

# Emulex OneCommand NIC Teaming Driver and VLAN Manager Application Release Notes

**Version (Kit):** 2.8.5-5

**Date:** March 1, 2016

# **Purpose and Contact Information**

These release notes describe the installation notes and warnings, supported operating systems, current known issues, and technical tips associated with this Emulex<sup>®</sup> OneCommand NIC Teaming driver and Multiple VLAN application release.

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

# **Installation Notes and Warnings**

**Note:** NIC Teaming driver will be deprecated in a future release.

You can update the base NIC driver, NIC firmware, and NIC teaming code in any order because the NIC teaming code is independent of the base NIC driver and firmware. However, when you upgrade the base driver, make sure it is an update, and not an uninstall or re-install. If the base NIC driver is uninstalled or re-installed, all of the NIC teams are assigned new GUIDs, which causes all of the current NIC team definitions to be invalid.

Use the version 2.8.5-5 Broadcom Emulex-provided kit to install, update, or uninstall the NIC teaming software. Do not use a previous version of the teaming utilities to install, update, or uninstall the Emulex OneCommand NIC Teaming driver and NIC Teaming and VLAN Manager. If you do, it will result in unpredictable behavior.

Do not update or uninstall the Emulex OneCommand NIC Teaming driver and NIC Teaming and VLAN Manager while I/O traffic is running. If you do, it will result in unpredictable behavior. The best way to stop the I/O traffic is to turn off power to the switch ports that are connected to the adapter. Do not disable any adapter ports when performing an upgrade.

# **Supported Operating Systems**

The Emulex OneCommand NIC Teaming driver supports the following operating systems:

- Windows Server 2012 x64
- Windows Server 2012 Server Core x64
- Windows Server 2008 x64 SP2
- Windows Server 2008 x64 R2
- Windows Server 2008 x64 R2 Server Core
- Windows Server 2008 x64 R2 with Hyper-V
- Windows Server 2008 x64 R2 SP1



- Windows Server 2008 x64 R2 SP1 Server Core
- Windows Server 2008 x64 R2 SP1 with Hyper-V

**Note:** For Windows Server 2012 R2 support, use the Microsoft NIC teaming driver.

# **New Features**

There are no new features.

# **Resolved Issues**

There are no resolved issues.

# **Known Issues**

1. When using more than 8 NIC instances, virtual or physical, the teaming manager GUI or teaming manager CLI might not list all available adapters for team creation.

Non-teamed adapter instances might be incorrectly bound to the teaming protocol driver.

#### Workaround

When using more than 8 NIC instances in the system prior to creating any teams, virtual or physical, in a system, the Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) service must be disabled prior to installing the hardware. If the hardware is installed and cannot be removed, Multichannel must be disabled prior to the operating system installation. The ISATAP service must be disabled prior to enabling Multichannel.

2. If Smart Load Balancing teams are used with IPv6, TCP sessions that exist when a link status change occurs could be subject to timeouts, including delays of many seconds, or be reset by the peer. For this reason, do not use Smart Load Balancing teams in an environment using IPv6.

# Workaround

None.

3. During the creation or deletion of teams, or adding or removing VLANs to teams or adapters, the Microsoft server module might generate error 2505 messages in the event log. These messages can be generated when a single machine has more than one connection to the same subnet.

## Workaround

None.

4. When adding VLANs to teams, the NetBT module might generate event log entries with an event ID of 4311.

## Workaround

None.

5. Microsoft Networking bridging must not be used to bridge teams or VLANs.

# Workaround

None.



6. For configuration changes, disabling adapters, teams or VLANs using the Windows Device Manager or Network Connection Property sheet is not supported.

For the purpose of making teaming configuration changes, the disabling of adapters, teams, or VLANs using the Windows Device Manager or Network Connection Property sheet is not supported. However for the purpose of testing the data path of established teams, such disabling is supported. Remember to re-enable any disabled adapters, teams, or VLANs before changing the team configuration.

#### Workaround

None.

7. Teams cannot be uninstalled from the Windows Device Manager.

#### Workaround

Use the Emulex OneConnect NIC Teaming and Multiple VLAN Driver and Application GUI or CLI to uninstall teams.

8. Differences in BIOS and motherboard versions can cause servers with identical model numbers to have different PCI slot addresses.

Restoration of backup files cannot be performed on these systems.

## Workaround

Manually duplicate the NIC teaming configurations.

9. When upgrading a configuration containing VLANs over teams from NIC Teaming 2.5 or NIC Teaming 2.6 to NIC Teaming 2.7 or 2.8, the team instance will be visible in Network Manager.

#### Workaround

Do not change the bindings of such an instance.

10. When upgrading from NIC Teaming 2.6 to NIC Teaming 2.7 or 2.8, a reboot is required. You must log back into the system after the reboot for the upgrade to complete.

# Workaround

None.

11. When adapters are deleted from teams created with NIC Teaming versions prior to 2.7, they may display incorrect MAC addresses.

#### Workaround

Use the adapter Property Sheets in Windows Device Manager to reset the MAC addresses after the team is deleted.

12. Windows Server 2008 SP2 systems fail to display team MAC addresses.

While the Emulex NIC Teaming and VLAN Manager GUI and CLI are displaying detailed information on a team, the team MAC address field is blank.

## Workaround

Use the GUI or CLI to view the details of the team's primary adapter. Its MAC address is the same as the team MAC address.



13. The OneCommand NIC Teaming and VLAN Manager Version 2.8 User Manual has an error on page 16.

The "Uninstalling the Driver and the NIC Teaming and VLAN Manager" section has an error.

#### Workaround

This instruction should state:

To uninstall the driver and NIC Teaming and VLAN Manager on Windows Server 2008 and Windows Server 2008 R2 systems, select **Start>Control Panel>Programs and Features**.

# **Technical Tips**

- 1. When using third party adapters as members of teams, all TCP offload settings, such as TCP/UDP/IP checksum offload, TCPv6/UDPv6/IPv6 checksum offload, etc. must be configured identically. The third party adapter documentation must be referred to determine how these settings are configured. Mismatches of settings may cause packet loss, connection timeouts, and even data corruption.
- 2. When using non-Broadcom Emulex adapters as team members, LSO v1 and LSO v2 must be disabled for teaming to work correctly.
- 3. Do not make any configuration changes while I/O traffic is running. Various issues, including system lockups and I/O disconnection, may occur.
- 4. To view online help using the Google Chrome browser, you must disable Chrome's security check using the --allow-file-access-from-files option.
  - a) Create a copy of the Chrome shortcut on the desktop and rename it RH Chrome Local (or something similar).
  - 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 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 click **Open With > Google Chrome**.

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