

This Former Spirent Business is Now Part of VIAVI

Contact Us +1 844 GO VIAVI | (+1 844 468 4284)

To learn more about VIAVI, visit viavisolutions.com/en-us/spirent-acquisition

Spirent AION

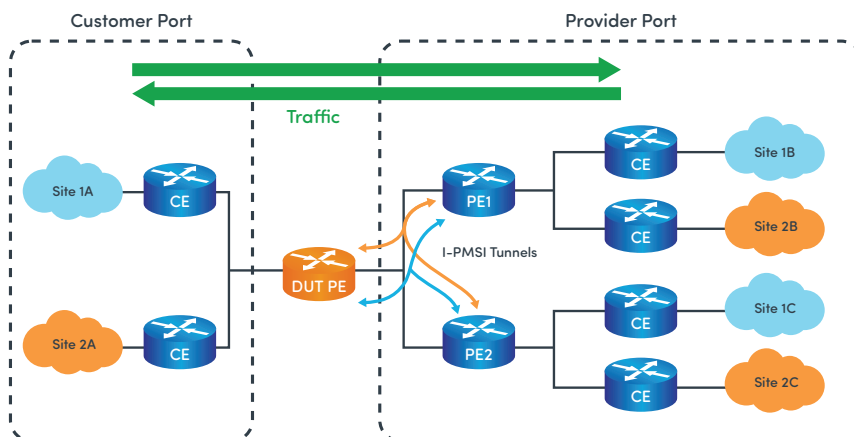
Spirent TestCenter Multicast VPN Bundle

Application Overview

Spirent TestCenter Multicast VPN Bundle supports high performance and realistic topologies for multicast routing technologies and enables Network Equipment Manufacturers, Service Providers and Enterprises to quickly evaluate and troubleshoot routing functionality, performance and scalability of any routing device or network. Users can expose the true performance of a router/switch by stress testing the routing software, data forwarding hardware, and the overall system architecture under both static and dynamic routing conditions.

Multicast Virtual Private Network (MVPNN) Bundle features cover comprehensive testing of Multicast VPN and next-generation Multicast VPN architectures. Multicast VPN (MVPN) (Draft-Rosen) defines the ability to transport multicast traffic across a Layer 3 VPN network with the use of multicast distribution trees (MDT) between PEs within a given VRF.

Next Generation Multicast VPN (NGMVPN) is predominantly used in service provider networks and provides improvements on scalability and manageability issues over traditional MVPN (Draft-Rosen) technology. BGP based next-generation MVPN control plane, distributes all the necessary information to enable end-to-end C-multicast routing exchange via BGP. The responsibilities of the control plane include MVPN auto-discovery, distribution of provider tunnel information, and PE-PE C-multicast route exchange. A new BGP address family called MCAST-VPN is introduced for supporting next-generation MVPN control plane operations.



The Multicast VPN technologies in this package work with the Unicast Routing, Multicast Routing and MPLS VPN protocols, to create complex Multicast VPN topology over IP/MPLS transport network. User can emulate MPBGP sessions, MLDP and RSVP-TE P2MP tunnels to test performance and scalability of any GRE based Multicast VPN network with traffic engineering or Next Generation MVPN technologies by stress testing the routing, label lookup, binding, and P2MP forwarding operations under dynamically changing conditions.

- **Realistic Network Topologies**—emulate real world networks and evaluate key performance parameters of routers or networks under typical or extreme traffic load conditions for minutes, hours and days
- **Network/Service Reliability**—verify scale, reliability, performance of Layer 2 & 3 services including data, multicast, and video delivered via unicast routing, multicast routing, switching, and MPLS VPN technologies
- **Wide Range of Use cases**—qualify routers during development, quality assurance, and regression testing; requalify routers after software or firmware upgrades and perform comparative analysis of routers during vendor selection
- **Increase Productivity**—test and configuration wizards allow quick setup; capture functionality, protocol events and live status views make troubleshooting easy with TestCenter IQ and help save time
- **Cost-Effective Solution**—complete Multicast VPN protocol emulation suite in simple affordable packages
- **Trusted Partner**—benefit from decades of testing experience with Spirent as your guide through a world of complex testing

About AION

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.

All of the above packages are integrated component of Spirent TestCenter and work with other Spirent TestCenter components to deliver easy, consistent TCL and Python scripting API and Command Sequencer NoCode automation. The routing and switching protocols can also be combined with Access or Segment Routing control-plane over routing/MPLS topology with stateful or stateless data-plane traffic.

Features & Benefits

- Quickly emulate large and complex MVPN or NG-MVPN topologies running multiple protocol operations from a single application interface
- Support Multicast LDP emulation for the setup of point-to-multipoint (P2MP) and multipoint-to-multipoint (MP2MP) Label Switched Paths (LSPs) in MPLS networks
- Multicast VPN wizard builds GRE-based Rosen-style VPNs. Including Unicast routing, PIM routing, routes, Multicast groups, GRE encapsulated traffic and optional Unicast labeled traffic
- Next-Generation Multicast VPN wizard builds MPBGP based next-generation MVPN topology with customer side and provider side of the VPN network, emulated and simulated CE, P, and PE routers, routing and labeling protocols, and creates the traffic that is sent between VPNs
- Integrated data-plane traffic enables users to send, receive, inspect, and accumulate statistics at wire-rate; users can also monitor the real time effects that router configurations have on traffic and QoS classes
- Validate performance, scalability and protocol functionality in the same test by running multiple protocols concurrently on each port
- Using advanced multi-threading architecture, user can scale number of sessions or route scale with multi-dimension
- Use the Command Sequencer with TCL scripts to send SNMP commands, get SNMP data, configure the device under test, run entire test and generate pass/fail results; advanced command sequencer capabilities allow users to extend Spirent TestCenter to meet their test needs

Technical Specifications

Parameter	Description
Multicast VPN	
MLDP	• MLDP P2MP / MLDP MP2MP
Multicast VPN	• Multicast VPN (Draft-Rosen)
NGMVPN	• Next Generation Multicast VPN • Ingress Replication • RSVP-TE P2MP • MLDP

Ordering Information

Product Number	Description
AON-PB-MCAST-VPN*	AION Multicast Virtual Private Network (VPN) Bundle

**Requires AION Routing & Switching (AON-PB-RTSW), AION Multicast Routing (AON-PB-MCAST-RT), and AION Multiprotocol Label Switching (AON-PB-MPLS) licenses.*

Bundles are available in different number of seats, contact your Spirent Sales Representative to find the right combination for your testing needs.