

OneCommand Manager Application for Linux Release Notes

Version: 10.2.370.16 Systems: RHEL 5.9-5.10

> RHEL 6.3-6.5 RHEL 7.0 SLES 11 SP2-SP3 Oracle Linux 5.5-5.8

Oracle Linux 6.0-6.3
Oracle Linux UEK R1, R2 with OL 6

Oracle Linux UEK R1, R2 with OL 5

Note: This version of the OneCommand Manager application for Linux provides full inbox management support for the OCe11100 and OCe14000-series UCNAs and the LPe12000 and LPe16000-series adapters. This OneCommand Manager application version also provides iSCSI support for SLES11 SP2-SP3, RHEL 5.9 and 5.10, RHEL 6.3-6.5, and UEK5 and UEK6.

Date: September 2014

Purpose and Contact Information

These release notes describe the new features, resolved issues, and known issues associated with this OneCommandTM Manager application version for the Emulex[®] drivers for Linux release.

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).

New Features

- Supports up to four functions per port on 4-port OCe14000-series adapters (when Alternate routing ID interpretation [ARI] is available)
- Supports iSCSI Boot firmware table (iBFT) for UEFI only
- Supports RHEL 7.0 operating system for LPe12000, LPe16000, OCe11100, and OCe14000-series adapters
- Supports inbox Linux drivers for LPe12000, LPe16000, OCe11100, and OCe14000-series adapters
- Supports D_Port (also known as ClearLink) for LPe16000-series adapters
- Supports ExpressLane (also known as FOF priority queueing)
- Supports Quality of Service (QoS) on LPe16000-series and OCe15000-series adapters
- Supports concurrent storage (iSCSI and Fibre Channel over Ethernet [FCoE]) on an OCe14000-series adapter port
- Supports read-only file systems



Resolved 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 correctly shows all speed settings.
- 2. Changing a driver parameter in permanent mode no longer fails on Linux SLES11 SP1 and SP2.

This failure applied to Linux SLES11 SP1 and SLES11 SP2 only. No other Linux releases are affected. When setting a new driver (LPFC) parameter value via the OneCommand Manager application or OneCommand Manager CLI using the permanent scope (change persists reboots), a failure occurred during the regeneration of the initial RAM disk of the Linux OS kernel. This issue has been resolved.

3. Transceiver data is available for OneConnect OCe1110x UCNAs.

The transceiver data is displayed correctly in the OneCommand Manager application or the OneCommand Manager CLI for OneConnect OCe1110x UCNAs.

- 4. If the OneCommand Manager application is launched on the LPe16202 adapter with a RHEL6364 virtual machine over SLES11 SP2 hyper-V, the Adapter Information tab shows the correct model description.
- 5. The OneCommand Manager application correctly reads the adapter configuration for an OCe14000-series adapter.

The Adapter Configuration tab previously showed: "Current Configuration: Unknown".

Known Issues

Known issues for the inbox Linux NIC driver

1. A dump on an LPe16202 fails on an inbox RHEL 6.3 NIC driver (OneCommand Manager application and OneCommand Manager CLI).

Workaround

None.

2. If the inbox driver is installed and UMC is enabled, attempting to get or set Universal Multi-channel logical port VLAN ID (UMC LPVID) values in the OneCommand Manager application GUI fails and an incorrect value is displayed. Also, the OneCommand Manager CLI UmcGetParams or UmcSetLPVID commands fail.

Workaround

Use the PXESelect or UEFI boot utilities to set the LPVID values during system boot. For more information about the PXESelect and UEFI boot utilities, see the *NIC*, *iSCSI*, *FCoE*, and *RoCE Protocols User Manual*.

3. A dump on an LPe16202 NIC port fails on an inbox RHEL 5.9 NIC driver (OneCommand Manager CLI).

Workaround

Power cycle the system.



4. The inbox NIC driver from the Linux RHEL 5.9 distributions does not support OneCommand Manager application functionality.

