Mellanox ConnectX-3 ESXi 6.0 Inbox Driver

Rev 1.0
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## Release Update History

*Table 1 - Release Update History*

<table>
<thead>
<tr>
<th>Release</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev 1.0</td>
<td>August 14, 2017</td>
<td>Added Known Issues 1117422 (see Section 3, “Known Issues”, on page 8)</td>
</tr>
<tr>
<td></td>
<td>December 9, 2016</td>
<td>Initial version of this release</td>
</tr>
</tbody>
</table>
1 Overview

These are the release notes of Mellanox ConnectX- ESXi 6.0 Inbox Driver. Mellanox ConnectX-ESXi 6.0 Inbox Driver supports the following uplinks to servers

*Table 2 - Supported Uplinks to Servers*

<table>
<thead>
<tr>
<th>Version</th>
<th>OS</th>
<th>Uplink Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev 1.0</td>
<td>ESXi 6.0</td>
<td>10/40GbE</td>
</tr>
</tbody>
</table>

1.1 Supported HCAs Firmware Versions

Mellanox ConnectX- ESXi 6.0 Inbox Driver Rev 1.0 supports the following Mellanox Ethernet HCA:

*Table 3 - Supported HCAs Firmware Versions*

<table>
<thead>
<tr>
<th>HCAs</th>
<th>Recommended Firmware Rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ConnectX-3</td>
<td>2.40.5000</td>
</tr>
<tr>
<td>ConnectX-3 Pro</td>
<td>2.40.5000</td>
</tr>
</tbody>
</table>

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](http://www.mellanox.com/page/vmware_matrix)
# Changes and New Features in Rev 1.0

## Table 4 - Changes and New Features

<table>
<thead>
<tr>
<th>Feature/Change</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetQueue</td>
<td>NetQueue is a performance technology in VMware ESXi that significantly improves performance in Ethernet virtualized environments.</td>
</tr>
<tr>
<td>Wake-on-LAN (WoL)</td>
<td>Allows a network administrator to remotely power on a system or to wake it up from the sleep mode.</td>
</tr>
</tbody>
</table>
| Hardware Offload    | • Large Send Offload (TCP Segmentation Offload)  
• Checksum Offload                                                                                                                                                                                                                                                                                             |
| Hardware Capabilities | • Multiple Tx/Rx rings  
• Fixed Pass-Through  
• Single/Dual port  
• MSI-X  
• Interrupt moderation                                                                                                                                                                                                                                                                                    |
| Ethernet Network    | • TX/RX checksum  
• Auto moderation and Coalescing  
• VLAN stripping offload                                                                                                                                                                                                                                                                                  |
| NetQ RSS            | Allows the user to configure multiple hardware queues to back up a single RX queue. NetQ RSS improves vMotion performance and multiple streams of IPv4/IPv6 TCP/UDP/IPSEC bandwidth over single interface between the Virtual Machines. For further information, see the User Manual section “NetQ RSS”. |
3 Known Issues

The following is a list of general limitations and known issues of the various components of this Mellanox ConnectX- ESXi 6.0 Inbox Driver release.

Table 5 - Known Issues

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Workaround</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>RM#1117422</strong>: ConnectX-3 Pro 10G adapter cards wrongly report support for 40G speed when running the &quot;esxcli network nic get&quot; command.</td>
<td>N/A</td>
</tr>
</tbody>
</table>