



Cisco IP Solution Center 4.1

Product Overview

Cisco Systems® announces the availability of the Cisco® IP Solution Center (ISC) 4.1. Cisco ISC is a family of intelligent network management applications that help reduce overall network administration and management costs by providing automated resource management and rapid profile-based provisioning capabilities to accelerate deployment and time to market for Multiprotocol Label Switching (MPLS) and Metro Ethernet technologies. Cisco ISC also helps reduce operational costs by providing automated workflow-based troubleshooting and diagnostic capabilities for MPLS VPNs. The following applications can operate alone or as a suite:

- Cisco ISC MPLS VPN Management application
- Cisco ISC Layer 2 VPN and Metro Ethernet Management (L2 VPN) application
- Cisco ISC Traffic Engineering Management (TEM) application
- Cisco MPLS Diagnostics Expert, a new product that works with the Cisco ISC family of applications; it can be used on its own or together with Cisco ISC MPLS VPN Management.

Cisco ISC’s capabilities include provisioning and automated diagnostics¹ of MPLS VPNs, ATM/Frame Relay/Ethernet over MPLS VPNs, ATM/Frame Relay transport over Layer 2 Tunneling Protocol Version 3 (L2TPv3) VPNs, Metro Ethernet VPNs, and planning and configuration of MPLS Traffic Engineering.

Table 1 lists features of Cisco ISC 4.1

Table 1. Cisco ISC 4.1 Features

Feature	Description
Tracking of Layer 3 and Layer 2 resources	Manages resources such as Border Gateway Protocol (BGP) autonomous system, regions, customers, customer sites, access domains, provider administrative domains, virtual routing and forwarding (VRF) names, IP addresses, VLAN IDs, pseudowire virtual circuit IDs, route distinguishers, and route targets.
Rapid profile-based provisioning	Allows service operators to define Layer 3 and Layer 2 VPN provisioning parameters in a service policy; uploads the network element configuration to calculate the change in configuration needed to help ensure successful service activation.
Recognition of incorrect service configuration	Provides postprovisioning validation of the service design in order to determine if the Layer 3 and Layer 2 VPNs are active and functional.
Investment protection from Cisco IOS® Software and line card changes	Provides comprehensive platform and Cisco IOS Software support.
Bandwidth protection planning	Identifies placement of Fast Reroute (FRR) backup tunnels to protect critical network elements. Installs backup tunnels to protect against link, node, or shared risk link group (SRLG) failures.
MPLS Traffic Engineering tunnel placement, repair, and network grooming	Generates MPLS Traffic Engineering tunnel paths that meet user-specified constraints, including bandwidth, affinity, and delay, and proposes fixes to meet user-specified constraints for new tunnel demands. Global reoptimization of primary tunnel placements improves network utilization.

¹ Refer to the New Features section for additional details on diagnostics features provided today.

Feature	Description
Automated workflow-based troubleshooting and diagnostics of MPLS VPN deployments	The diagnostics performed by Cisco MPLS Diagnostics Expert are based upon analysis of network failure scenarios across MPLS access, edge, and core.
Carrier-grade infrastructure for large deployments	Provides the following system features: <ul style="list-style-type: none"> • Four-tiered distributed architecture • Thin Web-based GUI client • Role-based access control (RBAC) • Extensible Markup Language (XML) over HTTP northbound interface • Data backup and restore

New Features

The following list describes the primary new features and updates of Cisco ISC 4.1. A complete list of updates is available in the Cisco ISC 4.1 release notes document.

- Cisco MPLS Diagnostics Expert – Cisco MPLS Diagnostics Expert is a new product option for Cisco ISC 4.1. It provides automated troubleshooting and diagnostics of connectivity problems in MPLS/BGP VPNs (edge, access, and core). The Cisco MPLS Diagnostics Expert works with the Cisco ISC family of applications. It can be used on its own or together with Cisco ISC MPLS VPN Management. For more information, check the Cisco MPLS Diagnostics Expert product bulletin at www.cisco.com/go/mde.
- New MPLS VPN Service Discovery and Layer 2 VPN/Virtual Private Line Service (VPLS) Service Discovery modules – These discovery modules add support for the discovery of existing MPLS VPN and Layer 2 VPN services. The discovery modules have also been integrated together into a discovery workflow, controlled and monitored from the Web-based GUI. These modules are available for purchase and can be optionally included or excluded in the discovery process.
- Enhanced support for the provisioning of Metro Ethernet services – These features include VLAN translation (you can enable one-to-one or two-to-one VLAN translation), storm control settings, enhanced Policy for Virtual Circuit ID (VC ID) attributes, Cisco Catalyst® 6500 Series Supervisor Engine 720 support on Cisco 7600 Series routers (no longer require the Optical Service Module [OSM] card), Cisco Catalyst 3750 Metro Series switches, and UNI Port Security.
- MPLS VPN and L2 VPN reports supported by the Cisco ISC API are now available through the Cisco ISC GUI.
- The Cisco ISC TEM application has been enhanced to support multivendor awareness and Cisco IOS XR Software devices with Cisco IOS XR Software Release 3.2.
- Cisco ISC quality of service (QoS) has been enhanced to support a Metro Ethernet 3.1 solution, including hierarchical QoS support for the Cisco 3750-ME, updated QoS support for Cisco 7600 Series routers, and IP QoS Cisco 12000 (GSR) Series new line card support.
- Updated Oracle database support – Oracle database has been tested with Oracle Database 10g Enterprise Edition Release 10.1.0.2.0 64-bit Production and support of Oracle logical standby.