When running with the NIC driver from the Linux RHEL 5.9 distributions, the OneCommand Manager application is unable to configure and monitor the Emulex adapter (NIC and iSCSI only).

Workaround

Update the NIC driver to a newer release for normal OneCommand Manager application functionality.

5. Inbox NIC drivers on SLES 11 SP1 or SLES 10 SP3 do not support Emulex CNA operation.

When running an OCe11102 or an OCe10102 adapter on either a SLES11 SP1 or SLES10 SP3 distribution, the inbox NIC driver must be updated to a driver other than the inbox NIC driver.

Workaround

None.

6. There is a 10 to 30 second delay in response time when using the OneCommand Manager application with an inbox driver.

Workaround

None.

General known issues

- 1. Known Issues related to updating firmware.
 - a) Firmware version 10.2.370.19 includes new features that required 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 10.2.370.19:

- Use the ISO flash tool.
- Use the released 10.2 version of the OneCommand Manager application GUI or OneCommand 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: Do not use Linux inbox drivers when performing the firmware update.

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

If you are updating from firmware version 10.0.803.37 or later, use one of these methods to update the firmware to 10.2.370.19:

- Use the ISO flash tool.
- Use the released 10.2 version of the OneCommand GUI or OneCommand CLI application, and reboot the system after the firmware update. (It is not necessary to perform the firmware update process twice).



Note: Do not use Linux inbox drivers when performing the firmware update

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

b) If iBFT boot is non-functional, and version 10.2.370.19 or later firmware is installed, you must update the firmware to version 10.2.370.19 using the ISO flash image or using a version 10.2 management application or firmware update utility. You must reboot the system after the firmware update.

If you updated the firmware from a version earlier than 10.0.803.37, you must perform the update process twice using a version 10.2 management application or firmware update utility. You must reboot the system after each firmware update.

2. Data Center Bridging (DCB) features are not available with 40G adapters.

Workaround

Configure the DCB settings through the switch settings.

3. On RHEL 5.9 systems, NIC port information may be displayed incorrectly in the OneCommand Manager application GUI if the OneCommand Manager Core Kit was previously installed using the OneCapture utility.

If the OneCommand Manager Core Kit is installed with the OneCapture utility "OneCapture_Linux_ocmcore.sh" script and the OneCommand Manager Enterprise Kit is subsequently installed, incorrect NIC port information may be displayed on the Discovery Information tab in the OneCommand Manager application GUI.

Workaround

Perform the following steps:

- a) Uninstall the OneCommand Manager Enterprise Kit.
- b) Uninstall the OneCommand Manager Core Kit.
- c) Install the OneCommand Manager Enterprise Kit.
- 4. Enabling or disabling boot on LPe16000-series adapters may show an error message.

When enabling or disabling boot from the OneCommand Manager application GUI or CLI, an error message may be displayed.

Workaround

The error message can be ignored. The boot state is changed even though the error message is displayed.

5. You can open multiple instances of the OneCommand Manager GUI application on a single system. Although it causes no problems, this practice is not recommended.

Workaround

None.

6. For the LPe16000-series adapters, if an external loopback plug is connected to the system, a D_Port test runs but does not stop running.

This issue exists for the OneCommand Manager application GUI and the OneCommand Manager CLI DportTest command.



Do not install an external loopback plug before running the D_Port test. The D_Port test can only run if the port is connected to an appropriate switch.

7. For the LPe16000-series adapters, if a diagnostic test (OneCommand Manager application or OneCommand Manager CLI) determines that the switch does not support D_Port, the port remains in D_Port mode.

Workaround

Manually reset the port.

8. For OCe14000-series adapters with an OCe11102 TCP offload, mutual CHAP credentials are inverted in the OneCommand Manager application.

In the Target Login dialog box (from the iSCSI Target Discovery tab), if Mutual CHAP is selected as the authentication method when you enter credential information and click **OK** the following error message is displayed:

Target login failed authentication

Note: In the OneCommand Manager CLI for the AddTarget and AddTargetPortal commands, the TgtCHAPName, TgtSecret, InitCHAPName, and InitSecret parameters are also inverted.

