechanism to automatically restart processes that fail unexpectedly. This process entails adding a retry count for the daemon processes as listed in the `$Data_Dir/shared/nnm/conf/ovspmd.restart.properties` file. By default, the number of retries is 3. When a process dies unexpectedly, this count is decremented by one until it reaches zero. At that point, the process will not be automatically restarted. Attempting to start the process with `ovstart` will reset the retry count and start the process again. If the process has been running for two hours, then the process resets its retry counter. Removing entries will cause `ovspmd` not to do restarts. This is also true if the retry count is 0.

`ovspmd` distinguishes between three classes of object managers:

`OVS_WELL_BEHAVED`

A well-behaved process uses the OVS_PMD API (see `OVS_PMD_API(3)`) to communicate with `ovspmd`. It sends `ovspmd` status information about successful and unsuccessful initialization, normal termination

and abnormal termination, if configured to do so. `ovsppmd` considers a well-behaved process to have initialized successfully only when it explicitly reports that it has done so. A well-behaved process also exits when it receives the command `OVS_CMD_EXIT` from `ovsppmd`.

The status information passed by the managed process to `ovsppmd` is forwarded to `ovstart`, `ovstop`, or `ovstatus`, if currently running. The last message received from each managed process is saved, and then forwarded, on request, to `ovstatus`. The messages received from well-behaved processes are also logged to the application event log (which can be examined with the Event Viewer).

`OVS_NON_WELL_BEHAVED`

`ovsppmd` can also manage object managers that do not use the `OVSPPMD` API (non-well-behaved processes) only if they do *not* go into the background of their own accord (see `OVS_DAEMON` below). Because a non-well-behaved process returns no status messages, `ovsppmd` considers such a process to have initialized successfully if it is not exited within the LRF-specified timeout interval.

Non-well-behaved processes are terminated with Terminal Process if they do not exit within the configured timeout.

`OVS_DAEMON`

Managed processes that go into the background cannot be managed with a communication channel or with signals. `ovsppmd` can start such a process, but it cannot stop or report meaningful status about the process because it does not have a communication channel or a process ID for it.

Parameters

`install`

Install `ovsppmd` as a service.

`start`

Start the `ovsppmd` service.

`stop`

Stop the `ovsppmd` service.

`remove`

Remove the `ovsppmd` service.

`-W`

Do not start managed processes when `ovsppmd` starts. Wait for `ovstart` to request it.

`-d`

Used for debugging. When used, `ovsppmd` does *not* become a service.

`-V`

Run in very verbose mode. In this mode, `ovsppmd` outputs very detailed information about the

configuration of the managed processes. This is far too much information for ordinary use.

`-f startup_file`

Read *startup_file* as the startup file (SUF) instead of the default. Note that *startup_file* must be an absolute path.

Application Authorization

`ovspmd` governs the management of HP Storage Operations Manager services. It uses the `ovspmd.auth` file to control which hosts, users, and applications can start and stop the HP Storage Operations Manager services. The `ovspmd.auth` file is located in `data_dir\shared\nm\conf\`.

`ovspmd` searches the entries in the `ovspmd.auth` file from beginning to end. As soon as it finds an entry that either explicitly allows or denies the access under consideration, it stops looking. Therefore, more specific entries should precede more general entries.

The file contains lines specifying the authorized hosts, users, and applications. Each line lists a single host, user, and application list authorized to connect to `ovspmd`. The format of each line of the file is:

`#comment`

```
hostname [username [appname1 appname2 appname3 ... ]]
```

The pound sign (#) and anything following it is a comment, which is ignored. Blank lines are also ignored.

username and *appname* are optional. If no application is present, the line permits (or denies) access by any application. If no username is present, the line permits (or denies) access by any user running any application.

If *hostname* is a plus sign (+), the line refers to access from any host. If *username* is a plus sign (+), the line refers to access by any user. If a hostname is preceded by a minus sign (-), the line explicitly denies all access from that host. (Any username or application names that also happen to appear on the line are ignored.) If a username is preceded by a minus sign (-), the line explicitly denies any access by that user from the specified host. (Any application names that also happen to appear on the line are ignored.)

If any applications are listed, the line permits access only to the applications listed (by the specified user from the specified host). Note that the application names listed in the authorization file must match the registered name of the application, except that white space in the registered application name must be replaced with underscores.

The `ovspmd.auth` file created at installation contains more examples of the file format, and some examples are also included in the EXAMPLES section.

DIAGNOSTICS

`ovspmd` issues error messages about configuration errors and system call failures. These messages are intended to be self-explanatory. If it currently has an open communication channel with `ovstart`, `ovstop`, or `ovstatus`, `ovspmd` forwards these error messages through the communication channel to be output by the program.

`ovspmd` can process multiple requests (start, stop, or status) at a time. Additional requests are queued by type

until the current request completes.

In addition, `ovspmd` logs processing, configuration, and system errors using `nettl` in the OVS subsystem at the `ERROR` level. Messages indicating normal events, such as successful initialization, are logged at the `INFORMATIVE` level. Messages indicating initialization failure or abnormal termination are logged at the `WARNING` level.

EXAMPLES

The following is an example of the contents of the `ovspmd.auth` file:

```
# Normally, you should authorize any application
# run by any user on the same host on which ovspmd is running.
# To do so, use a single line listing the
# name of the host on which this file is located
# (for example, "thishost"):
```

```
thishost
```

```
# Similarly, if you are running Management
# Consoles, you should authorize any application
# run by any user on all the client hosts and on
# the server host. For example, if your server
# system named "bigsystem" has one client named
# "hohum", list each of them on a separate line in
# this file on bigsystem:
```

```
bigsystem
hohum
```

```
# It is possible to permit specific users to run
# specific applications from a remote system. The
# following line permits the user "shem" from host
# "blimp" to run the applications "Toaster Manager"
# and "Blender". Note that, because the application's
# registered name "Toaster Manager" contains white
# space, you must replace the whitespace with the
# underscore character in the authorization file:
```

```
shem blimp Toaster_Manager Blender
```

```
# It is not possible to exclude specific applications,
# except by explicitly permitting all non-excluded
# applications.
```

```
# The following line denies access by the user "fred"
# from any host:
```

```
+ -fred
```

```
# The following line denies any application access
# from the host "badguy":
```

```
-badguy
```

AUTHOR

`ovspmd` was developed by Hewlett-Packard Company.

FILES

See the `nmn.envvars` reference page (and the UNIX manpage) for information about using environment variables for the following files:

`install_dir\bin\ovspmd`

`install_dir\conf\ovsuf`

See `$data_dir/shared/nnm/conf/ovspmd.restart.properties` for restart property configuration.

EXTERNAL INFLUENCES

Environmental Variables

`$LANG` provides a default value if the internationalization variables, `LC_ALL`, `LC_CTYPE`, and `LC_MESSAGES` are unset, null, or invalid.

If `$LANG` is unset, null, or invalid, the default value of `C` (or `English_UnitedStates.1252` on Windows) is used.

`LC_ALL` (or `$LANG`) determines the locale of all other processes started by `ovspmd`.

`LC_CTYPE` determines the interpretation of text as single-byte characters, multiple-byte characters, or both; the classification of characters as printable; and the characters matched by character class expressions in regular expressions.

