

Emulex[®] OneCommand[®] Manager Application for Windows

Release 12.2.349.9-1

Purpose and Contact Information

These release notes describe the supported operating systems, 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.

Supported Operating Systems

- Windows Server 2019
- Windows Server 2016

New Features

1. Adds support for LPe35000-series one-port and two-port adapters.
2. Changes made to x86 boot settings are applied to UEFI boot settings and changes made to UEFI boot settings are applied to x86 boot settings.
3. Adds duration support for beaconing.
4. Adds support for Namespace (Device Name Mapping) information.
5. Changes the ClearLink[®] (D_Port) default from Static to Dynamic.
6. Adds support for multiple dump retrieval.
7. Adds support for trunking (also called FC port aggregation) on LPe35000-series adapters.
8. Removes support for the following operating systems:
 - Windows Server 2012 R2
 - Windows Server 2012

Resolved Issues

1. An error no longer occurs when setting the `vmid-inactivity-timeout` parameter globally using the OneCommand Manager CLI.
2. When attempting to manage large SAN configurations on ESXi 6.7 systems, the OneCommand Manager application GUI no longer reports that the CIM server is not responding.
3. The MDS driver parameter can now be enabled while diagnostic tests are not being run.
4. The message `WWN Management is disabled while FA-PWWN is enabled` is no longer displayed by the OneCommand Manager GUI **Maintenance** tab when FA-PWWN is not enabled on the selected port.
5. Revision B of the Fiber Optic Interconnect Technology (FOIT) AFCT-57F3TMZ-ELX (16GFC longwave optic transceiver) supports D_Port (also called ClearLink) for MDS Diagnostic for Cisco switches.

Known Issues

1. 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. | <code>SetPortSpeed</code> |
| Enable or disable a port | Port Information tab | <code>SetPortEnabled</code> |
| Enable or disable boot code | Boot from SAN Configuration dialog | <code>EnableBootCode</code> |
| Run diagnostics tests | Diagnostics tab | Only the following diagnostic commands are available: <ul style="list-style-type: none"> ■ <code>DPortTest</code> ■ <code>EchoTes</code> ■ <code>FcTraceRoute</code> ■ <code>GetBeacon</code> ■ <code>LoadList</code> ■ <code>LoopBackTest</code> ■ <code>LoopMap</code> ■ <code>PostTest</code> ■ <code>SetBeacon</code> ■ <code>Wakeup</code> |
| WWN management | Maintenance tab | <code>ChangeWWN</code> <code>GetWWNCap</code> <code>ReadWWN</code> <code>RestoreWWN</code> |
| 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 | <code>HbaAttributes</code> |
| Firmware download | Maintenance tab (LPe12000-series adapters) Firmware tab (all other adapters) | <code>Download</code> |

Table 1: Unavailable Features (Continued)

| Feature Description | GUI Element | CLI Command |
|---------------------|--------------------------------|---------------------------|
| 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 for MDS diagnostics for Cisco switches.
- Neither Revision A nor Revision B of the FOIT AFCT-57F3TMZ-ELX (16GFC 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 12.2.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 OneConnect CNAs on hosts installed with the 12.2.x kit. Remove all CNAs from the system prior to installing the 12.2.x kit.
- The OneCommand Manager application does not display updated driver parameters after a batch update.

Workaround

None.

7. Enabling and disabling a Fabric Assigned Port World Wide Name (FA-PWWN) might cause an adapter port's WWPN to change. The OneCommand Manager application discovery-tree might not display the port's newly assigned WWPN.

Workaround

Stop and restart the OneCommand Manager application services and daemons when prompted by the OneCommand Manager application.

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

Workaround

Perform the following steps:

- a. Disable FA-PWWN.
 - b. Reset the port.
 - c. Change the driver parameters using the OneCommand Manager GUI.
 - d. Enable FA-PWWN.
 - e. Reboot the system.
 - f. Reconfigure the driver parameters.
 - g. Verify that the correct driver parameters are used.
9. 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.

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

Workaround

Enable beaconing after resetting or disabling HBA ports.

11. 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.

12. 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.

13. 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.

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

15. 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.

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

17. Loopback tests are not supported on trunked ports.

Workaround

Disable trunking on the port before running loopback tests.

18. Transceiver data retrieval is disabled when trunking is active.

19. Failure to reload the driver after disabling the `EnableAuth` driver parameter causes reports about obsolete authentication settings when reenabling DHCHAP.

Workaround

Reboot the server when authentication is disabled.

20. When there are two dumps in the adapter's flash memory and the retention count is set to 2, collecting a third dump causes the first dump to be deleted from the adapter's flash memory and the host file system. Only the second dump and the new dump information are saved to the host file system.

Workaround

Set the retention count to 3 or greater to save the information for all the dumps.

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

Workaround

Perform a port reset.

Technical Tips

1. Performing a core dump command might fail if a WWPN is specified.

When performing a core dump operation in the OneCommand Manager CLI and specifying an FC WWPN to indicate which adapter to dump, the command fails if the adapter is in a down state.

Workaround

None.

2. Some management functions are unavailable through the CIM interface with the OneCommand Manager application kits.

The following management functions are unavailable through the CIM interface with the OneCommand Manager application kits (OneCommand Manager application GUI and OneCommand Manager CLI):

- Boot from storage area network (SAN)
- Get and clear event logs

Workaround

None.

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

Workaround

Clear the adapters that you do not want to include in the batch download before starting the download. If you start the download without clearing the nonmatching adapters, the firmware download is initiated and results in an error for nonmatching adapters.

4. If the CLI (HBACMD) is used to perform a firmware download to a local adapter, and the OneCommand Manager GUI is running while the firmware download is occurring, the OneCommand Manager GUI might experience problems displaying information on various window tabs after the download is completed. The value displayed for most of the fields on the affected tabs or dialogs is N/A.

Workaround

Perform one of the following procedures:

- When a firmware download has been performed using the OneCommand Manager CLI, if **N/A** is shown for most of the OneCommand Manager GUI display fields, exit the GUI, and then restart it. The fields are displayed correctly.
 - Ensure that the OneCommand Manager GUI is stopped or is not running prior to performing a firmware download using the OneCommand Manager CLI.
 - Perform the firmware download using the OneCommand Manager GUI instead of the CLI.
5. The OneCommand Manager application does not show the operating system (OS) Device Name for logical unit numbers (LUNs) attached to virtual ports (vPorts).

The **LUN Information** tab, the **Mapping Information** area, and the **OS Device Name** field display **N/A** instead of the device name. All other information on the **LUN Information** tab is displayed correctly.

6. 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 by typing 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 by typing the following command:

```
etc/init.d/sfcbd-watchdog start
```

7. 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 displays 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 vanishes immediately.

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

9. 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 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 0
```

10. If a switch-connected port speed is configured to Auto-negotiate and the 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.

11. 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.
12. 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.

13. 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.

14. If an adapter is disabled when you attempt to save the DCB settings, the DCB settings are not saved.

Workaround

Ensure that the adapters are enabled.

15. 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.

16. 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.

17. 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.

18. 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 User Guide* for additional information on Secure Management mode.

19. 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.

20. 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**.

21. 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.

22. 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.

23. 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.

24. D_Port is enabled by default.

25. 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.

26. For trunked ports, the **Port Speed** field displays the maximum speed that the trunked port is capable of if all ports in the trunk are up.

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