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# **Mellanox OFED for FreeBSD for ConnectX-4 Release Notes**

Rev 3.0.0

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# Release Update History

*Table 1 - Release Update History*

Release	Date	Description
3.0.0	November 2015	Initial release

# 1 Introduction

These are the release notes for Mellanox Technologies' driver for FreeBSD Rev 3.0.0 driver kit for Mellanox ConnectX®-4 adapter cards supporting the following uplinks to servers:

- Ethernet: 10GigE, 25GigE, 40GigE, 50GigE and 100GigE

## 1.1 Supported Platforms and Operating Systems

The following are the supported OSs in Mellanox OFED for FreeBSD Rev 3.0.0:

**Table 2 - Supported Platforms and Operating Systems**

Operating System	Platform
FreeBSD 11 Current (v289420)	AMD64

## 1.2 Supported Adapters Firmware Versions

Mellanox OFED for FreeBSD Rev 3.0.0 supports the following Mellanox network adapter cards:

Supported Adapters	Current Firmware Rev.
ConnectX®-4	12.12.4002 <sup>1</sup>
ConnectX®-4 Lx	14.12.1100

1. In order to obtain this firmware version, please contact Mellanox Support at [support@mellanox.com](mailto:support@mellanox.com).

## 2 Changes and New Features in Rev 3.0.0

**Table 3 - Changes and Fixes in Rev 3.0.0**

Category	Description
Hardware LRO	Added support for Large Receive Offload (LRO) in the hardware. It increases inbound throughput of high-bandwidth network connections by reducing CPU overhead. Hardware LRO is only supported in ConnectX®-4.
Completion Based Moderation	Added the option to reset the timer for generating interrupts upon completion generation.
EEPROM Cable Reading	Added support for EEPROM cable reading via ifconfig and sysctl. EEPROM is only supported in ConnectX®-4.
Interface Name	Changed the interface name from mlx5en<X> to mce<X>.

For additional information on the new features/performance tuning, please refer to the User Manual.

### 3 Known Issues

The following is a list of general limitations and known issues of the various components of this Mellanox OFED for FreeBSD release.

**Table 4 - Known Issues**

Index	Category	Description	Workaround
1.	VLAN	Kernel panic may occur when creating/destroying a VLAN in a loop during traffic	N/A
2.	Static Configuration	The following error message may be printed to dmesg when using static configuration via rc.conf: "loopback_route: deletion failed" This is a kernel-related issue.	N/A
3.	LAG	LAG creation and destruction may sometimes cause both interfaces to have the same MAC address. This is a kernel-related issue.	N/A
4.	netif restart	Rapidly restarting the interface using netif start/stop may cause an infinite number of messages printing to dmesg: "mce0: a looped back NS message is detected during DAD for fe80:6::e61d:2dff:feal:e974. Another DAD probes are being sent"	N/A
5.	media type	Choosing a wrong interface media type will cause a "no carrier" status and the physical port will not be active.	N/A
6.	MTU	There is no TCP traffic when configuring MTU in the range of 72-100 bytes in ConnectX®-4 Lx.	N/A