



VSPERF Results

Release draft (0c0d7c2)

OPNFV

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OPNFV BRAHMAPUTRA SCENARIOS

Available Tests and aspects of scenarios:

| Framework Test | Definition |
|-----------------------|--|
| phy2phy_tput | PacketLossRatio for Phy2Phy |
| back2back | BackToBackFrames for Phy2Phy |
| phy2phy_tput_mod_vlan | PacketLossRatioFrameModification for Phy2Phy |
| phy2phy_cont | Phy2Phy blast vswitch at x% TX rate and measure throughput |
| pvp_cont | PVP blast vswitch at x% TX rate and measure throughput |
| pvvp_cont | PVVP blast vswitch at x% TX rate and measure throughput |
| phy2phy_scalability | Scalability0PacketLoss for Phy2Phy |
| pvp_tput | PacketLossRatio for PVP |
| pvp_back2back | BackToBackFrames for PVP |
| pvvp_tput | PacketLossRatio for PVVP |
| pvvp_back2back | BackToBackFrames for PVVP |
| phy2phy_cpu_load | CPU0PacketLoss for Phy2Phy |
| phy2phy_mem_load | Same as CPU0PacketLoss but using a memory intensive app |

Supported deployment scenarios:

- **Phy2Phy**: Physical port -> vSwitch -> Physical port.
- **PVP**: Physical port -> vSwitch -> VNF -> vSwitch -> Physical port.
- **PVVP**: Physical port -> vSwitch -> VNF -> vSwitch -> VNF -> vSwitch -> Physical port.

Loopback applications in the Guest can be:

- **DPDK testpmd**.
- **Linux Bridge**.
- **l2fwd**.

Supported traffic generators:

- **Ixia**: IxOS and IxNet.
- **Spirent**.
- **Dummy**.

OPNFV BRAHMAPUTRA RESULTS

The vsperf CI jobs that were used to obtain the results can be found at https://wiki.opnfv.org/wiki/vsperf_results.

The following table maps the results in the test dashboard to the appropriate test case in the VSPERF Framework and specifies the metric the vertical/Y axis is plotting. **Please note**, the presence of dpdk within a test name signifies that the vswitch under test was OVS with DPDK, while its absence indicates that the vswitch under test was stock OVS.

| Dashboard Test | Framework Test | Metric | Guest Interface |
|-----------------------|-----------------------|--------------------|-----------------|
| tput_ovsdpdk | phy2phy_tput | Throughput (FPS) | N/A |
| tput_ovs | phy2phy_tput | Throughput (FPS) | N/A |
| b2b_ovsdpdk | back2back | Back-to-back value | N/A |
| b2b_ovs | back2back | Back-to-back value | N/A |
| tput_mod_vlan_ovs | phy2phy_tput_mod_vlan | Throughput (FPS) | N/A |
| tput_mod_vlan_ovsdpdk | phy2phy_tput_mod_vlan | Throughput (FPS) | N/A |
| scalability_ovs | phy2phy_scalability | Throughput (FPS) | N/A |
| scalability_ovsdpdk | phy2phy_scalability | Throughput (FPS) | N/A |
| pvp_tput_ovsdpdkuser | pvp_tput | Throughput (FPS) | vhost-user |
| pvp_tput_ovsvirtio | pvp_tput | Throughput (FPS) | virtio-net |
| pvp_b2b_ovsdpdkuser | pvp_back2back | Back-to-back value | vhost-user |
| pvp_b2b_ovsvirtio | pvp_back2back | Back-to-back value | virtio-net |
| pvvp_tput_ovsdpdkuser | pvvp_tput | Throughput (FPS) | vhost-user |
| pvvp_tput_ovsvirtio | pvvp_tput | Throughput (FPS) | virtio-net |
| pvvp_b2b_ovsdpdkuser | pvvp_back2back | Throughput (FPS) | vhost-user |
| pvvp_b2b_ovsvirtio | pvvp_back2back | Throughput (FPS) | virtio-net |

The loopback application in the VNF used for PVP and PVVP scenarios was DPDK testpmd.