

vSwitch Benchmarking Methodology Pack

Spirent MethodologyCenter

Features

- Conforms to draft standard Benchmarking Virtual Switches in OPNFV (draftvsperf-bmwg-vswitchopnfv-00)
- Characterizes the performance of virtual switches according to NFVi stats*
- Provides visibility into underlying resource utilization
- Generates detailed yet easy-to-read reports with drill-down results
- Reports can be saved as XLS, PDF or DOCX formats
- Browser-based UI works on any popular operating system

*Coming soon in Q4 2016

Virtual switches are an integral component of NFV infrastructure. Benchmarking their performance is critical to ensuring the success of virtualized environments. The IETF has defined a draft RFC for this purpose in <u>https://tools.ietf.org/html/draft-vsperf-bmwg-vswitch-opnfv-00</u>, detailing a set of tests specific to virtual switches.

Spirent vSwitch Benchmarking Methodology Pack implements the key tests defined in the IETF draft as a suite of methodologies available on Spirent MethodologyCenter web application. With a focus on ease-of-use, test scenarios can be configured and run from any popular browser. Executing methodologies generates detailed reports with drill-down results that are easy to interpret, or save in various formats. The methodologies require Spirent TestCenter hardware to generate and receive traffic.

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Benefits

- Rapid vSwitch performance benchmarking
- Ease of use, improved productivity and user experience, preconfigured topology profiles help save time
- Compatible with Spirent TestCenter hardware and virtual ports

Methodologies

The vSwitch Benchmarking Methodology Pack includes four methodologies:

- **Throughput and Latency Profile**-determines how throughput and latency degrade as the rate is varied in the region of the DUT's maximum forwarding rate
- **Performance Consistency**–determines the throughput consistency profile using RFC 2544-like testing
- Flow Scale-varies the number of flows while running RFC 2544 throughput tests

Initial Packet Processing Latency–measures the minimum, average and maximum latency of the initial packet of a flow of the initial packet of a flow

| 🕄 MethodologyCenter | Methodology Selection | | | |
|---|------------------------|----------------------------------|--|---------------------------------|
| Switch Benchmark 016 14:20 | king Flow Scale 10-24- | vSwitch Benchmar (ver. 1-0-0) | rking Flow Scale Available Ports: 4/100 | 00 Run Tes |
| Topology | | | | |
| West Port Group | | \bigcirc | East Port Group | |
| Configure | 1 Port(s) | SUT | Configure | 1 Port(s) |
| ► Global Parameters | | ► Metho | dology Initialization F | 'arameters |
| Traffic Configurati | on | | | |
| | | | | 1 |
| RENT | ©2016 Spirent Co | mmunications, Inc. All rights | reserv Terms of Service MC V | /er. 1.1.145 STC Ver. 4.69.94 |

Configuration page for the vSwitch Benchmarking Flow Scale Methodology

| MethodologyCenter | Methodology Selection | | | |
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| ethodology Select | ion | Q S | earch | |
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| ∧ 🐝 vSwitch Ben | chmarking | | vSwitch | |
| vSwitch Benchmarl Throughput and La Determines how through as the rate is varied in the maximum forwarding rate | tency Profile but and latency degrades region of a DUT's | VSwitch Benchmarking 0000- Performance Consistency This methodogrup us tails atimilar to the RFC 2544 Throughput test to determine the consistency profile of vswitches or VNF services. | | |
| vSwitch Benchmarking Flow (0 of 99-) Scale | | vSwitch Benchmarking Initial 0 of 99- Packet Processing Latency | 45. | |
| Runs a test similar to the at a variety of flow counts services. | RFC 2544 Throughput test for vSwitches or VNF | This test measures the minimum, average, and maximum latency of the initial packet of a flow through the vSwitch. | | |
| | | | | |
| NT | ©2016 Spir | rent Communications, Inc. All rights reserv Terms of Service | MC Ver. 1.1.145 STC Ver. 4.69 | 9.94 |

Selection Page for vSwitch Benchmarking Methodology Pack in MethodologyCenter

vSwitch Benchmarking Methodology Pack

Spirent MethodologyCenter

About Spirent Communications

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks.

We help bring clarity to increasingly complex technological and business challenges.

Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled.

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| Technical Specifications | | | | |
|--|--|-----------------------------|--|--|
| Description | Details | | | |
| Applicable Standards | https://tools.ietf.org/html/draft-ietf-bmwg-vswitch-opnfv | | | |
| Tests Included | vSwitch Benchmarking Throughput and Latency Profile vSwitch Benchmarking Performance Consistency vSwitch Benchmarking Flow Scale vSwitch Benchmarking Initial Packet Processing Latency | | | |
| Ordering information | | | | |
| Description | | Part Number | | |
| vSwitch Performance Methodology Package - perpetual | | TMV-MC-VSWITCHPERF-PACK-P | | |
| vSwitch Performance Methodology Package - 1 year | | TMV-MC-VSWITCHPERF-PACK-1YR | | |