

Emulex® OneCommand® Manager

Application for Windows

Release 12.4.243.7-3

Purpose and Contact Information

These release notes describe the new features, resolved issues, known issues, and technical tips associated with this release of the Emulex® OneCommand® Manager application for Windows.

For the latest product documentation, and for supported driver versions, go to www.broadcom.com. If you have questions or require additional information, contact an authorized Broadcom® Technical Support representative at ecd-tech.support@broadcom.com.

New Features

1. Adds support for Fabric Assigned Boot LUNs (FABL).
2. Adds internal and external loopback test support on trunked ports. (LPe35000-series adapters only).
3. Displays transceiver data for trunked ports. (LPe35000-series adapters only).
4. Adds support for AMD Epyc 7002-series processors (PCIe 4.0).

Resolved Issues

1. If trunking is enabled and disabled before rebooting the system, pending WWPN change messages no longer appear.
2. Loopback tests are supported on trunked ports.
3. An issue in which obsolete authentication setting messages appeared when re-enabling DHCHAP after disabling the `enable_auth` driver parameter without reloading the driver is fixed.
4. An issue in which previous dump files could be deleted when performing a new dump is resolved.
5. Transceiver data retrieval is supported when trunking is active.
6. On LPe35004 HBAs, correct factory default WWNs are now displayed on the second two-lane trunk after clicking **Get Factory Default WWNs**.

Known Issues

1. You must first update the OneCommand Manager application to version 12.4.x before using it to update the firmware to version 12.4.x.

Workaround

None.

2. If you use the OneCommand Manager application on the Windows operating system to manage adapters installed on the ESXi 6.7 Update 1 operating system, the features listed in [Table 1](#) are unavailable.

Table 1: Unavailable Features

Feature Description	GUI Element	CLI Command
Set port speed	Firmware Parameters tab (for non-LPe12000 adapters). For LPe12000-series adapters, the port speed is configured with a driver parameter that is available.	SetPortSpeed
Enable or disable a port	Port Information tab	SetPortEnabled
Enable or disable boot code	Boot from SAN Configuration dialog	EnableBootCode
Run diagnostics tests	Diagnostics tab	Only the following diagnostic commands are available: <ul style="list-style-type: none"> ■ DPortTest ■ EchoTes ■ FcTraceRoute ■ GetBeacon ■ LoadList ■ LoopBackTest ■ LoopMap ■ PostTest ■ SetBeacon ■ Wakeup
WWN management	Maintenance tab	ChangeWWN GetWWNCap ReadWWN RestoreWWN
Create and delete diagnostic dump files	Diagnostics tab (LPe12000-series adapters) Firmware tab (all other adapters)	Dump commands are not supported.
Get IPL file name	Adapter Information tab	HbaAttributes
Firmware download	Maintenance tab (LPe12000-series adapters) Firmware tab (all other adapters)	Download
Firmware parameters	Firmware Parameters tab	getfwparams setfwparam

The features listed in [Table 2](#) are available using the OneCommand Manager application on the Windows operating system to manage adapters installed on the ESXi 6.7 Update 1 operating system.

Table 2: Available Features

Feature Description	GUI Element	CLI Command
Perform discovery	Discovery Information tab	ListHBAs
View adapter information	Adapter Information tab	HbaAttributes
View port information	Port Information tab	PortAttributes
View port statistics	Statistics tab	PortStatistics
View server attributes	N/A	ServerAttributes
Configure driver parameters	Host Driver Parameters tab Driver Parameters tab	DriverConfig GetDriverParams GetDriverParamsGlobal SaveConfig SetDriverParam SetDriverParamDefaults
View transceiver information	Transceiver Data tab	GetXcvrData
View PCI register information	Diagnostics tab	PciData

Workaround

Use the `esxcli` management tool or the OneCommand Manager for VMware vCenter application to manage adapters installed on the ESXi 6.7 Update 1 operating system. The issue is resolved in ESXi 6.7 Update 2.

