

netconf 2023

Sabrina Dubroca

2023-09-26

SW simulation of HW offloads

- ▶ full SW implementation
 - ▶ actually processing TX/RX packets in the way a real driver/device would
 - ▶ in netdevsim or similar (depending on the type of offload)
- ▶ good
 - ▶ able to test core stack changes without access to HW
 - ▶ easily test error paths and fallback code
 - ▶ more selftests + fuzzing
- ▶ bad
 - ▶ waste too much time maintaining them and fixing corner cases in the emulation? (instead of finding bugs in the stack)
- ▶ limit the set of offloads to simulate?
 - ▶ ipsec, macsec, tls: probably yes
 - ▶ TLS TOE: probably no
 - ▶ things like checksum/TSO/vlan?

netdev features expansion

- ▶ `netdev_features_t` (64b) has been full for a while (`NETIF_F_HW_HSR_DUP` added in Feb 2021)
- ▶ work to expand started ~2 years ago by Jian Shen
- ▶ work stopped (RFCv8) a year ago
- ▶ is there any doubt that this needs to be done?

How to increase the number of reviews: obstacles for reviewers

- ▶ finding time (we're all overloaded), convincing managers (or ourselves) to focus on reviews
- ▶ complexity of interactions between components
 - ▶ can scare away some reviewers (when reading someone else's review: "I wouldn't have found that issue with the patch")
 - ▶ which can lead to not sending a formal Reviewed-by ("I think it's ok, but I'm not sure enough of my review")
 - ▶ ... or not commenting
 - ▶ would maintainers rather see "eh, LGTM, but what do I know?" accompanied by a reviewed-by rather than no reviewed-by? or even just the reviewed-by?
- ▶ missing some errors in past reviews
- ▶ formatting/style issues
 - ▶ worth reporting vs very complex (possibly urgent) fixes?
 - ▶ where to draw a line?