Workaround

In the OneCommand Manager application:

- Enter the Target CHAP Name and Target Secret into the Initiator CHAP Name and Initiator Secret fields.
- Enter the Initiator CHAP Name and Initiator Secret into the Target CHAP Name and Target Secret fields.
- 9. For OCe14000-series adapters, on the Physical Port Info tab, the Set Speed button may be grayed out.

Workaround

None.

10. For LPe12000-series and LPe11000-series adapters, the firmware version is not correct on the OneCommand Manager application GUI.

The Port Information and Maintenance tabs show "Unknown" as the current firmware version.

Workaround

None.

11. The OneCommand Manager application doesn't display the OS Device Name for LUNs attached to vPorts.

On an OCe14000-series adapter running Citrix 6.1 or Citrix 6.2, the OneCommand Manager application LUN Information tab shows "N/A" instead of the device name. All other information on the tab is correct.

Workaround

None.



12. On the Channel Management tab, the OneCommand Manager application always shows 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 shows the current (user-settable) MAC address and the permanent MAC address.

13. The NIC driver must be installed and enabled to run the OneCommand Manager application on the OneConnect adapter.

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

Unavailable management functions include:

- Downloading
- o All diagnostics, including beaconing and diagnostic dumps
- o Disabling or enabling a port
- o Changing DCB settings

Erroneous or corrupt display information includes:

- FCoE storage ports are incorrectly grouped under the physical port
- o NIC, FCoE, and iSCSI ports do not appear under the correct adapter
- Active and flash firmware versions
- Firmware status
- o BIOS version
- Boot code version
- o Transceiver data display
- o Physical port link status
- o All DCB settings
- Event log display (CLI only)
- Adapter temperature

Workaround

Install and enable the NIC driver before running the OneCommand Manager application or OneCommand Manager CLI.

14. The OneCommand Manager Application User Manual (GUI) 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.)

15. The OneCommand Manager Command Line Interface User Manual incorrectly lists that the DMA loopback test is supported on the LPe16202 adapters.

The DMA loopback test is supported only on OneConnect adapters.



None.

16. The OneCommand Manager Command Line Interface User Manual contains incorrect syntax and parameter information for several commands.

The commands and parameters specify a WWPN or MAC is required to run these commands. A WWPN or MAC is not required to run these commands:

GetDumpFileNames

GetDumpDirectory

SetDumpDirectory

GetRetentionCount

SetRetentionCount

Workaround

None required.

17. The Onecommand Manager Command Line Interface User Manual contains incorrect information for the SetDriverParameter command.

The manual documents that setting Flag2 to P will result in a permanent change that persists across reboots. This is incorrect. In order to make a permanent change, you must set Flag1 to G (Global).

18. A diagnostic dump may fail on the LPe16202 adapter.

Workaround

None.

19. If more than one virtual function is attached, the LPe16202 adapter with RHEL 6.4 shows the maximum bandwidth incorrectly on the Port Information tab.

If only one virtual function is attached, the maximum bandwidth shows correctly.

Workaround

None.

20. The LPe16202 adapter with RHEL 6.4 shows the PCI Express link speed as "unknown" on the Adapter Information tab.

Workaround

None.

21. For OCe14000-series adapters, the OneCommand Manager CLI SetAdapterPortConfig command fails on PPC clients.

The SetAdapterPortConfig command fails and shows "ERROR: the NIC protocol is not supported on the specified function."

Workaround

None.



22. For OCe11102-series adapters, the OneCommand Manager CLI SetInitiatorProperties command errors if you are changing an initiator_alias.

The SetInitiatorProperties command fails and shows "ERROR:

HBACMD_SetInitiatorProperties: RM_iSCSI_SetInitiatorProperties() Failed.

ERROR: <1>: Error"

Workaround

Use the OneCommand Manager application GUI.

23. For OCe14000-series adapters, the OneCommand Manager GUI on PPC clients show incomplete Adapter Configuration tab information if the adapter configuration is changed.