- Revision A of the FOIT AFCT-57F3TMZ-ELX (16GFC longwave optic transceiver) does not support D_Port (also called ClearLink[®]) for Brocade[®] switches and MDS for Cisco switches.
- Neither Revision A nor Revision B of the FOIT AFCT-57F3TMZ-ELX (16GFC longwave optic transceiver) or AFCT-57G5MZ-ELX (32GFC longwave optic transceiver) supports D_Port for Brocade switches.
- Beginning with software release 11.2, FC HBAs and OneConnect[®] CNAs have independent software kits. Before updating earlier drivers and applications to the software in release 12.4.x, refer to the *Emulex Software Kit Migration User Guide* for special instructions and considerations for using the 11.2 and later software kits for FC HBAs and OneConnect CNAs.
- The OneCommand Manager GUI and CLI cannot manage CNAs on hosts installed with the 12.4 kit. Remove all CNAs from the system prior to installing the 12.4 kit.
- Do not use version 12.4.x applications to manage LPe16202 adapters on remote hosts running version 11.4.x software. Management of LPe16202 adapters must be performed using the legacy version 11.4.x applications available on those hosts. If version 12.4.x management is used to manage LPe16202 adapters on remote hosts running version 11.4.x, the following limitations apply:
 - The GUI will discover LPe16202 adapters installed on the remote hosts being managed; however, LPe16202 adapter-specific (FCoE or NIC) counters are not displayed on the various function summary tabs.
 - The CLI will discover LPe16202 adapters using the `ListHBAs` command, and will generally be manageable. However, the FCoE-specific commands `GetFIPParams`, `SetFIPParam`, and `GetFCFInfo` are no longer supported.

8. The OneCommand Manager application does not display updated driver parameters after a batch update.

Workaround

None.

9. Windows driver parameters do not persist after reboot if they are set with FA-PWWN enabled.

Workaround

- Disable FA-PWWN, reset the port, and change the port's WWPN using the OneCommand Manager application GUI.
- Enable FA-PWWN and reboot the system.
- Verify that the correct WWPN is used.

10. The **Target Mapping** tab allows you to create duplicate target bindings with different bus and target IDs. The first target binding is used after a reboot.

Workaround

You can change target bindings using the **Target Mapping** tab.

11. Except on LPe12000-series HBAs, resetting or disabling HBA ports turns off beaconing.

Workaround

Enable beaconing after resetting or disabling HBA ports.

12. If trunking is enabled and you disable it and then reboot the system, pending user-defined WWPN changes are reported for the port, but no pending changes exist.

Workaround

Ignore the report of pending WWPN changes.

13. Brocade switches using Fabric Operating System (FOS) version 8.2.1B and earlier might encounter the following issues with DHCHAP authentication:

- You might not be able to configure the secret pair between the switch and the HBA.
- When authentication is enabled on the switch, and authentication is disabled on the HBA, the switch disables the port, but it does not issue the expected status messages.
- The Brocade switch authenticates the HBA port when authentication is disabled on the switch, or when a frame is dropped.

14. If HBACMD is used to set a hash priority to a single value on the HBA port, ensure that the same hash priority value is set on the switch. A difference between the hash priority values causes an authentication failure.

15. Boot from SAN is not supported if FC-SP-2 authentication (DHCHAP) is enabled.

16. The OneCommand Manager CIM client does not manage HBAs on ESXi 6.7 U1 systems.

Workaround

Use OneCommand Manager for VMware vCenter to manage HBAs on ESXi 6.7 U1 systems.

17. After deleting authentication, you must reload the driver or reboot the system to view the new settings in the OneCommand Manager GUI.

18. A link speed that was configured using the OneCommand Manager application is not reflected in the x86 Boot BIOS utility.

Workaround

In the x86 Boot BIOS utility, to view a non-default link speed that was configured in the OneCommand Manager application, ensure that the link is up in the x86 Boot BIOS utility by performing a `scan for target devices` or `configure the boot devices`.

19. Dual-port LPe35002 HBAs display quad-port LPe35004 HBA trunking attributes.

Workaround

None.

20. After Dynamic D_Port is transitioned from enabled to disabled, OneCommand Manager might fail D_Port diagnostics.

Workaround

Perform a port reset.

21. If an adapter is installed in a server running version 12.4 of the OneCommand Manager application, do not attempt to manage, view or set the FABL (Fabric Assigned Boot LUN) EFI boot parameter from a remote OneCommand Manager application client. Doing so might result in incorrect settings being read or written.

Workaround

When running version 12.4 of the OneCommand Manager application, do not manage the FABL EFI parameter from a remote version of the OneCommand Manager application client. Manage the FABL EFI boot parameter using the local version 12.4 of the OneCommand Manager application.

22. When running version 12.4 of the OneCommand Manager application, do not attempt to manage, view or set the EFI boot parameters for a remote adapter installed in a server that is running version 12.2, or earlier, of the OneCommand Manager application. Doing so will yield unpredictable results.

Workaround

Use version 12.2, or earlier, of the OneCommand Manager application to manage the EFI settings on the version 12.2 server.

