



# mlxup - Mellanox Firmware Utility Release Notes

---

Rev 4.13.0

NOTE:

THIS HARDWARE, SOFTWARE OR TEST SUITE PRODUCT ("PRODUCT(S)") AND ITS RELATED DOCUMENTATION ARE PROVIDED BY MELLANOX TECHNOLOGIES "AS-IS" WITH ALL FAULTS OF ANY KIND AND SOLELY FOR THE PURPOSE OF AIDING THE CUSTOMER IN TESTING APPLICATIONS THAT USE THE PRODUCTS IN DESIGNATED SOLUTIONS. THE CUSTOMER'S MANUFACTURING TEST ENVIRONMENT HAS NOT MET THE STANDARDS SET BY MELLANOX TECHNOLOGIES TO FULLY QUALIFY THE PRODUCT(S) AND/OR THE SYSTEM USING IT. THEREFORE, MELLANOX TECHNOLOGIES CANNOT AND DOES NOT GUARANTEE OR WARRANT THAT THE PRODUCTS WILL OPERATE WITH THE HIGHEST QUALITY. ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT ARE DISCLAIMED. IN NO EVENT SHALL MELLANOX BE LIABLE TO CUSTOMER OR ANY THIRD PARTIES FOR ANY DIRECT, INDIRECT, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING, BUT NOT LIMITED TO, PAYMENT FOR PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY FROM THE USE OF THE PRODUCT(S) AND RELATED DOCUMENTATION EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.



Mellanox Technologies  
350 Oakmead Parkway Suite 100  
Sunnyvale, CA 94085  
U.S.A.  
[www.mellanox.com](http://www.mellanox.com)  
Tel: (408) 970-3400  
Fax: (408) 970-3403

© Copyright 2019. Mellanox Technologies Ltd. All Rights Reserved.

Mellanox®, Mellanox logo, Connect-IB®, ConnectX®, CORE-Direct®, GPUDirect®, LinkX®, Mellanox Multi-Host®, Mellanox Socket Direct®, UFM®, and Virtual Protocol Interconnect® are registered trademarks of Mellanox Technologies, Ltd.

For the complete and most updated list of Mellanox trademarks, visit <http://www.mellanox.com/page/trademarks>.

All other trademarks are property of their respective owners.

## Table of Contents

<b>Table of Contents</b> .....	<b>3</b>
<b>List of Tables</b> .....	<b>4</b>
<b>Release Update History</b> .....	<b>5</b>
<b>Chapter 1 Overview</b> .....	<b>6</b>
1.1 Supported Operating Systems and Platforms .....	6
1.2 Supported Adapters Firmware Versions .....	7
<b>Chapter 2 Changes and New Features in Rev 4.13.0</b> .....	<b>8</b>
<b>Chapter 3 Known Issues</b> .....	<b>9</b>
<b>Chapter 4 Bug Fixes History</b> .....	<b>10</b>
<b>Chapter 5 Change Log History</b> .....	<b>11</b>

## List of Tables

Table 1:	Release Update History . . . . .	5
Table 2:	Supported Adapters Firmware Versions . . . . .	7
Table 3:	Changes and New Features in Rev 4.13.0 . . . . .	8
Table 4:	Known Bugs and Limitations . . . . .	9
Table 5:	Bug Fixes History . . . . .	10
Table 6:	Change Log History . . . . .	11

## Release Update History

*Table 1 - Release Update History*

Release	Date	Description
Rev 4.13.0	October 16, 2019	Initial version of this mlxup release.

# 1 Overview

These are the release notes for mlxup. mlxup is a Mellanox firmware utility that enables scanning the server machine for available Mellanox adapters and indicates whether firmware update is required for each adapter.

This utility simplifies the procedure of firmware upgrade and is currently available for ConnectX® family adapter cards and Connect-IB™ Mellanox cards only (see [Section 1.2, “Supported Adapters Firmware Versions,” on page 7](#))

## 1.1 Supported Operating Systems and Platforms

For the complete list, please refer to MFT documentation: <https://docs.mellanox.com/> --> Software --> Firmware Management --> MFT

## 1.2 Supported Adapters Firmware Versions

mlxup Rev 4.13.0 supports the following Mellanox network adapter cards firmware versions:

**Table 2 - Supported Adapters Firmware Versions**

Supported Adapters	Current Firmware Rev.
ConnectX®-3 VPI	2.42.5000
ConnectX®-3 EN	
ConnectX®-3 Pro VPI	
ConnectX®-3 Pro EN	
Connect-IB™	10.16.1200
ConnectX®-4	12.26.1040
ConnectX®-4 Lx	14.26.1040
ConnectX®-5	16.26.1040
ConnectX®-5 Ex	16.26.1040
ConnectX®-6	20.26.1040
BlueField	18.26.1040



The firmware versions above are only for Mellanox cards. For OEM cards, mlxup may contain different firmware versions.