The Adapter Configuration tab does not show minimum and maximum bandwidth information.

Workaround

None.

24. PFC (priority-based flow control), active priority information is incorrect.

The OneCommand Manager application GUI shows incorrect information in the PFC Properties area on the DCB tab. If the PFC Properties state is disabled, the Active Priority field shows a value. It should show "N/A".

The OneCommand Manager CLI getpginfo and getdcbparams commands also show a value for the PFC Priority field if the PFC State is disabled.

Workaround

None.

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

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

Workaround

None.

26. Assigning a static IP address to an iSCSI port may result in the following error message:

Unable to write configuration changes

Although this error message is displayed, the static IP address is assigned correctly.

Workaround

None.

27. The OneCommand Manager application has a dependency on libHBAAPI from the Linux distribution.

The OneCommand Manager application requires that the SNIA HBAAPI wrapper library (libHBAAPI.so) that is provided with the Linux distribution (all versions except SLES 10) be installed on the target machine. Failure to do so causes the OneCommand Manager application installation to fail with an explicit message.



28. The OneCommand Manager CLI GetQoSInfo command shows incorrect units.

The output for this comment is shown in bps. It is actually 20 Gbps, not bps. For example:

Max. GBit/sec: 20

Workaround

None.

29. Enabling channel management at less than 10Gb/sec may cause the link to go down and channel management settings may 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 Manager application does allow channel management to be enabled and configured, however, enabling channel management in this case may cause the link to go down and channel management settings may not take effect.

Workaround

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

30. The OneCommand Manager application reports virtual ports under one adapter on a Linux guest operating system.

When running the OneCommand Manager application client on a Linux guest operating system (virtual machine), Emulex virtual NIC functions (ports) are displayed under one Emulex adapter. This is caused by the virtual BDF (Bus:Device:Function) information returned on the guest operating system.

Workaround

None.

31. Creating Secure Management users and groups after the OneCommand Manager application is installed in Secure Management mode causes the GUI to fail.

If the OneCommand Manager application Secure Management users and groups are created after the OneCommand Manager application has been installed in Secure Management mode, when you attempt to start the OneCommand Manager application GUI as a member of this group, the GUI does not run. The following error message is displayed by the operating system:

-Bash: /usr/sbin/OneCommand Manageranager/OneCommand Manageranager: Permission denied

Workaround

Do one of the following:

- Create the users and groups before you install the OneCommand Manager application in Secure Management mode.
- Uninstall and reinstall the OneCommand Manager application.



32. The OneCommand Manager Secure Management mode on Linux systems require PAM authentication configuration on the host machine.

In Secure Management mode, a user is authenticated on the machine at OneCommand Manager application GUI startup. This is handled via the PAM interface.

Workaround

The /etc/pam.d/passwd file "auth" section or its earlier equivalent must be configured.

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

33. When you install the OneCommand Manager application on a guest operating system, the installer prompts for management mode.

When installing the OneCommand Manager application, you are presented with management mode options (e.g. local-only, full-management, read-only, etc.) to specify how the OneCommand Manager application will run on the host. When the OneCommand Manager application runs on a virtual machine (VM) with an Emulex NIC virtual function (VF), it automatically runs in local-only and read-only management mode. This means you can view the VF and only the VF in the OneCommand Manager application, but you cannot manage the adapter or the VF from the OneCommand Manager application. Any selections for the management mode options made during installation outside of this mode are ignored. For example, if you select full management mode during installation, while the VF can be viewed from remote OneCommand Manager hosts, the OneCommand Manager application running on the VM cannot view or manage any remote host adapters, nor can it manage the adapter on which the VF is running.

Workaround

None.

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

Any attempt to run a loopback test on the OCe11101-E UCNA results in failure.

Workaround

None.

35. In-band (FC-CT) remote management operations do not work properly on SLES11 SP1, RHEL 6.0, and Oracle UEK 5.x/6.x systems.