Technical Tips

1. If you change the volatile World Wide Name (WWN) on an LPe16000-series adapter, a reboot is required.

2. OneCommand Manager CLI commands might fail in Windows PowerShell.

OneCommand Manager CLI commands with parameters that contain embedded commas, such as `SetDCBPriority`, fail execution in Windows PowerShell.

Workaround

Enclose embedded commas in quotation marks. For example, the following command:

```
hbacmd SetDCBPriority 10:00:00:00:c9:3c:f7:88 3 0,1,2,4,5,6,7 3 0 0 0 0 0
```

must be formatted as follows to run successfully in Windows PowerShell:

```
hbacmd SetDCBPriority 10:00:00:00:c9:3c:f7:88 3 "0,1,2,4,5,6,7" 3 0 0 0 0 0
```

3. If a switch-connected port speed is configured to auto negotiate and the LPe12000-series adapter port speed is also configured to auto negotiate (the default), the **Port Information** tab displays **8 Gb/s** as the port speed. If the speed of the adapter is changed without the OneCommand Manager application GUI, the port speed does not change on the **Port Information** tab.

Workaround

When possible, use the OneCommand Manager application GUI to change the port speed of the adapter.

4. Start a command shell with the `Run As Administrator` option for OneCommand Manager CLI commands and batch files, if User Account Control (UAC) is enabled.

If you do not start the command shell with the `Run as Administrator` option, Windows shows a dialog that prompts you to allow UAC. After you agree to allow UAC, the output from a command is displayed in a separate window, but it disappears immediately.

5. The OneCommand Manager application does not display the OS Device Name for LUNs attached to vPorts.

In the **LUN Information** tab, under **Mapping Information**, the **OS Device Name** field displays **N/A** instead of the device name. All other information on the **LUN Information** tab is displayed correctly.

6. When you install the OneCommand Manager application on a guest operating system, answers to the installer prompts are ignored.

When you install the OneCommand Manager application on a guest operating system, you are presented with management mode options (for example, local only, full-management, read-only, and so on). Answers to these questions are ignored; all installations on guest operating systems are set to local only, read-only, and remote management.

7. When you manage a host using the CIM interface and you initiate a batch download process, all the adapters of the CIM-managed host are displayed because the required validation logic is not available in the CIM provider.

Workaround

Manually deselect the adapters you do not want included in the batch download before starting the download. If you start the download without deselecting the non-matching adapters, the firmware download is initiated and results in an error for non-matching adapters.

8. When you start the OneCommand Manager application on a Windows Server 2012 R2 system, the popup message `Publisher is unknown` is displayed.

This message indicates that the publisher is unknown, and you are prompted to allow the program to make changes to the computer.

Workaround

Do one of the following:

- Click **Yes** on the popup message to run the OneCommand Manager application.
- Disable the popup by setting the **User Account Control** settings to **Never Notify**.
- Disable the popup by performing the following steps:
 - a. Select **Start > Run**, type `secpol.msc`, and click **OK**.
 - b. Double-click **Local Policies**.
 - c. Double-click **Security Options**.
 - d. Double-click **User Account Control: Behavior of the elevation prompt for administrators in Admin Approval Mode**.
 - e. Select **Elevate without prompting**.
 - f. Click **OK**.

9. A set link speed issue occurs after an SFP hot swap.

LPe16000-series adapters do not support an SFP hot swap if the replacement SFP is not the same model as the original SFP. Two consequences occur in the OneCommand Manager application:

- The **Port Attributes** tab in the OneCommand Manager application or the OneCommand Manager CLI `PortAttributes` command might display incorrect data for the **Supported Link Speeds** attribute. This issue is cosmetic.
- Boot from SAN Management might be unable to set the `Boot Code Link Speed` parameter to 16 Gb/s.

Workaround

After changing the SFP, reset the LPe16000 port or reboot the server.

10. When using an Internet Explorer 11 browser, navigating to the **Index** or **Search** pages in the online help results in those pages being blank.

Workaround

Click **Contents** and refresh the browser, or load the help URL in a different browser.

11. On an ESXi host, when FA-PWWN is enabled or disabled and an adapter port is reset using the `esxcli elxmgmt` plug-in, operations performed on the adapter using the OneCommand Manager application might not work as expected.

Workaround

To discover the adapter ports with the new WWPN, restart the Small-Footprint CIM Broker (SFCB) on the ESXi host and refresh the OneCommand Manager application.

12. LPe31000-series and LPe32000-series adapters might experience a link-down condition after running a cable link diagnostics test when they are connected to Brocade switches running FOS versions prior to v8.1.2.

