

OneCommand Manager Application for Windows

Release Notes

Version: 10.0.803.9

System: Windows Server 2008 (x86 and x64)
Windows Server 2008 R2, Windows Server 2012, and Windows Server 2012 R2
(x64 versions, Enterprise and Server Core installation)

Date: February 2014

Purpose and Contact Information

These release notes describe the resolved issues and known issues associated with this OneCommand™ Manager (OCM) application version for the Emulex® drivers for Windows.

For the latest product documentation, go to www.Emulex.com. If you have questions or require additional information, contact an authorized Emulex® technical support representative at tech.support@emulex.com, 800-854-7112 (US/Canada toll free), +1 714-885-3402 (US/International), or +44 1189-772929 (Europe, Middle East, and Africa).

Resolved Issues

1. Adds support for the OCe14000 family of adapters.
2. A physical loopback diagnostic test succeeds if no transceiver is present on the OneConnect OCe1010x UCNA port. Heavy TCP/IP traffic on the port does not cause a MAC loopback diagnostic test on the OneConnect OCe1010x UCNA adapter to fail.

Known Issues

1. In the Change Port Speed dialog box (from the Physical Port Info tab), if the Mode is set to Auto-Negotiate, the Speed drop-down menu shows only single speed settings. The multiple speed settings are missing.

Workaround

Use the SetPhyPortSpeed CLI command to set auto-negotiate speeds to multiple speed choices.

2. On Windows Server 2008 R2 systems, persistent binding does not survive after a reboot.

Workaround

Set the binding again.

3. The *OneCommand Manager Application User Manual* (GUI) user manual and online help omitted a description of the VEPA (Virtual Ethernet Port Aggregator) field on the NIC Port Information tab.

VEPA allows VFs network traffic to bypass the hypervisor's virtual switch, and allows the PFs to transmit the traffic to the external switch. Check "Enable" to use VEPA. (Only available on OCe14000-Series adapter NIC ports.)

4. **On the Channel Management tab, the OCM application always displays the permanent MAC address for each channel.**

Workaround

To correlate the permanent MAC address with the current MAC address, view the Port Information tab. The Port Information tab always displays the current (user-settable) MAC address and the permanent MAC address.

5. **The “UmEnableChanLink” OneCommand CLI command has been removed.**

To enable the logical link status of a channel, use the “CMSetBW” OneCommand CLI command to set the minimum bandwidth to a value greater than 0. To disable the logical link status, set the minimum bandwidth to 0.

6. **When running the OCM application in Secure Management mode, in-band ports appear in the discovery-tree but cannot be managed.**

Emulex is beginning the process of phasing out support for in-band discovery in the OCM application. Therefore, this issue will not be fixed.

7. **Installing the OCM application on a guest operating system prompts for a management mode.**

When installing the OCM application on a guest operating system running on a virtual machine, the installer prompts for a management mode (e.g. local-only, full-remote, etc.) and read-only mode. However, when the OCM application runs on a guest operating system it runs in local-only and read-only modes, so it does not matter how these modes are specified during installation.

Workaround

None.

8. **All FC/FCoE switches impose an upper limit on the number of virtual ports that can be configured.**

An attempt to configure more than the maximum supported number of virtual ports may, with some switches, cause unpredictable behavior in the OCM application.

Workaround

Do not attempt to exceed the maximum number of virtual ports supported by the switch.

9. **The OCe11101-E UCNA cannot run loopback diagnostic tests (PHY, MAC, External).**

An attempt to run a loopback test on the OCe11101-E UCNA fails.

Workaround

None.

10. **SR-IOV: Running the OCM application on a guest operating system with more than one virtual function causes all NIC ports to appear under a single adapter.**

If you assign NIC virtual functions from multiple adapters to a virtual machine and run the OCM application in the virtual machine's guest operating system, the NIC functions appear under a single adapter node in the OCM application discovery-tree. The guest operating system in a virtual machine reports the same PCI bus number for all virtual functions, and the OCM application incorrectly determines that each of the discovered NICs are from the same adapter.

