Linux HBA providers for HP Systems Insight Manager

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About this document

HP Systems Insight Manager (HP SIM) uses CIM/WBEM servers and providers that conform to the Storage Management Initiative Specification (SMI-S). Before HP SIM can manage and report on a storage host, the appropriate SMI-S provider must be installed and configured.

About the SMI-S provider

The SMI-S provider is also called the cimserver.

Models supported

The Linux HBA SMI-S provider enables HP SIM support for the following Fibre Channel Host Bus Adapter (HBA) models:

HP HBAs (QLogic OEM)

- HP FCA2214
- HP FCA2214DC

The HP Fibre Channel HBA models listed above are supported on the following Linux operating systems:

- Red Hat Enterprise Linux 3 (AMD64/EM64T)
- Red Hat Enterprise Linux 3 (x86)
- Red Hat Enterprise Linux 4 (AMD64/EM64T)
- Red Hat Enterprise Linux 4 (x86)
- SUSE Linux Enterprise Server 8 (AMD64)
- SUSE Linux Enterprise Server 9 (AMD64/EM64T)
- SUSE Linux Enterprise Server 9 (x86)

HP HBAs (Emulex OEM)

- HP FC2242SR 4Gb PCI-e DC HBA
- HP FC2142SR 4Gb PCI-e HBA
- HP FC2143 4Gb PCI-X 2.0 HBA
- HP FC2243 4Gb PCI-X 2.0 DC HBA
- A7298A
- 394757-B21
- 394588-B21

The HP Fibre Channel HBA models listed above are supported on the following Linux operating systems:

- Red Hat Enterprise Linux 3.0 on x86 and x86-64
- Red Hat Enterprise Linux 4.0 on x86 and x86-64
- SUSE Linux Enterprise Server 8.0 on x86 and x86-64
- SUSE Linux Enterprise Server 9.0 on x86 and x86-64

Requirements

The following requirements must be met in order for HP SIM to support the listed Linux HBAs:

- HP SIM 5.0 or later must be installed on the central management server (CMS).
- SSL must be installed on the host.

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• HP Emulex HBAs only: Emulex driver version 8.0.16.29 (or later) or 8.1.6.6 (or later) and the corresponding applications kit are required.

Installing the SMI-S provider HP HBAs (QLogic OEM)

- Make sure OpenSSL is installed on your system. Enter opensll version to show the version. If you get an error, check with your OS provider. OpenSSL is available with most common Linux operating system.
- 2. To obtain the provider, open a web browser and go to http://h18006.www1.hp.com/storage/saninfrastructure/hba.html
- Click the link for the applicable HBA model.
- 4. Click the **Software & Drivers** link.
- 5. Click the applicable Linux operating system link.
- 6. Scroll down to the Software section, and click the **Obtain Software** link for *SMI-S CIM Providers for HP QLogic HBAs*.
- Run rpm on the rpm file that you downloaded for your version of Linux.
- 8. Change to the directory where the provider is installed and run the pegsetup program by entering:
 - . ./pegsetup

NOTE:

Be sure to enter a space between the two periods in . ./pegsetup

9. Start the cimserver by entering cimserver.

HP HBAs (Emulex OEM)

- 1. To obtain the provider, open a web browser and go to <u>http://h18006.www1.hp.com/storage/saninfrastructure/hba.html</u>
- 2. Click the link for the applicable HBA model.
- 3. Click the Software & Drivers link.
- 4. Click the applicable Linux operating system link.
- 5. Scroll to the Software section, and click the **Obtain Software** link for the SMI-S provider.

The Linux release kit is provided in the file format: elxsmiprovider-<OS>-<processor>-<version>.tar.gz, where <OS> is the operating system variant, <processor> si the processor type, and <version> is the provider version. For example, elxsmiprovider-rhe14-i386-1.1.6-2.tar.gz is version 1.1.6-6 or the provider for Red Hat Enterprise Linux 4 (x86).

 Copy the release kit to the /tmp directory on the computer where it will be installed.

- 7. Enter tar -zxvf elxsmiprovider-<OS>-<processor>-<version>.tar.gz to expand the release kit.
- 8. Enter cd elxpegasus . ./cimsrvinstall_start.sh

You can use the <code>-https_port</code>, <code>-http_port</code>, and <code>-</code> <code>new_password</code> options to change the https port, http port, and password for the root account. The <code>-no_prompts</code> option specifies a non-interactive installation. If no options are specified, you will be prompted to change the port numbers and password.

The elxpegasus directory is copied to /opt/Emulex/elxpegasus.

 In HP SIM, navigate to Options > Protocol Settings > Global Protocal Settings, and enter the SMI-S provider username (root) and password (pwd580) in the Default WBEM settings section. There is a limit of five username/password combinations.

Limitations

HP SIM may experience a slight delay in discovering the Linux HBAs while the SMI-S provider gathers information from the hosts for the first time.

Links

- HP SIM overview: <u>http://h18013.www1.hp.com/products/servers/management/hp</u> <u>sim/index.html</u>
- HP SIM SMI-S provider information: <u>http://h18013.www1.hp.com/products/servers/management/hp</u> <u>sim/smi-s-providers.html</u>