Features By Platform

Latest version: DC 7.0.0

Feature Collapse All	Standard	DC First Version Supported	Edgecore AS7816-64x	Edgecore AS9716-32D	Edgecore AS9736-64D	Edgecore AIS800-64D	Ufispace S9321-64E	Ufispace S9321-64EO	Celestica DS1000	Edgecore AS4625-54T	UfiSpace S6301-56ST	Edgecore AS5835-54X	Edgecore AS5835-54T	UfiSpace S8901-54X	UfiSpace S8901-54XC-16G	Edgecore AS7326-56x	Edgecore AS7726-32X	UfiSpace S9110-32X	Edgecore AS9726-32DB	UfiSpace S9300-32D
- Detail																				
Family			DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC	DC
Vendor			Edgecore	Edgecore	Edgecore	Edgecore	UfiSpace	UfiSpace	Celestica	Edgecore	UfiSpace	Edgecore	Edgecore	UfiSpace	UfiSpace	Edgecore	Edgecore	UfiSpace	Edgecore	UFISpace
Broadcom Chip			TH2	TH3	TH4	TH5	TH5	TH5	TD3-X2	TD3-X2	TD3-X2	TD3-X5	TD3-X5	TD3-X5	TD3-X5	TD3-X7	TD3-X7	TD3-X7	TD4	TD4
Capacity			6400	12800	25600	51200	51200	51200	120	120	120	1080	1080	2000	2000	2000	3200	3200	12800	12800
- Supported Product			Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare	Compare
			OCNOS-DC-PLUS-6400 OCNOS-DC-IPBASE-6400	OCNOS-DC-PLUS-12800 OCNOS-DC-IPBASE-12800	OCNOS-DC-PLUS-25600-TH4 OCNOS-DC-IPBASE-25600-TH4	OCNOS-DC-IPBASE-51200-TH5 OCNOS-DC-PLUS-51200-TH5	OCNOS-DC-IPBASE-51200-TH5 OCNOS-DC-PLUS-51200-TH5	OCNOS-DC-IPBASE-51200-TH5 OCNOS-DC-PLUS-51200-TH5	OCNOS-DC-IPBASE-120 OCNOS-DC-MGMT-120	OCNOS-DC-IPBASE-120 OCNOS-DC-MGMT-120	OCNOS-DC-IPBASE-120 OCNOS-DC-MGMT-120	OCNOS-DC-PLUS-1080 OCNOS-DC-IPBASE-1080	OCNOS-DC-PLUS-1080 OCNOS-DC-IPBASE-1080	OCNOS-DC-PLUS-2000 OCNOS-DC-IPBASE-2000	OCNOS-DC-PLUS-2000 OCNOS-DC-IPBASE-2000	OCNOS-DC-PLUS-2000 OCNOS-DC-IPBASE-2000	OCNOS-DC-PLUS-3200 OCNOS-DC-IPBASE-3200	OCNOS-DC-PLUS-3200 OCNOS-DC-IPBASE-3200	OCNOS-DC-PLUS-12800 OCNOS-DC-IPBASE-12800	OCNOS-DC-PLUS-12800 OCNOS-DC-IPBASE-12800
- Layer 1																				
xConnect	IPI Proprietary	4.2	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
xConnect Resiliency	IPI Proprietary	4.2	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Layer 2																				
Virtual Local Area Network (VLAN)																				
Virtual LANs with Port-based VLANs	IEEE 802.1Q (2005)	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Routed VLAN interface	IEEE 802.1Q (2005)	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Port based VLAN interface	IEEE 802.1Q (2005)	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Private VLAN	IEEE 802.1Q (2005)	1.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
Spanning Tree Protocol (STP)																				
STP	IEEE 802.1D (2004)	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multiple Spanning Tree Protocol (MSTP)	IEEE 802.1Q (2005): Clause 13	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rapid Spanning Tree (RSTP)	IEEE 802.1D (2004): Clause 17	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rapid Per VLAN Spanning Tree (RPVST+)	Cisco Proprietary	1.3.3	✓	✓	✗	✗	✗	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Link Layer Discovery Protocol (LLDP)																				
LLDP v2	IEEE 802.1ab 2009	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Link Aggregation																				
Link Aggregation Control Protocol (LACP)	IEEE 802.3ad-2002	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static link aggregation group	IEEE 802.3ad-2002	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Load Balancing on interfaces with unequal bandwidths	IPI Proprietary		✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Multi-Chassis Link Aggregation (Layer2 only)																				
Multi-Chassis Link Aggregation (MLAG)	IPI Proprietary	1.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG Active/Standby support as attachment circuit for VPWS Pseudowire Redundancy	IPI Proprietary	1.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MLAG with RSTP																				
MLAG Active/Active over po interface	IPI Proprietary	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG Active/Standby over po interface	IPI Proprietary	6.0.0	✗	✗	✓	✓	✓	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓
MLAG Active/Active over sa interface	IPI Proprietary	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG Active/Standby over sa interface	IPI Proprietary	6.0.0	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓
UCMP MLAG Active/Active over sa interface	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
UCMP MLAG Active/Standby over sa interface	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
IGMP Snooping over MLAG Active/Active	IPI Proprietary	6.5.3	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
IGMP Snooping over MLAG Active/Standby	IPI Proprietary	6.5.3	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Protected Port on MLAG with RSTP																				
Protected Port on MLAG+RSTP Active/Active over po interface	IPI Proprietary	6.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Protected Port on MLAG+RSTP Active/Active over SA interface	IPI Proprietary	6.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
MLAG + Provider Bridging (PB) with RSTP																				
MLAG+PB Active/Active over po interface	IPI Proprietary	6.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+PB Active/Standby over po interface	IPI Proprietary	6.0.0	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+PB Active/Active over sa interface	IPI Proprietary	6.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+PB Active/Standby over sa interface	IPI Proprietary	6.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IGMP Snooping over MLAG Active/Active	IPI Proprietary	6.5.3	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
IGMP Snooping over MLAG Active/Standby	IPI Proprietary	6.5.3	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
MLAG+VRRPv4 with RSTP																				
MLAG+VRRPv4 Active/Active over po interface + VRRPv4 (VMAC enabled) + VRRPv4 with Non-Owner (VRRP Virtual-IP is unique) + Static route	IPI Proprietary	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+VRRPv4 Active/Active over po interface + VRRPv4 (VMAC enabled) + VRRPv4 with Non-Owner (VRRP Virtual-IP is unique) + EBGP	IPI Proprietary	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+VRRPv4 Active/Standby over po interface + VRRPv4 (VMAC enabled) + VRRPv4 with Non-Owner (VRRP Virtual-IP is unique) + Static route	IPI Proprietary	6.0.0	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
MLAG+VRRPv4 Active/Standby over po interface + VRRPv4 (VMAC enabled) + VRRPv4 with Non-Owner (VRRP Virtual-IP is unique) + EBGP	IPI Proprietary	6.0.0	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
MLAG+VRRPv4 Active/Active over sa interface	IPI Proprietary	6.0.0	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
MLAG+VRRPv4 Active/Standby over sa interface	IPI Proprietary	6.0.0	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
DHCP Relay over MLAG+VRRPv4 + Static route	IPI Proprietary	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLAG+VRRPv6 with RSTP																				
MLAG+VRRPv4 Active/Active over po interface + VRRPv6 (VMAC enabled) + VRRPv6 with Non-Owner (VRRP Virtual-IP is unique) + VRRPv6 Virtual-IPv6 address as Link-Local Address + Static route	IPI Proprietary	6.0.0	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
MLAG+VRRPv6 Active/Standby over po interface	IPI Proprietary	6.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
MLAG+VRRPv6 Active/Active over sa interface	IPI Proprietary	6.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
MLAG+VRRPv6 Active/Standby over sa interface	IPI Proprietary	6.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
Link Bonding																				
Link Bonding - For transmission over several slower links (Eg: Radio links) which are bonded together. Packets are fragmented and and reassmebled.	Broadcom Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Data Center Bridging (DCB)																				
Priority-based Flow Control (PFC) with QoS	IEEE 802.1Qbb	6.2.0	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DCBX	IEEE 802.1Qaz IEEE 802.1ab 2009	6.2.0	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Provider Bridging (PB)																				