Workaround

None.

- 11. Performing a core dump command may fail if a World Wide Port Name (WWPN) is specified.**

When performing a core dump operation in the OneCommand CLI and specifying a Fibre Channel (FC) WWPN to indicate which adapter to dump, the command fails if the adapter is in a “down” state.

Workaround

Always use the MAC address for one of the NIC ports on the adapter in the core dump command.

- 12. On OCe11100-series adapters, if the Mode is set to Force and the Speed is set to 1Gb, do not perform a MAC loopback test using the OCM application.**

If you perform a MAC loopback test, the link does not come back up after the test is performed.

Workaround

None.

- 13. Make sure that the OCM application is not running if you enable or disable an Emulex device driver (NIC, iSCSI, FC, or FCoE) or manually update a driver using the Device Manager. If you perform any of these actions while the OCM application is running, you may be forced to reboot your system.**

Viewing and managing devices in the OCM application is unpredictable if any operation causes an Emulex device driver to load or unload while the OCM application is running.

Workaround

Exit the OCM application and restart the application.

- 14. An in-band FCoE-CT may fail with an ERROR 254 (Response Timeout).**

An in-band FCoE-CT download requires that the FCoE switch have support for non-standard jumbo frames or frames that are larger than the standard Ethernet frame size.

Workaround

Enable support for jumbo frames on the FCoE switch.

- 15. While OneCommand Vision (OCV) Sensor installation from the OCM application installer is possible on Windows Server 2012, OCV is not officially supported on this operating system and it may not run correctly.**

Workaround

Emulex recommends that you do not install the OCV Sensor (either by clearing the install check box in the GUI or with the OCV install command line option) when installing the OCM application on Windows Server 2012.

- 16. If you enable Dynamic Host Configuration Protocol (DHCP) for iSCSI ports from the Modify TCP/IP Configuration dialog box (under the Port Information tab) and if virtual**

local area networking (VLAN) is already enabled, a TCP/IP address may not be obtained from the DHCP server (remaining 0.0.0.0): IP address, subnet mask and gateway address.

You may encounter this known issue if your DHCP Server is not VLAN-aware or is not configured for VLAN.

Workaround

Do one of the following:

- Use a DHCP Server that is VLAN-aware and properly configured.
- Do not enable VLAN with DHCP when the DHCP server does not support VLANs.

17. Some management functions are unavailable through the Common Information Model (CIM) interface with the OCM application kit.

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

- Port enable/disable
- DMA loopback and external loopback diagnostic tests
- Reset adapter
- Boot from SAN
- Get and clear event logs
- iSCSI management - Once the personality of an adapter is changed to iSCSI and rebooted, the OCM application does not discover the iSCSI ports. Use the OCM application for VMware to manage iSCSI functions on Emulex adapters installed on VMware hosts.
- vNIC attributes: Enabled, name, Outer VLANID, Minimum Bandwidth and Maximum Bandwidth

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

19. When you manage a host using the CIM interface, the Flash Firmware Image field does not automatically change after a firmware download.

Workaround

You must restart the Small Footprint CIM Broker (SFCB) for this field to change.

20. Some fields are not available through the CIM interface for LightPulse® Adapters.

The CIM Provider supports diagnostic tests only for NIC ports including the PHY Loopback test and Get and Set Beacon. For FCoE ports, the diagnostic tests do not give proper results if an FCoE port is specified in the OneCommand CLI. The following fields are not available through the CIM interface for LightPulse adapters:

- PCI Function in ListHbas
- Function Type in HbaAttrib

- Sub Device Id in HbaAttrib
- Sub Vendor Id in HbaAttrib

Workaround

None.

21. Restriction for setting host driver parameters for a host with both CNAs and FC HBAs.

Windows driver parameters for CNAs (LP21000 and OneConnect™) are stored under the elxcna registry key, whereas for FC HBAs the parameters are stored under elxstor registry key. The Windows driver acts on these two registry keys independently.

