CHAPTER 11

Supported Technologies

This chapter outlines the technologies supported in Prime Network 3.9. Supported technologies are listed in Table 11-1. Technology support that was introduced in Prime Network 3.9 is marked as such in the table. The fact that a specific technology is listed in Table 11-1 does not imply that every aspect of every relevant standard is represented and supported. In addition, the specific level of support provided for a particular technology on individual network elements can vary. For details on technology support on individual VNEs, see Part 1—Cisco VNEs.

The supported technologies table indicates the level of support that Prime Network provides for the various technologies, as follows:

- Element modeling—Device-level inventory, support for events.
- Network modeling—Support for flows (correlation, path trace).
- Topology view—Technologies for which links are auto-discovered, and technologies that can be viewed in the context of topological links in a map.

Note Please refer to the Prime Network Technology Center on Cisco Developer Network (CDN) for information about technology IMOs and their attributes.

Table 11-1 Supported Technologies

Technology Family	Technology Group	Technology	Element Modeling	Network Modeling	Topology View
Network (Layer 3)	IP	IP (including IPv6)	Yes	Yes	
		Address Resolution Protocol (ARP)	Yes	Yes	
		Hot Standby Router Protocol (HSRP)	Yes		
		Generic Routing Encapsulation (GRE)	Yes	Yes	Yes
		Carrier Grade NAT	Yes		
		IP SLA Responder	Yes		
		6PE	Yes	Yes	
		6RD	Yes		
		X-LAT	Yes		
		Access Control Lists (ACLs)	Limited		
		VRRP	Yes		
	Routing Protocols	Border Gateway Protocol (BGP), Multiprotocol extensions (MP-BGP), external BGP (eBGP), internal BGP (iBGP)	Yes	Yes	Yes
		Open Shortest Path First (OSPF) and OSPFv3	Yes		
		Intermediate System to Intermediate System (IS-IS)	Yes		
	VPN and VRF	Virtual Routing and Forwarding (VRF)	Yes	Yes	Yes
		VRF-Lite (Multi-VRF)	Yes	Yes	
		VPN		Yes	Yes
		CSCVPN	Yes		
		6VPE	Yes	Yes	Yes
	BFD	Bidirectional Forwarding Detection	Yes		Yes
	SBC	Session Border Controller	Yes		

Table 11-1 Supported Technologies (continued)

Technology Family	Technology Group	Technology	Element Modeling	Network Modeling	Topology View
Hybrid Network/ Data Link (Layers 3 and 2)	MPLS	Multiprotocol Label Switching (MPLS)	Yes	Yes	Yes
		Label Distribution Protocol (LDP)	Yes		
	MPLS TP	MPLS TP	Yes	Yes	Yes
	MPLS TE	Multiprotocol Label Switching Traffic Engineering (MPLS TE)	Yes	Yes	Yes
		P2MP (Point-to-Multipoint) TE			
		MPLS TE Fast Reroute (MPLS TE FRR)	Yes		
	Pseudowire	Pseudowire Emulation Edge to Edge (PWE3)	Yes	Yes	Yes
		VCCV	Yes		
		Pseudowire Redundancy	Yes		
		Static Pseudowire	Yes		
		TDM Pseudowire	Yes	Yes	Yes
		Multi-segment Pseudowire	Yes	Yes	Yes
		ATM over Pseudowire (ATM PW)	Yes	Yes	Yes
		PW-to-TP Tunnel Mapping	Yes	Yes	
		PW-to-TE Tunnel Mapping	Yes	Yes	
	Clocking	IE1588	Yes		
		SyncE	Yes		
		ACR	Yes		

Table 11-1 Supported Technologies (continued)

Technology Family	Technology Group	Technology	Element Modeling	Network Modeling	Topology View
Data Link/MAC (Layer 2)	Ethernet	Ethernet (IEEE 802.3)	Yes	Yes	Yes
		VLAN (IEEE 802.1Q)	Yes	Yes	Yes
		QinQ (IEEE 802.1ad)	Yes	Yes	
		LAG (IEEE 802.3ad)	Yes	Yes	Yes
		Ethernet Channel	Yes	Yes	Yes
		STP (IEEE 802.1D)	Yes		Yes
		RSTP (IEEE 802.1w)	Yes		Yes
		PvSTP	Yes		Yes
		MST (IEEE 802.1s)	Yes		Yes
		SVI	Yes		
		VTP	Yes		
		REP	Yes		Yes
		VPLS	Yes	Yes	Yes
		H-VPLS	Yes	Yes	Yes
		VSI	Yes	Yes	Yes
		PBB	Yes		
		EFP	Yes	Yes	Yes
		Access Gateway	Yes		
		mLACP (Iccp Redundancy Group)	Yes		
	Ethernet OAM	CFM (Cisco and Draft 8.1)	Yes		
		Link OAM	Yes		
		Ethernet LMI	Yes		
	ATM	ATM	Yes	Yes	
		IMA	Yes	Yes	
		ATM Cross-Connect	Yes	Yes	
		ATM OAM	Yes		
		IP over ATM (MPoA 1483R)	Yes	Yes	
		Ethernet over ATM (MPoA 1483B)	Yes	Yes	
	Frame Relay	Frame Relay	Yes	Yes	
	ISDN	Integrated Services Digital Network (ISDN)	Minimal		
	PPP	Point To Point Protocol (PPP)	Yes	Yes	
		PPPoA, PPPoE, PPPoFR	Yes		

Table 11-1 Supported Technologies (continued)

Technology Family	Technology Group	Technology	Element Modeling	Network Modeling	Topology View
Data Link/MAC (Layer 2)	Discovery Protocols	CDP, LLDP	Yes		
	L2TP	L2TP	Minimal		
	Local Switching	Local Switching	Yes	Yes	
Physical Layer (Layer 1)	xDSL	Digital Subscriber Line (xDSL)	Yes		
	IPoDWDM	Internet Protocol over Dense Wave Division Multiplexing (IPoDWDM)	Yes	Yes	
	SONET/SDH	SONET/SDH	Yes		
	TDM/DSx	TDM	Yes		
		DSx	Yes		
		CEM	Yes		
		T3/E3	Yes		
		Channelized T3, OC3, DS3 interface	Yes		
	Serial	Serial	Yes		
	Hardware	Pluggable Transceiver	Yes		
Mobility (3.9)	GGSN	GGSN	Yes		
	APN	APN	Yes		
	GTPU	GTPU	Yes		