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

Version: 11.2.1193.38-1

System: Windows Server 2016 (out-of-box)
Windows Server 2012 and Windows Server 2012 R2 (x64 versions, Enterprise and Server Core installation)
Windows 10
Windows Server 2008 and Windows Server 2008 R2
Windows 8 and 8.1

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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.broadcom.com/web2tech/ccx.html.

New Features

- Beginning with software release 11.2, OneConnect adapters and LightPulse® 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 OneConnect and LightPulse adapters.
- Windows Server 2016 (out-of-box) is supported.

Resolved Issues

There are no resolved issues in this release.

Known Issues

1. **Known issues regarding updating firmware.**

   The following notes apply to updating firmware on OCe14000-series adapters for this release:

   Caution: After an adapter has been flashed to firmware version 11.0.xxx.xx or later, do not attempt to flash down to an older version without first contacting Lenovo System x support. Lenovo System x support provides a special required down-

grade flash procedure. If this procedure is not followed, there is a risk in making the adapter permanently unusable.

- If the adapter in use is currently running firmware 10.0.803.2202 or earlier and iSCSI boot firmware table (iBFT) functionality is required, special steps must be followed when upgrading to this release. The recommended flash method is to use the Emulex OneConnect Offline Flash International Standards Organization (ISO), which will allow flashing in a single step.
- To upgrade and enable iBFT functionality with online tools, the most recent version of the network interface card (NIC) driver, the OneCommand CNA Manager application, and the Emulex Common Information Model (CIM) Provider must first be installed. Additionally, the firmware must be flashed twice with a reboot after each flash.

  Some online flash utilities, such as the OneCommand CNA Manager application, might instruct you to reboot and flash a second time. If iBFT functionality is not required, this message may be safely ignored. No additional procedures are necessary when iBFT functionality is not required.

2. **OneCommand Manager CLI command line parameters with commas may fail in Windows PowerShell.**

   OneCommand Manager CLI commands with parameters that contain embedded commas will 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:

   ```
   .\HbaCmd.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:

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

3. **When the OneCommand CNA Manager application is installed on a guest operating system, you are prompted for a management mode.**

   When running an Emulex adapter with SR-IOV enabled, when the OneCommand CNA Manager application is installed on a guest operating system running on a virtual machine (VM) using a NIC virtual function (VF), the installer prompts for a management mode (such as local-only, full-remote) and read-only mode.

   However, when the OneCommand CNA Manager application runs on a guest operating system with a NIC VF, it runs in local-only and read-only modes, so it does not matter how these modes are specified during installation.

   Workaround

   None.

4. **All FC over Ethernet (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 might, with some switches, cause unpredictable behavior in the OneCommand CNA Manager application.

Workaround

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

5. **Single root I/O virtualization (SR-IOV): Running the OneCommand CNA Manager 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 VM and run the OneCommand CNA Manager application in the VM's guest operating system, the NIC functions appear under a single adapter node in the OneCommand CNA Manager application discovery–tree. The guest operating system in a VM reports the same PCI bus number for all virtual functions, and the OneCommand CNA Manager application incorrectly determines that each of the discovered NICs are from the same adapter.

   Workaround

   None.

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

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

   Workaround

   None.

7. **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.**

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

   Workaround

   Exit the OneCommand CNA Manager application and restart the application.

8. **If you enable Dynamic Host Configuration Protocol (DHCP) for iSCSI ports from the Modify TCP/IP Configuration dialog (under the Port Information tab) and if virtual local area networking (VLAN) is already enabled, a TCP over Internet Protocol (TCP/IP) address might not be obtained from the DHCP server (remaining 0.0.0.0): IP address, subnet mask, and gateway address.**

   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.

9. **Some management functions are unavailable through the CIM interface with the OneCommand CNA Manager application kits.**

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

   - Boot from storage area network (SAN).
   - Get and clear event logs.
   - iSCSI management - After 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.

   Workaround

   None.

10. **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

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

11. **The NIC driver must be installed and enabled to run the OneCommand CNA Manager application on OneConnect adapters.**

    If the OneConnect adapter is running without the NIC driver installed and enabled, many of the management functions are unavailable, and erroneous information is displayed by the OneCommand CNA Manager application.

    Unavailable management functions include the following:

    - Firmware
      - Core dump
      - Download
      - All diagnostics, including beaconing and diagnostic dumps
      - Disabling or enabling a port
      - Changing Data Center Bridging (DCB) settings
    - Erroneous information includes the following:
      - 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 data center bridging (DCB) settings
- Event log display (OneCommand Manager CLI only)
- Adapter temperature

Workaround

The NIC driver must always be installed on OneConnect adapters.

12. **When you start the OneCommand CNA Manager application on a Windows Server 2012 R2 system, the following pop-up message is displayed:**

