



# IETF RFCs supported by Cisco NX-OS MPLS Features

This appendix lists the IETF RFCs supported in Cisco NX-OS for MPLS.

## MPLS LDP RFCs

RFCs	Title
RFC 3036	<i>LDP Specification</i>
RFC 3037	<i>LDP Applicability</i>
RFC 3478	<i>Graceful Restart Mechanism for Label Distribution Protocol</i>
RFC 3815	<i>Definitions of Managed Objects for the Multiprotocol Label Switching (MPLS), Label Distribution Protocol (LDP)</i>
RFC 5036	<i>LDP Specification</i>
RFC 5443	<i>LDP IGP Synchronization</i>

## MPLS TE RFCs

RFCs	Title
RFC 2205	<i>Resource ReSerVation Protocol (RSVP) - Version 1 Functional Specification</i>
RFC 2961	<i>RSVP Refresh Overhead Reduction Extensions</i>
RFC 3209	<i>RSVP-TE: Extensions to RSVP for LSP Tunnels</i>
RFC 3630	<i>Traffic Engineering (TE) Extensions to OSPF Version 2</i>
RFC 3784	<i>Intermediate System to Intermediate System (IS-IS) Extensions for Traffic Engineering (TE)</i>
RFC 3812	<i>MPLS TE MIB</i>
RFC 4090	<i>Fast Reroute Extensions to RSVP-TE for LSP Tunnels</i>

## MPLS Layer 2 VPN RFCs

RFCs	Title
RFC 2113	<i>IP Router Alert Option</i>
RFC 3032	<i>MPLS Label Stack Encoding</i>
RFC 3036	<i>LDP Specification</i>
RFC 3916	<i>Requirements for Pseudo-wire Emulation Edge-to-Edge (PWE3)</i>
RFC 3985	<i>Pseudo Wire Emulation Edge-to-Edge Architecture</i>
RFC 4379	<i>Detecting Multi-Protocol Label Switched (MPLS) Data Plane Failures</i>
RFC 4447	<i>Pseudowire Setup and Maintenance Using the Label Distribution Protocol (LDP)</i>
RFC 4448	<i>Encapsulation Methods for Transport of Ethernet over MPLS Networks</i>
RFC 4761	<i>Virtual Private LAN Service (VPLS) Using BGP for Auto-Discovery and Signaling</i>
RFC 4762	<i>Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling</i>
RFC 5085	<i>Pseudowire Virtual Circuit Connectivity Verification (VCCV): A Control Channel for Pseudowires</i>
RFC 6074	<i>Provisioning, Auto-Discovery, and Signaling in Layer 2 Virtual Private Networks (L2VPNs)</i>
draft-martini-l2circ uit-trans-mpls-08	<i>Transport of Layer 2 Frames Over MPLS</i>
draft-martini-l2circ uit-encap-mpls-04.	<i>Encapsulation Methods for Transport of Layer 2 Frames Over MPLS</i>

## MPLS Layer 3 VPN RFCs

RFCs	Title
RFC 2547	<i>BGP/MPLS VPNs</i>
RFC 2685	<i>Virtual Private Networks Identifier</i>
RFC 3107	<i>Carrying Label Information in BGP-4</i>  <b>Note</b> The labeled unicast subsequent address family identifier (SAFI) value 4 that is specified in RFC 3107 applies to both IPv4 and IPv6 address family identifiers (AFIs). As of this publication date, we only support labeled unicast for IPv6 AFI.
RFC 4360	<i>BGP Extended Communities Attribute</i>
RFC 4364	<i>BGP/MPLS IP Virtual Private Networks (VPNs)</i>
RFC 4382	<i>MPLS/BGP Layer 3 Virtual Private Network (VPN) MIB</i>
RFC 4577	<i>OSPF as the Provider/Customer Edge Protocol for BGP/MPLS IP Virtual Private Networks (VPNs)</i>
RFC 4659	<i>BGP/MPLS IP Virtual Private Network (VPN) Extension for IPv6 VPN</i>
RFC 4684	<i>Constrained Route Distribution for Border Gateway Protocol/MultiProtocol Label Switching (BGP/MPLS) Internet Protocol (IP) Virtual Private Networks (VPNs)</i>
RFC 4760	<i>Multiprotocol Extensions for BGP-4</i>
RFC 4781	<i>Graceful Restart Mechanism for BGP with MPLS</i>

RFCs	Title
RFC 4798	<i>Connecting IPv6 Islands over IPv4 MPLS Using IPv6 Provider Edge Routers (6PE)</i>
draft-retana-bgp-custom-decision-00	<i>BGP Custom Decision Process</i>

## MPLS MVPN RFCs

RFCs	Title
draft-rosen-vpn-mcast-10	<i>Multicast in MPLS/BGP IP VPNs</i>

## MPLS MVPN RFCs

RFCs	Title
RFC 2113	<i>IP Router Alert Option</i>
RFC 3443	<i>Time To Live (TTL) Processing in Multi-Protocol Label Switching (MPLS) Networks</i>
RFC 4377	<i>Operations and Management (OAM) Requirements for Multi-Protocol Label Switched (MPLS) Networks</i>
RFC 4378	<i>A Framework for Multi-Protocol Label Switching (MPLS) Operations and Management (OAM)</i>
RFC 4379	<i>Detecting Multi-Protocol Label Switched (MPLS) Data Plane Failures</i>

