VSPERF News

Release draft (bc1c22c)

OPNFV

March 14, 2016

CONTENTS

CHAPTER

ONE

OPNFV BRAHMAPUTRA RELEASE

Supports both OVS and OVS with DPDK.

Available tests:

- phy2phy_tput: LTD.Throughput.RFC2544.PacketLossRatio
- back2back: LTD.Throughput.RFC2544.BackToBackFrames
- phy2phy_tput_mod_vlan:LTD.Throughput.RFC2544.PacketLossRatioFrameModification
- phy2phy_cont: Phy2Phy Continuous Stream
- pvp_cont: PVP Continuous Stream
- pvvp_cont: PVVP Continuous Stream
- phy2phy_scalability:LTD.Scalability.RFC2544.0PacketLoss
- pvp_tput: LTD.Throughput.RFC2544.PacketLossRatio
- pvp_back2back: LTD.Throughput.RFC2544.BackToBackFrames
- pvvp_tput: LTD.Throughput.RFC2544.PacketLossRatio
- pvvp_back2back: LTD.Throughput.RFC2544.BackToBackFrames
- phy2phy_cpu_load: LTD.CPU.RFC2544.0PacketLoss
- phy2phy_mem_load: LTD.Memory.RFC2544.0PacketLoss

Supported deployment scenarios:

- Physical port -> vSwitch -> Physical port.
- Physical port -> vSwitch -> VNF -> vSwitch -> Physical port.
- Physical port -> vSwitch -> VNF -> vSwitch -> VNF -> vSwitch -> Physical port.

Loopback applications in the Guest can be:

- DPDK testpmd.
- Linux Bridge.
- l2fwd Kernel Module.

Supported traffic generators:

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

1.1 Release Data

Project	vswitchperf
Repo/tag	brahmaputra.1.0
Release designation	Brahmaputra base release
Release date	February 26 2016
Purpose of the delivery	Brahmaputra base release

CHAPTER

TWO

NOVEMBER 2015

- Support of opnfv_test_dashboard

CHAPTER

THREE

OCTOBER 2015

- Support of PVP and PVVP deployment scenarios using Vanilla OVS

CHAPTER

FOUR

SEPTEMBER 2015

- Implementation of system statistics based upon pidstat command line tool.
- Support of PVVP deployment scenario using bhost-cuse and vhost user access methods

CHAPTER

FIVE

AUGUST 2015

- Backport and enhancement of reporting
- PVP deployment scenario testing using vhost-cuse as guest access method
- Implementation of LTD.Scalability.RFC2544.0PacketLoss testcase
- Support for background load generation with command line tools like stress and stress-ng

CHAPTER

SIX

JULY 2015

- PVP deployment scenario testing using vhost-user as guest access method - Verified on CentOS7 and Fedora 20 - Requires QEMU 2.2.0 and DPDK 2.0

CHAPTER

SEVEN

MAY 2015

This is the initial release of a re-designed version of the software based on community feedback. This initial release supports only the Phy2Phy deployment scenario and the LTD.Throughput.RFC2544.PacketLossRatio test - both described in the OPNFV vswitchperf 'CHARACTERIZE VSWITCH PERFORMANCE FOR TELCO NFV USE CASES LEVEL TEST DESIGN'. The intention is that more test cases will follow once the community has digested the initial release.

- Performance testing with continuous stream
- Vanilla OVS support added.
  - Support for non-DPDK OVS build.
  - Build and installation support through Makefile will be added via next patch(Currently it is possible to manually build ovs and setting it in vsperf configuration files).
  - PvP scenario is not yet implemented.
- CentOS7 support
- Verified on CentOS7
- Install & Quickstart documentation
- Better support for mixing tests types with Deployment Scenarios
- Re-work based on community feedback of TOIT
- Framework support for other vSwitches
- Framework support for non-Ixia traffic generators
- Framework support for different VNFs
- Python3
- Support for biDirectional functionality for ixnet interface
- xmlunit output is currently disabled