Important Cisco ISC 4.1 platform and Cisco IOS Software release updates are described in the following list. A complete list of updates is available in the Cisco ISC 4.1 release notes document.

- Cisco ISC MPLS VPN Management application update support of Cisco IOS Software Release 12.0(31)S for Cisco 12000 Series routers; Cisco IOS Software Release 12.2(27)SBB for Cisco 7200, 7500, and 10000 series routers; and Cisco IOS Software Release with 12.2(18)SXE for Cisco 7600 Series routers and Cisco Catalyst 6500 Series Supervisor Engine 2 and Engine 720

- Cisco ISC L2 VPN Management application and Metro Ethernet services update support for Cisco IOS Software Release 12.2(18)SXE for Catalyst 6500 Series and Cisco 7600 Series routers, Cisco IOS Software Release 12.1(22)EA1 for Cisco Catalyst 3550 Series switches, and Cisco IOS Software Release 12.2(25)EY for Cisco Catalyst 3750 Metro Series switches
- Cisco ISC TEM application update support for Cisco IOS Software releases 12.0(30)S and 12.0(31) for Cisco 7200 and 7500 series routers, Cisco IOS Software Release 12.2(18)SXE for Cisco 7600 Series routers, Cisco IOS Software Release 12.0(31)S for Cisco 12000 Series routers, Cisco IOS Software Release 12.0(30)S3 for Cisco 10000 Series routers, and Cisco IOS XR Software Release 3.2 for Cisco CRS-1 Series and Cisco 12000 Series routers

Upgrade Paths

Cisco ISC 4.0 and 3.x and Cisco VPN Solution Center (VPNSC) customers are encouraged to migrate to Cisco ISC 4.1. Cisco ISC 4.1 simplifies management of multiple technologies by providing an integrated management product for technologies such as Layer 3 VPN (including automated troubleshooting and diagnostics), Any Transport over MPLS (AToM), Metro Ethernet, and Layer 2 tunneled VPNs and MPLS Traffic Engineering. In addition to the set of supported technologies, Cisco ISC 4.1 provides updated hardware and Cisco IOS Software platform support and enhanced infrastructure features such as a four-tiered architecture, off-the-shelf relational database management systems (RDBMS) such as Sybase and Oracle, a Web-based GUI, an XML-over-HTTP northbound API, and enhanced Role-Based Access Control (RBAC). The following paragraphs outline the upgrade paths for existing Cisco ISC and VPNSC customers.

Existing Cisco ISC 4.0 MPLS VPN, L2 VPN, and TEM customers with a current Software Application Support (SAS) contract can order an update kit through the Cisco Product Upgrade Tool at <http://www.cisco.com>. See Table 12 for ordering information. Customers without a SAS contract can purchase an update kit for a fee. See Table 13 for ordering information.

Existing Cisco ISC 3.x MPLS VPN and L2 VPN Management customers can purchase an update kit for a fee by contacting their Cisco sales representatives. See Table 11 for ordering information.

Existing Cisco ISC 3.x Security Management customers should not upgrade to Cisco ISC 4.1. The Cisco IP Solution Center 3.x Security Management product will continue to be supported only in the ISC Security Management 3.2 product branch.

On August 18, 2004, Cisco Systems announced the end of sale and end of life for Cisco ISC 3.0 and 3.1. The last day to order these products was February 18, 2005. Cisco ISC 3.0 and 3.1 customers are encouraged to upgrade to Cisco ISC 4.1. The last date that Cisco Engineering may release any final software maintenance releases or bug fixes is February 18, 2006. For additional details on the end-of-sale and end-of-life program for Cisco ISC 3.0 and 3.1, please visit: http://www.cisco.com/en/US/products/sw/netmgtsw/ps4748/prod_eol_notices_list.html.