	(2014)																		
Customer VLAN (CVLAN)/ Service tag VLAN (SVLAN) translation (Also supports Untag-Provider Edge Port (PEP)/ Untag-Customer Edge Port (CEP) option)	IEEE 802.1ad	1.3.3	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
SVLAN translation (Also supports CVLAN modification option)	IEEE 802.1ad	1.3.3	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Changing the outer TPID (Tag Protocol Identifier) of provider network port	IEEE 802.1ad	1.3.3	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Remarking COS, Canonical Format Indicator (CFI) for C-Tag and S-Tag at CEP and PNP (Provider Network Port)	IEEE 802.1ad	1.3.3	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Q-in-Q Layer 3 Termination	IEEE 802.1ad	1.3.3	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Other Layer 2 Features																			
Bridge Protocol Data Unit (BPDU) Protect	IEEE 802.1d	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Root Guard	IEEE 802.1d	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Media Access Control (MAC) Learning disable	IEEE 802.1q	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static MAC Address Assignment	IEEE 802.1q	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Port based authentication with Radius server	IEEE 802.1x	1.0.0	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
TFO (Trigger FailOver)	IPI Proprietary	1.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Port Security	IPI Proprietary	1.3.6	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
VLAN Cross Connect	IPI Proprietary	1.3.6	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗
VLAN Cross Connect with double TAG	IPI Proprietary	1.3.9	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗
LACP Force-up	IPI Proprietary	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LACP Aggregator Force-up	IPI Proprietary	5.2	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Protected Port on Physical Interface	IPI Proprietary	5.0	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
MAC Authentication Bypass	IPI Proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Unidirectional Link Detection (UDLD)	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- **Layer 3**																			
Address Resolution Protocol (ARP)																			
Ethernet ARP	RFC 826	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Path MTU																			
Path Maximum Transmission Unit (MTU) for IPv4 and IPv6	RFC 1191 (obsoletes 1063)	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Routing																			
Transmission of Internet Protocol (IP) Datagrams over Ethernet	RFC 894	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Congestion Control in IP/Transmission Control Protocol (TCP) Networks	RFC 896	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP Broadcast	RFC 919	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP Broadcast in the Presence of Subnets	RFC 922	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP Subnetting	RFC 950	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Classless Inter-Domain Routing (CIDR)	RFC 1519	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Requirements for IP Version 4 Routers	RFC 1812	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Route Redistribution across RIP, OSPF and BGP	RFC 2328, RFC 4271, RFC 2453	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VLAN Routing		1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IPv6 IF MIB	RFC 8096 Sec3	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Route-Map Continue	IPI Proprietary	1.3.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static Route Discard	IPI Proprietary	1.3.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Policy Based Routing	IPI Proprietary	4.1	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Policy Based Routing with Next Hop tracking	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Inter Virtual Routing and Forwarding (VRF) Route Leaking	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static Inter VRF Route Leaking for IPv6 (between Default and Non-Default instances)	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Multiple Loopback interfaces in same VRF	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
Static route tracking using object tracking (IP SLA)	IPI Proprietary	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Route Advertisement for IPv6	IPI Proprietary	6.2.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Route Monitor	IPI Proprietary	6.4.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
UDLD Support on L3 Interface	IPI Proprietary	6.4.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Recursive Next Hop resolution for VRF static routes	IPI Proprietary	6.6.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
URPF (Unicast Reverse Path Forwarding)																			
Loose mode	RFC 3704	1.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Loose default mode	RFC 3704	1.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Strict mode	RFC 3704	1.0.0	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Border Gateway Protocol (BGP)																			
Border Gateway Protocol, Version 4	RFC 4271	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Community Attributes	RFC 1997	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Large Community	RFC 8092	6.0.1	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
BGP Multiple large communities support in route-map	IPI Proprietary	6.6.1	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
BGP Route Flap Dampening	RFC 2439	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Route Reflection	RFC 4456	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Autonomous System (AS) Confederations for BGP	RFC 5065	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Capabilities Negotiation with BGP-4	RFC 5492	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Applications of BGP-4 in the Internet	RFC 1772	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protection of BGP Sessions Via the TCP Message-digest (MD5) Signature Option	RFC 2385	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Route Refresh Capability for BGP-4	RFC 2918	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Support for Four-Octet AS Number Space	RFC 4893	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subcodes for BGP Cease Notifications	RFC 4486	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Graceful BGP Session Shutdown	draft-ietf-grow-bgp-gshut-06	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGPv4 MD5 Authentication	RFC 2385	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Trigger for BGP	RFC 5882	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Route Target Filter	RFC 4684	1.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Next Hop Tracking	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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BGP - Labeled Unicast (BGP-LU)	RFC 3107	1.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP MIB	RFC 4273	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Graceful-Restart	RFC 4724	4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inter-VRF route leaking for user-defined VRFs	RFC 4364	1.3.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Dynamic Peering	IPI Proprietary	1.3.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Unnumbered - using extended next hop encoding (ENHE)	RFC 5549	1.3.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Peer Groups	IPI Proprietary	3.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Add Path - Advertisement of Multiple Paths in BGP	RFC 7911	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EIBGP Max Path - Multipath load sharing among external Border Gateway Protocol (eBGP) and internal BGP (iBGP) paths for improved load balancing	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The Accumulated IGP Metric Attribute for BGP	RFC 7311	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extended BGP Administrative Shutdown Communication	RFC 9003	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extended Optional Parameters Length for BGP OPEN Message	RFC 9072	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP community for IANA (Internet Assigned Numbers Authority) reserved address for blackholing	RFC 7999	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Advertising IPv4 Network Layer Reachability Information (NLRI) with an IPv6 Next Hop	RFC 8950	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP GR for VPN Address Family	RFC 4724	5.1	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP PIC Edge	draft-ietf-rtgwg-bgp-pic-19		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Flowspec	RFC 8955		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Auto soft clear	RFC 2918	6.6.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
EVPN RR/Route Server	RFC 4456	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP Policy Grouping and Nesting	RFC 9067	7.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP RPKI Invalid Route Rejection	RFC 8210	7.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BGP-LS (Link State)																			
BGP Link state distribution (OSPF)	RFC 7752	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Link state distribution (ISIS)	RFC 7752	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Link state distribution for OSPF-SR	draft-ietf-idr-bgp-ls-segment-routing-ext-12	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Link state distribution for ISIS-SR	draft-ietf-idr-bgp-ls-segment-routing-ext-12 draft-ietf-isis-segment-routing-extensions-22	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP-LS extensions for Segment Routing (SR) BGP Egress Peer Engineering	draft-ietf-idr-bgpls-segment-routing-epe-19	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP - Link State (BGP-LS) Advertisement of IGP Traffic Engineering Performance Metric Extensions	RFC 8571		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Routing Information Protocol (RIP)																			
RIP Version 1	RFC 1058	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RIP and RIP Version 2	RFC 2453	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increment Metrics When Sending Routes, Not When Receiving	RFC 2453	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RIP-2 MD5 Authentication	RFC 2082	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Open Shortest Path First (OSPF)																			
Open Shortest Path First Version 2	RFC 2328	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Applicability statement for OSPF	RFC 1370	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OSPF Opaque Link State Advertisements (LSA)	RFC 5250	1.0.0	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
OSPF Graceful Restart	RFC 3623	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OSPF as PE/CE protocol for BGP/MPLS IP VPN	RFC 4577	1.0.0	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Passive Interface Support for OSPFv2	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OSPF Multiarea adjacency	RFC 5185	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OSPF Not-So-Stubby-Area (NSSA) Option	RFC 3101	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP FRR (Fast Reroute): OSPF-LFA (Loop-Free Alternate)	RFC 5286	4.2	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Bidirectional Forwarding Detection (BFD) Trigger for OSPFv2	RFC 5882	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Link Local Signaling	RFC 2328	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Virtual link	RFC 2328	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OSPF Traffic Engineering (TE) Metric Extensions	RFC 7471	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF Sham-link between VPN (Virtual Private Networks) sites	RFC 4577	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF Version 3 for IPv6 Support	RFC 5340	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Passive Interface Support in OSPFv3	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Graceful Restart Mechanism for OSPFv3	RFC 5187	1.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Trigger for OSPFv3	RFC 5613	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Authentication/Confidentiality for OSPFv3 with IPsec	RFC 4552	6.0.0	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
OSPFv3 MTU	RFC 5340	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF LDP Sync	IPI Proprietary	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF Support For Demand Circuits	RFC 1793	6.0.0	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
OSPF Stub Router Advertisement	RFC 6987	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP Fast Reroute - Remote Loop-Free Alternate for OSPF(RLFA)	RFC 7490 RFC 8102	6.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Intermediate System-Intermediate System (ISIS)																			
Use of OSI IS-IS for routing in TCP/IP and dual environments	RFC 1195	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Management Information Base (MIB) for ISIS	RFC 4444	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Original ISO specification of IS-IS	ISO 10589	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic Hostname Exchange Mechanism for IS-IS	RFC 2763	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Restart Signaling (Graceful Restart) for IS-IS	RFC 5306	4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Routing IPv6 with IS-IS	RFC 5308	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IS-IS Exponential Back-off of SPF (Shortest Path First)	RFC 8541	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Intermediate System to Intermediate System for IPv6	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Passive Interface Support for IS-IS	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bidirectional Forwarding Detection Trigger for IS-IS	RFC 5882	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IS-IS Mesh Groups	RFC 2973	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Three-Way Handshake for Intermediate System to Intermediate System (IS-IS) Point-to-Point AdJacencies	RFC 3373	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IS-IS extensions for Traffic Engineering	RFC 5305	5.0	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	×
ISIS Traffic Engineering (TE) Metric Extensions	RFC 8570	5.0	✓	✓	×	×	×	×	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	×	×
M-ISIS: Multi Topology (MT) Routing in IS-IS	RFC 5120	6.5.2	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IS-IS Cryptographic Authentication	RFC 3567	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IS-IS Expanded Use of Overload Bit for BGP Convergence	RFC 3277	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP Fast Reroute - Loop-Free Alternate for IS-IS	RFC 5286	4.2	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	×	×
Micro-loop avoidance (IS-IS)	RFC 6976		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Invalid TLV Handling in IS-IS	RFC 8918	6.4.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bidirectional Forwarding Detection (BFD)																				
BFD	RFC 5880	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD for IPv4 single hop	RFC 5881	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Generic Application for BFD	RFC 5882	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Multi-hop	RFC 5883	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Over BGP / ISIS / OSPF / Static route	RFC 5882	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Over Non-default VRF for static (IPv4 and IPv6) and OSPF v2 and v3	RFC 5880,RFC 5882	1.3.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BFD Authentication for MultiHop BFD	RFC 5880	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MIB support for BFD	IPI proprietary, RFC 7331	4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓
Virtual Router Redundancy Protocol (VRRP)																				
VRRP Version 3 for IPv4	RFC 5798	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VRRP Version 3 for IPv6	RFC 5798	4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VRRP Interface Tracking	IPI proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VRRP Authetication for VRRP v2 backward compatibility	RFC 2328	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
VRRP Object Tracking	IPI proprietary	5.1	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Multi-Protocol Label Switching (MPLS)																				
MPLS – General																				
MPLS Architecture	RFC 3031	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MPLS Label Stack Encoding	RFC 3032	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Time To Live (TTL) Processing in Multi-Protocol Label Switching (MPLS) Networks	RFC 3443	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MPLS Diffserv	RFC 3270	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Multiprotocol Label Switching (MPLS) Label Switching Router (LSR) Management Information Base (MIB)	RFC 3813	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Multiprotocol Label Switching (MPLS) Forwarding Equivalence Class to Next Hop Label Forwarding Entry (FEC-To-NHLFE) Management Information Base (MIB)	RFC 3814	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MPLS reachability for LU nexthop tracking	IPI proprietary	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MPLS aware RIB	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Label Distribution Protocol (LDP)																				
LDP	RFC 5036	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Applicability	RFC 3037	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Support for LDP TCP-MD5	RFC 5036	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Definitions of Managed Objects for the MPLS and LDP	RFC 3815	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Downstream-on-Demand (DoD) in Seamless MPLS	RFC 7032	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Extension for Inter-Area Label Switched Paths (LSPs)	RFC 5283	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Graceful Restart	RFC 3478	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Fast Re-Route (FRR)	RFC 5286		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Remote Loop Free Alternate IP Fast Reroute (RLFA)	RFC 7490		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Session Protection	RFC 8223	5.1 MR	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP ECMP	IPI proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Authentication support for Auto Targeted Peer	IPI proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
LDP Tunneling over RSVP-TE	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Resource Reservation Protocol (RSVP)																				
RSVPv1	RFC 2205	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP Refresh Overhead Reduction Extensions	RFC 2961	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Inter-area RSVP-TE	RFC 4105		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Fast Reroute Extensions to RSVP-TE for LSP Tunnels One-to-One Backup	RFC 4090	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Fast Reroute Extensions to RSVP-TE for LSP Tunnels - Facility Backup	RFC 4090	6.3.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVPv1 message processing rules	RFC 2209	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Entropy label support for RSVP transport	RFC 6790	1.0 ED2.4	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP re-optimization	IPI Proprietary	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Diffserv Traffic Engineering (DSTE)	RFC 3564		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Protocol Extensions for Support of Diff-serv-aware MPLS Traffic Engineering	RFC 4124	1.0.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Maximum Allocation Bandwidth Constraints Model for Diff-serv-aware MPLS Traffic Engineering	RFC 4125		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) Management Information Base (MIB)	RFC 3812	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP multiple secondary	IPI Proprietary	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP Shared Risk Link-Group (SRLG) support	RFC 4203, RFC 4205	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP MIB	RFC 2206	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP Multipath (Mapping services over multiple RSVP trunks)	IPI Proprietary	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP Graceful Restart	RFC 3473	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
RSVP-TE dynamic facility backup LSP	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Auto-Bandwidth with RSVP-TE	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Layer 2 VPN (VPWS and VPLS)																				
Pseudowire Setup and Maintenance using the Label Distribution Protocol	RFC 4447	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Virtual Private Wire Service (VPWS) ethernet encapsulation mapping (Service Mapping) 1> Outer tag Match 2> Outer and inner tag Match 3> Outer tag range Match 4> Untag	IPI Proprietary	4.2	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

