

Emulex[®] OneCommand[®] CNA Manager Application for OneConnect[®] Adapters for Windows Release Notes

Version: 11.2.1153.25

System: Windows Server 2016
Windows Server 2012, and Windows Server 2012 R2 (x64 versions, Enterprise, and Server Core installation)
Windows Server 2008 (x86 and x64)
Windows Server 2008 R2
Windows 10
Windows 8-x64 (Base version, Pro, and Enterprise; supported only on OCe1110x and OCe1400x NICs and CNAs). and Windows 8.1
Windows 7-x64 (Ultimate, Enterprise, or Professional edition; supported only on OneConnect OCe1110x and OCe1400x network interface card [NICs] and Converged Network Adapters [CNAs])

Date: January 30, 2017

Purpose and Contact Information

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

For the latest product documentation, go to www.broadcom.com. If you have questions or require additional information, contact an authorized Broadcom technical support representative at ccx-tech.support@broadcom.com or request assistance online at <https://oemsupportportal.emulex.com/web2tech/ccx.html>.

New Features

- Beginning with software release 11.2, LightPulse[®] adapters and OneConnect adapters have independent software kits. Before updating earlier drivers and applications to the software in release 11.2, refer to the *Emulex Software Kit Migration User Guide* for special instructions and considerations for using the 11.2 software kits for LightPulse and OneConnect adapters.
- iSCSI qualified Name (IQN) is assigned on a per-port basis instead of globally.

Resolved Issues

There are no resolved issues for this release.

Known Issues

1. The network interface card (NIC) driver must be installed and enabled on each port to run the OneCommand CNA Manager application with OneConnect adapters.

If the OneConnect adapter is running without the NIC driver installed and enabled, many of the management functions are unavailable, or the OneCommand CNA Manager application displays erroneous information. Unavailable management functions include:

- Downloading
- All diagnostics, including beaconing and diagnostic dumps
- Disabling or enabling a port
- Changing data center bridging (DCB) settings

Erroneous information includes:

- Fibre Channel over Ethernet (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
- Basic input/output system (BIOS) version
- Boot code version
- Transceiver data display
- Physical port link status
- All DCB settings
- Event log display (OneCommand CNA Manager command line interface [CLI] only)
- Adapter temperature
- Adapter configuration display

Workaround

Install and enable (on each port) the NIC driver before running the OneCommand CNA Manager application or the OneCommand CNA Manager CLI.

2. When viewing or modifying the Preboot Execution Environment (PXE), FCoE, or iSCSI boot configurations on an OCe14000-series adapter, these settings are saved as legacy boot settings. The Unified Extensible Firmware Interface (UEFI) boot settings for PXE, FCoE, and iSCSI are stored separately and cannot be viewed or modified by the OneCommand CNA Manager application. If both legacy and UEFI boot settings are configured, the boot order configured in the system BIOS determines which settings take precedence.

Workaround

Configure either legacy boot settings or UEFI boot settings, but not both.

3. Known Issues related to updating firmware.

For OCe14000-series adapters, firmware version 11.x includes new features that require new flash regions to support them. Firmware versions earlier than 10.0.803.37 did not have the ability to configure the flash regions to support these new features.

If you are updating from a firmware version earlier than 10.0.803.37, use one of these methods to update the firmware to 11.x:

- Use the Offline Flash International Standards Organization (ISO) flash tool.
- Use the released 11.x version of the OneCommand CNA Manager application graphical user interface (GUI) or OneCommand CNA Manager CLI application. You must perform the firmware update procedure twice to ensure that the flash regions are properly configured, and you must reboot the system after each firmware update.

Note: After you have updated the firmware, you must not downgrade the firmware to a version earlier than 10.0.803.37.

4. A reboot is required if you change the volatile World Wide Name (WWN) on an LPe16000-series adapter.

Workaround

None.

5. OneCommand CNA Manager CLI commands might fail in Windows PowerShell.

OneCommand CNA Manager CLI commands with parameters that contain embedded commas fail execution in Windows PowerShell. Examples of parameters that contain embedded commas are `SetAdapterPortConfig`, `CMSetBW`, `UmcSetBW`, and `SetDCBPriority`.

