



About This Guide

Objective

This guide describes how to use Cisco IP Solution Center (ISC) to configure and provision Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN). This guide explains the concepts, tasks, and screen information that you need to set up the MPLS VPN network infrastructure in ISC and deploy the MPLS VPN service on the network.

Audience

This guide is designed for network engineers, service operators, and business managers who are responsible for configuring, provisioning, and managing MPLS VPN services on a network. Users of this documentation should be familiar with the following concepts:

- Basic concepts and terminology used in internetworking
- MPLS VPN terms and technology
- IP network topologies and protocols

Organization

This guide contains the following chapters:

- [Chapter 1, “Getting Started with MPLS VPN,”](#) describes the tasks required to get started using Cisco IP Solution Center (ISC) Multiprotocol Label Switching (MPLS) virtual private network (VPN).
- [Chapter 2, “Setting Up the ISC Services,”](#) describes how to set up ISC services needed for MPLS policies and service requests.
- [Chapter 3, “Independent VRF Management,”](#) describes how to create, deploy and manage VRF objects independent of MPLS VPN links and service requests.
- [Chapter 4, “IPv6 and 6VPE Support in MPLS VPN,”](#) describes MPLS VPN support for IPv6 and 6VPE for this release.
- [Chapter 5, “MPLS VPN Service Policies,”](#) describes the Policy Manager GUI and work flow for MPLS VPN.
- [Chapter 6, “MPLS VPN Service Requests,”](#) describes the Service Requests GUI and work flow for MPLS VPN.

- [Chapter 7, “Provisioning Regular PE-CE Links,”](#) describes an end-to-end scenario for creating a regular PE-CE link.
- [Chapter 8, “Provisioning Multi-VRFCE PE-CE Links,”](#) describes an end-to-end scenario for creating a Multi-VRFCE PE-CE link.
- [Chapter 9, “Provisioning Management VPN,”](#) describes how to provision a management VPN in ISC.
- [Chapter 10, “Provisioning Cable Services,”](#) describes how to provision MPLS VPN cable services.
- [Chapter 11, “Provisioning Carrier Supporting Carrier,”](#) describes how to provision Carrier Supporting Carrier.
- [Chapter 12, “Provisioning Multiple Devices,”](#) describes how to provision Ethernet to the home, hub and spoke, and ring topologies.
- [Chapter 13, “Spanning Multiple Autonomous Systems,”](#) describes the network configuration for spanning multiple autonomous systems.
- [Chapter 14, “Generating MPLS Reports,”](#) describes how to set up, run, and format MPLS reports.
- [Appendix A, “Sample Configlets,”](#) shows various configlets generated by this application.
- [Appendix B, “Working with Templates and Data Files,”](#) provides information about using templates and data files in ISC policies and service requests.
- [Appendix C, “Troubleshooting MPLS VPNs,”](#) describes how to troubleshoot MPLS VPN.
- [Appendix D, “Service Request Transition States,”](#) describes the ISC service request transition states.
- [Appendix E, “MPLS VPN Concepts,”](#) provides an overview of MPLS VPN concepts and security considerations.

Related Documentation

The entire documentation set for Cisco IP Solution Center, 5.1 can be accessed at:

http://www.cisco.com/en/US/products/sw/netmgmtsw/ps4748/tsd_products_support_series_home.html



Tip

To cut and paste a two-line URL into the address field of your browser, you must cut and paste each line separately to get the entire URL without a break.

The following documents comprise the ISC 5.1 documentation set.

General documentation (in suggested reading order)

- *Cisco IP Solution Center Getting Started and Documentation Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/roadmap/docguide.html
- *Release Notes for Cisco IP Solution Center, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/release/notes/relnotes.html
- *Cisco IP Solution Center Installation Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/installation/guide/installation.html

- *Cisco IP Solution Center Infrastructure Reference, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/infrastructure/reference/guide/infrastructure.html
- *Cisco IP Solution Center System Error Messages, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/system/messages/messages.html

Application and technology documentation (listed alphabetically)

- *Cisco IP Solution Center Carrier Ethernet and L2VPN User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/carrier_ethernet/user/guide/l2vpn51book.html
- *Cisco IP Solution Center MPLS VPN User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_vpn/user/guide/mpls51book.html
- *Cisco IP Solution Center Traffic Engineering Management User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/traffic_management/user/guide/tem.html
- *Cisco MPLS Diagnostics Expert 2.1.3 Failure Scenarios Guide on ISC 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_failure_scenarios/user/guide/mdefs.html
- *Cisco MPLS Diagnostics Expert 2.1.3 User Guide on ISC 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_diagnostics/user/guide/mdeuser.html

API Documentation

- *Cisco IP Solution Center API Programmer Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/developer/guide/api-gd.html
- *Cisco IP Solution Center API Programmer Reference, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/developer/reference/xmlapi.zip



Note

All documentation *might* be upgraded over time. All upgraded documentation will be available at the same URLs specified in this document.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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