Untag																			
VPWS ethernet action (Service Mapping, Action) 1> POP outer tag 2> XLATE outer tag 3> Push tag	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VPLS ethernet action (Service Mapping, Action) 1> POP outer tag 2> XLATE outer tag 3> Push tag	IPI Proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Multiple match criteria for VPWS Ethernet Encapsulation using Service Template	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Multiple match criteria for VPLS Ethernet Encapsulation using Service Template	IPI Proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Encapsulation Methods for Transport of Ethernet Over MPLS Networks	RFC 4448	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Static VPLS	IPI Proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling	RFC 4762	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Virtual Private LAN Service (VPLS) Using BGP for signaling and auto-discovery	RFC 4761	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Static pseudowire Setup and Maintenance	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Pseudowire MIB support	RFC 5601	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Pseudowire (PW) over MPLS PSN (Packet Switched Network) Management Information Base (MIB)	RFC 5602	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Ethernet Pseudowire (PW) Management Information Base (MIB)	RFC 5603	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
FAT Pseudowire(PW) Label	RFC 6391		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
L2CP/L2PT over VPWS	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Split-horizon for VPLS	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Hierarchical VPLS	RFC 4762		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Auto-discovery for LDP signaled VPLS	RFC 6074		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MLAG (Active/Standby) for VPLS	RFC 6718		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VPLS: MAC Withdrawal	RFC 4762		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VPLS/H-VPLS: MAC Move Protection	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Per L2 subinterface mac-limit (port-security) for VPLS/EVPN services	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
L2VPN-L3VPN stitching	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Layer 3 VPN																			
Extranet VPNs with BGP/MPLS IP Virtual Private Networks (VPNs)	RFC 4364	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF as the Provider Edge/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs)	RFC 4577	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Intranet VPNs with BGP/MPLS IP Virtual Private Networks (VPNs)	RFC 4364	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Static route as the Provider Edge/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs)	RFC 4364	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP-MPLS IP Virtual Private Network (VPN) Extension for IPv6 VPN (6vPE)	RFC 4659	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Connecting IPv6 Islands over IPv4 MPLS using IPv6 Provider Edge Routers (6PE)	RFC 4798	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Label Disposition for VPNv4 and 6VPE	RFC 4364,RFC 4659	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Label Disposition for 6PE	RFC 4798	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Inter AS option A support for L3PVN/6VPE/6PE	RFC 4364,RFC 4659,RFC 4798	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Inter AS option B support for L3PVN/6VPE/6PE	RFC 4364,RFC 4659,RFC 4798	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Inter AS option C support for L3PVN/6VPE/6PE	RFC 4364,RFC 4659,RFC 4798	3.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PER VRF Label support for 6PE	IPI proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
LU as transport for 6VPE/VPN	RFC 4659	3.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP Peer Group - static	IPI proprietary	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Internet access for L3VPN	RFC 4365 section 10.1	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
L3VPN MIB	RFC 4382	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
DSCP preserve for L3VPN	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
L3VPN ECMP (VPNv4 & VPNv6)	RFC 4364		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Bridged Virtual Interface(BVI)support for VPNv4 & VPNv6, 6PE, DHCPv4 and DHCPv6	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP-LU next-hop-self in route map	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VRF export-map extension	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MPLS OAM																			
OAM for MPLS networks	RFC 4377	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
A framework for MPLS OAM	RFC 4378	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Detecting MPLS Data Plane Failures	RFC 4379	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MPLS BFD Detection	RFC 5884, RFC 5885	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MPLS PW and LSP Traffic Statistics																			
Stats per Label Switched Path (LSP)	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Stats per Virtual Circuit (VC)	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
L2VPN Statistics MIB	IPI Proprietary	4.2	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- Carrier Ethernet																			
Connectivity Fault Management (CFM)																			
Maintenance Domain (MD), Maintenance Association (MA), Maintenance domain Intermediate Point (MIP), Down Maintenance association End Point (MEP)	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Continuity check (multicast CCM)	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Ping (unicast)	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Link trace	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
Fault reporting (RDI, MAC Status defect, CCM Cross Connect Defect, Error CCM Defect)	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
CFM over Layer 2 Bridge with xSTP	IEEE 802.1ag - 2007	1.0.0 ED1	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
CFM over VPWS using SubInterface	IEEE 802.1ag / RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELINE Single Homing	IEEE 802.1ag / RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELINE Multi Homing(Active/Active)	IEEE 802.1ag / RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELINE Multi Homing(Active/Standby - Port-Active)			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELINE Multi Homing(Active/Standby - Single-Active)			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELAN Single Homing			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN MPLS ELAN Multi Homing(Active/Active)			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN VxLAN ELINE Single Homing	IEEE 802.1ag/RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN VxLAN ELAN Single Homing	IEEE 802.1ag/RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
CFM over EVPN VxLAN ELAN Multi Homing(Active/Active)	IEEE 802.1ag / RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

