

Linux Devlink Documentation

devlink is an API to expose device information and resources not directly related to any device class, such as chip-wide/switch-ASIC-wide configuration.

Locking

Driver facing APIs are currently transitioning to allow more explicit locking. Drivers can use the existing `devlink_*` set of APIs, or new APIs prefixed by `devl_*`. The older APIs handle all the locking in devlink core, but don't allow registration of most sub-objects once the main devlink object is itself registered. The newer `devl_*` APIs assume the devlink instance lock is already held. Drivers can take the instance lock by calling `devl_lock()`. It is also held in most of the callbacks. Eventually all callbacks will be invoked under the devlink instance lock, refer to the use of the `DEVLINK_NL_FLAG_NO_LOCK` flag in devlink core to find out which callbacks are not converted, yet.

Drivers are encouraged to use the devlink instance lock for their own needs.

Interface documentation

The following pages describe various interfaces available through devlink in general.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\networking\devlink\linux-master) (Documentation) (networking) (devlink) index.rst, line 29)
```

Unknown directive type "toctree".

```
.. toctree::
   :maxdepth: 1

   devlink-dpipe
   devlink-health
   devlink-info
   devlink-flash
   devlink-params
   devlink-port
   devlink-region
   devlink-resource
   devlink-reload
   devlink-trap
```

Driver-specific documentation

Each driver that implements devlink is expected to document what parameters, info versions, and other features it supports.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\networking\devlink\linux-master) (Documentation) (networking) (devlink) index.rst, line 49)
```

Unknown directive type "toctree".

```
.. toctree::
   :maxdepth: 1

   bnxt
   hns3
   ionic
   ice
   mlx4
   mlx5
   mlxsw
   mv88e6xxx
   netdevsim
   nfp
   qed
   ti-cpsw-switch
   am65-nuss-cpsw-switch
   prestera
   iosm
   octeontx2
```