Workaround

A host that has both CNA and FC HBAs accesses both registry keys. On the OCM application host Driver Parameter tab, there are two entries in the drop-down window for the Installed driver - elxfc and elxcna. To set a host driver parameter, first select the driver type in the Installed driver window, and then set the parameters accordingly.

The list of driver parameters shown for host driver parameters only includes those that are common for both CNA and FC HBAs.

22. The NIC driver must be installed to run the OCM application on the OneConnect adapter.

If the OneConnect adapter is run without the NIC driver installed and enabled, many of the management functions are unavailable and erroneous/corrupted information is displayed by the OCM application.

The management functions that are unavailable are:

- Firmware
 - Download
 - All diagnostics, including beaconing and diagnostic dumps
 - Disabling or enabling a port
- Erroneous display information includes:
 - FCoE storage ports are incorrectly grouped under the physical port
 - NIC, FCoE, and iSCSI ports do not appear under the correct adapter
 - Active and flash firmware versions
 - Firmware status
 - BIOS version
 - Boot code version
 - Transceiver data display
 - Physical port link status
 - All Converged enhanced Ethernet (CEE) settings
 - Event log display (OneCommand CLI only)
 - Adapter temperature

Workaround

The NIC driver should always be installed on OneConnect adapters.

23. When you start the OCM application on a Windows Server 2008 R2, Windows Server 2012, or a Windows Server 2012 R2 system, the pop-up 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 pop-up message to run the OCM application.
- Disable the pop-up by setting the User Account Control settings to **Never Notify**.
- Disable the pop-up by performing the following steps:
 - a) Click **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**.

24. Restriction when assigning DCB priorities to priority groups.

Although there are eight priority groups (PGs) to which priorities can be assigned, you are able to configure the maximum number of PGs (displayed by the OCM application). This value is set by the OneConnect adapter and its current configuration. If the switch specifies the PGs and provides more PGs than the maximum number displayed, not all the PGs will be honored by the adapter. In cases where the adapter is running only a NIC function on the port, the switch may return a storage priority and storage PG because the switch port is configured for NIC+storage. However, these storage values will be ignored.

Workaround

None.

25. The Microsoft iSCSI initiator name is used as OneConnect iSCSI initiator name.

If you have enabled the Microsoft iSCSI initiator, the iSCSI initiator name set at system boot on the OneConnect adapter is the same as that of the Microsoft iSCSI initiator. If you change the iSCSI initiator name in the OCM application, the change is lost on system reboot and the iSCSI initiator name reverts to that of the Microsoft iSCSI initiator.

Workaround

Stop and disable the Microsoft iSCSI initiator service. Replace the Microsoft iSCSI initiator name with the desired OneConnect iSCSI initiator name.

26. iSCSI priority is not specified when VLAN and DCBX are disabled.

For the iSCSI protocol, the iSCSI priority configured in the DCB tab is not set in the iSCSI packets sent out by the port when both VLAN and DCBX are disabled. VLAN is enabled or disabled from the OCM application's iSCSI Port Info tab. DCBX is enabled or disabled from the DCB tab.

Workaround

None.

27. DH-CHAP authentication is not supported for OneConnect and LPe1600x adapters.

There is no support for FCoE Diffie-Hellman Challenge Handshake Authentication Protocol (DH-CHAP) for OneConnect and LPe1600x adapters. Although the DH-CHAP tab is displayed by the OCM application when an FCoE node of a OneConnect port is selected in the discovery-tree, the DH-CHAP option should not be used.

No errors are sent if you set up DH-CHAP in the DH-CHAP tab or use the OneCommand CLI. However if you configure DH-CHAP and the link on the port goes down, the port may disappear from the OCM application, making it impossible to disable DH-CHAP. In OneCommand CLI, the authentication commands return an error indicating the command is not supported when a OneConnect FCoE port is specified.

Workaround

None.

