

Systems Insight Manager. These ports can be enabled by using the "esxcfg-firewall" command in the service console, or by answering 'y' when prompted by the installation script.

For the SIM certificate to be added in SMH, the outgoing connections on port 280 needs to be enabled in the firewall. This connection can be opened by using the command "esxcfg-firewall -0 280,tcp,out,sim-cert" in the service console, or by answering 'y' when prompted by the install script.

Some things you will want to consider before you start the installation:

1. Will you be using the HP SIM console? If so, you want to allocate an IP address for the HP SIM console as you will need to provide it during the installation process. You must provide either the IP address or the fully qualified DNS name for the HP SIM console. This will be an additional "rocommunity" string in the snmpd.conf file. The installation script will ask for this information or you can skip this step and modify "/etc/snmp/snmpd.conf" to the necessary information.
2. Do you have other ProLiant or HP servers that you wish to manage? If so, you should layout what the SNMP community strings should be. The default is usually "public" but since everybody knows the default, this is not considered to be very secure. The snmpd.conf(5) man page has more information. In general, you need to know the "community strings" (e.g. public) and the IP address of the HP SIM console.

Once you have the information to configure the SNMP and web enabled agent interfaces, you can install the packages. To install, you must be logged onto the console OS as user name "root". At the command prompt:

```
[root@myserver hpmgmt] ./installvm760.sh
```

You will be presented with the various installation options.

Automating the Installation:

To automate the installation of the agents, make a copy of the hpmgmt.conf.example file and rename it to hpmgmt.conf. This file contains the configuration information for the hpsm package, vmware-snmp sub-agent (for ESX 2.5.x) and firewall port configurations (for ESX 3.0.x). Edit this file to fit your environment. Please see the example file for complete details on the configuration settings. At a minimum, you should configure Local Read/Write community for snmp and the vmware snmp subagent. When you are ready to install, run the script as follows:

```
[root@myserver hpmgmt] ./installvm760.sh --silent --inputfile hpmgmt.conf
```

This will start the installation process immediately--you will not be prompted for confirmation. If you are missing information from your configuration file, you may be prompted for it during installation.

To automate the configuration of the System Management Homepage, place a copy of the smhpd.xml file with the desired settings into the same directory as the installvm760.sh script. When performing a silent install this file will be copied to the appropriate directory. It is recommended to use a file from a pre-existing installation rather than edit by hand.

VALIDATING INSTALLATION:

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You can run a few utilities to validate that the installation of the package was successful.

`snmpwalk localhost public enterprises | grep hp`

This command will list all the SNMP Management Information Block (MIB) items associated with "hp". These are the HP management items.

`snmpwalk localhost public enterprises | grep 6876`

This command will list all the SNMP Management Information Block (MIB) items associated with the VMware ESX Server software. These are the VMware management items. Note that once the system is rebooted, this command may no longer work if you have not enabled the VMware SNMP subagent to run at startup (automatic). If you want full monitoring of the system, you need to log onto the VMware console as previously described and enable automatic start of the VMware SNMP processes.

`https://fully.qualified.name.com:2381`

Point your web browser to the fully qualified name of this server (or the IP address) and port 2381. Note that you MUST use the "https://" prefix and port ":2381" or this will not work. This will allow you to log into the Web Agent and view the status of the machine. The System Management Homepage uses OS accounts for authentication.

REMOVAL INSTRUCTIONS:

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You need to change to the directory where this file is located. Then enter the following command:

```
./installvm760.sh --uninstall
```

This will remove all instances of the HP Advanced Management Software including the snmp stack (the snmp stack will not be removed on ESX 2.5.3 and above). If you wish to continue monitoring your VMware installation through SNMP without the HP ProLiant Advanced Server Management software, you will need to re-install the SNMP packages from the VMware media. The VMware SNMP packages are located on the VMware media at:

```
./VMware/RPMS/ucd-snmp-{version}.i386.rpm  
./VMware/RPMS/ucd-snmp-utils-{version}.i386.rpm
```

On ESX 3.0.x, the firewall port for the 'hpim' service and port 280 (used by hp SIM) will be disabled during uninstall of the agents. The 'snmpd' service can be disabled in the firewall by using the command "esxcfg-firewall --disableservice snmpd".

AGENT CONFIGURATION:

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For complete details on configuring HP Insight Manager Agents, please see the hpsm man page.

Support for 4GB Qlogic and Emulex HBAs has been added with this version of the agents for ESX 3.0.x. For the storage agents to display the correct information for the Qlogic and Emulex HBAs, the libraries corresponding to the Qlogic and Emulex driver versions have to be installed on the ESX 3.0.x Service Console. Please ensure that you run through these instructions ONLY if you do not see a link for either the HBA or the target drives in the System Management Homepage.

The following steps guide you through the installation for the corresponding libraries -

1. Download the libraries for the driver loaded in the vmkernel from the following links:

Link for Emulex libraries - <http://www.emulex.com/ts/docoem/vmware/index.html>

Link for Qlogic libraries - http://support.qlogic.com/support/oem_product_detail_vmware.asp

2. Stop the 'hpsmhd' and 'hpsasm' agents by issuing the commands, 'service hpsmhd stop' and 'service hpsasm stop' from the service console (you must be logged in as root).

3. Remove the older corresponding libraries from the '/opt/compaq/storage/bin' directory. ('libdfc.so' for Emulex, and 'libqlsdm.so' for Qlogic).

4. Install the libraries which were downloaded in step 1 using the install script present in those packages.

5. For the Qlogic libraries you might have to rename the library file. Use the following command to rename the library file -

```
'mv /usr/lib/libqlsdm-ia32.so /usr/lib/libqlsdm.so'
```

5. Restart the 'hpsmhd' service first using the command 'service hpsmhd start'. Then, start the 'hpsasm' service using the command 'service hpsasm start'.

ACKNOWLEDGEMENTS:

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This package contains additional 3rd-party software. By installing this software you agree to the licensing terms for use of this software set forth in the LICENSE file.

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se ensure that you run through these instructions ONLY if you do not see a

```
*****
* System Management Homepage installed successfully with *
* default configuration values. To change the default *
* configuration values, type the following command at *
* the root prompt:
*
* perl /usr/local/hp/hpSMHSetup.pl
*
*****
```

Please read the Licence Agreement for this software at

/opt/compaq/hpasm/hpasm.license

By not removing this package, you are accepting the terms of the "License for HP Value Added Software".

HP Insight Manager agents have been installed successfully!