

mlx5 devlink support

This document describes the devlink features implemented by the `mlx5` device driver.

Parameters

Generic parameters implemented

Name	Mode	Validation
<code>enable_roce</code>	<code>driverinit</code>	Type: Boolean
<code>io_eq_size</code>	<code>driverinit</code>	The range is between 64 and 4096.
<code>event_eq_size</code>	<code>driverinit</code>	The range is between 64 and 4096.
<code>max_macs</code>	<code>driverinit</code>	The range is between 1 and 2^{31} . Only power of 2 values are supported.

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

Driver-specific parameters implemented

Name	Type	Mode	Description
<code>flow_steering_mode</code>	<code>string</code>	<code>runtime</code>	Controls the flow steering mode of the driver <ul style="list-style-type: none"><code>dmfs</code> Device managed flow steering. In DMFS mode, the HW steering entities are created and managed through firmware.<code>smfs</code> Software managed flow steering. In SMFS mode, the HW steering entities are created and manage through the driver without firmware intervention.
<code>fdb_large_groups</code>	<code>u32</code>	<code>driverinit</code>	Control the number of large groups (size > 1) in the FDB table. <ul style="list-style-type: none">The default value is 15, and the range is between 1 and 1024.

The `mlx5` driver supports reloading via `DEVLINK_CMD_RELOAD`

Info versions

The `mlx5` driver reports the following versions

devlink info versions implemented

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