

NAME

devlink-dev – devlink device configuration

SYNOPSIS

devlink [*OPTIONS*] **dev** { *COMMAND* | **help** }

OPTIONS := { **-V**[*ersion*] | **-n**[*no-nice-names*] }

devlink dev show [*DEV*]

devlink dev help

devlink dev eswitch set *DEV* [**mode** { **legacy** | **switchdev** }] [**inline-mode** { **none** | **link** | **network** | **transport** }] [**encap** { **disable** | **enable** }]

devlink dev eswitch show *DEV*

devlink dev param set *DEV* **name** *PARAMETER* **value** *VALUE* **cmode** { **runtime** | **driverinit** | **permanent** }

devlink dev param show [*DEV* **name** *PARAMETER*]

devlink dev reload *DEV* [**netns** { **PID** | **NAME** | **ID** }]

devlink dev info [*DEV*]

devlink dev flash *DEV* **file** *PATH* [**target** *ID*]

DESCRIPTION**devlink dev show - display devlink device attributes**

DEV - specifies the devlink device to show. If this argument is omitted all devices are listed.

Format is:

BUS_NAME/BUS_ADDRESS

devlink dev eswitch show - display devlink device eswitch attributes**devlink dev eswitch set - sets devlink device eswitch attributes**

mode { **legacy** | **switchdev** }

Set eswitch mode

legacy - Legacy SRIOV

switchdev - SRIOV switchdev offloads

inline-mode { **none** | **link** | **network** | **transport** }

Some HWs need the VF driver to put part of the packet headers on the TX descriptor so the e-switch can do proper matching and steering.

none - None

link - L2 mode

network - L3 mode

transport - L4 mode

encap { disable | enable }
Set eswitch encapsulation support

disable - Disable encapsulation support

enable - Enable encapsulation support

devlink dev param set - set new value to devlink device configuration parameter

name *PARAMETER*
Specify parameter name to set.

value *VALUE*
New value to set.

cmode { runtime | driverinit | permanent }
Configuration mode in which the new value is set.

runtime - Set new value while driver is running. This configuration mode doesn't require any reset to apply the new value.

driverinit - Set new value which will be applied during driver initialization. This configuration mode requires restart driver by devlink reload command to apply the new value.

permanent - New value is written to device's non-volatile memory. This configuration mode requires hard reset to apply the new value.

devlink dev param show - display devlink device supported configuration parameters attributes

name *PARAMETER* Specify parameter name to show. If this argument is omitted all parameters supported by devlink devices are listed.

devlink dev reload - perform hot reload of the driver.

DEV - Specifies the devlink device to reload.

netns { PID | NAME | ID } - Specifies the network namespace to reload into, either by pid, name or id.

devlink dev info - display device information.

Display device information provided by the driver. This command can be used to query versions of the hardware components or device components which can't be updated (*fixed*) as well as device firmware which can be updated. For firmware components *running* displays the versions of firmware currently loaded into the device, while *stored* reports the versions in device's flash. *Running* and *stored* versions may differ after flash has been updated, but before reboot.

DEV - specifies the devlink device to show. If this argument is omitted all devices are listed.

devlink dev flash - write device's non-volatile memory.

DEV - specifies the devlink device to write to.

file *PATH* - Path to the file which will be written into device's flash. The path needs to be relative to one of the directories searched by the kernel firmware loaded, such as /lib/firmware.

component NAME - If device stores multiple firmware images in non-volatile memory, this parameter may be used to indicate which firmware image should be written. The value of *NAME* should match the component names from **devlink dev info** and may be driver-dependent.

EXAMPLES

devlink dev show

Shows the state of all devlink devices on the system.

devlink dev show pci/0000:01:00.0

Shows the state of specified devlink device.

devlink dev eswitch show pci/0000:01:00.0

Shows the eswitch mode of specified devlink device.

devlink dev eswitch set pci/0000:01:00.0 mode switchdev

Sets the eswitch mode of specified devlink device to switchdev.

devlink dev param show pci/0000:01:00.0 name max_macs

Shows the parameter max_macs attributes.

devlink dev param set pci/0000:01:00.0 name internal_error_reset value true cmode runtime

Sets the parameter internal_error_reset of specified devlink device to true.

devlink dev reload pci/0000:01:00.0

Performs hot reload of specified devlink device.

devlink dev flash pci/0000:01:00.0 file firmware.bin

Flashes the specified devlink device with provided firmware file name. If the driver supports it, user gets updates about the flash status. For example:

Preparing to flash

Flashing 100%

Flashing done

SEE ALSO

devlink(8), devlink-port(8), devlink-sb(8), devlink-monitor(8),

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