In-band (FC-CT) remote management operations that involve transmitting large amounts of data across the wire do not work properly. This includes firmware download and retrieving targets and LUNs.

Workaround

Emulex recommends that you use out-of-band remote management on the affected Linux distributions.

36. Some RHEL 6.x versions are not configured by default to return LDAP group user membership.

By default, some versions of RH6.x do not return the Lightweight Directory Access Protocol (LDAP) group user membership along with the LDAP group info for LDAP



client machines as can be evidenced by inspecting the output of the "getent group" Linux command.

Workaround

To work with OneCommand Manager Secure Management, these machines must be configured such that the "getent group" command returns not only the groups configured on the machine/domain but also each group's users. Otherwise, OneCommand Manager Secure Management requires the OneCommand Manager group to be the user's primary group to provide the OneCommand Manager Secure Management function.

37. SR-IOV: Running the OneCommand 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 adapters to a virtual machine and run the OneCommand Manager application in the virtual machine's guest operating system, the NIC functions appear under a single adapter node in the OneCommand Manager application discovery–tree. In this situation, the guest operating system in a virtual machine reports the same PCI bus number for all virtual functions and the OneCommand Manager application incorrectly ascertains that each of the discovered NICs are from the same adapter.

Workaround

None.

38. Performing a core dump command may fail if a WWPN is specified.

When performing a core dump operation in OneCommand Manager CLI and specifying a Fibre Channel world wide port name 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.

39. 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 in the OneCommand Manager application. The Mode and Speed can be set from the Physical Port info tab in the OneCommand Manager application or with the SetPhyPortSpeed OneCommand CLI command.

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

Workaround

None.

40. 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.



Use one of the following workarounds:

- Use a DHCP Server that is VLAN-aware and properly configured.
- Follow these steps to disable and enable DHCP and VLAN:
 - a) On the Port Information tab, click **Modify**. The Modify TCP/IP Configuration dialog box is displayed.
 - b) Clear the VLAN Enabled and DHCP Enabled check boxes.
 - c) Click **OK**. The Port Information tab is displayed.
 - d) On the Port Information tab, click **Modify**. The Modify TCP/IP Configuration dialog box is displayed.
 - e) Check the **VLAN Enabled** and **DHCP Enabled** check boxes and click **OK**.

41. Neither the Core Kit nor the Enterprise Kit installs on RHEL 5.5.

This is due to a missing Libnl (Net Links) library. Unlike other supported operating systems, RHEL 5.5 does not install Libnl during a default installation.

Workaround

Install the Libnl from the RHEL 5.5 distribution media.

42. OneConnect installation path order recommendation.

When installing new UCNA driver and firmware versions, it is best to install both the driver and the firmware without rebooting between installations to minimize the possibility of operating with mismatched versions of driver and firmware.

Workaround

None.

43. The NIC driver must be installed and enabled to run the OneCommand Manager application with an FCoE adapter.

If the OneConnect FCoE 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 OneCommand Manager application.

The management functions that are unavailable are:

- Downloading
- All diagnostics including beaconing and diagnostic dumps
- Disabling/enabling a port

Erroneous/corrupt display information includes:

- FCoE storage ports are not properly grouped under the correct physical port
- NIC and FCoE 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 CEE settings



• Event log display (OneCommand Manager CLI only)

Workaround

Install and enable the NIC driver before running the OneCommand Manager application or OneCommand Manager CLI.

44. Requirement for unloading or loading Emulex device drivers (FC/FCoE, NIC and iSCSI).

If you load or unload an Emulex device driver for Linux (FC/FCoE, NIC and iSCSI) after the machine is rebooted, you must perform these steps in the following order:

- a) Close any open OneCommand Manager applications.
- b) Restart OneCommand Manager application daemons. To restart OneCommand Manager application daemons, the daemons must be stopped and started.
 - i) Run the /usr/sbin/ocmanager/stop_ocmanager script.
 - ii) Run the /usr/sbin/ocmanager/start_ocmanager script.
- c) Run the Emulex OneCommand Manager application and/or the OneCommand Manager CLI client applications.
- 45. If both VLAN and data center bridging exchange (DCBX) are disabled, the iSCSI priority configured in the DCB tab is not set in the iSCSI packets sent out by the port.