## 2 Changes and New Features in Rev 4.13.0

*Table 3 - Changes and New Features in Rev 4.13.0*

Feature/Category	Description
<b>Operating Systems</b>	Updated Operating Systems list, added ConnectX®-6. See <a href="#">Section 1.1, on page 6</a>
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx, ConnectX®-5 and BlueField. See <a href="#">Section 1.2, on page 7</a>



### 3 Known Issues

The following table provides a list of known bugs and limitations in regards to this release of the mlxup.

**Table 4 - Known Bugs and Limitations**

Internal Ref.	Issue
669272	<p><b>Description:</b> In VMware ESXi, mlxup is not a standalone tool. It requires MLNX-OFED ESXi driver and MST driver to be installed and loaded in the machine.</p> <p><b>WA:</b> Install and load MLNX_OFED ESXi driver (part of the ESXi 5.5 and newer Inbox driver), and MST driver, which can be found at <a href="http://www.mellanox.com">www.mellanox.com</a>.</p> <p><b>Key Words:</b> mst driver, ESXi, VMware</p>
-	<p><b>Description:</b> Running mlxup in parallel with MFT tools causes read/write corruptions and yields unexpected behavior.</p> <p><b>WA:</b> Do not run mlxup in parallel with other MFT tools.</p> <p><b>Key Words:</b> MFT, parallel</p>

## 4 Bug Fixes History

*Table 5 - Bug Fixes History*

Internal Ref.	Issue
681475	<b>Description:</b> Running mlxup query on ConnectX-4 devices will show both Base MAC and Base GUID, even if the two ports are configured to be ETH only, or IB only.
	<b>Key Words:</b> GUID, MAC, query
	Discovered in Release: 4.1.0
	Fixed in Release: 4.4.0
631415	<b>Description:</b> Downloading the latest mlxup binaries by using the flags --download <dir> and --downlaod All is not supported.
	<b>Key Words:</b> Online
	Discovered in Release: 4.0.0
	Fixed in Release: 4.1.0
	<b>Description:</b> OpenSSL library has been upgraded to v1.0.2b in FreeBSD 11 r290500 while mlxup is compiled with an older version, therefore mlxup 4.1.0 will not work with FreeBSD 11 r290500 and above.
	<b>Key Words:</b> FreeBSD, OpenSSL
	Discovered in Release: 4.0.0
	Fixed in Release: 4.1.0

## 5 Change Log History

**Table 6 - Change Log History**

Feature/Category	Description
<b>Rev. 4.12.0</b>	
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx, ConnectX®-5 and BlueField. See <a href="#">Section 1.2, on page 7</a>
<b>Rev. 4.11.0</b>	
<b>Operating Systems</b>	Updated Operating Systems list. See <a href="#">Section 1.1, on page 6</a>
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx, ConnectX®-5 and BlueField. See <a href="#">Section 1.2, on page 7</a>
<b>Rev. 4.10.0</b>	
<b>Operating Systems</b>	Updated Operating Systems list. See <a href="#">Section 1.1, on page 6</a>
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx, ConnectX®-5 and BlueField. See <a href="#">Section 1.2, on page 7</a>
<b>Rev. 4.9.0</b>	
<b>Operating Systems</b>	Updated Operating Systems list. See <a href="#">Section 1.1, on page 6</a>
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx and ConnectX®-5. See <a href="#">Section 1.2, on page 7</a>
<b>Rev. 4.8.0</b>	
<b>Operating Systems</b>	Updated Operating Systems list. See <a href="#">Section 1.1, on page 6</a>
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx and ConnectX®-5. See <a href="#">Section 1.2, on page 7</a>
<b>Rev. 4.7.0</b>	
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4, ConnectX®-4 Lx.
<b>Rev. 4.6.0</b>	
<b>Operating System</b>	Aligned supported OSs with MFT supported OSs.
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4 and ConnectX®-4 Lx.
<b>Rev. 4.5.0</b>	
<b>Operating System</b>	Aligned supported OSs with MFT supported OSs.
<b>Firmware</b>	Updated firmware version for ConnectX®-3/ConnectX®-3 Pro/ConnectX®-4 and ConnectX®-4 Lx.
<b>Rev. 4.4.0</b>	
<b>Operating System</b>	Aligned supported OSs with MFT supported OSs.
<b>Firmware</b>	Updated firmware version for ConnectX®-4, ConnectX®-4 Lx and Connect-IB®.
<b>Rev. 4.3.0</b>	
<b>Operating System</b>	Added support for VMware ESXi.

**Table 6 - Change Log History**

Feature/Category	Description
<b>Firmware</b>	Updated FW version for all cards.
<b>Rev. 4.1.0</b>	
<b>Firmware</b>	Added support for ConnectX®-4, ConnectX®-4 Lx and Connect-IB™ firmware.
	Updated firmware version for ConnectX®-3 and ConnectX®-3 Pro.