28. The NIC Teaming and VLAN Manager and the OCM application should not run simultaneously.

Do not run the OCM application while the NIC Teaming and VLAN Manager is running. Doing so may cause problems with the NIC Teaming and VLAN Manager's attempts to disable and re-enable the NIC drivers, leaving them in a disabled state. Doing so also causes problems with the manner in which properties are displayed in the OCM application until it is restarted after exiting the NIC Teaming and VLAN Manager.

Workaround

None.

29. Changing a NIC driver property may make the OCM application unavailable.

If you change NIC driver properties (such as packet size) using the Windows Driver Properties applet while the OCM application is running, the OCM application may no longer be able to manage OneConnect adapters. As a result, most data fields show "n/a", adapter settings are not be configurable, and firmware download is not available.

Workaround

Exit and restart the OCM application.

30. There is no support for OCM application Web-launch on Itanium systems.

Workaround

None.

31. Requirement if DCBX settings are connected to a non-DCBX switch.

If DCBX settings are required when connected to a non-DCBX switch (or switch with DCBX disabled), DCBX must be disabled on the OneConnect adapter to use the adapter's configured parameters. If DCBX is enabled, the DCB PFC and Priority Groups are ignored (because the adapter assumes that the switch does not support these parameters). For FCoE adapters, the FCoE priority (COS) is 3.

Workaround

None.

32. Logged in iSCSI targets retain login options through reboots.

When an iSCSI target is discovered by adding a target portal, that target takes the target portal's login options. The target portal's login options are taken from the initiator login options. However, you can modify them when adding the target portal.

If a target is discovered by iSNS, it gets its default login options from the initiator login options.

Once a target is discovered, its login properties are not changed when the initiator login options are changed. When you log into a target, the login properties used at the time of login are remembered. If you reboot, the logged in targets are logged in again with the remembered login options (initiator login options are not used).

When you remove the targets (and the target portal if that is how they were discovered) and then cause the targets to be rediscovered, the target's login properties are defined once again by how they are discovered as described at the beginning of this known issue.

Workaround

None.

33. Changed the OneCommand CLI (hbacmd.exe) path.

Prior to the release of the OCM application version 5.1, the hbacmd.exe file was installed in "\\Program Files\\Emulex\\util\\HBAnyware", or "\\Program Files (x86)\\Emulex\\util\\HBAnyware" on 64-bit platforms. Since OCM application version 5.1, the HBAnyware directory has been renamed to OCManager. Any scripts that are hard coded to run hbacmd.exe from the HBAnyware directory must be modified to run from the OCManager directory.

34. Top level installation directory change.

The OCM application components running on x64 platforms are x64-bit compiled binaries (IA-64 are still 32-bit binaries), and the top level installation directory for x64 platforms is "Program Files". Any scripts that ran on x64 platforms and used the old 32-bit "\\Program Files (x86)" installation directory must be modified.

35. Set Link Speed Issue after SFP Hot Swap

The LPe16000 family of adapters does not support SFP hot swap if the replacement SFP is not the same model as the original SFP. There are two ramifications in the OCM application:

- a) The Port Attributes tab in OCM application or the OneCommand CLI's PortAttributes command may display incorrect data for the Supported Link Speeds attribute. This issue is cosmetic.
- b) Boot From SAN management may be unable to set the Boot Code Link Speed parameter to 16 Gb.

Workaround

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

36. The Web Launch browser client must be run with administrator/root privileges.

When running the OCM Web Launch GUI, you must have administrator privileges when logged in to the Web Launch client. On a Windows browser client, you must be logged in as the Administrator. Unusual behavior may occur if this requirement is not met.

Workaround

None.

37. Possible interference with the OCM applications ability to permanently change WWNs.

Some newer boards (such as CNAs) on some newer systems employ techniques in the BIOS code at boot time to configure the adapter, which may include the adapter WWN. In such cases, these techniques may interfere with the OCM application's ability to make permanent (non-volatile) changes to the adapter WWN.

Workaround

None.

