Mellanox NATIVE ESX Driver for VMware vSphere 6.0
Release Notes

Rev 3.15.2.0

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Table of Contents

List Of Tables

Release Update History

Table 1 - Release Update History

Release	Date	Description
Rev 3.15.2.0	March 01, 2016	Initial release of this MLNX-NATIVE-ESX version

1   Overview

These are the release notes of "Mellanox Native Driver for VMware® vSphere 2015". 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 Package

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

- MLNX-NATIVE-ESX-ConnectX-3-3.15.2.0-10EM-600.0.0.2768847.zip - Hypervisor bundle for ESXi 2015 bundle contains the following kernel modules:
  - nmlx4_core (ConnectX family low-level PCI driver)
  - nmlx4_en   (Mellanox Technologies Ethernet driver)
  - nmlx4_rdma (Mellanox Technologies RDMA driver)
- nmlx_en_mgmtInterface.tar.gz - management interface tarball

1.2   Supported HCAs Firmware Versions

MLNX-NATIVE-ESX Rev 3.15.2.0 supports the following Mellanox Ethernet HCA:

Table 2 - Supported HCAs Firmware Versions

HCAs	Recommended Firmware Rev.
ConnectX-3 Pro	2.35.5100
ConnectX-3	2.35.5100

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 3.15.2.0

Table 3 - Changes and New Features in Rev 3.15.2.0

Category	Description
Bug fixes	See Section 4, "Bug Fixes History", on page 9

3   Known Issues

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

Table 4 - Known Issues

#	Description	Workaround
1.	When the port is DOWN, the management interface `port type` field (`nmlx_en_MgmtIFPortType`) indicates one of the port types supported by the device, in the following order: TP, FIBER, DA, NONE. If the cable supports several types, the first type in the list mentioned above will be printed.	N/A
2.	When the port is UP, the management interface `port type` field (`nmlx-_en_MgmtIFPortType`) indicates which one of all possible supported types is currently connected.	N/A
3.	Management interface `port type` field (`nmlx_en_MgmtIFPortType`) reports SFP-to-RJ45 cable as FIBER.	N/A
4.	Management interface `auto negotiation` field (`nmlx_en_MgmtIFAutoNegMode`) is equivalent to "`esxcli network nic get -n vmnicX`" field "`Pause Autonegotiate`"	N/A

4   Bug Fixes History

Table 5 lists the bugs fixed in this release.

Table 5 - Fixed Bugs List

#	Category	Description	Discovered in Release	Fixed in Release
1.	Ethernet	Fixed an issue which prevented VLAN tag Priority Code Point (PCP) in RX and TX from working properly.	3.2.0	3.15.2.0
2.	Installation	Fixed a PSOD case during installation when the RDMA module was not removed.	3.2.0	3.15.2.0
3.	Management interface	Management interface `port type` field (`nmlx-_en_MgmtIFPortType`) reported incorrect value.	3.1.0	3.2.0

5   Change Log History

Table 6 - Change Log History

Release	Category	Description
3.2.0	VXLAN	Added support for VXLAN hardware offload. VXLAN hardware offload enables the traditional offloads to be performed on the encapsulated traffic. With ConnectX®-3 Pro, data center operators can decouple the overlay network layer from the physical NIC performance, thus achieving native performance in the new network architecture.
3.1.0	Management interface	Added Management Interface support
3.0.0	Hardware Performance	• 1G • 10G • 40G
	Hardware Offload	• Large Send Offload (TCP Segmentation Offload) • WoL (only on supported hardware) • RSS Queues
	Hardware Capabilities	• Multiple Tx/Rx rings • NetQueue support • Fixed Pass-Through • Single/Dual port • MSI-X