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MLNX-EN-ESX Driver for VMware(R) Infrastructure 5.5Ux Release Notes

Rev 1.9.9.4

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Release Update History

Table 1 - Release Update History

Release	Date	Description
1.9.9.4	August 2014	Initial version

1 Overview

These are the release notes of MLNX-EN-ESX Driver for VMware® Infrastructure 5.5Ux Release Notes. This document provides instructions on Ethernet driver for Mellanox Technologies ConnectX® family based adapter cards with VMware ESXi Server environment.

1.1 Legacy Features Overview

- Single/Dual port
- MSI-X / Int-X
- NetQueue support
- Multiple Tx/Rx rings
- Large Send Offload (TCP Segmentation Offload)
- VLAN Tx/Rx acceleration (Hardware VLAN stripping/insertion)
- Ethtool support
- NAPI support
- WoL (only on supported hardware)
- NC-SI
- Auto moderation
- Net dump (Only for ESXi5.5Ux)
- RSS Queues
- Fixed Pass-Through
- 10G
- 40G (Only for ESXi5.5Ux)

2 Main Features in This Release

MLNX-EN-ESX-1.9.9.4 provides the following changes and new features:

- VXLAN hardware TX checksum offload (ConnectX®-3 Pro v2.32.5100 only)

3 Content of MLNX-EN-ESX Package

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

- MLNX-EN-ESX-1.9.9.4-10EM-550.0.0.1331820 - Hypervisor bundle For ESXi 5.5Ux

Each bundle contains the following kernel modules:

- mlx4_en (ConnectX family Ethernet driver)
- mlx4_core (ConnectX family low-level PCI driver)

The driver package is distributed as an offline bundle (.zip file).

4 Supported HCAs

MLNX-EN-ESX Rev 1.9.9.4 supports the following Mellanox Ethernet HCA:

- ConnectX®-3 Pro (Rev 2.30.8000 and above)
- ConnectX®-3 Pro (Rev 2.32.5100) used for VXLAN TX Hardware Offload
- ConnectX®-3 (Rev 2.30.8000 and above)
- ConnectX®-2 (Rev 2.9.1200 and above)

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/>

5 Known Issues

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

Table 2 - Known Issues

Index	Issue	Description	Workaround
1.	Driver update	Updating the driver from the last certified driver is not supported.	Uninstall any previous drive prior to installing the new driver manually.
2.	vSwitch	Frequent vSwitch MTU changes or link/unlink operations during background heavy stress traffic might cause traffic loss.	-
3.	WoL	WoL is supported by default for 10G. For 40G support please contact Mellanox Support.	-
4.	Ring Size	Frequent changes of ring size during background heavy stress traffic is not supported.	-

6 Bug Fixes History

Table 3 lists the bugs fixed in this release.

Table 3 - Fixed Bugs List

#	Issue	Description	Discovered in Release	Fixed in Release
1.	High Memory	Enabled module heap to expand into high memory	1.9.9.0	1.9.9.4