Workaround

Manually reset the switch port using the `portdporttest --exit` command.

13. Roles-based Secure Management mode is available.

Secure Management mode is a roles-based security implementation. During the OneCommand Manager application installation, you are asked if you want to run in Secure Management mode. When the OneCommand Manager application is installed in this mode, the following operational changes occur:

- A non-root or non-administrator user can run the OneCommand Manager application.
- The OneCommand Manager application host uses a user's credentials for authentication.
- A user has OneCommand Manager application configuration privileges according to the OneCommand Manager application group to which the user is assigned.
- In Secure Management mode, a root or administrator user is provided full privileges on the local machine (OneCommand CLI does not require credentials) but no remote privileges.

NOTE: Refer to the *Emulex OneCommand Manager Application Adapters User Guide* for additional information on Secure Management mode.

14. OneCommand Manager Secure Management mode requires OneCommand Manager user groups to be configured on the domain or, if the host is not running on a domain, on the host machine.

OneCommand Manager Secure Management must be able to get the OneCommand Manager application group to which the user belongs from the host's domain (Active Directory or LDAP) or, if the host is not part of a domain, the host's local user accounts. This access is associated with user groups, not with specific users. Administrators set up user accounts such that a user belongs to one of these four OneCommand Manager application user groups.

Table 3: Secure Management User Privileges

User Group	OneCommand Manager Capability
ocmadmin	Allows full active management of local and remote adapters.
ocmlocaladmin	Permits full active management of local adapters only.
ocmuser	Permits read-only access of local and remote adapters.
ocmlocaluser	Permits read-only access of local adapters.

These four groups must be created and configured on the host machine or network domain. OneCommand Manager Secure Management uses the C-library API calls `getgrnam` and `getgrid` to retrieve the OneCommand Manager Secure Management group information. The equivalent to these can be obtained on the shell command line by typing the `getent group` command. If the four OneCommand Manager application groups are listed, along with their member users, this is an indication that the host machine is sufficiently configured to work with OneCommand Manager Secure Management.

15. To view online help using the Google Chrome browser, you must disable Chrome's security check using the `--allow-file-access-from-files` option:
 - a. Create a copy of the Chrome shortcut on the desktop, and rename it to RH Chrome L.
 - b. Right-click the new **Chrome** icon and select **Properties**.
 - c. Add the `--allow-file-access-from-files` text to the end of the path appearing in the target. You must leave a space between the original string and the tag you are adding.
 - d. Click **OK** to save your settings. Close any open instances of Chrome.
 - e. To open a local copy of the online help, either use the new shortcut to open Chrome, and then press **Ctrl + Open** and browse to the start page; or open Chrome with the new shortcut, and then right-click the start page and click **Open With > Google Chrome**.
16. The 32-bit or 64-bit `libcurl` file is required and must be copied to the Windows system when downloading firmware using http or https services with the Windows Management Instrumentation (WMI) CIM Studio tool.
17. To manage a remote ESXi 6.5 host using the OneCommand Manager application, set the configuration parameter `enableSSLv3` to `true` in the SFCB configuration file (`/etc/sfcb/sfcb.cfg`). By default, this parameter is not present in the configuration.

To add or update the `enableSSLv3` parameter, perform these steps:

 - a. Stop the `sfcb-watchdog` application. Type the following command:


```
etc/init.d/sfcbd-watchdog stop
```
 - b. Add or update the following lines in the `/etc/sfcb/sfcb.cfg` file:


```
enableSSLv3:    true
sslCipherList:  HIGH
```
 - c. Start the `sfcb-watchdog` application. Type the following command:


```
etc/init.d/sfcbd-watchdog start
```
18. `D_Port` and `FA-PWWN` cannot be enabled simultaneously.

Workaround

If `D_Port` is enabled and you want to enable `FA-PWWN`, you must first disable `D_Port`. If `FA-PWWN` is enabled and you want to enable `D_Port`, you must first disable `FA-PWWN`.

19. Neither FA-PWWN nor D_Port can coexist with the trunking feature on LPe35000-series adapters. If trunking is enabled, the firmware automatically disables FA-PWWN and D_Port.
20. D_Port is enabled by default.
21. When managing adapters on ESXi hosts using Windows OneCommand Manager, if a non-root user is used, the CIMOM might reject the request and return no data. This could happen even if the non-root user has root privileges.

Workaround

Be the root user when executing commands using HBACMD or when adding the host to the OCM GUI.

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