



Updating Firmware After Installation

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The firmware can be updated using one of the following methods.

Updating the Device Online

To update the device online on the machine from the NVIDIA site, use the following command line:

```
mlxfwmanager --online -u -d <device>
```

Example:

```
# mlxfwmanager --online -u -d 0000:81:00.0
Querying Mellanox devices firmware ...

Device #1:
-----

Device Type: ConnectX6DX
Part Number: MCX623106AN-CDA_Ax
Description: ConnectX-6 Dx EN adapter card; 100GbE; Dual-port QSFP56; PCIe 4.0/3.0
x16;
PSID: MT_0000000359
PCI Device Name: 0000:81:00.0
Base GUID: 1c34da030080284a
Base MAC: 1c34da80284a
Versions: Current Available
FW 22.28.1034 22.28.1002
PXE 3.6.0101 3.6.0101
UEFI 14.21.0016 14.21.0016

Status: Update required
-----
```

Found 1 device(s) requiring firmware update. Please use -u flag to perform the update.

Updating the Device Manually

When running the install script with the '--without-fw-update' option or using an OEM card that you now wish to (manually) update firmware on your adapter card(s), perform the steps below. The following steps are also appropriate to burn newer firmware that was downloaded from the website (i.e., [nvidia.com/en-us/networking/ Support Support Firmware Download](https://www.nvidia.com/en-us/networking/support/firmware-download)).

1. Get the device's PSID.

```
mlxfwmanager_pci | grep PSID  
PSID: MT_1210110019
```

2. Download the firmware BIN file from the website or the OEM website.
3. Burn the firmware.

```
mlxfwmanager_pci -i <fw_file.bin>
```

4. Reboot the device once the firmware burning is completed.

Updating the Device Firmware Automatically Upon System Boot

Firmware can be automatically updated upon system boot.

The firmware update package (mlnx-fw-updater) is installed in the "/opt/mellanox/mlnx-fw-updater" folder, and the openibd service script can invoke the firmware update process if requested on boot.

If the firmware is updated, the following message will be printed to the system's standard logging file:

```
fw_updater: Firmware was updated. Please reboot your system for the changes to take effect.
```

Otherwise, the following message will be printed:

```
fw_updater: Didn't detect new devices with old firmware.
```

Please note that this feature is disabled by default. To enable the automatic firmware update upon system boot, set the following parameter to “yes” “RUN_FW_UPDATER_ONBOOT=yes” in the openibd service configuration file “/etc/infiniband/openib.conf”.

You can opt to exclude a list of devices from the automatic firmware update procedure. To do so, edit the configurations file “/opt/mellanox/mlnx-fw-updater/mlnx-fw-updater.conf” and provide a comma separated list of PCI devices to exclude from the firmware update.

Example:

```
MLNX_EXCLUDE_DEVICES="00:05.0,00:07.0"
```

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