`LC_MESSAGES` determines the language in which messages are displayed.

All other environment variables are inherited from the shell executing `ovspmd` (or the initial `ovstart` that starts `ovspmd`). `ovspmd` and all service processes share this same environment. As a result, `ovspmd` must be stopped and restarted for any environment changes to take effect (see `ovstart`).

SEE ALSO

[ovstatus](#), [ovstart](#), [ovstop](#), [ovaddobj](#), [ovdelobj](#).

[Return to Reference Pages Index](#)

Name

ovstart — start HP Storage Operations Manager managed processes

SYNOPSIS

```
ovstart [ [-c] [-d] [-o ovspmd_path] [-v] [--][ovspmd_options...][managed_process_names...]
```

DESCRIPTION

`ovstart` starts HP Storage Operations Manager managed processes. If called with one or more *managed_process_name* arguments, it starts the designated managed process after first starting any other managed processes on which it depends. If called with no arguments, it starts all the managed processes that are configured to start by default.

`ovstart` does not exit until all the managed processes it has tried to start have either responded or timed out (failed to respond within the LRF-specified timeout interval). By default, it produces no output unless a managed process fails. When you execute it from the command line, it is advisable to use the `-c` or `-v` option to track the progress of the operation. Running `ovstart` again after the successful completion of a previous attempt to `ovstart` is completely harmless.

`ovstart` sends a start request (`OVS_REQ_START`) to the process management service, `ovspmd`. If `ovspmd` is not already running, `ovstart` starts it first.

`ovstart` must be run by the administrator or super-user.

The managed processes are configured by `ovaddobj` from information in local registration files (see `lrf(4)`). A managed process is named by the first field in the LRF describing it.

Parameters

`ovstart` recognizes the following options. Any unrecognized options are reported by a usage message.

`-c`

Produce one line of information about the success or failure of each managed process.

`-d`

Report the important stages in processing, including starting, contacting, and sending the start request to `ovspmd`, and closing the communication channel.

`-o ovspmd_path`

Specifies that the executable for `ovspmd` is in *ovspmd_path* instead of in the default location, `install_dir/bin`. If `ovspmd` is already running, this option is ignored.

`-v`

Produce several lines of information about the success or failure of each managed process.

- *ovspmd_options*

Any option not known by `ovstart` is passed to `ovspmd`. Since the `-d` option is valid for both programs, it will be interpreted as an `ovstart` option, and will *not* be passed on to `ovspmd`. Likewise, the `-v` option *will be* passed to `ovspmd` since it is not valid for `ovstart`. If an option is not recognized by either, a usage message will be printed from `ovspmd`, not `ovstart`.

--

Terminates the options section of the `ovstart` command line. Any arguments following the comment token (`--`) are interpreted as names of managed processes to start, and passed to `ovspmd`.

RETURN VALUE

In a non HP Storage Operations Manager cluster environment `ovstart` exits with the status representing the number of object managers from the start list that were *not* started successfully. If all requested managed processes were started successfully, `ovstart` exits with the status 0 (zero).

In a HP Storage Operations Manager cluster environment `ovstart` always exit immediately with the status 0 (zero).

DIAGNOSTICS

`ovstart` reports certain command-line errors (in particular, too many arguments) and system errors. The messages are prefixed with `ovstart:`, and are intended to be self-explanatory. `ovstart` also outputs error messages received from `ovspmd`. These messages are prefixed with `ovspmd:`. `ovstart` does not treat unrecognized options as errors, but `ovspmd` does.

Note that `ovspmd` can process multiple requests (`ovstart`, `ovstop`, or `ovstatus`) at a time. If any of these commands is being handled, the new request will be queued by type until the previous command has completed.

EXAMPLES

```
ovstart
```

Request `ovspmd` to start all managed processes configured to start by default. If `ovspmd` is not already running, start it with no options. Only failures are reported.

```
ovstart -v -V -- ovjboss
```

Request `ovspmd` to start the `ovjboss` process, which results in starting the Jboss application server and all of the HP Storage Operations Manager services that are deployed together within Jboss, after first starting any other managed processes that the `ovjboss` process depends on. If `ovspmd` is not already running, start it in verbose mode (`-v` option). Report program startup, whether successful or not (`-v` option). Note that the comment token (`--`) option is necessary so that `ovstart` does not interpret `ovjboss` as an argument to the unrecognized `-v` option.

AUTHOR

`ovstart` was developed by Hewlett-Packard Company.

FILES

See the `nmn.envvars` reference page (or the UNIX manpage) for information on using environment variables for the following files:

`install_dir\bin\ovstart`

`install_dir\bin\ovspmd`

EXTERNAL INFLUENCES

Environmental Variables

`$LANG` provides a default value if the internationalization variables, `LC_ALL`, `LC_CTYPE`, and `LC_MESSAGES` are unset, null, or invalid.

If `$LANG` is unset, null, or invalid, the default value of `C` (or `English_UnitedStates.1252` on Windows) is used.

`LC_ALL` (or `$LANG`) determines the locale of all other processes started by `ovspmd`.

`LC_CTYPE` determines the interpretation of text as single-byte and/or multi-byte characters, the classification of characters as printable, and the characters matched by character class expressions in regular expressions.

`LC_MESSAGES` determines the language in which messages are displayed.

If `ovstart` is executed, and no `ovspmd` process is currently running, `ovspmd` inherits the environment of the executing shell. All managed processes started by `ovspmd` inherit this same environment.

To change the environment for `ovspmd` or any managed process, you must restart `ovspmd` with the correct environment. This requires that all managed processes be stopped (`ovspmd` does not terminate until all managed processes have been shut down).

As a result, to change the environment for any managed process started from `ovstart/ovspmd`, you must do the following:

1. Execute `ovstop` with no arguments to shut down all managed processes and `ovspmd`.
2. Set up the correct environment variables.
3. Execute `ovstart` to restart `ovspmd` and any or all managed processes.

SEE ALSO

[ovstatus](#), [ovstop](#), [ovaddobj](#), [ovdelobj](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

ovstop — stop HP Storage Operations Manager managed processes

SYNOPSIS

```
ovstop [ [-c] [-d] [-v] [managed_process_names...] ] [ [-nofailover|-failover|-cluster]]
```

DESCRIPTION

ovstop stops the HP Storage Operations Manager managed processes. ovstop sends a stop request (OVS_REQ_STOP) to the process management process (UNIX operating systems) or service (Windows operating systems), ovspmd. If called with one or more *managed_process_name* arguments, it stops the designated managed processes after first stopping any dependent processes. If called with no arguments, or if one of the named arguments is ovspmd, it stops all managed processes currently running, including ovspmd itself.

When a managed process does not respond to the ovstop request within the LRF-specified timeout interval, ovspmd forces the process to terminate by sending it termination signals, first SIGTERM, then SIGKILL (see kill(1)). Note that ovstop reports forced termination only if the -v or -c options are used (for example, ovstop -v [*managed_process_name*]). Whenever a managed process times out during a stop request, it is advisable to increase its timeout value. To increase the number of seconds that ovspmd waits for a process to respond to an ovstop request, follow the instructions in \$HPSOM_LRF/ov* (UNIX operating system) or *install_dir*\lrf\ov* (Windows operating systems).