CFM over PB	IEEE 802.1ag - 2007	5.1	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
CFM using L2 subinterface	IEEE 802.1ag - 2007		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
CFM over VPLS	IEEE 802.1ag - 2007		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Ethernet Data Plane Loopback (EDPL)	RFC 2544		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Performance Monitoring																			
Frame Delay and inter frame delay variation measurement using DMM and DMR over Layer 2 Bridge	Y.1731	2.4	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over VPWS	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over VPLS	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELINE Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELINE Multi Homing(Active/Standby - Port-Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELINE Multi Homing(Active/Standby - Single-Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN MPLS ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN VxLAN ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN VxLAN ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over EVPN VxLAN ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Delay and inter frame delay variation measurement using DMM (Delay Measurement Message) and DMR (Delay Measurement Reply) over xConnect	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR and SLM/SLR over Layer 2 Bridge	Y.1731	2.4	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR and SLM/SLR over VPWS	Y.1731	2.4	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over VPLS	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over VPLS	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN MPLS ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN MPLS ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN MPLS ELINE Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN MPLS ELINE Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR and SLM/SLR over EVPN MPLS ELINE Multi Homing(Active/Standby - Port-Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR and SLM/SLR over EVPN MPLS ELINE Multi Homing(Active/Standby - Single-Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN MPLS ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN MPLS ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN MPLS ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN MPLS ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN VxLAN ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN VxLAN ELINE Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN VxLAN ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN VxLAN ELAN Single Homing	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR over EVPN VxLAN ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using SLM/SLR over EVPN VxLAN ELAN Multi Homing(Active/Active)	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Measurement using LMM/LMR and SLM/SLR over xConnect	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Frame Loss Diagnostics ETH-TST/LCK	Y.1731	4.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Y.1731 Ethernet Bandwidth Notification (EBN)	Y.1731	5.0	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Ethernet Client Signal Fail (ETH-CSF)	G.8013/Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Y.1731 over PB	Y.1731		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Ethernet Ring Protection (ERPS)																			
ERPS over CFM on Provider/Customer domain	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Sub-ring support (Multiple ring and ladder topologies)	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Support of multiple ERP instances on single ring	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Over Native-L2	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Over Bridge-domain	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over MPLS	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over EVPN	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over LAG interface	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
With CFM (for link fault detection)	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Separate Control and Data-VLAN	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Multiple major ring	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Multiple Sub-ring	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Sub-ring with virtual channel	ITU-T G.8032v2	4.2	✓	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Sub-ring without virtual channel	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Multiple instances over same physical ring	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
E-Line over G.8032 (1:1) (Ref. Sec.7.3 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
E-Line over G.8032 (1+1) (Ref. Sec.7.3 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
E-Tree Over G.8032 (Ref. Sec.7.4 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
E-LAN Over G.8032 (Ref. Sec.7.5 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Mixed E-Services Over G.8032 (Ref. Sec.7.6 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Dual-homed connectivity to EVPN network (Ref. Sec.8 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Single node resilient connectivity to EVPN network (Ref. Sec.8 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Single node resilient connectivity to VPLS network (Ref. Sec.8 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Dual-homed connectivity to VPLS network (Ref. Sec.8 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
G.8032 resilient inter-network connectivity (Ref. Sec.8 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
G.8031 service Over G.8032 (Ref. Sec.10.2 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Access Sub-Ring connected to Major ring (Ref. Sec.10.3 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

