

Firmware and Boot Code Release Notes for Emulex OneConnect OCe11100-series Adapters

Version: 10.2.470.13

Date: December 2014

Purpose and Contact Information

These release notes describe resolved known issues and current known issues associated with this release of the firmware and boot code for Emulex OneConnect™ OCe11100 series adapters.

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

Resolved Issues from Firmware Version 10.2.370.15

Firmware Resolved Issues

1. **Corrected an issue with the number of virtual machine queues (VMQs) that were available when using a NIC Teaming virtual switch (vSwitch).**

iSCSI UEFI Resolved Issues

1. **Corrected an issue where an intermittent system hang would occur when saving the target iSCSI name, CHAP ID, or CHAP secret.**

Known Issues

Firmware Known Issues

1. **With the default mode for Advanced Mode now set to enabled, older inbox drivers accompanying certain operating systems and older out-of-box drivers may experience issues.**
 - On RHEL 5.6 systems using the 2.102.518r inbox driver, installing the new firmware may cause the system to stop responding when powering down the server.
 - On Citrix XenServer 5.6 systems using the 2.104.277.1 inbox driver, MAC addresses may be incorrect after installing the new firmware.
 - On Windows Server 2008 R2 and Windows Server 2008 systems using the 2.102.517.0 out-of-box driver, NIC cannot be initialized and a warning message is presented after installing the new firmware.
 - On the following operating systems using the indicated drivers, NIC cannot be initialized after installing the new firmware:
 - RHEL 6.0 and 2.102.426r inbox driver

- RHEL 6.1 and 2.103.298r inbox driver
- SLES 10 SP4 and 2.102.453s inbox driver
- SLES 11 SP1 and 2.102.147s inbox driver
- SLES 11 SP2 and 4.1.277u inbox driver
- XenServer 6 and 6.02 and 2.104.277.1 inbox driver
- XenServer 6.1 Tampa RC1 and 4.1.450.7 inbox driver
- Solaris 11 and 1.20e inbox driver

Workaround

Either disable Advanced Mode after installing the new firmware, or install the latest out-of-box driver.

2. **LRO may not function properly on the second port of a dual-port adapter, which causes traffic not to run on the second port.**

Workaround

None.

3. **Running traffic on two ports with TCP segmentation offload (TSO) and generic segmentation offload (GSO) disabled and jumbo frames enabled may result in reduced throughput.**

Workaround

None.

4. **For systems running RHEL 7.0 with a LAN on motherboard (LOM) controller installed, the ethtool may display the 10G LOM SFP+ port interface as direct-attached copper (DAC) instead of fibre.**

Workaround

None.

NIC UEFI Known Issues

1. **After enabling multichannel mode in the NIC UEFI and rebooting the server, you may still be able to boot from all functions even though the link is down and the bandwidth values are set to zero.**

Workaround

None.

iSCSI UEFI Known Issues

1. **UEFI iSCSI BIOS fails to discover targets when more than 64 targets are added per port.**

Workaround

None.

2. **Dell PowerEdge R720 systems may appear to hang when configuring the adapter in the NIC UEFI utility because pop-up messages are not supported on this specific Dell platform.**

Note: The system is not in a hang state, but it is actually waiting for the <Esc> key to be pressed.

Workaround

If the system appears to be locked up and making configuration changes, press the <Esc> key to see if the system responds.

FCoE UEFIBoot Known Issues

1. **If the fabric login is unsuccessful after three retries, the driver will exit with an unsuccessful login message.**

Workaround

None.

2. **The Configure Boot Devices menu only scans for the next 16 LUNs from the starting LUN, which limits the LUNs displayed.**

Workaround

None.

PXE BootBIOS Known Issues

1. **The PXE Boot Support attribute on the PXESelect utility's Port Configuration page does not match the Option ROM attribute on the UEFI NIC Configuration page.**

Workaround

None.

2. **When using the RHEL 6.5 snapshot with the inbox drivers on IBM x3650 systems, PXE boot subsystem may not come up and scan for PXE servers, which also causes the system to hang or reboot indefinitely.**

Workaround

None.

iSCSI BootBIOS Known Issues

1. **If Edit Target fails when enabling the Header/Data Digest, the resulting screen indicates the Header/Data Digest as "Disabled" and you cannot fix the session.**

Workaround

You must remove and re-add the session.

2. **The iSCSISelect utility currently accepts and saves invalid iSCSI IQN names.**

Workaround

None.

FCoE x86 BootBIOS Known Issues

1. The **Configure Boot Devices** menu only scans for the next 16 LUNs from the starting LUN, which limits the LUNs displayed.

Workaround

None.

Technical Tips

1. Under SLES 11, the bond 5 and 6 modes must be configured properly to work with the firmware. When configuring the bond mode, change the default setting to include "updelay=100". For example, the correct setting for bond 6 is `BONDING_MODULE_OPTS='mode=6 miimon=100 updelay=100'`.
2. For Cisco switches, the access mode must be set in trunk mode, and native VLAN cannot be FCoE VLAN, that is, the FCoE VLAN must be in the allowed list.
For example, if VLAN 2 is the FCoE VLAN and VLAN 1 is the Ethernet VLAN, you would enter the following:
 - `Switchport mode trunk`
 - `Switchport trunk native vlan 1`
 - `Switchport trunk allowed vlan 1-2`
3. For Brocade switches, trunk mode must be set in converged mode.
For example, if VLAN 2 is the FCoE VLAN, you would enter the following:
 - `Switchport mode converged`
 - `Switchport converged allowed vlan add 2`
4. For best performance, disable the Spanning Tree Protocol (STP) on all networked switches if you are using the following:
 - Adapter fault tolerance (AFT)
 - Automatic load balancing (ALB)
 - Static link aggregation teaming
5. OCe11100-series adapters may not establish a link with an Extreme Networks Summit x650 switch when a 5-meter Cisco DAC cable is used. Emulex recommends using a different vendor cable (if a 5m cable length is desired) or using a different length Cisco DAC cable.
6. BIOS target scan may not report any assigned targets because Emulex adapters only report direct access block devices.

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

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