Unlike ovstart, ovstop will *not* start ovspmd if it is not already running.

The managed processes are configured by ovaddobj from information in Local Registration Files (see lrf(4)). A managed process is named by the first field in the LRF describing it. Like ovstart, ovstop uses dependency information from the LRF. If other managed processes depend on a managed process that is stopped, ovspmd notes their dependency and terminates all appropriate managed processes in reverse LRF dependency order.

ovstop must be run by the Windows administrator or UNIX superuser.

If an OVS_DAEMON process is configured with a Stop Command in its LRF entry, ovstop runs the command (see lrf(4)). This feature is used to stop processes that are no longer in contact with ovspmd. The Stop Command is provided and configured by the developer of the process, if appropriate.

The names of the HP Storage Operations Manager managed processes that were started by previous ovstart operation can be obtained by running the ovstatus -c command.

The ovstop ovjboss command would stop the Jboss application server and all of the HP Storage Operations Manager services deployed together within Jboss. The names of Jboss deployed HP Storage Operations Manager services can be obtained by running the ovstatus -v ovjboss command. The HP Storage Operations Manager services could only be stopped altogether by running the ovstop ovjboss command. It is not supported to stop any of these HP Storage Operations Manager services individually, independent of the other HP Storage Operations Manager services.

Parameters

`ovstop` recognizes the options described below. The first argument that is not an option, and any succeeding arguments, are interpreted as names of managed processes to stop, and are passed to `ovspmd` in the stop request.

`-c`

Produce one line of information about the success or failure for each managed process.

`-d`

Report the important stages in its processing, including contacting and sending the stop request to `ovspmd`, and the closing the communication channel.

`-v`

Produce several lines of information about the success or failure of each managed process.

RETURN VALUE

`ovstop` exits with a status representing the number of managed processes that were *not* stopped successfully. If all requested managed processes were successfully stopped, `ovstop` exits with the status 0 (zero).

DIAGNOSTICS

`ovstop` reports certain command-line errors (in particular, too many arguments) and system errors. The messages are prefixed with `ovstop:`, and are intended to be self-explanatory. `ovstop` also outputs error messages received from `ovspmd`. These messages are prefixed with `ovspmd:`. `ovstop` ignores unrecognized options.

If a managed process is in a `PAUSED`, `PAUSE_ERROR`, `PAUSE_TIMEOUT`, `RESUME_ERROR`, `RESUME_TIMEOUT`, or `DEPENDENCY_ERR` state, it is stopped. However, a warning message is printed to inform you that `ovstop` was used on a process that was not in a running state.

Note that `ovspmd` can process multiple requests (`ovstart`, `ovstop`, or `ovstatus`) at a time. If any of these commands is being handled, the new request will be queued by type until the previous command has completed.

AUTHOR

`ovstop` was developed by Hewlett-Packard Company.

FILES

The environment variables below represent universal pathnames that are established according to your shell

and platform requirements. See the `nmm.envvars(1)` manpage for information on universal pathnames for your platform and shell.

See the `nmm.envvars` reference page ((or the UNIX manpage) for information about using environment variables for the following files:

Windows: `install_dir\bin\ovstop`

Windows: `install_dir\bin\ovspmd`

UNIX: `$HPSOM_BIN/ovstop`

UNIX: `$HPSOM_BIN/ovspmd`

EXTERNAL INFLUENCES

Environmental Variables

If a `com.hp.ov.nms.cluster.name` is defined in the `$DataDir/shared/nmm/conf/props/nms-cluster.properties` file, then `ovstop` will defer startup to the `nmmcluster` command.

`$LANG` provides a default value if the internationalization variables, `LC_ALL`, `LC_CTYPE`, and `LC_MESSAGES` are unset, null, or invalid.

If `$LANG` is unset, null, or invalid, the default value of `C` (or `English_UnitedStates.1252` on Windows) is used.

`LC_ALL` (or `$LANG`) determines the locale of all other processes started by `ovspmd`.

`LC_CTYPE` determines the interpretation of text as single-byte characters, multiple-byte characters, or both; the classification of characters as printable; and the characters matched by character class expressions in regular expressions.

`LC_MESSAGES` determines the language in which messages are displayed.

SEE ALSO

[ovstatus](#), [ovstart](#), [ovaddobj](#), [ovdelobj](#), [ovspmd](#).

[Return to Reference Pages Index](#)

Name

sombakupembdb.ovpl — make a full backup of the HP Storage Operations Manager embedded database.

SYNOPSIS

```
sombakupembdb.ovpl [-?|-h|-help] [-noTimeStamp] -target <target directory> [-force]
```

DESCRIPTION

Use the `sombakupembdb.ovpl` script to make a full backup of the SOM embedded database. The contents of the backup are uncompressed and stored in a file you specify. This file must be used to restore the SOM embedded database by using the `nnmrestoreembdb.ovpl` script.

If you plan to use the `sombakupembdb.ovpl` script to create a backup of the SOM embedded database, then use the `nnmrestoreembdb.ovpl` script to place embedded database records on a second SOM management server, both SOM management servers must have the same type of operating system and SOM version and patch level.

Before running the `sombakupembdb.ovpl` script, make sure you have adequate storage space in the target directory. Look for the embedded database data storage in the `%HPSOM_DATA%\shared\nnm\databases\Postgres` (Windows) or `$HPSOM_DATA/shared/nnm/databases/Postgres` (UNIX) directory. Check the size of this directory to make sure the target directory has sufficient space to store the backup file. Compress the file after backup if necessary.

The backup file is created in the target directory and contains all data stored in the database at the start of the backup operation. Any statements run in the database while the backup is running are not included in the backup.

You can run this script while SOM is running; however, you may experience temporary performance degradation. At a minimum, the `somdbmgr` process must be running for the script to be successful. If you use the `-force` option, the script starts the `somdbmgr` process (if it is not running), and suppresses any interactive messages.

You must be logged in as administrator on Windows systems or root on UNIX systems to run this script.

Parameters

`-noTimeStamp`

With this option, the `sombakupembdb.ovpl` script stores the backup files in a target directory without a timestamp in the name. Any previous backup which exists with that same folder/file name will be renamed to have ".previous" suffix. If there is already a ".previous" backup, it will be deleted. This option is provided to allow for daily backups, keeping latest two successful backups, and not keeping every backup that has been performed, over time, to reduce disk usage.

`-target <directory>`

Directory name in which to store the backup file. (Will be created if it does not exist)

-force

If you provide this option, the script starts the `somdbmgr` process if it is not currently running.

-?|-h|-help

Display command usage.

EXAMPLES

You can use this script to run an *on-demand* backup, or you can include running the script as a task in regularly scheduled backup scripts. Run the script as follows:

```
# sombackupembdb.ovpl -target /backups/nnm
```

You'll see these messages:

```
WARNING: Running this command while SOM is running, while allowed, will cause
         temporary performance problems. At a minimum, please make sure the
         somdbmgr process is running (ovstart somdbmgr).
```

```
Are you sure you want to run a full database backup now? [n] y
```

```
Ok, performing full embedded database backup...
```

```
SOM embedded database successfully backed up to /backups/nnm/nm-bak.2009092906.pgd.
#
```

AUTHOR

`sombackupembdb.ovpl` was developed by Hewlett-Packard Company.

