

Windows HBA providers for HP Systems Insight Manager

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 Windows¹ 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

HP HBAs (Emulex OEM)

- A7388A
- A7387A
- AB466A
- AB467A
- A8003A
- A8002A
- A7560A
- 394757-B21
- 394588-B21
- FC2143
- FC2243
- ProLiant BL460c (Emulex C Class Blade HBA, HP Part #403621-B21)

NOTE:

All of the HP Fibre Channel HPA models listed above are supported on Windows hosts running Microsoft Windows 2000, Microsoft Windows Server 2003, Microsoft Windows Server 2003 for 64-bit Extended Systems, or Microsoft Windows Server 2003 64-bit Edition.

The HP HBA (Emulex OEM) is supported on the ProLiant BL460c.

Requirements

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

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- HP SIM 5.0 or later must be installed on the central management server (CMS).
- HP QLogic HBAs only: SSL must be installed on the host (a binary version is available at <http://www.openssl.org/related/binaries.html>).
- HP QLogic HBAs only: If you plan to install the HP HBA (QLogic OEM) SMI-S provider and the Command View EVA 5.0 SMI-S provider on the same host, you must install the Command View EVA 5.0 SMI-S provider first. Refer to the *HP EVA SMI-S Provider for HP Systems Insight Manager* document for information about the Command View EVA SMI-S provider.
- HP Emulex HBAs only: The hotfix for KB916531 is required. Without this hotfix, the system may perform slowly or stall. Go to <http://support.microsoft.com/kb/916531> for instructions on obtaining and installing the hotfix.
- HP Emulex HBAs only: Version 1.20a7 (or later) of the Emulex Storport Miniport driver is required. Visit <http://www.emulex.com/> for the latest information on SMI-S provider support for driver releases.
- If you plan to use the HBAnyware WebLaunch feature of the SMI-S provider, you must first install HBAnyware 3.1a5 (or later), and set up a web server.

Installing the SMI-S provider

HP HBAs (QLogic OEM)

1. Install SSL on the Windows host if it is not already installed.
2. To obtain the provider, open a web browser and go to <http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>
3. 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*.
7. Go to the location where you downloaded the provider, and run the Windows installation program.
8. Open a command window, and change to the QLogic HBA CIM Provider /bin directory.
9. Do one of the following:
 - To install the cimserver as a service, enter:
`cimserver -install`

The cimserver will be listed in the **Services** window as **Pegasus CIM Object Manager**, and if it is set to *Automatic*, it will run every time the PC is started. The service can be started manually the first time through the **Services** window.

To remove the service, enter:
`cimserver -remove`

 - If you installed the Command View EVA 5.0 SMI-S provider on the host, enter:
`cimserver -install qlogic enableHttpConnection=true`

```
httpPort=6000 enableHttpsConnection=true
httpsPort=6010
```

This will install the CIMOM as a Windows service and rename it so it does not conflict with the name of the server installed by Command View EVA 5.0, and it will also select http and https ports other than the defaults that Command View EVA 5.0 uses.

The cimserver will be listed in the **Services** window as **Pegasus CIM Object Manager –qlogic**, and if it is set to *Automatic*, it will run every time the PC is started. The service can be started manually the first time through the **Services** window.

To remove the service, enter:
`cimserver -remove qlogic`

HP HBAs (Emulex OEM)

1. To obtain the provider, open a web browser and go to <http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>
2. Click the link for the applicable HBA model.
3. Click the **Software & Drivers** link.
4. Click the applicable Windows operating system link.
5. Scroll to the Software section, and click the **Obtain Software** link for the SMI-S provider.
6. Go to the location where you downloaded the provider, and double-click the `elxsmiprovider1.1.6-2.exe` file. Follow the on-screen installation instructions.

The cimserver is installed as a Windows service (Emulex CIM Server). You can use the Windows Service manager to start and stop the service.

To uninstall the Emulex HBA SMI-S provider, use **Control Panel > Add/Remove Programs**.

NOTE:

By default, members of the local group *Administrators* have full access to the CIM server.

Managing the provider ports

QLogic

If you need to change the port the provider is using, change it in the following places:

- On your PC, edit the `C:\Pegasus-2.4-qlogic\cimserver_planned.conf` file by replacing `xxxx` with the port number you will use on the line: `httpsPort = xxxx`. The port number can be up to five digits.

- For HP SIM, edit the `Program Files/HP/Systems Insight Manger/config/identification/wbimportlist.xml` file. Follow the existing file format.

Emulex

If you need to change the port the provider is using, change it in the following places:

- On your PC, edit the `Program Files\Emulex\AMI HBA Provider\cimserver_planned.cong` file by replacing `xxxx` with the port number you will use on the line: `httpsPort = xxxx`. The port number can be up to five digits.
- For HP SIM, edit the `Program Files/HP/Systems Insight Manger/config/identification/wbimportlist.xml` file. Follow the existing file format.

Managing the CIMOM password

You can use the `cimuser` command to manage the CIMOM password.

1. Open a command window, and change to the provider's `/bin` directory.
2. To change the CIMOM password, enter `cimuser -m -u %USERNAME% -w old password -n new password`. Substitute actual values for `%USERNAMR%`, old password, and new password.

If there is no existing password enter `cimuser -a -u %USERNAME% -w password`. Substitute actual values for `%USERNAMR%` and password.

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.
- If you lose a connection between the HBA and a switch, the HBA driver will stall waiting for the connection to be reestablished. If the loss of connection was intentional, rebooting the system with the HBA will start the driver again. If you reestablish the connection, the driver will star again in a few minutes, and a reboot is not necessary.

Links

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