38. OCV Sensor installation requires SNMP service.

If you are going to install the OCV sensors as part of the OCM application installation, you must have the Windows SNMP service installed prior to running the installer. If the SNMP service is not installed, the OCV installation fails. Although the failure message does not specify this, the failure is because SNMP is not installed. If you receive this failure message, verify that SNMP is installed on the host. If you are running the OCM installer in silent mode, you are not be notified of this error and the OCV sensor services is not be installed.

Workaround

None.

39. FC driver name change.

The released FC driver prior to OCM application version 6.0 was called elxstor. The new name for this driver is elxfc. The in-box driver retains the elxstor name. If the elxfc driver is installed and the previous system had the elxstor driver installed, the host driver parameters under the elxstor registry key are automatically migrated to the elxfc registry key so they are not lost.

40. OCM application installation output messages may be misleading for OCV installation failures.

If you choose to install OCV as part of the OCM application installation and there are any installation problems with OCV, no installation failure messages are displayed.

The message "OneCommand Manager Installation Successful" is displayed regardless of OCV installation problems, because the OCM application has no dependency on the OCV package. However, an OCV issue could still exist.

Technical Tips

1. If you are running Windows 7, 8 or 8.1 with User Account Control (UAC) enabled, you should start a command shell with the "Run As Administrator" option for OneCommand CLI (hbacmd) commands and batch files.

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

2. New roles based Secure Management mode is available.

Secure Management mode is a new management mode available with this release. It is a roles based security implementation. During the OCM application installation, you are prompted as to whether or not to run in Secure Management mode. When the OCM application is installed in this mode, the following changes occur:

- A non-root or non-administrator user can now run the OCM application.

- The OCM application host uses a user's credentials for authentication.
- A user has OCM application configuration privileges according to the OCM 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 (CLI does not require credentials), but no remote privileges.

Note: Refer to the *OneCommand Manager Application User Manual* for more information on Secure Management mode.

3. OCM Secure Management mode requires OCM user groups be configured on the domain or if the host is not running in a domain, the host machine.

OCM Secure Management must be able to get the OCM application group to which the user belongs from the host's domain (Active Directory or Lightweight Directory Access Protocol [LDAP]) or if the host is not part of a domain, the host's local user accounts. This access is associated with the user groups, not with specific users. An administrator needs to create these user groups and then set up user accounts such that a user belongs to one of these four OCM application user groups:

Table 1 Secure Management User Privileges

User Group	OCM 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 OCM application groups must be created and configured on the host machine or domain.

- 4. To view online help using the Google Chrome browser, you must disable Chrome's security check using the "--allow-file-access-from-files" option.**
- Create a copy of the Chrome shortcut on the desktop and rename it to RH Chrome Local (or something similar).
 - Right-click on the new Chrome icon and choose **Properties**.
 - Add the "--allow-file-access-from-files" text to the end of the path appearing in Target. You must leave a space between the original string and the tag you are adding to the end of it.
 - Click **OK** to save your settings.
 - Close any open instances of Chrome.
 - To open a local copy of the online help, use the new shortcut to open Chrome, then press **Ctrl + Open** and browse to the start page; or open Chrome with the new shortcut, then right-click the start page and click **Open With > Google Chrome**.
- 5. On OCe11102-series adapters, if you change the port speed via the Change Port Speed dialog box, and the selected speed is supported by the adapter's port but is not supported by the connected hardware, the link does not come up.**

6. The OCM application Firmware tab is at different locations for 8 Gb/s and lower FC adapters, and 16 Gb/s and 10 Gb/s FC adapters.

Because the 16 Gb/s and 10 Gb/s adapter share a single firmware image for all ports on the adapter, the Firmware tab for 16 Gb/s and 10 Gb/s adapters is at the adapter level. Because 8 Gb/s and lower adapters have a separate firmware images for each individual port, the Firmware tab for 8 Gb/s and lower adapters is at the port level.

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Note: References to OCe11100 series products also apply to OCe11100R series products.