



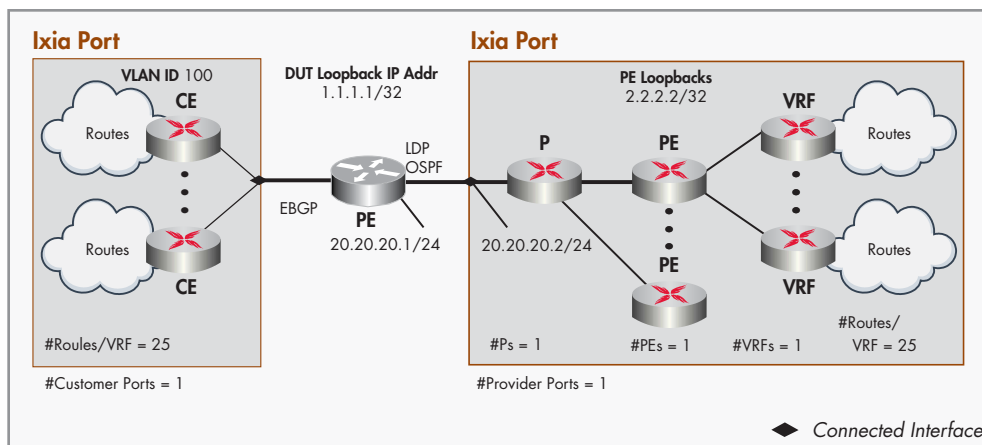
IxNetwork

IxNetwork is specifically designed to test IP network infrastructure functionality and performance. IxNetwork provides service modeling at Internet scale, as well as real-time measurements per traffic flow for rapid isolation of network issues. From the simplest traffic QoS measurements to the most complex L3 VPN test scenarios, IxNetwork makes it easy to validate the performance of your network device.

IxNetwork works with Ixia's high performance hardware platform to exchange control and data plane traffic with the device or network under test. Each port is equipped with an independent processor and substantial memory, in addition to specialized traffic stream generation and capture hardware – providing the speed and intelligence needed for large-scale protocol emulation.

Service Modeling at Internet Scale

- Emulate ultra-high-scale network topologies
- Track up to 4 million flows
- Generate deterministic traffic profiles and control each profile dynamically
- Apply network impairments such as delay, jitter and loss
- Scale up to 600 test ports per session



Rapid Isolation of Service Violations

- Debug difficult problems quickly
- Monitor total service quality
- Drill-down to traffic class statistics

Traffic Item	Egress Tracking	Tx Frames	Rx Frames	Frames Delta	Loss %	Tx Frame Rate	Rx Frame Rate	Rx Bytes	Tx Rate (bps)	Rx Rate (bps)	Tx Rate (bps)	Rx Rate (bps)
1	Traffic Item 1 (Ethernet:IPv4 TOS Precedence (3 bits) at offset 120)	58742378	58742377	1	1.70234851575127E-06	446428.5	446429	3759512128	28571424	28571456	228571392	228571648
2	3/3 Flow	0	9790397				74405	626585408		4761920		38095360
3		3	19580792				148809.5	1253170688		9623808		76190464
4		7	20271188				223214.5	1879756632		14285728		114285824

Drill down per IPv4 Precedence
 Show All Filtered Flows
 Ingress/Egress Statistics
 Customise...
 Edit Filter Selection
 Edit Statistics Designer

Ethernet:IPv4 TOS Precedence (3 bits) at offset 120
 Show All Egress



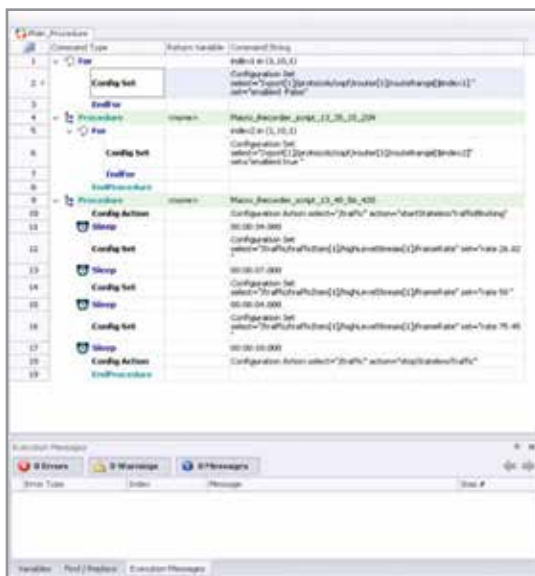
Simple Workflow

- Collaborate on, share, and re-use port, traffic and protocol configurations
- View statistics alongside protocol and traffic configuration for instant feedback
- Make quick adjustments based on color-coded indicators of protocol and traffic status
- Improve productivity with context-sensitive help ribbons



