netconf '24

Vienna

Testing update

- CI UI
- How to improve developer-local experience
- update on patchwork
    - Funding frozen
    - Still working on previous improvements

HW testing

tl;dr - MAINTAINERS lists the following Status options:

S: *Status*, one of the following:

Supported: Someone is actually paid to look after this.

Maintained: Someone actually looks after it.

Odd Fixes: It has a maintainer but they don't have time to do

much other than throw the odd patch in. See below..

Orphan: No current maintainer [...]

HW testing rules

1. Require all netdev Ethernet drivers listed as Supported in MAINTAINERS to periodically run netdev CI tests.

2. Must run all tests under drivers/net and drivers/net/hw targets of Linux selftests. Running and reporting private / internal tests is welcome.

3. The minimum run frequency is once every 12 hours. Must test the designated branch from the selected branch feed.

4. Note that branches are auto-constructed and exposed to intentional malicious patch posting, so the test systems must be isolated.

5. Drivers supporting multiple generations of devices must test at least one device from each generation. A testbed manifest (exact format TBD) should describe the device models tested.

6. The driver maintainer may arrange for someone else to run the test, there is no requirement for the person listed as maintainer (or their employer) to be responsible for running the tests.

7. The tests must run reliably and failing to do so will result in losing the Supported status.

8. Test failures due to bugs or incompatibility (rather than inadequate / buggy infrastructure) are not a basis for losing Supported status.

9. netdev CI will maintain an official page of supported devices, listing their recent test results.

a. Collaboration between vendors, hosting GH CI, other repos under linux-netdev, etc. are most welcome.

Driver testing plan / flow

- track only passing tests (skip, fail etc don't matter)
- report loss of signal, rather than failure itself
    - week of straight passes -> start tracking a test
- DB scalability?

Private drivers

- No regression rules
- Multiple in tree users
- Accept external contributions
- Help refactoring
- Participating in CI

Netlink

- lack of packaging
    - CLI
    - Python as a library
- only C/C++ support on GH
    - C++ used in prod by Meta
- lack of testing?
- TBD how many YAML specs?