```
Publisher is unknown
```

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:

- Select **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**.

13. **The Microsoft iSCSI initiator name is used as the 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.

14. **iSCSI priority is not specified when VLAN and Data Center Bridging Capabilities 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 iSCSI **Port Information** tab. DCBX is enabled or disabled from the **DCB** tab.

Workaround

None.

15. **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 no longer be able to manage OneConnect adapters. As a result, most data fields show **N/A**, adapter settings are not configurable, and firmware download is not available.

    Workaround

    Exit and restart the OneCommand CNA Manager application.

16. **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.

    After 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 (the 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.

17. **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.

18. **There is possible interference with the OneCommand CNA Manager applications ability to permanently change WWNs.**

    Some newer adapters such as converged network adapters (CNAs) on some newer systems use techniques in the BIOS code at boot time to configure the adapter, which might include the adapter WWN. In such cases, these techniques might interfere with the OneCommand CNA Manager application's ability to make permanent (non-volatile) changes to the adapter WWN.

    Workaround

    None.

19. **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.**

20. **In some cases, the Peripheral Component Interconnect (PCI) registers in the OneCommand CNA Manager application might display all zeros in the PCI Registers tab when the tab is first opened immediately after a reboot.**

    Workaround

    Perform one of the following tasks:

    - Click on a different tab, and then click back on the **PCI Registers** tab to refresh it.
    - Use the CLI `PciData` command to display PCI configuration data.

21. **For multichannel configuration, if you attempt to switch from SIMode to vNIC1 in the OneCommand CNA Manager application when more than eight functions have been configured in SIMode, the operation fails, and an error message is displayed.**

    Workaround

    To configure vNIC1, use the OneCommand CNA Manager CLI `SetAdapterPortConfig <MAC|WWPN>` command.

    For example:

    ```
    HbaCmd SetAdapterPortConfig <MAC|WWPN> p0=nic,fcoe,nic,nic
    p1=nic,fcoe,nic,nic mctype=VNIC1
    ```

22. **If you enable Custom mode, the personality may revert to NIC, iSCSI, or FCoE if an actual Custom configuration is not defined.**

    If Custom mode is enabled, the following conditions apply:

    - If you leave all functions set to NIC, the configured personality is automatically switched from Custom to NIC.
    - If you leave the functions configured the same as they would be for iSCSI, the configured personality is automatically switched from Custom to iSCSI.
    - If you leave the functions configured the same as they would be for FCoE, the configured personality is automatically switched from Custom to FCoE.

23. **When non-persistent targets are added using the Windows `iSCSICLI.exe` command line tool and the system is rebooted, the non-persistent targets still show as disconnected in the iSCSI Target tab.**

    Workaround

    Use the OneCommand CNA Manager application to manually remove the disconnected targets that are displayed in the **Target** tab.

24. **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.

25. **Logical unit numbers (LUNs) are not displayed when the target connection is refreshed after port flap.**

    Workaround

    Restart the OneCommand CNA Manager application.

26. **If the CLI (HBACMD) 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 may experience problems displaying information on various display tabs after the download completes. The value displayed for most of the fields on the affected tabs and dialogs will be N/A.**

    Workaround

    There are three possible workarounds:

    - After having performed a firmware download using HBACMD, if N/A displays for most of the OneCommand CNA Manager GUI display fields, exit the GUI, then restart it. The fields should be displayed correctly after restarting.
    - Make sure that the OneCommand CNA Manager GUI is stopped and not running prior to performing a firmware download using HBACMD.
    - Perform the firmware download using the OneCommand CNA Manager GUI instead of HBACMD.

27. **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.

Technical Tips

1. **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 and maximum bandwidth to 0.

2. **The OneCommand CNA Manager application no longer installs OneCommand Vision components.**

3. **If you are running Windows Server 2012 or 2012 R2 with User Account Control (UAC) enabled, you must start a command shell with the Run As Administrator option for OneCommand CNA Manager CLI (hbacmd) commands and batch files.**

   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.

4. **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 prompted as to whether to run in Secure Management mode. When the OneCommand CNA Manager application is installed in this mode, the following changes occur:

   - A non-root or non-administrator user can now 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 (the CLI does not require credentials), but no remote privileges.

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

5. **OneCommand 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, the host machine.**

   OneCommand 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 must 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 the following table.

Table 1 Secure Management User Privileges

User Group	OneCommand Manager Application 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 OneCommand CNA Manager application groups must be created and configured on the host machine or domain.

6. **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 on the new Chrome icon and select **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 of it.
    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, then press Ctrl + Open**,** and browse to the start page; or open Chrome with the new shortcut, then right-click the start page and select **Open With > Google Chrome**.

7. **On OneConnect adapters, if you change the port speed by using the Change Port Speed dialog, 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.**

8. **The OneCommand CNA Manager GUI might not appear to display the adapter's next boot configuration for all available ports when a remote management console is being used; for example, integrated Lights Out (iLO), integrated Dell Remote Access Controller (iDRAC), and Interactive Media Manager (IMM).**

    The size of the screen provided by these management modules might not be big enough for the OneCommand CNA Manager window to fully display all of the GUI components and information under the **Adapter Configuration** tab. Readjust the size of the OneCommand CNA Manager GUI window for all the GUI scroll bars under the **Adapter Configuration** tab to become visible. You can also decrease the width of the discovery-tree panel.