On April 1, 2003, Cisco Systems announced the end of sale and end of life for the Cisco VPN Solution Center (VPNSC) 1.x and 2.x. Cisco VPNSC is no longer being sold. Cisco VPNSC customers are encouraged to migrate to Cisco ISC 4.1, which provides additional application support in the areas of QoS, L2 VPN, MPLS VPN diagnostics, and MPLS Traffic Engineering (Table 2). The end of software maintenance for Cisco VPNSC products was reached on August 1, 2005. For additional details on the end-of-sale and end-of-life program for Cisco VPNSC 1.x and 2.x, please visit: http://www.cisco.com/en/US/products/sw/netmgtsw/ps2327/prod_eol_notices_list.html.

Availability

Cisco ISC 4.1 and associated minor release update kits will begin shipping on December 13, 2005. Customers can order these new products through normal Cisco sales channels beginning December 2, 2005.

Ordering Information

Tables 2 through 13 provide ordering information for Cisco ISC applications and SAS.

Table 2. Cisco ISC 4.1 Entry Points and Combo Packages

Part Number	Description
ENTRY-ISC4.1-K9	Cisco ISC 4.1 MPLS Provisioning and Layer 2 Ethernet Access Bundle (incl. 200 Activation Licenses [AL])
COMBO-ISC4.1-K9	Cisco ISC 4.1 MPLS, L2 VPN, TEM, and MPLS Diagnostics Expert combo bundle (incl. 500 AL/20 nodes)

Table 3. Cisco ISC 4.1 Options for Entry Points and Combo Packages

Part Number	Description
MDE1.0-ISC4.1-AP	Cisco MPLS Diagnostics Expert 1.0 application option for entry bundle (incl. 200 AL)
TEM-ISC4.1-20N-AP	Cisco ISC 4.1 TEM application option for entry bundle (incl. 20 nodes)
ENTRY-ISC-500TU	Cisco ISC 4.1 MPLS/L2VPN activation license upgrade for entry bundle (incl. 200 to 500 AL upgrade)
ENTRY-ISC-1000TU	Cisco ISC 4.1 entry bundle upgrade to service providers model (incl. L2 VPN and 500 to 1000 TU)
ENTRY-MDE-500TU	Cisco MPLS Diagnostics Expert 1.0 upgrade from 500 to 1000 attachment circuits
COMBO-MVLV-1K-UP	Activation upgrade from Cisco ISC 4.1 combo bundle to service providers model for MPLS and L2 VPN (incl. 1000 AL for MPLS/L2)
COMBO-TEM-50N-UP	Activation upgrade from Cisco ISC 4.1 combo bundle to service providers model for Cisco ISC TEM (incl. 50 nodes)
COMBO-CMDE-1K-UP	Cisco MPLS Diagnostics Expert 1.0 upgrade from 500 to 1000 attachment circuits

Table 4. Cisco ISC 4.1 Applications Media Kit for Service Providers

Part Number	Description
BASE-ISC4.1-K9	Cisco ISC 4.1 CD Base Media (required for new customers)
MPLS-ISC4.1-APP	Cisco ISC 4.1 MPLS VPN Business Services App Kit (does not include Activation Licenses)
L2VPN-ISC4.1-APP	Cisco ISC 4.1 L2 VPN Business Services App Kit (does not include Activation Licenses)
TEM-ISC4.1-APP	Cisco ISC 4.1 Traffic Engineering Starter App (does not include nodes activation license)

Table 5. Cisco ISC 4.1 Options for Service Providers

Part Number	Description
MPLS-ISC4.1-API	Cisco ISC 4.1 MPLS VPN API
L2VPN-ISC4.1-API	Cisco ISC 4.1 L2 VPN/Metro Ethernet VPN API

Table 6. Cisco ISC 4.1 Activation License Tier Upgrades for MPLS VPN and L2 VPN Management for Service Providers

Part Number	Description
TIER-ISC4.1-1K	Cisco ISC 4.1 upgrade to 1000 activation license
TIER-ISC4.1-3K	Cisco ISC 4.1 upgrade from current 1000 to 3000 activation license
TIER-ISC4.1-6K	Cisco ISC 4.1 upgrade from current 3000 to 6000 activation license
TIER-ISC4.1-10K	Cisco ISC 4.1 upgrade from current 6000 to 10,000 activation license
TU-ISC4.1-1K-INC	Cisco ISC 4.1 1000 incremental activation license upgrade beyond 10,000 connections ¹
TU-ISC4.1-5K-INC	Cisco ISC 4.1 5000 incremental activation license upgrade beyond 10,000 connections ¹
TU-ISC4.1-10K-INC	Cisco ISC 4.1 10,000 incremental activation license upgrade beyond 10,000 connections ¹

1. Cisco ISC 4.1 incremental activation license upgrades are only applicable to customers that have already bought tier upgrades of 10,000 activation licenses and beyond.