Workaround

Enclose embedded commas in quotation marks.

For example, the following command:

```
.\BrcmHbacmd.exe cmsetbw 00-90-FA-30-39-06 25,100 25,100 25,100 25,100
```

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

```
.\BrcmHbacmd.exe cmsetbw 00-90-FA-30-39-06 "25,100" "25,100" "25,100" "25,100"
```

6. For OCe14000-series 1 GB local area network (LAN) on Motherboard (LOMs), on the Physical Port Info tab, the Set Speed button might be inactive.

Workaround

None.

7. Configuration information might be displayed as zeros for an OCe14101 or OCe14102 adapter.

On an OCe14101 or OCe14102 adapter, disabling a NIC adapter might cause the configuration information on the **Active Adapter Configuration** window to display as zeros for the port's logical port VLAN ID (LPVID), Min bandwidth (BW), and Max BW. The Active Adapter Configuration window is accessed when you click **Details** on the **Adapter Configuration** tab.

Workaround

None.

- 8. If a switch connected port speed is configured to Auto-negotiate and the adapter port speed is also configured to Autonegotiate (the default), the OneCommand CNA Manager application GUI shows 8 Gb per second (Gb/s) as the port speed on the Port Information tab. If the speed of the adapter is changed without the OneCommand CNA Manager application GUI, the port speed does not change on the Port Information tab.**

Workaround

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

- 9. On Windows 8.1 operating systems, attempting to use the Web Launch interface results in an error message (even if the firewall is disabled).**

The following error message is displayed:

```
The OneCommand Manager Web Launch Utility is unable to communicate with the Web Launch Server, possibly due to the presence of a firewall around either the client or the server.
```

Workaround

Web Launch should only be run on server operating systems such as Windows Server 2012 R2.

- 10. On Windows Server 2008 R2 systems, persistent bindings do not remain after a reboot.**

Workaround

Set the binding again.

- 11. Enabling channel management at less than 10 Gb/s might cause the link to go down and channel management settings might not take effect.**

Channel management can be enabled and configured for 10 Gb/s ports running at slower speeds. Channel management is only supported for OneConnect CNA ports running at speeds of at least 10 Gb/s.

If a port's native speed is 10 Gb/s or higher, but the port is currently operating at a speed lower than 10 Gb/s, the OneCommand CNA Manager application allows channel management to be enabled and configured. However, enabling channel management in this case might cause the link to go down and channel management settings might not take effect.

Workaround

Before enabling channel management, make sure the OneConnect CNA port's physical link is operating at 10 Gb/s or higher. If a 10 Gb/s link is not possible, do not enable channel management on that port.

- 12. When you install the OneCommand CNA Manager application on a guest operating system, the installer prompts for management mode.**

When installing the OneCommand CNA Manager application on a guest operating system running on a virtual machine, the installer prompts for a management mode (for example, local-only, full-management, read-only, etc.). However, when the OneCommand CNA Manager 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.

- 13. The OCe11101-E adapter cannot run loopback diagnostic tests (physical layer (PHY), media access control (MAC), External).**

Attempting to run a loopback test on the OCe11101-E adapter fails.

Workaround

None.

- 14. On OCe11100-series adapters, if the Mode is set to Force and the Speed is set to 1 Gb/s, do not perform a MAC loopback test using the OneCommand CNA Manager application.**

The Mode and Speed can be set from the Physical Port Info tab in the OneCommand CNA Manager application or with the `SetPhyPortSpeed` OneCommand CNA Manager CLI command. If you perform a MAC loopback test, the link does not come back up after the test is performed.

Workaround

None.

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

The view and management of these devices in the OneCommand CNA Manager application is unpredictable after performing any operation that causes an Emulex device driver to be unloaded or loaded while the OneCommand CNA Manager application is running.

Workaround

Exit the OneCommand CNA Manager application and restart the application.

- 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 Transmission Control Protocol over Internet Protocol (TCP/IP) address might not be obtained from the DHCP server (remaining 0.0.0.0).**

You might 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 OneCommand CNA Manager application kit.**

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

- Boot from storage are network (SAN)
- Get and clear event logs
- iSCSI management - When the personality of an adapter is changed to iSCSI and rebooted, the OneCommand CNA Manager application does not discover the iSCSI

ports. Use the OneCommand CNA Manager application for VMware to manage iSCSI functions on Emulex adapters installed on VMware hosts.