FILES

Windows: %SOM_BIN%\sombackupembdb.ovpl

UNIX: \$SOM_BIN/sombackupembdb.ovpl

SEE ALSO

[ovstatus](#), [ovstart](#), [ovaddobj](#).

[Return to Reference Pages Index](#)

Name

somchangedbpw.ovpl — change the user name and password used to authenticate with the HP Storage Operations Manager database.

SYNOPSIS

somchangedbpw.ovpl

DESCRIPTION

Use the `somchangedbpw.ovpl` script to change the user name and password SOM uses to connect to the database. This script is useful when database passwords expire, or if you need to change the database user name. Before running this script, run the `ovstop` command to stop SOM.

Note

To avoid adverse behavior after changing the database user name and password, you must stop SOM before running the `somchangedbpw.ovpl` script. You can run this script while SOM is running, but any new database connections created by SOM fail during authentication.

You must be logged in as `administrator` on Windows systems or `root` on UNIX systems to run this script.

Parameters

No supported parameters.

EXAMPLES

Use the `somchangedbpw.ovpl` script if your organization requires frequent password changes for the SOM database, or to change the user name SOM uses to connect to the SOM database.

The `somchangedbpw.ovpl` script does not display the password as you type it in.

When using the `somchangedbpw.ovpl` script, you should see the following messages:

```
# somchangedbpw.ovpl
WARNING: Please make sure SOM has been stopped before running this tool.
         Failure to stop SOM could result in unexpected database failures.

Have you stopped SOM (ovstop)? [n] y
Thank you!

Please provide a database user account name.
user: mydbuser

Please provide the password for database user account.
password: mynewpw
enter password again: mynewpw
```

User/Password changed successfully!
#

AUTHOR

somchangedbpw.ovpl was developed by Hewlett-Packard Company.

FILES

Windows: %SOM_BIN%\somchangedbpw.ovpl

UNIX: \$SOM_BIN/somchangedbpw.ovpl

SEE ALSO

[ovstatus](#), [ovstart](#), [ovaddobj](#).

[Return to Reference Pages Index](#)

Name

somchangeembdbpw.ovpl — change the password used to authenticate with the HP Storage Operations Manager embedded database.

SYNOPSIS

somchangeembdbpw.ovpl

DESCRIPTION

Use the `somchangeembdbpw.ovpl` script to change the password SOM uses to connect to the embedded database. This script is useful if you installed SOM with the embedded database option. Only use this script if you want to change the default password that was created for the embedded database during installation. If you do not run this script, SOM functions normally.

The `somchangeembdbpw.ovpl` script requires that SOM is stopped and `nmsdbmgr` is running. It will automatically bring the system to this state if necessary, i.e. automatically running `ovstop` followed by `ovstart nmsdbmgr`.

After the `somchangeembdbpw.ovpl` script finishes, the embedded database password is changed to the value supplied through the interactive prompts, and the SOM management server is reconfigured to use the new password to connect to the database.

You must be logged in as `administrator` on Windows systems or `root` on UNIX systems to run the `somchangeembdbpw.ovpl` script.

Parameters

No supported parameters.

EXAMPLES

Use the `somchangeembdbpw.ovpl` script if your organization requires frequent password changes for the SOM embedded database.

The `somchangeembdbpw.ovpl` script does not display the password as you type it in.

When using the `somchangeembdbpw.ovpl` script, you should see the following messages:

```
# somchangeembdbpw.ovpl
```

```
WARNING: Stop SOM and all SOM processes before running this tool.  
         Failure to stop SOM could result in unexpected database failures.  
         After stopping SOM, run ovstart nmsdbmgr to start only the database.
```

```
Have you stopped SOM (ovstop)? [n] y  
Thank you!
```

```
Provide a new password for the embedded database user account.  
password: mynewpw  
enter password again: mynewpw  
  
Password changed successfully!  
#
```

AUTHOR

somchangeembdbpw.ovpl was developed by Hewlett-Packard Company.

FILES

Windows: %SOM_BIN%\somchangeembdbpw.ovpl

UNIX: \$SOM_BIN/somchangeembdbpw.ovpl

SEE ALSO

[ovstatus](#), [ovstart](#), [ovaddobj](#).

[Return to Reference Pages Index](#)

Name

somchangesyspw.ovpl — change the password for the system account normally set during HP Storage Operations Manager installation.

SYNOPSIS

somchangesyspw.ovpl

DESCRIPTION

You can use the `somchangesyspw.ovpl` script to change the SOM system password. The SOM system password is normally set during installation and used for recovery purposes. Only use this command if you want to reset the system password that was set during SOM installation.

Before running the `somchangesyspw.ovpl` script, run the `ovstop` command to stop SOM. After running the `somchangesyspw.ovpl` script, run the `ovstart` command to start SOM. This will ensure that the new value for the password is valid immediately.

You must be logged in as `administrator` on Windows systems or `root` on UNIX systems to run this script.

Parameters

No supported parameters.

EXAMPLES

You might want to change the system password if you have deleted all other user accounts with administrator privileges, and do not remember the system password value set during SOM installation.

The `somchangesyspw.ovpl` script does not display the password as you type it in.

When using the `somchangesyspw.ovpl` script, you should see the following messages:

```
# somchangesyspw.ovpl
WARNING: This change may not take affect immediately unless SOM is
         restarted. Please run ovstop before executing this script,
         and ovstart after execution to ensure the change is immediate.
Would you like to continue? [n] y
Thank you!

Please provide a new password for the system user account.

password: mynewpw
enter password again: mynewpw

System password changed successfully

#
```

AUTHOR

somchangesyspw.ovpl was developed by Hewlett-Packard Company.

FILES

Windows: %NNM_BIN%\somchangesyspw.ovpl

UNIX: \$NNM_BIN/somchangesyspw.ovpl

SEE ALSO

[ovstart\(1M\)](#), [ovstop\(1M\)](#), [ovstatus\(1M\)](#).

[Return to Reference Pages Index](#)

Name

somofficialfqdn.ovpl — Display the official Fully Qualified Domain Name (FQDN) of the HP Storage Operations Management server.

SYNOPSIS

somofficialfqdn.ovpl

DESCRIPTION

Use `somofficialfqdn.ovpl` to display the official Fully Qualified Domain Name (FQDN). The official FQDN must be correct and consistent across systems to enable Single Sign On. HPSOM sets the official FQDN during installation. After installation, you can change it using the `somsetofficialfqdn.ovpl` command.

Options

`somofficialfqdn.ovpl` by default displays verbose output with a ping test. `somofficialfqdn.ovpl` recognizes the following options:

-d

Display the domain name of the official FQDN. If the FQDN is only a short hostname or an IP address and if the terse option (-t) is used, HPSOM does not display a value; otherwise, HPSOM displays a message informing you that the domain name cannot be found.

-t

Terse mode. Displays the FQDN or domain name value only. When the FQDN or domain name is not found, no warning or informative text is shown. This option also skips the ping test.

-m

Query for the default FQDN and display the value. HPSOM displays whichever value it finds first using the following order:

- FQDN
- Short hostname
- IP address

If none of the above are found, then 'localhost' is displayed.

-h

Display the help menu listing all the options.

