

Emulex OneCommand NIC Teaming Driver and VLAN Manager Application Release Notes

Version (Kit): 2.8.5-5

Date: June 3, 2016

Purpose and Contact Information

These release notes describe the installation notes and warnings, supported operating systems, current known issues, resolved issues, and technical tips associated with this Emulex® 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® technical support representative at ecd-tech.support@broadcom.com, 800-854-7112 (US/Canada toll free), +1 714-885-3402 (International), or +44 1189-772929 (Europe, Middle East, and Africa; UK business hours only 8:30 am - 5:00 pm UTC M-F).

Installation Notes and Warnings

Note: The NIC teaming driver will be deprecated in a future release.

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

Use the Broadcom Emulex provided kit, version 2.8.5-5 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 the 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

1. The error in *OneCommand NIC Teaming and VLAN Manager Version 2.8 User Manual* on page 16 is fixed.

Known Issues

1. When using more than eight 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, disable multichannel prior to the operating system installation. Disable the ISATAP service 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. **Do not use Microsoft networking bridging to bridge teams or VLANs.**

Workaround

None.

6. **For configuration changes, disabling adapters, teams, or VLANs using the Windows Device Manager or the 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 that contains VLANs over teams from NIC teaming 2.5 or NIC teaming 2.6 to NIC teaming 2.7 or to NIC teaming 2.8, the team instance is 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 to NIC teaming 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 might 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 display 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.

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, and so on, must be configured identically. Refer to the third-party adapter documentation to determine how these settings are configured. Mismatches of settings might cause packet loss, connection timeouts, and even data corruption.
2. When using Emulex adapters that are not Broadcom as team members, disable LSO v1 and LSO v2 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, might 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 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**.

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