

Emulex PCI-E OCe adapter firmware update

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1. Introduction

This document describes how to display and update the revision of the firmware/bootcode embedded in the Emulex PCI-E adapters of the OCe family.

IMPORTANT:

**The firmware/bootcode update cannot be proceeded under EFI : running the EFI version of the Emulex utility freezes the system.
You will need to use a Linux Operating System or a VMware ESXi installation to execute the procedure.**

2. Linux Procedure

2.1 Firmware/Bootcode Update Tool

Updating the Emulex OCe adapter firmware/bootcode can be realized using the OneCommandManager software supplied by Emulex. The procedure described below uses OneCommandManagerCLI, the command line version of the application.

The firmware/bootcode update file provided by Emulex contains new versions for both firmware and bootcode which will be updated simultaneously.

2.2 Update Tool Installation

The resource CD contains an archive file including all the components needed to install and run the update tool: OneCommandManagerCLI-<software revision>.zip

Uncompress this archive file in a temporary folder.

From this folder, install the software tool by running the command:

```
./install.sh
```

The installation process will install the hbacmd executable file in the /usr/bin folder.

Then, extract the firmware/bootcode update file from its archive file;

Copy this extracted file in the folder where hbacmd command is installed.

You are now ready to proceed with firmware update.

2.3 Adapter Firmware Update

2.3.1 Display the adapters list

First, display the list of Emulex adapters present in the system by running:

```
/usr/sbin/hbacmd listhbas
```

This command allows identifying each adapter port by its WWPN.

2.3.2 Get Firmware and Option Rom current revision

Read current firmware and Option Rom revisions of a given adapter port with the command:

```
/usr/sbin/hbacmd HBAAattrib <Adapter_port_WWPN>
```

2.3.3 Firmware and BootCode update

Update the firmware and boot code for a given adapter port by running the command:

```
hbacmd Download <WWPN> <firmware/bootcode_FileName>
```

firmware/bootcode_FileName is the firmware/bootcode file name.

3. VMware ESXi Procedure

3.1 Pre-requisites

3.1.1 Emulex CIM provider on ESXi host

This component may already be installed on the host.

3.1.1.1 Check Emulex CIM provider on ESXi host

Run the following command on the host:

```
~ # esxcli software vib list | grep emulex-cim
```

```
emulex-cim-provider
```

If above command does not return anything, you will need to install appropriate Emulex CIM provider.

3.1.1.2 Install CIM provider

Installing the CIM provider will require to reboot the ESXi host. Please take appropriate actions to plan this downtime.

There are several ways to install a CIM provider :

- Using VMware vSphere CLI
- Using commands on the host through ESXi shell or SSH. This is the way which is described in this document.

Please note that file names in commands below are subject to change, mainly due to version numbering changes.

Copy the zip file from the bullion resource DVD to the ESXi host, under /tmp:

```
scp VMW-ESX-5.0.0-emulex-cim-provider-3.6.12.1-01-799300.zip
```

```
root@esxihost:/tmp
```

Under ESXi shell, unzip the file:

```
unzip /tmp/ VMW-ESX-5.0.0-emulex-cim-provider-3.6.12.1-01-799300.zip
```

Then install Emulex CIM provider:

```
esxcli software vib install -d /tmp/VMW-ESX-5.0.0-emulex-cim-provider-3.6.12.1-01-offline_bundle-799300.zip --maintenance-mode
```

Reboot the ESXi host:

```
reboot
```

3.1.2 Emulex OneCommand Manager plugin on the vCenter Server

This component may already be installed on the vCenter Server.

This plugin is only available for Windows versions of vCenter Server (not available for vCenter Server appliance)

3.1.2.1 Check Emulex OneCommand Manager vCenter Server plugin installation

Connect vSphere Client to vCenter Server, then click a host.

In the right pane, a tab named « Emulex OneCommand » is present if the plugin is installed and enabled.

If the plugin is not installed, you need to install the plugin as described below.

3.1.2.2 Install Emulex OneCommand Manager vCenter Server plugin

Copy the Emulex OneCommand Manager vCenter Server plugin installer from the resource DVD to the vCenter Server, then execute the setup file on it.

The User Manual of the plugin is also available on the resource DVD.

During installation, you might need to change default port if they are already in use in your configuration (the software will let you know if it is needed to change default values)

At the end of installation, accept to launch the plugin registration and fill the various fields with the IP address of the vCenter Server, and the port number you chose during installation of plugin.

Open a new vSphere Client session to your vCenter and check that the Emulex OneCommand plugin is enabled (menu " Plug-ins → Manage Plug-Ins ").

3.1.2.3 Adobe flash player 11.2 or later

Adobe flash player 11.2 or later must be installed on the machine where the vSphere Client will be executed to proceed to the update.

3.2 Updating firmware/boot code

1. From the resource DVD, extract on the vCenter Server the .ufi firmware update file from the .zip file.
2. Under the ESXi host shell, disable the firewall with following command:

```
esxcli network firewall unload
```

3. Connect to the vCenter Server via vSphere client.
4. Select the host containing Emulex PCIe boards to update
5. Click the « Emulex OneCommand » tab in the right pane
6. Click the « Maintenance » tab
7. Select « Update firmware »
8. In « Firmware download » window, browse to select the .ufi file which was inside the downloaded zip file.
9. Click « Start Update » and wait for the end of the progress
10. Reboot the host to finish the update