EXAMPLES

Running the command without any options displays the official FQDN and performs a ping test:

```
# somofficialfqdn.ovpl
  FQDN: hostname.somedomain
  Ping test: pinging hostname.somedomain please wait...
  Ping OK
```

Running the command with the `-t` option displays the official FQDN as follows:

```
# somofficialfqdn.ovpl -t
  hostname.somedomain
```

Running the command using the `-d` option displays the domain name as follows:

```
# somofficialfqdn.ovpl -d
  Domain: somedomain
```

Running the command using the `-d` and `-t` options displays only the domain name:

```
# somofficialfqdn.ovpl -dt
  somedomain
```

AUTHOR

`somofficialfqdn.ovpl` was developed by Hewlett-Packard Company.

FILES

`somofficialfqdn.ovpl` resides in `$SOM_BIN` directory.

SEE ALSO

[ovstatus](#), [ovstart](#), [ovaddobj](#), [somsetofficialfqdn](#)

[Return to Reference Pages Index](#)

Name

`somresetembdb.ovpl` — drop (delete) and recreate the embedded database, if HP Storage Operations Manager is configured to run with the embedded database

SYNOPSIS

```
somresetembdb.ovpl [-?|-h|-help] [-silent] [-nostart]
```

DESCRIPTION

Use `somresetembdb.ovpl` to drop (delete) and recreate the SOM embedded database. This command is useful only if you installed SOM with the embedded database option. You should use this command only if your database is corrupt, and you are willing to lose all of your data; or, if you simply want to reset your database to the state it was in after initial installation.

If SOM is running when this command is executed, the command first stops SOM (using `ovstop`), then starts the `somdbmgr` process to work with the database (using `ovstart`). Unless the `-nostart` option is present, SOM restarts (using `ovstart`) upon successful completion of the reset process.

When the database reset has completed, the embedded database has no tables or data in it. The tables are recreated when you restart SOM using the `ovstart` command, or when the `somresetembdb.ovpl` command automatically starts SOM. You must be logged in as `root` on UNIX systems, or as `administrator` on Windows systems to run this command.

Parameters

The `somresetembdb.ovpl` command recognizes the following parameters:

`-silent`

The `somresetembdb.ovpl` command does not display the command results when you use the `-silent` option.

`-nostart`

The `somresetembdb.ovpl` command does not start SOM after the database reset when you use the `-nostart` option.

`-?|-h|-help`

Display command usage.

EXAMPLES

You can use this script to reset your database if you have a bad discovery or a corrupted database; or if you

want to reset the database (including configuration items stored in the database) to the state the database was in after initial installation.

You'll see these messages:

```
# somresetembdb.ovpl -nostart
```

```
WARNING: Running this tool will stop SOM, drop and recreate the database,  
and restart SOM. Please make sure no major activity is occurring at  
this time.
```

```
Is it OK to stop SOM (ovstop)? [n] y  
Thank you!
```

```
WARNING: This will delete all configuration and discovered data. You cannot  
recover from a reset unless you have taken a backup.
```

```
Are you sure you wish to reset your database? [n] y
```

```
Attempting to reset the embedded database...  
Starting somdbmgr process for database reset...  
Successfully started somdbmgr process for database reset.  
Successfully reset private database.  
Successfully reset SOM embedded database.
```

```
#
```

AUTHOR

somresetembdb.ovpl was developed by Hewlett-Packard Company.

FILES

somresetembdb.ovpl resides in $\$SOM_BIN$ (UNIX) or *install_dir*\bin (Windows) directories.

SEE ALSO

[ovstart](#), [ovstop](#), [ovstatus](#).

[Return to Reference Pages Index](#)

Name

somsetofficialfqdn.ovpl — Set the official Fully Qualified Domain Name (FQDN) of the HP Storage Operations Management server.

SYNOPSIS

```
somsetofficialfqdn.ovpl [-f | -force] <fqdn>
```

DESCRIPTION

Use the `somsetofficialfqdn.ovpl` script to change the official FQDN for the SOM management server after installation. If you run this script without any arguments, it sets the official FQDN to the default value. The default value is obtained by performing a hostname lookup. See the reference page for the `nmsofficialfqdn.ovpl` script using the `-m` option for more information about the default hostname lookup.

If the FQDN is changed, the user is prompted to auto generate a new SSL certificate. All certificates that SOM auto generates have the following alias syntax: `fqdn.selfsigned`. Because the SSL certificate is tied to the FQDN, HTTPS breaks if a new certificate is not generated and added to both the `nmn.keystore` and `nmn.truststore` files. If you provide the `-force` option, the `somsetofficialfqdn.ovpl` script generates and inserts the certificate into both the `nmn.keystore` and `nmn.truststore` files. If the new certificate's alias already exists in either the `nmn.keystore` or `nmn.truststore` files, the certificate is not inserted.

If a new certificate is generated, the system property `com.hp.ov.nms.ssl.KEY_ALIAS` in the `nms-local.properties` file is updated to reference the new certificate alias. This is a necessary step for HTTPS to work correctly when SOM is started again.

Options

There are two optional arguments to `somsetofficialfqdn.ovpl`

<fqdn>

Resets the official FQDN to <fqdn> on confirmation from the user.

If the value of <fqdn> does not have a domain (for example, it is a short hostname, IP address or localhost), SSO is disabled.

-force | -f

This is a *force flag* that does not prompt the user for confirmation and does not print verbose information. When used alone, the force flag sets the official FQDN to the default. When `fqdn` is used after this flag, it changes the official FQDN to `fqdn`.

EXAMPLES

Set the FQDN to the default value:

```
somsetofficialfqdn.ovpl
```

Set the FQDN to the value somehost.somedomain:

```
somsetofficialfqdn.ovpl somehost.somedomain
```

Force the official FQDN to the default value:

```
somsetofficialfqdn.ovpl -f
```

AUTHOR

somsetofficialfqdn.ovpl was developed by Hewlett-Packard Company.

FILES

somsetofficialfqdn.ovpl resides in the %SOM_BIN% (Windows) or \$SOM_BIN (UNIX) directory.

SEE ALSO

[somofficialfqdn](#).

[Return to Reference Pages Index](#)

Name

somrestoreembdb.ovpl — restore a full backup of the SOM embedded database

SYNOPSIS

```
somrestoreembdb.ovpl [-?|-h|-help] [-force] -source <backup file>
```

DESCRIPTION

Use the `somrestoreembdb.ovpl` script to restore a full backup of the HP Storage Operations Manager embedded database. Create the backup file required for the restore using the `sombackupembdb.ovpl` script. Because query planning statistics are not backed up, these statistics are gathered as part of the restore procedure to ensure good database performance after a restore.

If you plan to use the `sombackupembdb.ovpl` script to create a backup of the SOM embedded database, then use the `somrestoreembdb.ovpl` script to place embedded database records on a second SOM management server, both SOM management servers must have the same type of operating system and SOM version and patch level.

Before running the `somrestoreembdb.ovpl` script, make sure the embedded database is empty. You can do this by running the `nnmresetembdb.ovpl` script. If you do not clear the embedded database, the restore procedure runs the `nnmresetembdb.ovpl` script for you and the restore fails if the `nnmresetembdb.ovpl` script fails.