Workaround

Enable or disable VLAN from the iSCSI Port Info tab in the OneCommand Manager application.

46. Possible interference with the OneCommand Manager application's ability to permanently change WWNs.

Some newer adapters (for example, CNAs) on some newer systems employ techniques in the BIOS code at boot time to configure the adapter, such as the adapter WWN. In such cases, this may interfere with the OneCommand Manager application's ability to make permanent (non-volatile) changes to the adapter's WWN.

Workaround

None.

47. iSCSI InitialR2T is not supported for iSCSI OneConnect adapters.

Although the OneCommand Manager application and OneCommand Manager CLI clients allow the configuring of the iSCSI InitialR2T parameter to "yes" or "no", the adapter does not recognize the setting. The adapter always operates with InitialR2T set to "yes".

Workaround

None.

48. FC-CT commands to the switch that time out can cause the OneCommand Manager application processes to hang on CentOS 6.0, Oracle UEK 5.x/6.x, or Citrix XS 6.0 systems.

The OneCommand Manager application uses FC-CT commands to the switch name server to obtain local HBA symbolic name information. FC-CT commands to the switch originating from the listed Linux distributions that time out may cause the



OneCommand Manager application process sending the FC-CT command to hang. This issue has been isolated to the BSG driver in the kernel. A kernel fix is in process.

Scenarios that might result in this behavior include disabling a switch port and modifying VLAN configuration, either on the switch or on the host machine via the OneCommand Manager application.

Workaround

None.

49. Messages appear on the terminal during Web-Launch install or uninstall.

On Linux SLES11 SP1 systems, when the OneCommand Manager Web-launch component is installed or uninstalled using wsinstall and wsuninstall scripts respectively, the following messages are displayed to the terminal.

```
insserv: Script jexec is broken: incomplete LSB comment.
insserv: missing `Required-Stop:' entry: please add even if empty.
```

These are warning messages that do not affect the operation or installation of the Web-launch component. They appear on SLES 11 SP2 specific versions of the relevant software (insserv and jexec). The scripts invoke this software via invocation of the standard Linux chkconfig utility typically used for daemon installations.

Workaround

None.

50. On SLES 11 SP1 systems, the Open-FCoE RPM package (open-fcoe-1.0.4-10.2) is incompatible with the OneCommand Manager application package and must be removed from the target host machine.

The HBA API library that the open-fcoe package installs (libhbalinux.so.1) causes all OneCommand Manager application processes to crash with a segmentation violation. To recover you must reinstall OneCommand Manager application without loading the Open-FCoE package.

Workaround

None.

51. On SLES 11 SP1 systems, installing or uninstalling the Open-FCoE RPM package after the OneCommand Manager application is installed results in the removal of the OneCommand Manager application entries in the system file in the /etc/hba.conf file.

This breaks the Linux system HBA API functionality and as a result, the OneCommand Manager application client applications no longer runs.

Workaround

Re-install the OneCommand Manager application.

52. On RHEL 5.5 systems and on Citrix 5.6 and later host systems, the OneCommand iSCSI SNMP daemon does not start if the libsensors shared object library is not found (for example, if libsensors RPM package is not installed).

Workaround

Install the libsensors RPM package off the appropriate RHEL or Citrix distribution and restart the OneCommand iSCSI SNMP daemon.



53. On some RHEL x86_64 and ppc 64 systems, uninstalling the Red Hat 32-bit or 64-bit libhbaapi RPM deletes entries in the /etc/hba.conf hbaapi configuration file thereby disabling OneCommand Manager hbaapi layer.

Workaround

Re-install the OneCommand Manager application.

54. Unloading the NIC driver from a Linux machine causes the OneCommand Manager application to lose connectivity.

If you unload the NIC driver from a Linux machine, OneCommand Manager applications or OneCommand Manager CLI commands running on the machine lose connectivity with the NIC and related configuration data.