Non-Revertive mode connected to major ring (Ref. Sec.11 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2																		
Revertive Mode	ITU-T G.8032v2	4.2	✓	✓	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Non-Revertive Mode	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Force Switch	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Manual Switch	ITU-T G.8032v2		×	×	×	×	×	×	✓	✓	×	×	×	×	×	×	×	×	×	×
Segmentation minimization (Ref. Sec.13 ITU-T-Series-G-Sup-52)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Y.1731 Over G.8032 ring	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MLAG (Active-Standby with IDP link) interconnection with G.8032 major ring	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MLAG (Active-Standby with IDL link) interconnection with G.8032 major ring	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MLAG IDL link as G.8032 ring port	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
User control over non-data VLAN forwarding (Block/unblock) : For Sub-Interface (as MPLS access interface)	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
User control over non-data VLAN forwarding (Block/unblock) : For I2 interface	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Traffic switchover within 50ms	ITU-T G.8032v2		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Ethernet Linear Protection (ELPS)																				
ELPS	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over Native L2	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over PB	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over Bridge-Domain	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over Cross-Connect	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Over LAG interface	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Multiple ELPS instance over same physical link	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Different Control and Data-VLAN	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Same Control and Data-VLAN	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
ELPS with CFM	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Manual Switch Signal	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Force Switch Signal	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Lockout Signal	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Exercise Signal	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Revertive mode	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Non-Revertive mode	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1:1 Protection Mode	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1+1 (Bidirectional) Protection Mode	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1+1 (Unidirectional) Protection Mode	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Traffic switchover within 50ms	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Y.1731 over ELPS (G.8031)	ITU-T G.8031		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Y1564-Service Activation Test(SAT)																				
Color blind	ITU-T Y.1564		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Color-aware	ITU-T Y.1564		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
- **Virtual Extensible LAN (VXLAN)**																				
Virtual Extensible LAN (VxLAN) - General																				
Layer 2 EVPN for VXLAN	RFC 7348, RFC 7432, RFC 8365	1.1.10	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Layer 2 EVPN Auto RT for VXLAN	RFC 8365	6.0.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Layer 2 EVPN Multihoming for VXLAN	RFC 7432, RFC 8365	1.3.4	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VxLAN EVPN with BGP unnumbered	IPI proprietary	4.2	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EVPN VXLAN- L2CP on EVPN Access	IPI proprietary	6.1.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VXLAN - QoS	RFC 2474	4.2	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VXLAN - Ethernet Virtual Connection (EVC)	RFC 7348	1.3.4	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Integrated Routing and Bridging (IRB) with VXLAN	RFC 9135	5.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Selectively Enabling Multiple IP addresses on IRB Interface for Anycast-gateway		6.3.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
VXLAN IRB QoS	RFC 2474	5.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
Prefix Route for EVPN IRB for VxLAN	RFC 9136	5.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
VXLAN EVPN ARP/ND cache Ageing	draft-ietf-bess-evpn-proxy-arp-nd-02	1.3.5	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inter-VRF route leaking over VXLAN-EVPN	RFC 9135, RFC 4364	5.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
IPv4 and IPv6 DHCP Relay for VxLAN IRB	RFC 6607	5.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
VXLAN tunnel over SVI interface	RFC 8365	5.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SNMP support for VXLAN statistics and traps	IPI proprietary	4.2	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static VXLAN	RFC 7348	5.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VXLAN Trunk as access port	RFC 7348	5.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VXLAN - Overlay Equal-Cost Multipath (ECMP)	RFC 7348	5.1	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VxLAN E-LINE/X-connect	RFC 8214		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
VxLAN- Sublif as access	IPI proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Service Monitoring over VxLAN (Ping, Pathtrace, CCM Functionality)	draft-tissa-nvo3-oam-fm-04.txt	6.1.0	×	×	×	×	×	×	×	×	×	✓	×	×	×	✓	✓	×	×	×
IRB support for advertising host routes	RFC 9135, RFC 9136	6.2.0	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
SPAN support for port+(VLAN/VLAN-range)	IPI proprietary	6.4.1	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ERSPAN on VXLAN Access Port	IPI Proprietary	6.6.0	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×
OSPF and ISIS support on an IRB Interface(SH)	RFC 9135, RFC 9136	6.4.1	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
OSPFv2 and ISISv4 support on an IRB Interface(MH)	RFC 9135, RFC 9136	6.4.2	×	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
MAC movement detection based on L2 traffic	RFC 7432	6.4.1	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E-TREE Single Homing	RFC 8317-Scenario 1	6.5.1	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×
E-TREE Multi Homing	RFC 8317-Scenario 1	6.5.1	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×
VLAN-to-VNI mapping	IPI proprietary	6.5.2	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×
ACL support on IRB interface	IPI Proprietary		×	×	×	×	×	×	✓	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓

