Mellanox ConnectX-3 ESXi 6.7 Inbox Driver Release Notes

Rev 3.17.9.12-vmw
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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 3.17.9.12-vmw</td>
<td>July 26, 2018</td>
<td>Initial version of this release</td>
</tr>
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</table>
1 Overview

These are the release notes of Mellanox ConnectX-3 ESXi 6.7 Inbox Driver. Mellanox ConnectX-3 ESXi 6.7 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 3.17.9.12-vmw</td>
<td>ESXi 6.7</td>
<td>1/10/4056/GbE</td>
</tr>
</tbody>
</table>

1.1 Supported HCAs Firmware Versions

Mellanox ConnectX-3 ESXi 6.7 Inbox Driver Rev 3.17.9.12-vmw 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>

For the latest firmware versions, visit:

## Changes and New Features in Rev 3.17.9.12-vmw

### Table 4 - Changes and New Features

<table>
<thead>
<tr>
<th>Feature/Change</th>
<th>Description</th>
</tr>
</thead>
</table>
| Remote Direct Memory Access (RDMA) | Remote Direct Memory Access (RDMA) is the remote memory management capability that allows server-to-server data movement directly between application memory without any CPU involvement.  
**Note:** It is recommended to use RoCE with PFC enabled in driver and network switches.  
For how to enable PFC in the driver see section *Priority Flow Control (PFC)* in the User Manual. |
| VXLAN Hardware Stateless Offloads | 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. |
| NetQueue                        | NetQueue is a performance technology in VMware ESXi that significantly improves performance in Ethernet virtualized environments.                  |
| Wake-on-LAN (WoL)               | Allows a network administrator to remotely power on a system or to wake it up from the sleep mode.                                           |
| Hardware Offload                | • Large Send Offload (TCP Segmentation Offload)                                                                                             |
| Hardware Capabilities           | • Multiple Tx/Rx rings  
• Fixed Pass-Through  
• Single/Dual port  
• MSI-X                                                                 |
| Ethernet Network                | • TX/RX checksum  
• Auto moderation and Coalescing  
• VLAN stripping offload                                                                 |
| Data Center Bridging (DCB)      | A set of enhancements to the Ethernet local area network communication protocol for use in data center environments, in particular for use with clustering and storage area networks. |