Table 7. Cisco ISC 4.1 Activation License Tier Upgrades for TEM

Part Number	Description
TEM-ISC4.1-20NTU	Cisco ISC 4.1 TEM 20-node activation license
TEM-ISC4.1-50NTU	Cisco ISC 4.1 TEM upgrade from current 20 to 50-node activation license
TEM-ISC4.1-50N-INC	Cisco ISC 4.1 TEM 50-node incremental upgrade beyond 50 nodes ¹

1. Cisco ISC 4.1 TEM incremental node license is only for customers with current 50 nodes licenses or beyond.

Table 8. Cisco ISC 4.1 Metro Ethernet Broadband Aggregation Packages and Activation License Tier Upgrades

Part Number	Description
BBAgg-ISC-SK-K9	Cisco ISC 4.1 broadband aggregation starter pack (incl. 5000 AL)
BBAgg-ISC-10K-TU	Cisco ISC 4.1 broadband aggregation from 5000 to 10,000 license
BBAgg-ISC-10K-INC	Cisco ISC 4.1 broadband aggregation 10,000 increments
BBAgg-ISC-50K-INC	Cisco ISC 4.1 broadband aggregation 50,000 increments
BBAgg-ISC-100K-INC	Cisco ISC 4.1 broadband aggregation 100,000 increments

Table 9. Cisco ISC 4.1 Metro Ethernet Residential Triple Play Packages and Activation License Tier Upgrades

Part Number	Description
EthSub-ISC-SK-K9	Cisco ISC 4.1 Ethernet subscriber starter pack (incl. 10,000 AL)
EthSub-ISC10K-INC	Cisco ISC 4.1 Ethernet subscriber 10,000 license increment
EthSub-ISC100K-INC	Cisco ISC 4.1 Ethernet subscriber 100,000 license increment

Table 10. Cisco ISC 4.1 Redundancy Options

Part Number	Description
ISC4.1-BU	Cisco ISC 4.1 backup pack (site diversification license)

Table 11. Upgrade Options from Cisco ISC 3.x to 4.1

Currently Owned	Type of Activation License	Upgrade To	Upgrade Kit to Order
Cisco ISC MPLS VPN Management and/or L2 VPN Management 3.x	Any activation license (500, 1500, 3000, 6000, 10,000, 20,000, 30,000, or 50,000 connections)	Cisco ISC 4.1	ISC3.X-4.1-UP-K9

Table 12. Update Options from Cisco ISC 4.0 to 4.1 for Customers with SAS Contract

Currently Owned	Type of Activation License	Update To	Update Kit to Request
Cisco ISC MPLS VPN Management 4.0	Any activation license (200, 500, 1500, 3000, 6000, 10,000, or more)	Cisco ISC 4.1	ISC4.1-MPLS-SR-K9
Cisco ISC L2 VPN Management 4.0	Any activation license (200, 500, 1500, 3000, 6000, 10,000, or more)	Cisco ISC 4.1	ISC4.1-L2VPN-SR-K9
Cisco ISC TEM 4.0	Any activation license (20, 50, 100, or 150 nodes)	Cisco ISC 4.1	ISC4.1-TEM-SR-K9

Cisco ISC 4.0 customers with Cisco SAS contracts can request the minor update kits above from the Cisco Product Upgrade Tool at <http://www.cisco.com/upgrade>.

Table 13. Update Options from Cisco ISC 4.0 to 4.1 for Customers Without SAS Contract

Currently Owned	Type of Activation License	Update To	Update Kit to Order
Cisco ISC MPLS VPN Management 4.0	Any activation license (200, 500, 1500, 3000, 6000, 10,000, or more)	Cisco ISC 4.1	ISC4.1-MPLS-UP-K9
Cisco ISC L2 VPN Management 4.0	Any activation license (200, 500, 1500, 3000, 6000, 10,000, or more)	Cisco ISC 4.1	ISC4.1-L2VPN-UP-K9
Cisco ISC TEM 4.0	Any activation license (20, 50, 100, or 150 nodes)	Cisco ISC 4.1	ISC4.1-TEM-UP-K9

Technical support services are orderable on these products through Cisco SAS programs. Service part numbers can be found on online Cisco ordering tools and price lists.

For More Information

For more information about Cisco ISC, visit <http://www.cisco.com/go/isc> or contact your local account representative.

Additional product information for Cisco ISC 4.1 is available at:

http://www.cisco.com/en/US/products/sw/netmgts/ps4748/prod_literature.html.

The Cisco MPLS Diagnostics Expert product page is available at: <http://www.cisco.com/go/mde>.

Marketing Contacts

If you have questions about Cisco ISC, send an e-mail to the product marketing group at isc-mktg@cisco.com.

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