Features By Platform

Latest version: DC 7.0.0

EVPN-VXLAN-MAC-Limit	IPI Proprietary	6.6.1	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VRF export-map extension	IPI Proprietary	7.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
EVPN AF route-maps + EVPN route-filtering based on RT	IPI Proprietary	7.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
EVPN Layer 3 GW / VXLAN Layer 3 stitching	RFC 9136	7.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
- Multicast																			
Protocol Independent Multicast (PIM)																			
PIM - Sparse Mode (PIM-SM)	RFC 4601	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bootstrap Router (BSR) Mechanism for PIM	RFC 5059	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Static Rendezvous Point Configuration	RFC4601 and RFC 5015	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM - Dense Mode (PIM-DM): Protocol Specification (Revised)	RFC 3973	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM - Source Specific Multicast	RFC 4607	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multicast Source Discovery Protocol (MSDP)	RFC 3618	4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Support for More than 32 PIM Interfaces	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Source-Specific Protocol-Independent Multicast in 232/8	RFC 4608	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Overview of Source-Specific Multicast (SSM)	RFC 3569	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bidirectional Protocol Independent Multicast (BIDIR-PIM)	RFC 5015		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Interoperability between the Virtual Router Redundancy Protocol and PIM	RFC 7910	4.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Bidirectional Forwarding Detection (BFD) Trigger for PIM	RFC 5882	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM MIB for IPv4	RFC 5060	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Group To RP Mapping	RFC 6226	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anycast-RP Using Protocol Independent	RFC 4610	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM ECMP IPv4	RFC6754	6.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protocol Independent Multicast (PIMv6)																			
PIM - Sparse Mode (PIM-SM)-IPv6	RFC 4601	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
Bootstrap Router (BSR) Mechanism for PIMv6	RFC 5059	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
Static Rendezvous Point Configuration-IPv6	RFC4601 and RFC 5015	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
PIM - Dense Mode (PIM-DM): Protocol Specification (Revised)-IPv6	RFC 3973		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM - Source Specific Multicast-IPv6	RFC 4607	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
Multicast Source Discovery Protocol (MSDP)-IPv6	RFC 3618		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Support for More than 32 PIM Interfaces-IPv6	IPI proprietary	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Source-Specific Protocol-Independent Multicast in 232/8-IPv6	RFC 4608	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓
Overview of Source-Specific Multicast (SSM)-IPv6	RFC 3569	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✗
Bidirectional Protocol Independent Multicast (BIDIR-PIM)-IPv6	RFC 5015		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓
Interoperability between the Virtual Router Redundancy Protocol and PIMv6	RFC 7910		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Bidirectional Forwarding Detection (BFD) Trigger for PIMv6	RFC 5882		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM MIB for IPv6	RFC 5060	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Group To RP Mapping-IPv6	RFC 6226		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Anycast-RP Using Protocol Independent-IPv6	RFC 4610		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIM ECMP-IPv6	RFC6754		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internet Group Management Protocol (IGMP)																			
IGMP, Version 2	RFC 2236	1.0.0	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IGMP, Version 3	RFC 3376	1.0.0	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IGMP report suppression for v1, v2 and v3	RFC 4541	1.0.0	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Considerations for IGMP Snooping Switches	RFC 4541	1.0.0	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IGMP-based Multicast Forwarding ("IGMP Proxying")	RFC 4605	1.0.0	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multicast Listener Discovery (MLD)																			
MLD, Version 1	RFC 2710	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLD, Version 2	RFC 3810	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLD report suppression for v1, v2	RFC 2710,RFC 3810	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MLD-based Multicast Forwarding MLD Proxying")	RFC 4605	6.5.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Considerations for Multicast Listener Discovery (MLD) Snooping Switches	RFC 4541	3.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Quality of Service (QoS)																			
QoS - General																			
DiffServ Field in IPv4/IPv6 Headers	RFC 2474	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Assign matching traffic flow to a specific queue	RFC 2475	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1/2/3 Level queuing hierarchy	RFC 3644	1.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Layer 2 and Layer 3 QoS	IEEE 802.1p, RFC 2474	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shaping per queue, per port	RFC 3644	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multiple hardware queues per port	IEEE 802.1p, RFC 2474	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weighted Round Robin (WRR)/ Weighted Fair Queueing (WFQ)/ Strict Priority (SP) Scheduling Per Queue	RFC 4594	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weighted Random Early Detection (WRED)	RFC 2309	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
802.1p remarking	RFC 2475	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Classification based on interface, ACL, DSCP, IP precedence, RTP, 802.1p, and VLAN	RFC 2475	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trust IEEE 802.1p/DSCP	RFC 2475	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remarking of bridged packets	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Police Rate (SRTCM/TRTCM)	RFC 2697, RFC 4115	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Minimum and Maximum Bandwidth Per Queue	RFC 3644	1.0.0	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Queuing (Mapping services to specific VLANs and shaping each VLAN based traffic)	IPI Proprietary	1.0.0 EA	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VLAN based shaping	IPI Proprietary	DC 1.3.3	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Explicit Congestion Notification	RFC 3168	1.3.8	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
QoS Class map statistics	IPI Proprietary	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Features By Platform

Latest version: DC 7.0.0

IP SLA (ICMP Echo)	IPI Proprietary	5.0	✓	✓	✗	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
ToS Based queue distribution over Layer 2 Interface	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Configurable CoPP	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Mirror to CPU with filtering	IPI Proprietary	7.0.0	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
- Management																				
Management - General																				
Role based CLI management and access	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CLI access via console, telnet (IPv4 and IPv6) and SSH (IPv4 and IPv6)	RFC-4251, RFC-4252, RFC-4253, RFC-4254	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CLI commit rollback	IPI Proprietary	6.4.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Authentication using TACACS+/radius client (IPv4 and IPv6)	Radius - RFC 2866, Tacacs+- RFC 8907	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extended ping and traceroute	Linux APIs	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SNMP v1, v2, and v3 (IPv4 and IPv6)	RFC-1157	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SNMP: support for multiple instances of SNMP MIB- v2, and v3	RFC 1910 , RFC 3411	5.1 MR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
sFlow	RFC 3176	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Error Disable	IPI Proprietary	1.3.4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Debounce Timer	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP Server (IPv4 and IPv6)	RFC 2131 - basic support	6.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
DHCP client (IPv4 and Ipv6)	RFC-8415, RFC-2131 - basic support	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP relay (IPv4 and IPv6)	RFC-3046- basic support	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
DHCP group (IPv4 and IPv6)	IPI Proprietary	6.4.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
NTP Client (IPv4 and IPv6)	RFC 5905	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NTP Server (IPv4 and IPv6)	RFC 5905	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Syslog (IPv4 and IPv6)	RFC-3164	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
File Upload/Download using File Transfer Protocol (FTP)/ Trivial File Transfer Protocol (TFTP)/ SSH/Secure File Transfer Protocol (SFTP)/ Secure Copy Protocol (SCP)	Linux APIs	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Management VRF	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Routing Protocols in Management VRF (RIP, OSPF, and ISIS)	IPI Proprietary	5.0	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Ansible	Not Applicable	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Upgrade Mechanism from ONIE prompt using onie nos install and from OcNOS shell using sys-update	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACL support over Management, VTY and Loopback	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Licensing (IPv4 and IPv6)	IPI Proprietary	1.3.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Two-Way Active Measurement Protocol (TWAMP)	RFC 5357 #Appendix-I	1.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP - One Way Measurement	RFC 5357 #Appendix-I		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Zero Touch Provisioning (ZTP)(with IPv4)	RFC 8572	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zero Touch Provisioning (ZTP) (with IPv6)	RFC 8572	5.0	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP Snooping over MLAG	RFC 7513	1.3.9	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗
DHCPv6 Prefix Delegation	RFC3633 - Partial, RFC8987 - Partial	1.3.9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
DNS Relay (IPv4 and IPv6)	RFC1034, 1035	5.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
DHCP-Option 82 (IPv4)	RFC 3046	6.2.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Storing Multiple images on Platform	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP Relay over L3VPN	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Fault Management System	IPI Proprietary	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP Relay across VRFs	IPI Proprietary	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TWAMP over MPLS transport	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP - Reflector/Server	RFC 5357		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP - Client	RFC 5357		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over MPLS L3VPN	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over EVPN MPLS L3VPN	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over L3VPN over SR MPLS	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over EVPN L3VPN over SR MPLS	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over L3VPN over SRv6	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
TWAMP over Inter-VPN access Interface	RFC 5337		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
NACM (Access Control) for RCA access roles	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Container runtime and its life cycle management (e.g., K3S) - single container	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Event Manager																				
Event Manager	IPI Proprietary	6.1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Network Configuration Protocol (NETCONF)																				
YANG 1.0 Data Modelling Language	RFC 6020	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NETCONF Protocol	RFC 6241	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NETCONF Protocol over Secure Shell (SSH)	RFC 6242	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NETCONF Protocol over Transport Layer Security (TLS)	RFC 5246	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NETCONF Event Notifications	RFC 5277	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YANG Module for NETCONF Monitoring	RFC 6022	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NETCONF Base Notifications	RFC 6470	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YANG 1.1 Data Modeling Language	RFC 7950	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Netconf Enable/Disable and custom port	IPI Proprietary	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multiple simultaneous config session for CLI	IPI Proprietary	5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transaction based CLI	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
With-defaults trim		6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Netconf Call Home	RFC 8071	6.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Openconfig Support	OpenConfig	6.5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Streaming Telemetry (gNMI Protocol)																				

