

Spirent AION

Spirent TestCenter Benchmarking Bundle

Overview

Spirent AION is a flexible delivery platform that enables users to achieve improved deployment and provisioning for all their cloud and network testing needs. It is designed to deliver ultimate flexibility in how Spirent TestCenter platforms are purchased and utilized.

The extended platform combines a wealth of industry-leading test solutions with a flexible licensing architecture to support a wide range of next-generation solution-based domain applications.

AION offers a centralized management hub to help leverage software and hardware functionalities across all lab users and locations for a simplified management and decision-making process:

- **Flexible purchasing options** available via subscription, consumption-based, and perpetual plans, with the ability to license different bandwidth, scale, and protocol bundles.
- **Flexible deployment options** offered include cloud-delivery, on-prem, and laptop-hosted licensing services.

Enhanced user serviceability delivers always-on platform services from auto-discovery and inventory management to user and workspace administration, notifications, and log aggregation.

Benchmarking Bundle

Spirent TestCenter Benchmarking Bundle is a comprehensive test package that includes multiple automated benchmarking tests, such as RFC 2544, RFC 2889, RFC 3918 and enables Network Equipment Manufacturers, Service Providers and Enterprises to measure and report the performance characteristics of network devices. It provides the ability to users to evaluate network devices from different vendors by comparing the benchmark test results. Some of the tests are based on IETF standards, while other test specifications are curated to specific industry need.

Utilizing TestCenter next generation architecture, benchmarking tests can be executed faster with nanosecond accuracy at high-density scale, including:

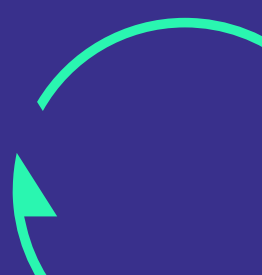
- **RFC 2544**—the industry-leading Layer 2 and Layer 3 network device benchmarking test specification.
- **RFC 2889**—the standard for initial performance testing of Layer 2 switches.
- **RFC 3918**—the industry standard for IP Multicast benchmarking test.
- **RFC 5180**—benchmarking test for IPv6, available within Spirent TestCenter RFC 2544 test to enable IPv6 option.

To support voice, video and data, access concentrators have evolved to address scalability, high-bandwidth, traffic management, QoS, authentication and multicast applications. **Asymmetric Performance Test** is a variation of RFC 2544 that allows asymmetric loads and suitable for access concentrator requirements.

Data Center Bridging Test includes several test methodologies for characterization of the underlying switching fabric of FC/FCoE and Priority Flow Control (PFC) capability.

The Benchmarking Bundle is an integrated component of Spirent TestCenter and works with other Spirent TestCenter components. Tests can also be combined with Routing and Switching, Access or Segment Routing control-plane.

- **Network Device Performance Validation**—verify performance of Layer 2 & Layer 3 devices, quickly and consistently over different network topologies
- **Increase Productivity**—reduce time-to-test through easy configuration wizards and fast automated execution
- **Cost-Effective Solution**—complete benchmarking test suite in a single package which is also light on budget
- **Trusted Partner**—benefit from decades of testing experience with Spirent as your guide through a world of complex testing



Features and Benefits

- Measure latency and jitter as part of throughput in a single test
- Test with jumbo frames and verify low-latency and wire-rate
- Test performance of different IMIX distributions
- Measure impact of QoS/DiffServ and latency types, including LILO/LIFO/FIFO with jitter, latency, and throughput in a single test
- IGMP/MLD support for RFC 3918 Multicast benchmarking test
- The Asymmetric Performance Test simplifies testing for access concentrator devices such as DSLAMs, PON OLTs and Cable CMTS
- Data Center Bridging test provides comprehensive characterization for FC/FCoE fabric and PFC capability
- Large port, full mesh tests through millions of available streams
- Summary and comprehensive detailed results using the Spirent TestCenter IQ

Technical Specifications

IETF Specification	Description
RFC 2544	RFC 2544 Benchmarking Methodology for Network Interconnect Devices <ul style="list-style-type: none"> • Throughput Test • Latency Test • Frame Loss Test • Back-to-Back Frames Test
RFC 2889	RFC 2889 Benchmarking Methodology for LAN Switching Devices <ul style="list-style-type: none"> • Forwarding Test • Congestion Control Test • Address Caching Test • Address Learning Test • Error Filtering Test • Broadcast Forwarding Test • Broadcast Latency Test • Forwarding Pressure Test • Maximum forwarding rate Test
RFC 3918	RFC 3918 Benchmarking Methodology for IP Multicast <ul style="list-style-type: none"> • Mixed Class Throughput Test • Scaled Group Forwarding Matrix Test • Aggregated Multicast Throughput Test • Multicast Forwarding Latency Test • Multicast Join/Leave Latency Test • Multicast Group Capacity Test

Custom Specification

Asymmetric Performance	Asymmetric Performance Test <ul style="list-style-type: none"> • Asymmetric Throughput Test • Asymmetric Latency Test • Asymmetric Frame Loss / Bit-Error-Rate Test
Data Center Bridging	Switching Fabric Test <ul style="list-style-type: none"> • Queueput Test • Maximum Forwarding Rate Test • Step Test • Back-to-Back Frames Test • Congestion Control Test Priority Flow Control Test <ul style="list-style-type: none"> • Buffering Test • Buffering with Histograms Test • Pause Response Time Test • Load Validation Test

Ordering Information

Product Number	Description
AON-PB-BENCHMARK	AION Benchmarking Bundle

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. For more information visit: www.spirent.com

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