Do *not* run this script while SOM is running unless you specify the `-force` option. Only the `somdbmgr` process can (and must) be running when you run the `somrestoreembdb.ovpl` script. You must be logged in as administrator on Windows systems or root on UNIX systems, to run this script.

Parameters

`-source <backup file>`

The file to use when restoring the backup. This file must be a file that was created using the `sombackupembdb.ovpl` script.

`-force`

If you provide this option, the script stops SOM if it is currently running, then starts the `somdbmgr` process.

`-?|-h|-help`

Display script usage.

EXAMPLES

Use this script to run a full database recovery when a restore from backup becomes necessary.

You will see these messages:

```
# somrestoreembdb.ovpl -source /backups/nnmDb.dump
WARNING: Running this command while SOM is running will cause sporadic
         failures in active sessions. Please ensure that only the somdbmgr
         process is running when executing this command (ovstart somdbmgr).
Are you sure you want to run a full database restore now? [n] y

Ok, performing full embedded database restore...
Statistics analysis completed successfully.

SOM embedded database successfully restored from /backups/nnmDb.dump.
#
```

AUTHOR

somrestoreembdb.ovpl was developed by Hewlett-Packard Company.

FILES

somrestoreembdb.ovpl resides in the following directories:

- *Windows*: %SOM_BIN%
- *UNIX*: \$SOM_BIN

SEE ALSO

[ovstart](#), [ovstop](#), [ovstatus](#), [sombackupembdb](#).

[Return to Reference Pages Index](#)

Name

somdataexportconfig — Configuration utility to enable or disable Data Export.

SYNOPSIS

```
somdataexportconfig.ovpl [-?|-h|-help] [-silent] {-listconfig|-enable|-disable} [-dataset {ALL|Inventory|Statistics}]
```

DESCRIPTION

This utility can be used to configure the data export from a HP Storage Operations Manager server to a Service Health Reporter server. You can enable or disable the data export using this. The enable or disable action can be done for all data or selectively for Inventory or Statistics data.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows and Linux:

To enable data export for All data:

```
somdataexportconfig.ovpl -enable -dataset ALL
```

To disable data export for All data:

```
somdataexportconfig.ovpl -disable -dataset ALL
```

To enable data export for Inventory data:

```
somdataexportconfig.ovpl -enable -dataset Inventory
```

To disable data export for Inventory data:

```
somdataexportconfig.ovpl -disable -dataset Inventory
```

To enable data export for Statistics data:

```
somdataexportconfig.ovpl -enable -dataset Statistics
```

To disable data export for Statistics data:

```
somdataexportconfig.ovpl -disable -dataset Statistics
```

To list the current configuration:

somdataexportconfig.ovpl -listconfig

While enabling or disabling data export the tool displays a warning message (the message while enabling data export for ALL data would be like the following message):

WARNING: This would enable data export for dataset 'ALL'.

Is it OK to continue? [n]

Enter 'y' to enable.

The data export configuration tool displays the following message after enabling the data export:

Enabling data export for dataset 'ALL'

If you are listing the current configuration the export tool does not ask for any information and displays the following message (This is for the case when the data export is enabled for ALL. This message would change as per the current configuration).

Remote Server : ALL

Inventory Export : ENABLED

Statistics Export : ENABLED

Parameters

somdataexportconfig recognizes the following options. Any unrecognised options are reported by a usage message.

-silent

Enables or Disables the data export without prompting the user for confirmation.

-enable

Enables the data export for the specified data set or for ALL if the data set is not specified.

-disable

Disables the data export for the specified data set or for ALL if the data set is not specified.

-dataset

Specifies the data set for which the data export has to be enabled or disabled. It can be either ALL or Inventory or Statistics. The default value is ALL.

-listconfig

Lists the current data export configuration.

AUTHOR

somdataexportconfig was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somdatatransfercertconfig — Utility to configure the certificate, remote server and folder for data transfer to a Service Health Reporter server.

SYNOPSIS

```
somdatatransfercertconfig.ovpl [-?|-h|-help] [-silent] {-certserver <certificate server> |  
-remoteserver <remote server> -remotefolder <remote folder> | -testtransfer}
```

DESCRIPTION

This utility can be used to configure the certificate needed to export data from a HP Storage Operations Manager server to a SHR (Service Health Reporter) server. You can also set the remote server and remote folder and test the connectivity to the SHR server using this.

1. Log on to the HP Storage Operations Manager server as root or administrator user.
2. Open a command prompt. Go to the following directory:

On Windows: `INSTALL_DIR\bin`

On Linux: `/opt/OV/bin`

3. Run the following command:

On Windows and Linux:

To request for a certificate from a SHR server

```
somdatatransfercertconfig.ovpl -certserver SHR_server_Hostname_or_IpAddress
```

To configure a remote server (SHR) and remote folder

```
somdatatransfercertconfig.ovpl -remoteserver  
SHR_server_Hostname_or_IpAddress -remotefolder /opt/HP/BSM/PMDB/extract
```

To test data transfer to the configured SHR server

```
somdatatransfercertconfig.ovpl -testtransfer
```

While requesting for a certificate from a SHR server the tool displays a warning message (sample message below):

WARNING: Running this tool will delete any existing client certificates,
set the Certificate Server and request for a signed certificate
from the server.

Is it OK to delete any existing client certificates? [n]

Enter 'y' to continue.

The data export configuration tool displays the following message after requesting the certificate server (SHR server) for a certificate.

Performing certificate configuration

Checking if all OVC services are running...

All needed OVC services are running!

Removing Certificate '20761842-66ba-7574-051b-9c2056fefe9b'...

INFO: Certificate has been successfully removed.

Removing Certificate 'CA_1ee90212-78a5-756f-023e-fe163bc26508_2048'...

INFO: Certificate has been successfully removed.

Setting the certificate server to shr_server_hostname_or_ipaddress

Requesting the certificate server for a signed certificate

INFO: Certificate request has been successfully triggered.

The certificate server 'shr_server_hostname_or_ipaddress' has to grant the request to complete the configuration.

If you are configuring the remote server and remote folder the utility displays the following message.

Setting the Remote Server to : shr_server_hostname_or_ipaddress

Setting the Remote Folder to : remote_folder_path

Please restart the SEi JBoss server for these changes to take effect.

If you are doing a test transfer to the remote server the utility displays the following message.

Transferring test file 'test_transfer_from_som_server_hostname.txt' to

shr_server_hostname_or_ipaddress at folder name remote_folder_path

Successfully transferred temp file

Parameters

somdatatransfercertconfig recognizes the following options. Any unrecognised options are reported by a usage message.

-silent

Configures the certificate without prompting the user for confirmation.

-certserver

Requests for a signed certificate from the specified certificate server.

-remoteserver

Specifies the remote server (SHR server) to which the exported csv files have to be transferred.

-remotefolder

Specifies the remote folder (on the remote server) to which the exported csv files have to be transferred.

-testtransfer

Creates and transfers a temporary file to the configured remote server at the configured remote folder.

AUTHOR

somdatatransfercertconfig was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somshrgrantcertrequest — Utility to grant certificates and configure the data source servers to enable transfer of data from a Storage Operations Manager (SOM) server. This utility needs to be executed on a Service Health Reporter (SHR) server.

