Netconf Day 2

2023

Process and stuff

- statistics
- pw-bot
- check stats
- CI plans / picture
  - Improve testing
  - Build conformance tests
  - Must be reliable
- feedback

Queue API

High level goals:

- Simplify the prepare / commit reconfiguration for drivers
- Allow creation of queues without full device reset
- Create a condensed queue configuration object

Queue API

- Memory alloc / free
- Queue alloc / free
- Queue start / stop / restart

```
+       unsigned int rxq_mem_size;
+
+       int (*rxq_mem_alloc)(struct net_device *netdev,
+                            const struct netdev_cfg *dcfg,
+                            const struct netdev_rxq_cfg *qcfg,
+                            void *qmem);
```

Queue API

Device config

- MTU

Queue config

- ring size
- header/data split
- page pool params
- …

Ring params may need to be global.

Queue API - configuration

(Ordered) rule based config?

Not exposed to the driver.

- Queue X has fewer entries.
- All queues in RSS context Y have bigger page pool.
- The whole device uses huge pages.

Rendered into "flat" per-queue configuration for the driver.

Queue API

Opens (more than the rest of it):

- Lifetime & permissions model
  - Some permissions are needed
  - NET_ADMIN probably implies "system demon" intermediary?
- Handling of "normal" stack queues - same or special?