Features By Platform

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gNMI Publish RPC IPv4 (dial-out)	gNMI dial-out via grpctunnel	6.5.1	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI Once and Poll modes (Subscribe RPC)	gNMI Spec v 0.8.0	6.5.1	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI Get RPC	gNMI Spec v 0.8.0	6.6.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI wild-card keylist name in sensor-path	gNMI Spec v 0.8.0	6.6.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI secure (TLS) connection	gNMI Spec v 0.8.0	6.6.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI in-band (single or multi vrf instance)	gNMI Spec v 0.8.0	6.6.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI On Change Stream Mode	gNMI Spec v 0.8.0	7.0.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI User authentication	gNMI Spec v 0.8.0	7.0.0	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
gNMI OpenConfig data models	OpenConfig	6.5.1	✓	✓	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Security																				
Security - General																				
Storm control	IPI Proprietary	1.0.0	✓	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flow control	IEEE 802.3x	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DHCP Snooping	RFC 7513	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×
IP Source Guard	RFC 7513	1.1.0	×	×	✓	✓	✓	✓	×	×	×	×	×	×	×	×	×	×	✓	✓
Dynamic ARP Inspection	IPI Proprietary	6.6.0	×	×	✓	✓	✓	✓	×	×	×	×	×	×	×	×	×	×	✓	✓
Configurable password policy	IPI Proprietary	6.5.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Access Control Lists (ACLs)																				
Source IP address	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Destination IP address	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TCP/UDP source port	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TCP/UDP destination port	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IP protocol type	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Source MAC address	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Destination MAC address	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ethertype	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TCP Flags, Protocol type, IP fragment flags, DSCP, CoS, IP precedence	RFC 2827	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rule prioritization and Re sequence	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
On-fly modification	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ACL per rule statistics	IPI Proprietary	4.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Timed ACL	IPI Proprietary	5.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ARP ACL	IPI Proprietary	6.3.0	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Hardware-Specific Features																				
Hardware-Specific Features - General																				
Switched port analyzer (SPAN)	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Remote switched port analyzer (RSPAN)	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Encapsulated remote switched port analyzer (ERSPAN)	IPI Proprietary	6.6.0	✓	×	×	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	✓
Unified Forwarding Table (UFT)	IPI Proprietary	1.0.0	✓	×	×	×	×	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Load balance	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic load balancing (RTAG7 hash)	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PHY/MAC level interface loopback	IPI Proprietary	5.0	✓	✓	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	×	×
TCAM space monitoring	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hardware watchdog timer	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Wake on LAN	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Backup and restore from USB	IPI Proprietary	7.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Chassis Monitoring																				
Chassis Monitoring - General																				
Temperature monitor	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fan control	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Power Monitoring	PMBus	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CPU load monitoring	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Board information (EEPROM)	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Power Supply Unit (PSU) Field Replacement Unit (FRU) information	IPI Proprietary	1.0.0	✓	×	✓	✓	✓	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fan FRU information (EEPROM)	IPI Proprietary	1.0.0	✓	×	✓	✓	✓	✓	×	×	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hardware MIB and Traps	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Port Breakout																				
100G Port Breakout into 4X10G	IPI Proprietary	4.2	✓	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
100G Port Breakout into 4X25G	IPI Proprietary	4.2	✓	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
100G Port Breakout into 2X50G	IPI Proprietary	4.2	✓	×	×	×	×	×	×	×	×	✓	✓	✓	✓	✓	✓	✓	×	×
400G Port Breakout-QSFP-DD	IPI Proprietary	6.4.1	×	✓	✓	✓	✓	✓	×	×	×	×	×	×	×	×	×	×	✓	✓
800G Port Breakout-QSFP-DD	IPI Proprietary	6.6.1	×	×	×	×	×	✓	×	×	×	×	×	×	×	×	×	×	×	×
Port Breakout on External PHY Ports	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
- Smart SFP																				
Support of OAM Functionality over Remote Loopback	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Suuport of attributes (Reset/DDM/Disable Tx Transmission)	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Digital Diagnostic Monitoring (DDM) support	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
SNMP Support	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
- EDFA																				
Configuration and monitoring attributes such as target-output, target-gain, operating modes	IPI Proprietary		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Digital Diagnostic Monitoring (DDM) support	SFF-8636		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
- QSFP-DD																				

