YANG model and implementation of Network Interconnect Tester

- IETF113 Hackathon
- March 19-20, 2022
- Online

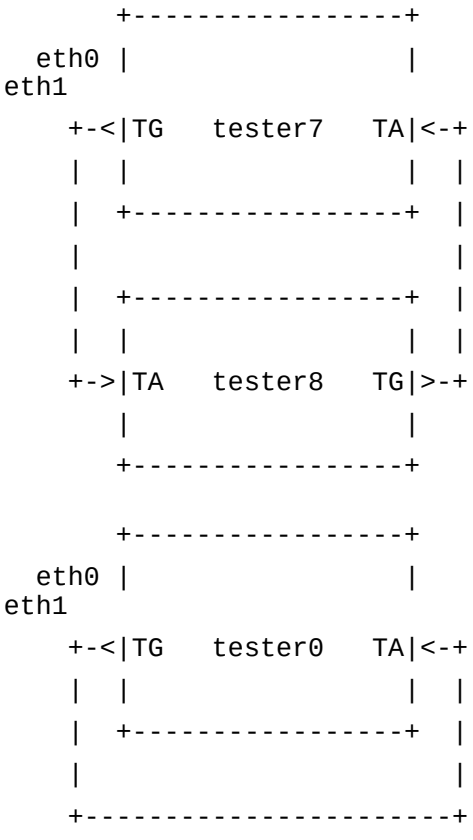
The project

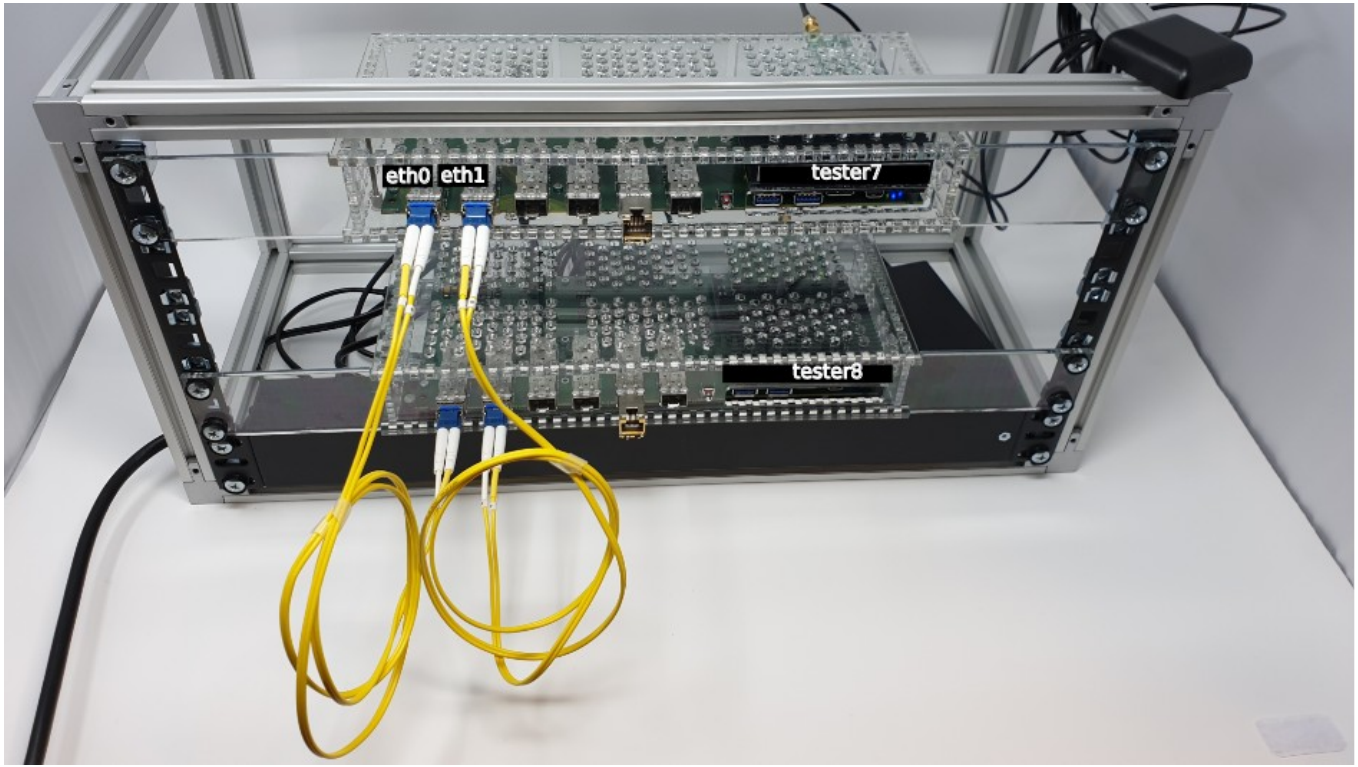
Specification:
* draft-vassilev-bmwg-network-interconnect-tester-07

