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Mellanox ConnectX-4 NATIVE ESX Driver for VMware vSphere 6.0 Release Notes

Rev 4.15.2.0

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Mellanox Technologies
 350 Oakmead Parkway Suite 100
 Sunnyvale, CA 94085
 U.S.A.
www.mellanox.com
 Tel: (408) 970-3400
 Fax: (408) 970-3403

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Release Update History

Table 1 - Release Update History

Release	Date	Description
Rev 4.15.2.0	September, 2015	Initial release of this MLNX-NATIVE-ESX-ConnectX-4 version

1 Overview

These are the release notes of "Mellanox ConnectX-4 Native Driver for VMware® vSphere 6.0". This document provides instructions on drivers for Mellanox Technologies ConnectX® based adapter cards with VMware ESXi Server environment.

1.1 Content of MLNX-NATIVE-ESX-ConnectX-4 Package

The MLNX-NATIVE-ESX-ConnectX-4 driver package is distributed as an offline bundle (.zip file) and contains:

- MLNX-NATIVE-ESX-ConnectX-4-4.15.2.0-10EM-600.0.0.2768847.zip - Hypervisor bundle for ESXi 2015 bundle contains the following kernel modules:
 - nmlx5_core (Mellanox Technologies Ethernet driver)

1.2 Supported HCAs Firmware Versions

MLNX-NATIVE-ESX-ConnectX-4 Rev 4.15.2.0 supports the following Mellanox Ethernet HCA:

Table 2 - Supported HCAs Firmware Versions

HCAs	Recommended Firmware Rev.
ConnectX-4	12.12.0780
ConnectX-4 Lx	14.12.0780

Please note that older firmware versions were not tested with this release.

For the latest firmware versions, visit:

- http://www.mellanox.com/page/vmware_matrix
- or
- <http://www.mellanox.com/supportdownloader/>

2 Changes and New Features in Rev 4.15.2.0

- Single/Dual port
- MSI-X
- Multiple TX/RX rings
- Large Send Offload (TCP Segmentation Offload)
- RSS (Device RSS)
- Fixed Pass-Through
- 10G
- 25G
- 40G
- 50G
- 100G
- Auto moderation and Coalescing
- VLAN stripping offload
- TX/RX checksum

3 Known Issues

The following is a list of general limitations and known issues of the various components of this MLNX-NATIVE-ESX-ConnectX-4 release.

Table 3 - Known Issues

#	Description	Workaround
1.	ESX displays incorrect NIC speed in case of 100GB configuration (ESX 6.0Limitation).	N/A
2.	Throughput performance on 100GB configuration might be lower than line rate.	N/A
3.	This driver support Ethernet cards only, VPI cards can be configured as Ethernet only mode when burning the firmware. For further information on firmware burning, please refer to the MFT User Manual. (www.mellanox.com > Products > Software > InfiniBand/VPI Drivers > Firmware Tools)	N/A