mlx5 devlink support

This document describes the devlink features implemented by the $\mathtt{mlx5}$ device driver.

Parameters

Generic parameters implemented

Name	Mode	Validation
enable_roce	driverinit	Type: Boolean
io_eq_size	driverinit	The range is between 64 and 4096.
event_eq_size	driverinit	The range is between 64 and 4096.
	driverinit	The range is between 1 and 2 ³ 1. Only
max_macs	driverinit	power of 2 values are supported.

The mlx5 driver also implements the following driver-specific parameters.

Driver-specific parameters implemented

Name	Type	Mode	Description	
flow_steering_mode	string	runtime	Controls the flow steering mode of the driver • dmfs Device managed flow steering. In DMFS mode, the HW steering entities are created and managed through firmware. • smfs Software managed flow steering. In SMFS mode, the HW steering entities are created and manage through the driver without firmware intervention.	
fdb_large_groups	u32	driverinit	 Control the number of large groups (size > 1) in the FDB table. The default value is 15, and the range is between 1 and 1024. 	

The ${\tt mlx5}$ driver supports reloading via ${\tt DEVLINK_CMD_RELOAD}$

Info versions

The ${\tt mlx5}$ driver reports the following versions

devlink info versions implemented

Name	Type	Description
fw.psid	fixed	Used to represent the board id of the device.
fw.version	stored, running	Three digit major.minor.subminor firmware version number.