- Virtual NIC (vNIC) attributes: Enabled, name, Outer VLANID, Minimum Bandwidth, and Maximum Bandwidth

18. When you manage a host using the common interface module (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.

19. When you start the OneCommand CNA Manager application on a Windows Server 2008 R2 or 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 OneCommand CNA Manager 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**.

20. 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 OneCommand CNA Manager 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.

21. iSCSI priority is not specified when VLAN and data center bridging exchange (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 OneCommand CNA Manager application's iSCSI **Port Info** tab. DCBX is enabled or disabled from the **DCB** tab.

Workaround

None.

22. The NIC Teaming and VLAN Manager and the OneCommand CNA Manager application should not run simultaneously.

Do not run the OneCommand CNA Manager application while the NIC Teaming and VLAN Manager is running. Doing so might 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. This can also cause problems with the manner in which properties are displayed in the OneCommand CNA Manager application until it is restarted after exiting the NIC Teaming and VLAN Manager.

Workaround

None.

23. 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 Internet storage name service (iSNS), it gets its default login options from the initiator login options.

When 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 again by how they are discovered as described at the beginning of this known issue.

Workaround

None.

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

When running the OneCommand CNA Manager 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 might occur if this requirement is not met.

Workaround

None.

25. Web Launch does not work with Java Runtime Environment 7.x (JRE 7.x) default setting.

When attempting to use Web Launch from the client using the JRE 7.x default setting, you might see the following error message:

```
Your security settings have blocked a self-signed application from running
```

Workaround

Set the Java security setting to medium.

- 26. If an adapter is disabled when attempting to save DCB settings, the DCB settings are not saved.**

Workaround

Ensure that adapters are enabled.

- 27. On occasion, the peripheral component interconnect (PCI) registers might show all zeros when the PCI Registers tab is first opened immediately after a reboot.**

Workaround

Click on a different tab, then click back on the **PCI Registers** tab to refresh the screen.

- 28. 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 on **Contents** and refresh the browser, or load the help URL in a different browser.

- 29. If you are using the OneCommand CNA Manager application to update firmware from a previous version to version 11.x, you must first update the OneCommand CNA Manager application to version 11.x.**

- 30. The IPv6 Automatic Assignment on iSCSI functions cannot be enabled or disabled by the OneCommand CNA Manager application GUI or the CLI.**

Workaround

Use Option ROM (OROM) or the Human Interface Infrastructure (HII) to set the Automatic Assignment.

- 31. Windows Server 2008 and Windows Server 2008 R2 are supported, although new features are not supported on those operating systems. For documentation of features supported on those operating systems, see the *Emulex OneCommand CNA Manager application for OneConnect Adapters User Guide* available on the Broadcom website.**

- 32. Enabling Single root I/O virtualization (SR-IOV) and then rebooting does not enable SR-IOV.**

Workaround

Refer to the most recent *Emulex Drivers for OneConnect Adapters for Windows User Guide* (available on the Broadcom website) for instructions on enabling SR-IOV.

- 33. When an adapter is configured with iSCSI in pNIC mode and you log into an iSCSI target, if boot flag has been enabled for the target Logical unit numbers (LUNs), target logout is successful with UEFI but not with the OneCommand CNA Manager application.**

Workaround

None.

- 34. For OCe14000-series adapters, on the Adapter Configuration tab, the third function does not allow the selection of any storage protocol.**

For example:

On the **Adapter configuration** tab with the **Custom** button selected, if you select **FCoE** from the list of the second function, the third function does not display other protocols (such as iSCSI) in the list.

Workaround

- a) Switch the protocols from **FCoE** to **iSCSI** for the second function. The third function now displays **FCoE**.
- b) Switch back to the original option for the second function (**FCoE**). This action now displays **iSCSI** for the third function.

This workaround can be repeated for the remaining ports if needed.

- 35. LUNs are not displayed when the target connection is refreshed after port flap.**

Workaround

Restart the OneCommand CNA Manager application.

- 36. The OneInstall kit upgrade fails if the One Command Manager application is open and running.**

Workaround

Close the One Command Manager application before starting the upgrade.

