

Mellanox NATIVE ESX Driver for VMware vSphere 7.0 Release Notes

Rev 3.19.70.1

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Release Update History

Table 1 - Release Update History

| Release | Date | Description |
|---------------|-----------------|--|
| Rev 3.19.70.1 | August 31, 2020 | 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-3-3.19.70.1-10EM-670.0.0.8169922.zip

Driver bundle for ESXi 7.0 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 v3.19.70.1 supports the following Mellanox Ethernet HCA:

Table 2 - Supported HCAs Firmware Versions

| HCAs | Recommended Firmware Rev. | Additional Firmware Rev. |
|----------------|---------------------------|--------------------------|
| ConnectX-3 Pro | 2.42.5000 | 2.36.5000 |
| ConnectX-3 | 2.42.5000 | 2.36.5000 |

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

2 Changes and New Features in Rev 3.19.70.1

Table 3 - Changes and New Features in Rev 3.19.70.1

| Category | Description |
|--|--|
| General | This is the initial software release of ESXi 7.0. It is based on and includes all features and capabilities of ESXi 6.7. |
| PSID in Privstats (Private statistics) | New feature: Adapter card's PSID is now displayed in the Privstats (Private statistics). |

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. | RM#1117422: ConnectX-3 Pro 10G adapter cards wrongly report support for 40G speed when running the "esxcli network nic get" command. | N/A |
| 2. | 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 |
| 3. | 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 |
| 4. | Management interface port_type field (nmlx_en_MgmtIFPortType) reports SFP-to-RJ45 cable as FIBER. | N/A |
| 5. | Management interface auto_negotiation field (nmlx_en_MgmtIFAutoNegMode) is equivalent to "esxcli network nic get -n vmnicX" field "Pause Autonegotiate" | N/A |