

mlx4 devlink support

This document describes the devlink features implemented by the `mlx4` device driver.

Parameters

Generic parameters implemented

Name	Mode
<code>internal_err_reset</code>	driverinit, runtime
<code>max_macs</code>	driverinit
<code>region_snapshot_enable</code>	driverinit, runtime

The `mlx4` driver also implements the following driver-specific parameters.

Driver-specific parameters implemented

Name	Type	Mode	Description
<code>enable_64b_cqe_eqe</code>	Boolean	driverinit	Enable 64 byte CQEs/EQEs, if the FW supports it.
<code>enable_4k_uar</code>	Boolean	driverinit	Enable using the 4k UAR.

The `mlx4` driver supports reloading via `DEVLINK_CMD_RELOAD`

Regions

The `mlx4` driver supports dumping the firmware PCI crspace and health buffer during a critical firmware issue.

In case a firmware command times out, firmware getting stuck, or a non zero value on the catastrophic buffer, a snapshot will be taken by the driver.

The `cr-space` region will contain the firmware PCI crspace contents. The `fw-health` region will contain the device firmware's health buffer. Snapshots for both of these regions are taken on the same event triggers.