- 37. If the CLI (BRCMHBACMD) is used to perform a firmware download to a local adapter, and the OneCommand CNA Manager GUI is up and running while that firmware download is taking place, then the OneCommand CNA Manager GUI might experience problems displaying information on various display tabs after the download completes. The value displayed for most of the fields on the affected tabs or dialogs will be N/A.**

Workaround

Do one of the following:

- When a firmware download has been performed by using BRCMHBACMD, if N/A is shown for most of the OneCommand CNA Manager GUI display fields, exit the GUI, then restart it. The fields are displayed correctly after doing this.
- Ensure that the OneCommand CNA Manager GUI is stopped or is not running prior to performing a firmware download using BRCMHBACMD.
- Perform the firmware download using the OneCommand CNA Manager GUI instead of BRCMHBACMD.

Technical Tips

1. **OCe14000-series adapters running Windows Server 2012 and Windows Server 2012 R2 support Virtual Ethernet Port Aggregator (VEPA) mode of operation by enabling VEPA at a port level through the OneCommand CNA Manager application. You must also enable VEPA on the switch. See the documentation that accompanied the switch for more information.**

When VEPA is enabled, all virtual function (VF)-to-VF traffic is transmitted to the external switch to be reflected back. VF-to-VF fails if the external switch is not configured for VEPA. virtual Ethernet bridging (VEB) is not used on OCe14000-series adapters when VEPA is enabled. While in VEPA mode, the adapter ensures that traffic is not returned to the originating VF. If an external port undergoes a link-down, all VFs see a link down condition and traffic stops.

2. **The OneCommand CNA Manager application no longer installs OneCommand Vision components.**
3. **The OneCommand CNA Manager CLI `UmcEnableChanLink` command has been removed.**

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

4. **Start a command shell with the Run As Administrator option for OneCommand CNA Manager CLI (BRMHBACMD) commands and batch files, if you are running one of these operating systems with User Account Control (UAC) enabled:**

- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2
- Windows Server 2016
- Windows 7
- Windows 8
- Windows 8.1

If you do not start the command shell with the Run as Administrator option, Windows shows 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.

5. **Roles-based Secure Management mode is available.**

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

- A non-root or non-administrator user can run the OneCommand CNA Manager application.
- The OneCommand CNA Manager application host uses a user's credentials for authentication.

- A user has OneCommand CNA Manager application configuration privileges according to the OneCommand CNA 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 CNA Manager CLI does not require credentials) but no remote privileges.

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

6. **On OneConnect adapters, if you change the port speed using 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.**
7. **OneCommand CNA Manager Secure Management mode requires OneCommand CNA Manager user groups to be configured on the domain or, if the host is not running in a domain, on the host machine.**

OneCommand CNA Manager Secure Management must be able to get the OneCommand CNA Manager 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 the four OneCommand CNA Manager application user groups listed in Table 1 on page 11. These four OneCommand CNA Manager application groups must be created and configured on the host machine or domain.

Table 1 Secure Management User Privileges

User Group	OneCommand CNA 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.

8. **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 Local (or something similar).
 - b) Right-click the new **Chrome** icon and choose **Properties**.
 - c) 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.
 - d) Click **OK** to save your settings.
 - e) Close any open instances of Chrome.
 - f) To open a local copy of the online help, 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**.

9. **The OneCommand CNA Manager application supports a maximum of 16 ASICs for OneConnect adapters. Most OneConnect adapters have a single ASIC, so a maximum of 16 adapters can be seen and managed by the OneCommand CNA Manager application. There are some OneConnect adapter models that have two ASICs. When all the adapters have two ASICs, a maximum of eight adapters can be seen and managed by the OneCommand CNA Manager application.**

10. **Changing a NIC driver property might make the OneCommand CNA Manager application unavailable.**

If you change NIC driver properties (such as packet size) using the Windows Driver Properties applet while the OneCommand CNA Manager application is running, the OneCommand CNA Manager application might not 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 OneCommand CNA Manager application.

11. **The 32-bit/64-bit libcurl file is required and must be copied to the Windows system when downloading firmware using http/https services with the WMI CIM Studio tool.**

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