Workaround

To recover, you must perform the following steps in the following order:

- a) Stop the OneCommand Manager applications and daemons using the stop_ocmanager script.
- b) Reload the NIC driver using modprobe.
- c) Restart the OneCommand Manager application daemons using the start_ocmanager script.
- d) Restart the desired OneCommand Manager application or OneCommand Manager CLI client.
- 55. When MILI and SNMP daemons start, they trigger warning messages within SELinux for certain operations.

Workaround

To avoid SElinux warning messages, disable SELinux.

- a) To disable SElinux, open a terminal and enter the following command at the prompt: echo 0 > /selinux/enforce
- b) To enable SElinux, open a terminal and enter the following command at the prompt: echo 1 > /selinux/enforce
- 56. A permanent driver parameter change fails if the system is rebooted too soon.

When you make permanent driver parameter changes via the OneCommand Manager application, the application automatically makes the required entry in the /etc/modprobe.conf or equivalent file. Because the LPFC driver loads so early in the Linux machine boot sequence, the new contents of the /etc/modprobe.conf file must be re-inserted into the Linux system initrd file (via "mkinitrd" utility) for the driver to pick up the new driver parameter value on the next boot. Failure to generate the new initrd file causes the driver to fail to get the new driver parameter value on subsequent driver loads (machine boots). The OneCommand Manager application automatically does this for you (re-creates initrd via mkinit function); however, it can take as long as 45-60 seconds after the driver parameter is changed for a complete initrd re-build. If you reboot the machine immediately after the driver parameter change is made, the auto-recreation of the initrd file by the OneCommand Manager application may fail to complete. In these cases, this failure causes the driver to "not obtain" the new driver parameter value upon subsequent reboots.



Wait a minimum of 45-60 seconds after making the driver parameter change before rebooting the machine.

57. Newly added LUNs on a storage array may not appear on the host machine Linux operating system or the OneCommand Manager application.

Workaround

Do one of the following:

• Run the following script from the command shell: /usr/sbin/lpfc/lun scan all

• Reboot the host machine after the LUN has been added at the target array.

58. When using IET software, target portals with more than 60 iSCSI targets may not be discovered.

When using the open source iSCSI Enterprise Target (IET) software package to present targets to the iSCSI initiator, adding target portals that contain greater than 60 targets fails the resulting target discovery operation. This is the result of an error in the IET target implementation.

Workaround

None.

59. 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 a 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 targets login properties are defined once again by how they are discovered as described at the beginning of this known issue.

Workaround

None.

60. Set Link Speed Issue exists after a SFP Hot Swap.

An LPe16000-series adapter 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 OneCommand Manager application:

- a) The Port Attributes tab in the OneCommand Manager application or the OneCommand Manager CLI 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/s.



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

61. The OneCommand Manager application's diagnostic echo test is not supported on Oracle UEK 5.x/6.x, and Citrix XS 6.0 systems.

Because of an issue that has been isolated to the BSG driver in the kernel that surfaces when in-band (FC-CT) commands timeout, the OneCommand Manager application's diagnostic echo test is not supported on the affected Linux distributions. The echo test is based on FC-CT remote communications.

Workaround

None. Emulex recommends that you avoid using in-band management on the affected distributions.

62. Loopback diagnostics are not supported on LPe16000-series adapter.

The OneCommand Manager application internal and external loopback diagnostic tests are not supported for the LPe16000-series adapters.

Workaround

Use the PCI loopback diagnostic test, which is an abbreviated form of the internal and external loopback diagnostic tests. This workaround is not available on earlier versions of Linux (RHEL 5.5, 5.6, and 5.7, and SLES 10.3 and 10.4).

63. The Web Launch browser client must be run with administrator or root privileges.

When running the OneCommand Manager Web Launch GUI, you must have administrator privileges when logged into the Web Launch client user. On a Linux browser client, you must be logged in as the 'root' user. Unusual behavior may occur if this requirement is not met.