SYNOPSIS

```
somshrgrantcertrequest.ovpl [-?|-h|-help] [-silent] {-reqserver <requesting server> | -  
datasource <SOM server1> <SOM server2>}
```

DESCRIPTION

This utility can be used to grant certificates (requested from one or more Storage Operations Manager servers) and also to configure one or more data sources (Storage Operations Manager servers). This utility needs to be copied on to a SHR server and executed there.

1. Log on to the HP Service Health Reporter server as root or administrator user.
2. Open a command prompt. Go to the directory where the 'somshrgrantcertrequest.ovpl' script has been copied to. Ensure the HP Perl is set in the PATH environment variable.

On Windows: `INSTALL_DIR\nonOV\perl\a\bin\perl.exe`

On Linux: `/opt/OV/nonOV/perl/a/bin/perl`

3. Run the following command:

On Windows and Linux:

To grant a certificate requested from a Service Operations Manager (SOM) server:

```
perl somshrgrantcertrequest.ovpl -reqserver SOM_server_Hostname_or_IpAddress
```

To configure one or more data sources (SOM servers):

```
perl somshrgrantcertrequest.ovpl -datasource  
SOM_server_Hostname_or_IpAddress  
Another_SOM_server_Hostname_or_IpAddress
```

While granting a certificate for a SOM server the utility displays messages similar to the ones below.

Checking if all OVC services are running...

All needed OVC services are running!

Listing all pending requests:

RequestID: a78483b2-3433-757b-0be8-872ffdcc1071

Context:

CN: 45d6fc82-ee12-7576-1e74-8169b133391c

Nodename: SOM_server_hostname

IPAddress: 1.2.3.4

PeerAddress: 1.2.3.4

Platform: Windows 6.2, CPU: x64, OSBITS: 64

InstallType: Manual

TimeReceived: 02/16/2015 05:41:01 PM IST

Processing request id : a78483b2-3433-757b-0be8-872ffdcc1071

Completed certificate grant operation

If the certificate grant operation fails the utility displays messages similar to the ones below.

Checking if all OVC services are running...

All needed OVC services are running!

Listing all pending requests:

No pending requests.

Unable to find any pending requests for the mentioned server : abcd

In such cases, please check if the SOM server's request was sent correctly and if the hostname or ip address used in the argument is the correct one.

If you are configuring one or more data sources (SOM servers) the utility displays messages similar to the ones below.

Configuring the data source servers...

Getting OV Core id for SOM_server_Hostname_or_IpAddress...

Getting OV Core id for Another_SOM_server_Hostname_or_IpAddress...

* Starting policy installation on host 'localhost'.

Installing policy file

'2E1E3F7B-8BC0-4470-94D5-13C3448593BB_header.xml'.

Triggering control service notification for host 'localhost'.

Install operation completed successfully.

Completed configuring the data source servers

***Please ensure the remote data push path in the data source servers

is set to '/opt/HP/BSM/PMDB/extract' folder !!!***

If the data source configuration fails the utility displays messages similar to the ones below.

Configuring the data source servers...

Getting OV Core id for SOM_server_hostname_or_IpAddress

Failed to get the OV Core id for SOM_server_hostname_or_IpAddress

In such cases please check if the SOM servers are reachable and the OVC services are running. Also, check if the needed ports are opened in the firewall settings.

Parameters

somshrgrantcertrequest recognizes the following options. Any unrecognised options are reported by a usage message.

-silent

Grants the certificate or configures the data sources without prompting the user for confirmation.

-reqserver

Grants the certificate based on a request from a SOM server.

-datasource

Configures one or more data source servers (SOM servers) from where the exported data would be received.

AUTHOR

somshrgrantcertrequest was developed by Hewlett-Packard Company.

[Return to Reference Pages Index](#)

Name

somlicenseemanager.ovpl — administer Storage Operations Manager licensing

SYNOPSIS

```
somlicenseemanager.ovpl [-h | -help]
```

```
somlicenseemanager.ovpl [ <PRODUCT> [-nosync] [(-g|-gui)|(-install|-f <lic_file>)] ]
```

The `-f|-install` option installs license keys into the licensing database.

DESCRIPTION

`somlicenseemanager.ovpl` provides license management for HP Storage Operations Manager (SOM). License management includes the ability to retrieve license keys from Hewlett-Packard, installing license keys from a file, the removal of license keys, and reporting valid licenses.

There are two steps to adding a license: updating the license database and notifying the running SOM processes that new license information is available. The `-nosync` option performs the former but does not notify SOM. If the `-nosync` option is not specified, the running SOM system is automatically notified; it is not necessary to stop and restart SOM.

The `-nosync` option allows you to perform multiple licensing tasks (e.g. removing a license and installing a replacement license). You then notify SOM with the following:

```
somlicenseemanager.ovpl SOM
```

The `-g|-gui` option opens the license management GUI, which provides access to most license management capabilities:

Retrieve/Install License Key

Enables a license key to be retrieved from Hewlett-Packard.

Install/Restore License Key

Installs license keys from a text file.

Request License Key through Email/Fax

Provides the ability to request a license for systems that cannot transfer data to Hewlett-Packard.

Report License Key

Reports license information for the particular product.

Backup License File

Enables the backing up of a license file before installing or removing licenses.

Remove License Key

Removes license keys (usually temporary or emergency licenses provided by Hewlett-Packard).

Recover License Key

Adds back licenses that were previously removed.

The license management GUI enables multiple operations before updating the running SOM system. For example, you can replace a license by removing the old license, and then adding a new one in its place.

Parameters

PRODUCT

The short name for the product being licensed.

`-nosync`

Prevents synchronization with the running SOM system.

`-g|-gui`

Starts the license management GUI.

`-f|-install <lic_file>`

Install the license contained in the specified license file

EXAMPLES

To install a license key contained in a file named "license.txt", perform the following:

```
$SomInstallDir/bin/somlicenseemmanager.ovpl SOM -f license.txt
```

This will update the license database and notify SOM of the licensing change. To avoid notifying SOM, the `-nosync` option can be provided:

```
$SomInstallDir/bin/somlicenseemmanager.ovpl SOM -nosync -f license.txt
```

AUTHOR

`somlicenseemmanager.ovpl` was developed by Hewlett-Packard Company.

FILES

`$SomInstallDir/misc/nms/lic/SOM.pdf`

Product definition file used by licensing.

`$SomDataDir/shared/nmm/conf/licensing/SOM.bin`

Data file representing the license information that is consumed by `somjboss`.

`<drive>:\ProgramData\AP`

Data files for licensing on Microsoft Windows systems.

`/var/adm/ap`

Data files for licensing on UNIX-based systems.

SEE ALSO

Installation Guide for future details on licensing.

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Name

ovc — Perform actions on local components

SYNOPSIS

```
ovc -h|-help ovc -start [<target> ... ] [-boot]{[-async]|[-verbose]} ovc -stop [<target> ... ][-nostart]{[-async]| [-verbose]} ovc -restart [<target> ... ] ovc -kill [-verbose] ovc -status [<target> ... ] [-level <level>] ovc -trace [<target> ... ] ovc -notify <event> [<target> ...] [-value <value>] ovc -version DESCRIPTION
```

DESCRIPTION

ovc controls the starting and stopping, event notification, and status reporting of all components registered with the HP Operations Control service.