Complete End-to-End System Automation

- Easily run repeatable, unattended test sessions
- Capture and replay GUI actions
- Build test scripts that include configuration of your device under test





Supported Protocols

	Protocol	Standard
Routing	RIP, RIPng	RFC 1058, RFC 2453
	OSPFv2/v3	RFC 2328, RFC 2740
	ISISv4/v6	ISO/IEC 10589
	EIGRP, EIGRPv6	Cisco Proprietary
	BGP-4,BGP+	RFC 1771, RFC 2545
MPLS	RSVP-TE	RFC 3209, RFC 4974, RFC 5151
	RSVP-TE P2MP	RFC 4875
	LDP	RFC 3036
	mLDP	draft-ietf-mpls-ldp-p2mp-11 draft-ietf-mpls-mldp-in-band-signaling-02
	PWE	RFC 3916, RFC 4385, RFC 4447
	L3 MPLS VPN, 6VPE	RFC 2547bis, RFC 4364
	MPLS-TP	RFC 5654 RFC 5860 RFC 5921 RFC 5586 draft-ietf-mpls-tp-oam-framework-10 draft-ietf-mpls-tp-ach-tlv-02 draft-ietf-mpls-tp-lsp-ping-bfd-procedures-01 draft-ietf-mpls-tp-cc-cv-rdi-02 draft-ietf-mpls-tp-on-demand-cv-01 draft-ietf-mpls-tp-fault-03 draft-ietf-mpls-tp-linear-protection-03 draft-ietf-mpls-tp-identifiers-03 draft-ietf-mpls-tp-loss-delay-00 draft-bhh-mpls-tp-oam-y1731-06
VPLS	6PE	RFC 4798
	BGP Auto-Discovery with LDP FEC 129 Support	draft-ietf-l2vpn-signaling-08 RFC 4447
	VPLS-LDP	RFC 4762 draft-ietf-l2vpn-signaling-08
	VPLS-BGP	RFC 4761
High-Availability	BFD	draft-ietf-bfd-base
IP Multicast	IGMPv1/v2/v3	RFC 1112, RFC 2236, RFC 3376
	MLDv1/v2	RFC 2710, RFC 3810
	PIM-SM/SSM, PIM-BSR	RFC 2362, RFC 4601
	Multicast VPN, VPNv6	IETF draft-rosen-l3vpn-mvpn draft-ietf-l3vpn-2547bis-mcast-07.txt (RSVP-TE P2MP Support) draft-ietf-l3vpn-2547bis-mcast-bgp-05.txt (A-D route 1,3,4,5,7)



Switching	STP/RSTP	IEEE 802.1D/802.1W
	MSTP	IEEE 802.1s
	PVST+/RPVST+	Cisco Proprietary
	Link Aggregation (LACP)	IEEE 802.3ad
Carrier Ethernet	Link OAM	IEEE 802.3ah-2004 Clause 57
	CFM	IEEE 802.1ag-2007
	Service OAM	ITU-T Y.1731-2006
	PBT/PBB-TE	Nortel Standard/IEEE 802.1Qay
	ESMC	ITU-T G.8264/Y.1364 SyncE
	PTP	IEEE 1588-2008 (Version 2)
Broadband	ANCP	draft-ietf-ancp-protocol-02 draft-ietf-ancp-framework-05
	PPPoX	RFC 1331, RFC 2516, RFC 4241
	DHCPv4 Client/Server, DHCPv6 Client/Server	RFC 2131 RFC 3315
	L2TPv2	RFC 3817
	Radius Attributes for L2TP	RFC 2865
Authentication	802.1x	IEEE 802.1x
	WebAuth	Cisco and HP implementations
	Cisco NAC	Cisco Proprietary
Data Center Bridging	Priority Flow Control	IEEE 802.1Qbb
	FCoE/ FIP	T11 FC-BB-5
	LLDP/DCBX	Intel 1.0, IEEE 1.01
	VNTAG/VIC	Cisco Proprietary