NFVbench

The NFVbench project develops a toolkit that allows developers, integrators, testers and customers to measure and assess the L2/L3 forwarding performance of an NFV-infrastructure solution stack (i.e. OPNFV scenario) using a black-box approach.

NFV bench is available as a self-contained docker container that includes the the main application and the Trex software traffic generator.

NFVbench is agnostic of the NFV platform, the controller used (ML2/OVS, ODL...), the network stack used (OVS, OVS-DPDK, VPP, SR-IOV...) and supports VLAN and VxLAN.

NFV bench is currently widely deployed in production NFV clouds around the world by multiple service providers and is mostly used for

- on-site integrated performance benchmarking tool, which allows instant performance measurement on every deployed NFV platform
- precise performance planning tool with high VNF density (multi-chaining)

NFVbench is also currently used as the traffic generator solution for the CNCF CNF testbed based on packet.net: CNF testbed slides.

Documentation

NFVbench User Guide

Source code

- Mirror of the OPNFV NFVbench project on GitHub
- Code review (Gerrit OPNFV)
- Issue tracker (Jira OPNFV)

Mailing list

There is no mailing list dedicated to NFVbench.

For inquiries and questions: send an email to anuket-tech-discuss@lists.anuket.io with a Subject line starting with "#nfvbench"

The list archives can be consulted and searched here: https://lists.anuket.io/g/anuket-tech-discuss/search?q=%23nfvbench&ct=1

OPNFV list archives:

https://lists.opnfv.org/g/opnfv-tech-discuss/search?q=%23nfvbench&ct=1

TRex project

- TRex homepage
- TRex manual
- TRex code (GitHub)
- TRex release notes

NFVbench Docker image

Where can I find NFVbench Docker images?

Available versions of NFVbench Docker images can be found on Docker hub:

https://hub.docker.com/r/opnfv/nfvbench/tags

Where is the change log for NFVbench Docker image?

No ChangeLog, look at NFVbench commit log on nfvbench.org.

Note: there is also a GitHub mirror for NFVbench, but it is more complicated to see the association between commit history and tags

Which version of TRex is associated to a given version of NFVbench?

For a given version of **NFVbench container image** on Docker hub, TRex version can be found in the **TREX_VER** environment variable in the image history. For instance, NFVbench Docker image version 3.4.1 is based on TRex 2.56 as can be seen here.

For a given version of **NFVbench code base**, the version of TRex that would be embedded in a Docker container built from that code base is given in the TREX_VER environment variable found in docker/Dockerfile For instance, NFVbench code base tagged 3.6.1 is meant to be used with TRex 2.61 as can be seen in the Dockerfile.

NFVbench loop VM image

The list of the artifacts generated by NFVbench project, including all versions of NFVbench loop VM, can be found here: https://artifacts.opnfv.org/nfvbench.html. Look for nfvbench/images.