A component can be a server process belonging to any of the products such as HP Operations Manager for Windows, HP Operations agents (for example, the Performance Agent or the Discovery Agent), an event interceptor, or an application delivered by an integrator. Each component must have an associated registration file providing HP Operations Manager with configuration and process information about the component. For more information about registration, `ovcreg(1)`.

A target can be either a component or a group of components, defined as a category. The ovc command first tries to initiate action on the category specified in target. If the category called target is not found, ovc then tries the individual component called target. Note that a category name must not match any component name.

The HP Operations Control daemon or service automatically restarts any component that terminates unexpectedly if the `AutoRestart` option in the registration file of the component is set to true. If the HP Operations Control daemon or service is stopped using the `-kill` option, all registered components are stopped, too.

Parameters

ovc recognizes the following options:

`-h|-help`

Displays all available options for the ovc command.

`-start [<target> ...] [-boot]{[-async]|[-verbose]}`

Starts the selected components. `<target>` specifies a component or category. If `<target>` is not used, all components are started. If `-boot` is used, only components that start at boot time are started.

The `-async` option starts the components asynchronously. If you use the `-verbose` option, ovc command displays the progress of the command execution. You can use the `-async` or the `-verbose` option, but you must not include these options together in a command.

`-stop [<target> ...] [-nostart][[-async]][verbose]}`

Stops the selected components. <target> specifies a component or category. If <target> is not used, all components are stopped except components, which belong to the CORE component group. If you specify the -nostart option and if the control daemon is not running, the command does not perform any action. If you do not specify the -nostart option, the ovc -stop command starts the control daemon and ovbbccb components if these components are not running. The -async option starts the components asynchronously. If you use the -verbose option, the ovc command displays the progress of the command execution. You can use the -async or the -verbose option, but you must not include these options together in a command.

`-restart [<target> ...]`

Stops components before they are restarted. <target> specifies a component or category. If <target> is not used, all components are stopped and restarted.

`-kill [-verbose]`

Stops all components registered with the HP Operations Control service. If you use the -verbose option, the ovc command displays the progress of the command execution.

`-notify <event> [<target> ...] [-value <value>]`

Sends notification of an event with the value of <value> to the component or category specified by <target> You can specify the <value> to the component that generates the event (event generator) and sends the event-related information to all components that request the event information (event subscribers). If target is not used, the event notification is sent to all components. If <value> is not used, only the event notification is sent.

`-trace <target> ...]`

This option is reserved for use by HP Support.

`-status [<target> ...] [-level <level>]`

Reports the status of a component or category specified by <target>. The status report contains the component's label, description, category, process ID, and STATE. Components can be in state: Stopped (0 in numeric format), Starting (1), Initializing (2), Running (3), Stopping (4), N/A (5) or Aborted (6). If <target> is not specified, the status of all components is returned. <level> specifies the type and quantity of information to display, as follows:

Level 0

Status of registered components monitored by HP Operations Manager.

Level 1

Status of registered components whether they are monitored by HP Operations Manager or not.

Level 2

Status of registered components and a dump of their registration information.

Level 3

ID of core processes. 0 (zero) indicates root, non-zero indicates non-root ownership.

Level 4

Similar to level 0, but the STATE is reported in numeric format.

Level 5

Similar to level 1, but the STATE is reported in numeric format.

Level 6

Similar to level 0, but the output is not formatted

Level 7

Similar to level 1, but the output is not formatted

-version

Prints the version of ovc

AUTHOR

ovc was developed by Hewlett-Packard Company.

EXIT STATUS

The following exit values are returned:

0

Success.

1

Not defined.

2

Ignored.

62

The UNIX daemon or Windows service is not running.

63

The Control daemon is being initialized.

64

Generic error.

65

Invalid target.

67

Operation aborted.

69

Missing prerequisite.

70

Authorization error.

71

Operation on prerequisite failed.

73

Invalid event.

EXAMPLES

The following examples show how to use the `ovc` command and some of its options to control and display important information about registered components.

To start the component registered as `opcle`:

```
ovc -start opcle
```

Before `opcle` itself starts, all the components that `opcle` depends on are started.

To start the component registered as `opcle` and display the progress of the command execution:

```
ovc -start opcle -verbose
```

Before `opcle` itself starts, all the components that `opcle` depends on are started.

To print the status of all registered components:

```
ovc -status
```

To stop the component registered as `opcle`:

```
ovc -stop opcle -verbose
```

Before `opcle` itself stops, all the components that depend on `opcle` are stopped. This command starts the control daemon and `ovbbccb` components if these components are not running.

To stop the component registered as opcle using the ovc -stop[<target>...] -nostart option:

```
ovc -stop opcle -nostart
```

Before opcle itself stops, all the components that depend on opcle are stopped. This command does not perform any action if the control daemon is not running.

To send the event RECONFIGURE to all running components:

```
ovc -notify RECONFIGURE
```

To start all components (and their dependents) belonging to category SERVER and AGENT.

```
ovc -start SERVER AGENT
```

To print the status of the component opcle and display the registration details:

```
ovc -status opcle -level 2
```

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Name

custom.properties — This file is used to configure the custom properties used in the product.

SYNOPSIS

custom.properties

DESCRIPTION

This file is used to create/edit the properties that can be configured in the product. The file is available under: For Windows C:\ProgramData\HP\HP BTO Software\Conf\som\custom.properties.sample and For Linux /var/opt/OV/conf/som/custom.properties.sample Once the properties are modified, rename the file to custom.properties and the ovjboss server needs to be restarted. The properties can be used to tweak the application behaviour like changing the default cache refresh time, selecting SNMPv3 for Cisco discovery, etc. All the properties under the custom.properties files will be reloaded on the JVM during the ovjboss restart.

Attributes

The properties that can be configured through custom.properties are listed below.

wbemcollector.collectioncachetimeout

Wbem Data Collection Cache Refresh Period (in hours). Value should be an integer ≥ 1 , however, it is not recommended to change it.

cisco.useSNMPv3

Setting this property to true enables discovery of CISCO switches through SNMPv3.

cisco.snmp.timeout

Value in milliseconds after which CISCO switch discovery times out.

cisco.snmp.retries

Number of retries for CISCO switch discovery.

cisco.snmp.privacyProtocol

The privacy protocol for CISCO switch discovery through SNMPv3.

cisco.snmp.authenticationProtocol

The authentication protocol for CISCO switch discovery through SNMPv3.

cisco.showDisabledVsans

Setting the value to true enables the collection of disabled VSANs for Fabric.

`discovery.exclude.vmware.vm`

Setting the value to true excludes discovery and data collection of ESX Virtual Machines for ESX servers.

`discovery.snmp.timeout`

Value in milliseconds after which the discovery process times out while attempting to discover any device through SNMP.

`discovery.snmp.retries`

Number of retries by the discovery process to discover a device using SNMP.

`collection.command.execution.timeout`

Command time out used for discovery and data collection.

EXAMPLES

Please refer to `custom.properties.sample` file under `DATA_DIR/conf/se` directory.

SEE ALSO

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Feedback on Reference Pages, March 2015 (Storage Operations Manager 10.00)

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.