Client side:
* Example script – rfc2544.py benchmark (Python)

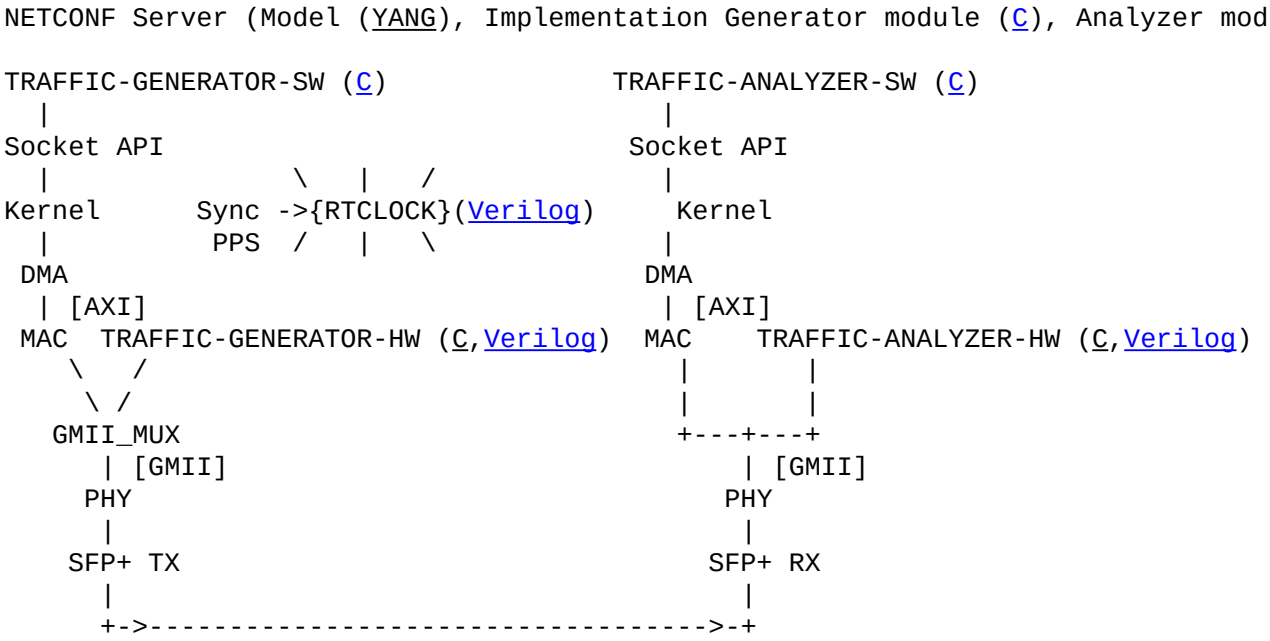
Device side:
* Software - YANG/NETCONF server instrumentation code (C)
* Firmware - (Verilog)
* Hardware – off-the-shelf FPGA module Ultra96 + 6x SFP+ network programmability kit shield (KiCAD, Walk-through)

Setup


eth0 |
eth1
+-<|TG tester7 TA|<-+
+->|TA tester8 TG|>-+
eth0 |
eth1
+-<|TG tester0 TA|<-+


eth0 eth1
tester7
tester8

Design and implementation

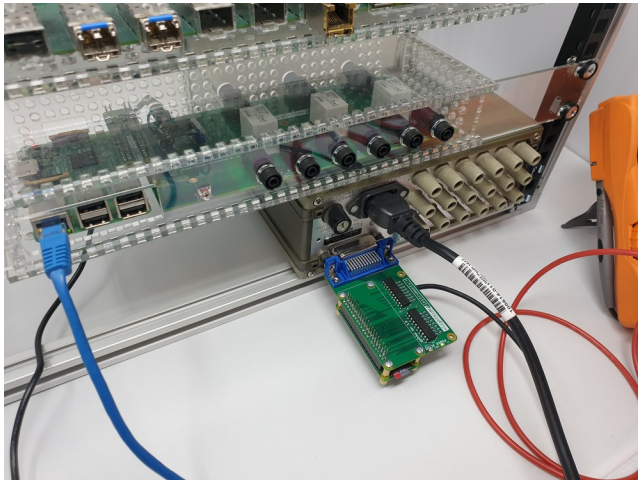


* - underlined text has links to repositories

What got done

* Work on the rfc2544.py script RFC2544 sec. 26.6 – Reset (Python).

* Work on YANG/NETCONF managed 59306A relay actuator.



Remaining work

* Multi-stream implementation