Features By Platform

Latest version: DC 7.0.0

400G -ZR	CMIS 5.1, OIF-C-CMIS-01.2		✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
400G - Open ZR/ZR+	CMIS 5.1, OIF-C-CMIS-01.2		✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
800G-Grey	CMIS 5.1, OIF-C-CMIS-01.2	6.6.1	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
800G-ZR, OpenZR/ZR+	CMIS 5.1, OIF-C-CMIS-01.2	6.6.1	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- Digital Diagnostics Monitoring (Transceiver)																			
Digital Diagnostics Monitoring (Transceiver) - General																			
Temperature monitor	SFF-8024, SFF-8436, SFF-8472, SFF-8679	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Power Monitoring (Power, Current, Voltage)	SFF-8024, SFF-8436, SFF-8472, SFF-8679	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hardware MIB and Traps	IPI Proprietary	1.0.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Timing and Synchronization																			
Timing and Synchronization - General																			
Timing characteristics of a synchronous equipment slave clock (SyncE)	G.8262		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Distribution of timing information through packet networks (ESMC)	G.8264		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP Telecom profile for phase/time synchronization with full timing support from the network (T-BC)	G.8275.1 (T-BC)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Timing characteristics of telecom boundary clocks for use with full timing support from the network (T-BC)	G.8273.2 (T-BC)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP Telecom profile for phase/time synchronization with full timing support from the network (T-GM with Antenna compensatation)	G 8275.1 (T-GM)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP TP for time/phase synchronization with partial timing support from the network (T-BC-P, T-BC-A)	G.8275.2 (T-BC-P, T-BC-A) G.8273.4		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP TP for time/phase synchronization with partial timing support from the network (T-GM with Antenna Compensation)	G 8275.2 (T-GM)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Default profile (T-BC)	IEEE-1588 (Annex J)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Default profile (T-GM)	IEEE-1588 (Annex J)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP Telecom Profile for frequency synchronization (T-GM)	G.8265.1 (T-GM)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PTP Telecom Profile for frequency synchronization (T-TSC)	G.8265.1 (T-TSC)		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
E2E Transparent clock (TC)	IEEE-1588 [Works with both G8275.1, G8275.2, default profile], G8273.3		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
IWF (Interworking function)	IEEE-1588		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Timing profile SMPTE 2059-2	IEEE-1588		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- Subinterface																			
Layer 3 Subinterface																			
Layer 3 termination of IPv4 and IPv6 packets	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
Subinterface on channel group (LAG)	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
VLAN tagged packet - single / double for 802.1q and 802.1ad and combination	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
VLAN tagged packet- 9100,9200 TPID	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
IPv4 and IPv6 Unicast routing	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
IP VRF	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
MPLS support	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MAC and IPv4 ACL	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
QoS	IPI proprietary	7.0.0	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PIM IPv4	RFC 4601, RFC 3837, RFC 4607, RFC 5015		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PIM IPv6	RFC 4601, RFC 3837, RFC 4607		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Layer 2 Subinterface																			
VLAN tagged packets - single/double for 802.1q and 802.1ad(88a8/9100/9200)	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Untagged and Default	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Static and Dynamic channel-group	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Rewrite operations - PUSH/POP/TRANSLATE for subinterface	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
"AC-AC Cross-connect service(Ethernet Point-to-point)	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Bridge Domain (Local-Briging Ethernet Point-to-MultiPoint)	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
MAC and IPv4 ACL	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
QoS	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
VLAN range	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Subinterface support for L2VPN (VPWS, VPLS)	IPI proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- MPLS with EVPN																			
MPLS with EVPN - General																			
E-LAN and E-LINE (Single/Multi Homing)	RFC 7432, RFC 8214		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - Auto RT	RFC 8365		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
QoS (Quality of Service)	RFC 3270		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
E-TREE Only optionA (Single Homing)	RFC 8317		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
E-TREE Single Homing	RFC 8317-Scenario 1		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
E-TREE Multi Homing	RFC 8317-Scenario 1		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
E-TREE - Support	RFC 8317- Scenario 2		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS/SR Active-Standby	RFC 7432, RFC 8214, RFC 8365, RFC 8584		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN over Segment-Routing (LSP/Policy)	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS Service Mapping via local Tunnel Policy	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - one to one backup protection	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - facility backup protection	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Egress network counters support	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Support EVPN MPLS with RSVP-ECMP	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Support EVPN MPLS with LDP-ECMP	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - MAC statistics	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - L2CP on EVPN Access	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - SR + TI-LFA	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - BGP-LU	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

EVPN MPLS - MAC hold timer	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS - Control Word	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Inter AS option A and C	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
RSVP/LDP GR support with EVPN service	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Integrated Routing and Bridging in Ethernet VPN (EVPN MPLS with IRB)	RFC 9135		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN MPLS L3VPN (without IRB)	RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
IRB support for advertising host routes	RFC 9135, RFC 9136		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Multiple IPs on IRB interface for anycast-gateway	RFC 9135, RFC 9136		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF and ISIS support on an IRB Interface(SH)	RFC 9135, RFC 9136		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
ACL support on IRB interface			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN LLF	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN Mac-Limit	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
ECMP for L3EVPN (Symmetric IRB)	RFC 9135, RFC 7432		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN-Flow Aware Transport			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN AF route-maps	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- Segment Routing																			
Segment Routing - General																			
Support of Segment routing generic base infrastructure.	RFC 8402		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
User Defined Adjacency SID (OPSFv2)	RFC 8665		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF extensions for Segment-Routing	1.RFC 8665 2.RFC 7684 3.RFC 4970		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
ISIS extensions for Segment-Routing	1. RFC 8667 2. draft-ietf-spring-conflict-resolution-05		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
LDP and SR interworking	1. RFC8661		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SR Mapping server	RFC 8661		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Segment-Routing Policy (Traffic Engineering)	draft-ietf-spring-segment-routing-policy-06		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Segment-Routing Policy Hop-Limit			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Segment-routing OAM (LSP Ping/Traceroute) for MPLS dataplane	RFC 8287		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Segment-routing BFD	RFC 7880		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Topology Independent Fast Reroute using Segment Routing	draft-ietf-rtgwg-segment-routing-ti-lfa-03		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Service mapping using tunnel policy over SR policy	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Entropy label support for SR MPLS (ISIS/OSPF)	RFC-9088 RFC-9089		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP On-demand nexthop (ODN) and auto steering	RFC 9012 #name-color-extended-community		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SR ECMP (ISIS/OSPF)			✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
ISIS SR Flexible Algorithms (Flex-Algo)	RFC 9350		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Traffic Steering for Flexible Algorithms	RFC 9012 #name-color-extended-community		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
FTN Fallback Support for Flexible Algorithms	IPI Proprietary		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SRLG Disjoint Backup Path Support For Flexible Algorithms	RFC 9350		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
User Defined Adjacency SID (ISIS)	RFC 8667		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SR based Micro loop Avoidance (ISIS)	draft-bashandy-rtgwg-segment-routing-uloop-12		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PCEP (Path Computation Element Protocol)																			
Support for path computation element protocol	RFC 5440 RFC 7896		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Support for Stateful PCE	RFC 8281 RFC 8231		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PCEP Extensions for Segment Routing	RFC 8664		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PCEP MIB Support	RFC 7420		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PCEP support for SRv6	draft-ietf-pce-segment-routing-ipv6-13		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Segment Routing over IPv6 Data plane (SRv6)																			
Support of Segment routing IPv6 generic base infrastructure.	RFC 8986		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
OSPF Extension to Support Segment Routing over IPv6 Dataplane	draft-ietf-lsr-ospfv3-srv6-extensions-01		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
IS-IS Extension to Support Segment Routing over IPv6 Dataplane	draft-ietf-lsr-isis-srv6-extensions-11		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP based L3VPN (VPNv4) over SRv6 core	draft-ietf-bess-srv6-services-08		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP-LS support for Segment routing IPv6 (ISIS)	draft-ietf-idr-bgpls-srv6-ext-08		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
BGP-LS support for Segment routing IPv6 (OSPF)	draft-ietf-idr-bgpls-srv6-ext-08		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN ELINE (Single Homing) for SRv6	RFC 9252		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN ELINE (Multi Homing) for SRv6	RFC 9252		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SRv6 OAM	RFC 9259		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
EVPN ELAN (Single Homing) for SRv6	RFC 9252		✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
- Ethernet for AI/ML																			
Dynamic Load Balancing (DLB)	TBD-ToBeUpdated	6.6.1	✗	✗	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
DLB - Reactive Path Rebalance	IPI Proprietary	7.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
DLB - Random Flow	IPI Proprietary	7.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PFC with QoS over L3 interface	IEEE 802.1Qbb	6.6.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DCBX LLDP capability for PFC over L3 interface	IEEE 802.1Qaz IEEE 802.1ab 2009	6.6.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Explicit Congestion Notification (ECN)	TBD-ToBeUpdated	6.6.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enhanced Transmission Selection (ETS) with QoS	IPI Proprietary	6.6.1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECN over VxLAN	IPI Proprietary	7.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
PFC over VxLAN	IPI Proprietary	7.0.0	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic ECN	IPI Proprietary	7.0.0	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
PFC Deadlock Detection and Recovery	IPI Proprietary	7.0.0	✗	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
Switch packet Buffer Tuning	IPI Proprietary	7.0.0	✗	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