

TestCenter™

LISP Emulation

Locator/Identifier Separation Protocol (LISP) disassociates two elements, the routing locator and the identifier that have traditionally been incorporated into one number space: the IP address. LISP uses a network-based map-and-encapsulate scheme (RFC 1955) to separate the identity and location functions. An identifier and a locator can be an IP address or an arbitrary element such as a set of GPS coordinates or a MAC address.

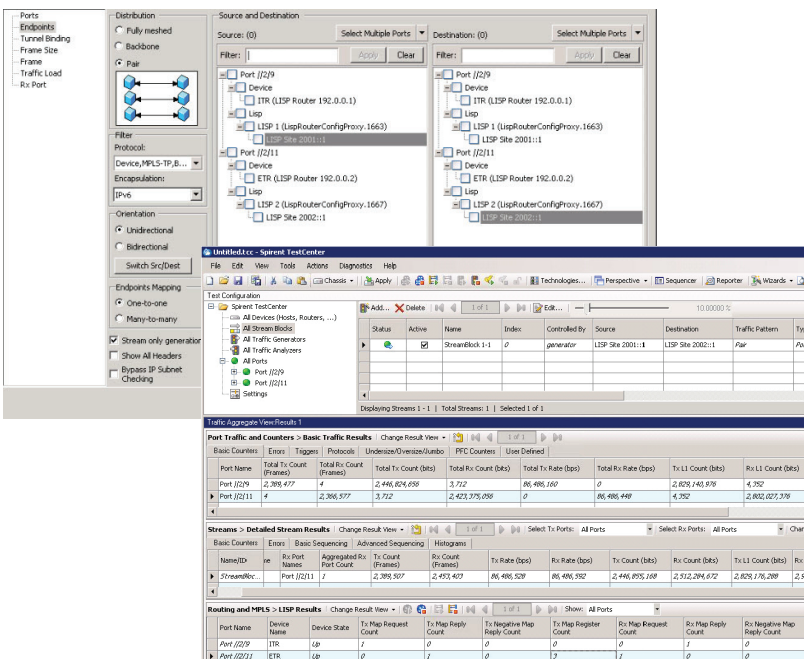
VIAVI's LISP emulation allows you to create complex tests to validate LISP implementations by simplifying multihomed routing and supporting datacenter virtual machine mobility.

Applications of VIAVI's LISP Emulation Testing Tools Includes:

- Testing Converged Fabrics—test end-to-end FCoE to FC performance emulating virtual machine initiators on Ethernet and storage array targets on native Fiber Channel test ports
- Testing High-Speed Ethernet FCoE Fiber Channel Forwarder (FCF) switches—test Enode and VN_port control plane scale and combined LAN/SAN queueput
- Testing FIP Snooping and N-Port Virtualization (NPV) bridge switches—test top of rack switch FCoE pass-through capabilities by emulating server VN_ports as well as fabric FCF VF ports

Features

- Supported on all VIAVI TestCenter modules. TestCenter device's roles can be both ETR and IGR, or either
- Setting up LISP site(s) is as easy as setting up a network block
- Run traffic and control plane; Bound Stream Blocks makes testing simple
- Real-time changes with TestCenter; Dynamic change exercises LISP in DUT
- Multiple block support
- Management and change of prefix length, address increment, negative mapping request will be dropped, etc.
- Static locator configurations
- Both IPv4 and IPv6 locator address family supported



The screenshot displays the VIAVI TestCenter interface for LISP Emulation. The top section shows the configuration of Source and Destination ports, including LISP Routers and Sites. The middle section shows the Test Configuration window with a table of streams.

Status	Active	Name	Index	Controlled By	Source	Destination	Traffic Pattern	Type
✓		StreamBlock 1-1	0	generator	LISP Site 2001::1	LISP Site 2002::1	Pair	Port

The bottom section shows the Traffic Aggregates/View Results window with a table of port traffic statistics.

Port Name	Total Tx Count (Frames)	Total Rx Count (Frames)	Total Tx Count (Bytes)	Total Rx Count (Bytes)	Total Tx Rate (bps)	Total Rx Rate (bps)	Tx L1 Count (Bytes)	Rx L1 Count (Bytes)
Port J2/9	2,208,477	0	2,446,624,658	3,712	86,486,160	0	2,629,143,918	4,792
Port J2/11	0	2,368,977	3,712	2,452,378,058	0	86,486,448	4,792	2,602,027,336

The bottom-most section shows the Routing and MPLS - LISP Results window with a table of mapping statistics.

Port Name	Device Name	Device State	Tx Map Request Count	Tx Map Reply Count	Tx Negative Map Reply Count	Tx Map Register Count	Rx Map Request Count	Rx Map Reply Count	Rx Negative Map Reply Count
Port J2/9	ETR	Up	0	0	0	0	0	0	0
Port J2/11	ETR	Up	0	2	0	0	2	0	0

Technical Specifications

Parameter	Description
LISP Emulation	<ul style="list-style-type: none">• Full Link Layer Discovery Protocol (LLDP) emulation• Auto-negotiation of 802.1Qbb Priority Flow Control (PFC) and 802.1Qaz Enhanced Transmission Selection (ETS)• LLDP & DCBX port summary results with exchanged priority map• Detailed DCBX feature results with 25+ metrics including PFC, FCoE Priority and Bandwidth allocation• 20+ LLDP and DCBX TLVs with default or configurable parameters• Customizable TLVs• Push or pull link configuration options thru DCBX TLV willingness settings• Bring logical link up and down• Automatic start and stop with FCoE emulation• Configurable Tx interval, multiplier and delays
Supported Platforms	Supported on current TestCenter platforms

Ordering Information

Description	Part Number
LISP Emulation	BPK-1181A
Related Items	
VXLAN Emulation	BPK-1310A
EVPN Emulation	BPK-1311A
FCoE/DCBX Emulation	BPK-1081A
OpenFlow Controller Emulation	BPK-1193A
OpenFlow Switch Emulation	BPK-1195A
SPB Emulation	BPK-1182A
TRILL Emulation	BPK-1187A



Contact Us: +1 844 GO VIAVI | (+1 844 468 4284). To reach the VIAVI office nearest you, visit viasolutions.com/contact

© 2026 VIAVI Solutions Inc. Product specifications and descriptions in this document are subject to change without notice. Patented as described at viasolutions.com/patents

tc-lispemulation-ds-hse-nse-ae
30194962 900 0226

viasolutions.com