Workaround

None.

64. VPD is required on NIC-only and iSCSI adapters.

Once you license an FCoE personality on an existing NIC-only or iSCSI adapter, you must make sure that the adapter has VPD written on it. Otherwise, FCoE management does not work in the OneCommand Manager application. Only older adapters of these types do not have VPD.

Workaround

None.

65. A dump command on a boot from SAN adapter may cause a system panic.

When the OneCommand Manager application performs a dump of an adapter that is booting from SAN and has no failover support, the operating system crashes when the adapter is taken offline to perform the boot and write the dump file to the host file system. The file system is unavailable because the adapter was taken offline.

Workaround

Before performing a dump of an adapter, ensure that the desired adapter is not a boot-from-SAN adapter. Alternatively, provide failover support so when the adapter is taken offline to perform the dump, the boot-from-SAN connection is maintained by the failover.



66. The NIC driver that comes inbox with the Linux distribution does not support OneCommand Manager application management functions.

Workaround

Emulex recommends that you install the inbox NIC driver on the Linux machine to a version compatible with the OneCommand Manager application version associated with the target Linux distribution.

67. The OneCommand Manager application elxhbmgrd daemon can take up to 30 seconds to stop.

The OneCommand Manager application elxhbamgrd daemon process may take up to 30 seconds to stop when attempting to kill it. This applies to SLES 11 SP1 and RHEL 6.0 and all subsequent Linux distributions corresponding to the 8.3.x LPFC driver versions.

Workaround

None. The behavior of the elxhbmgrd daemon is linked with the MAX time out the Linux kernel associates with SCSI BSG interface commands and the OneCommand Manager application register for events function.

Technical Tips

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

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

2. DH-CHAP authentication is no longer supported.

There is no support for DH-CHAP authentication for the RHEL 6.0 and RHEL 6.1 and subsequent Linux distributions. The kernel has removed this technology from the FC device driver module layer.

3. The OneCommand 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. On OneConnect 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.
- 5. The OneCommand Manager application no longer installs OneCommand Vision components.



6. There are OneCommand Manager application differences when running the Open-iSCSI driver.

When running the Open-iSCSI version of the Linux iSCSI driver (which is used on RHEL 6.3 and later, and SLES 11 SP2 and later), the OneCommand Manager application functionality differs from the proprietary device driver (which is used on RHEL 5.x and SLES 10 SPx). extended time out (ETO) and Link Down Time Out (LDTO) are not available in the Open-iSCSI implementation. Therefore, you cannot set ETO on a per target basis. Only the boot target should be made persistent for each port. The boot target cannot be added using iscsiadm or the OneCommand Manager application; you must use the iSCSISelect utility. iSCSI boot is not supported in the OneCommand Manager application for the Open-iSCSI implementation.

All the targets added in the database will automatically be logged in at boot time.

7. Emulex SR-IOV features are available on SLES11 distributions beginning with the SP2 release.

The OneCommand Manager application support for displaying the SR-IOV virtual functions on the base operating system are provided on SLES11 distributions beginning with the SP3 release.

8. Roles based Secure Management mode is available.

Secure Management mode is a roles based security implementation. During the OneCommand Manager application installation, a user is prompted as to whether or not 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 *OneCommand Manager Application User Manual* for more information on Secure Management mode.

9. OneCommand Manager Secure Management mode requires OneCommand 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 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 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 1 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.

The OneCommand Manager application Firmware tab is at a different location for 8 Gb/s and lower Fibre Channel adapters, and 16 Gb/s and 10 Gb/s Fibre Channel adapters. Because the 16 Gb/s and 10 Gb/s adapters 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 image for each individual port, the Firmware tab for 8 Gb/s and lower adapters is at the port level.

- 10. An end-to-end (ECHO) diagnostic test fails if the corresponding targets are not supported.
- 11. 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 on the new Chrome icon and choose **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, use the new shortcut to open Chrome, then hold down **Ctrl>** and press **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**.

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