



Release Notes for Cisco IP Solution Center, 5.1

Cisco IP Solution Center (ISC) 5.1 is a follow-on release to ISC 5.0.



Note

This ISC release includes an update to Cisco MPLS Diagnostics Expert (MDE) 2.1.3 from MDE 2.1.

All documentation, including this *Release Notes for Cisco IP Solution Center, 5.1* document and any or all parts of the ISC 5.1 documentation set, *might* be upgraded over time. Therefore, we recommend you access the ISC 5.1 documentation set at: <http://www.cisco.com/go/isc>. You can also navigate to this documentation set by clicking **Help** on the Home Page of the ISC 5.1 product.

The information in this *Release Notes for Cisco IP Solution Center, 5.1* document gives you an overview of this release and helps you understand it at a high level. After reading the *Cisco IP Solution Center Getting Started and Documentation Guide, 5.1*, please read this document prior to reading any other manual for ISC.

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Introduction

ISC 5.1 is a follow-on release to ISC 5.0 with some functionality added and changed (see the “[New and Changed Information for ISC 5.1](#)” section on page 2) and problems fixed (see the “[Problems Fixed in ISC 5.1](#)” section on page 9).

URLs for base information about ISC 5.1 and an overview and suggested reading order of these documents is given in the *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).

ISC is a family of intelligent network management applications that helps reduce overall administration and management costs by providing automated resource management and rapid profile-based provisioning capabilities. ISC enables fast deployment and time to market of Multiprotocol Label Switching (MPLS) and Carrier Ethernet technologies. In addition, the ISC Traffic Engineering Management application is Cisco's exclusive planning and provisioning application for Cisco MPLS Traffic Engineering (MPLS-TE)-enabled routers. For Diagnostics, use MDE, which is an automated, decision tree analysis-based network management application that troubleshoots and diagnoses problems in MPLS VPNs. There are four separate applications in ISC 5.1, which can operate alone or as a suite in an L2/L3 Management Solution. These and Application Programming Interfaces (APIs) are all distributed on one product CD:

- Cisco ISC MPLS VPN Management (ISC:MPLS)
- Cisco ISC Layer 2 VPN and Carrier Ethernet Management (ISC:L2VPN/CE)
- Cisco ISC Traffic Engineering Management (ISC:TEM)
- Cisco MPLS Diagnostics Expert (MDE)

System Recommendations

The system recommendations and requirements are listed in Chapter 1, “System Recommendations” of the *Cisco IP Solution Center Installation Guide, 5.1*. This chapter also includes the network devices and related software supported with ISC 5.1.

The recommendation is to thoroughly review this list before even planning your installation, to be sure you have all the hardware and software needed for a successful installation.

New and Changed Information for ISC 5.1

ISC 5.1 is based on ISC 5.0 with the addition of new and changed information that was introduced in the ISC 5.0.x releases:

- ISC 5.0.1 (see the *Release Notes for Cisco IP Solution Center, 5.0.1*) - adds many updates for L2VPN, MPLS, MDE (2.1.1), and Template Manager.
- ISC 5.0.2 (see the *Release Notes for Cisco IP Solution Center, 5.0.2*) - adds infrastructure updates: custom router login prompt and offline configuration collect mechanism; and MDE 2.1.2 updates: MDE selector GUI enhancement and MDE observations (CSCsi96376).
- ISC 5.0.3 (see the *Release Notes for Cisco IP Solution Center, 5.0.3*) - adds updates for L2VPN relative to pseudowires, including API support, and Virtual LAN (VLAN) transport mode.

ISC 5.1 includes problems fixed since ISC 5.0 (see [Problems Fixed in ISC 5.1, page 9](#)).

Specific to ISC 5.1 are the new and changed information, as follows:

- [API New Features, page 4](#)

This section includes the following new features:

- [API Enhancements to Expose Previously Unavailable Service Request Attributes Via the L2VPN API, page 4](#)
- [FlexUNI/EVC Support, page 4](#)
- [Template Manager Enhancements, page 4](#)

- [Common Infrastructure New Features, page 4](#)

This section includes the following new features:

- [Apache Velocity Engine, page 5](#)
- [Apache Velocity Tools, page 5](#)
- [Sybase Supported Version, page 5](#)
- [Template Manager Enhancements, page 5](#)

- [L2VPN New Features, page 5](#)

This section includes the following new features:

- [FlexUNI/EVC Support, page 6](#)
- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Provisioning Support, page 6](#)
- [IOS XR Support for Local Connection on E-Line, page 7](#)
- [IOS XR Support for Provisioning a Port Mode Connection for ATM Over MPLS, page 7](#)
- [Manually Defining Names, page 7](#)
- [Template Manager Enhancements, page 7](#)

- [MPLS New Features, page 7](#)

This section includes the following new features:

- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 7](#)
- [Second VLAN Matching \(Q-in-Q\), page 7](#)
- [Template Manager Enhancements, page 7](#)

- [TEM New Features, page 8](#)

This section includes the following new features:

- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 8](#)
- [MPLS IP on a Per Tunnel Basis, page 8](#)
- [Multiple OSPF Areas, Including ABRs, page 8](#)
- [Multiple Users, page 8](#)
- [New Renaming Capabilities, page 8](#)
- [PBTS Support, page 8](#)
- [TE Link Deletion, page 9](#)
- [Tunnel Enhancements, page 9](#)

- [MDE New Feature, page 9](#)
This section includes the following new feature:
 - [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 9](#)
- [Documentation Enhancements, page 9](#)

API New Features

All API features, including the new features since ISC 5.0, are explained in detail in the *Cisco IP Solution Center API Programmer Guide, 5.1* and the *Cisco IP Solution Center API Programmer Reference, 5.1*.

The following API enhancements were added specifically in ISC 5.1:

- [API Enhancements to Expose Previously Unavailable Service Request Attributes Via the L2VPN API, page 4](#)
- [FlexUNI/EVC Support, page 4](#)
- [Template Manager Enhancements, page 4](#)

API Enhancements to Expose Previously Unavailable Service Request Attributes Via the L2VPN API

New service request attributes now available via the API are:

- Standard UNI option
- Keep Alive
- Unicast Traffic
- Broadcast Traffic
- Multicast Traffic
- Pseudowire on Switched Virtual Interface (SVI)

FlexUNI/EVC Support

The APIs support the new FlexUNI/EVC feature, as described in the [“FlexUNI/EVC Support” section on page 6](#).

Template Manager Enhancements

The APIs support the new Template Manager enhancements, as described in the [“Template Manager Enhancements” section on page 5](#).

Common Infrastructure New Features

This section includes the new features for multiple components that were added specifically in ISC 5.1:

- [Apache Velocity Engine, page 5](#)
- [Apache Velocity Tools, page 5](#)

- [Sybase Supported Version, page 5](#)
- [Template Manager Enhancements, page 5](#)

Apache Velocity Engine

The Apache Velocity Engine has been upgraded to version 1.5. This is used by Template Manager but does not affect the behavior of Template Manager.

Apache Velocity Tools

The Apache Velocity Tools has been upgraded to version 1.3. This is used by Template Manager but does not affect the behavior of Template Manager.

Sybase Supported Version

The ISC imbedded database management system is Sybase 8, Sybase SQL Anywhere 8.0.3.

Template Manager Enhancements

ISC 5.1 includes new template manager enhancements that are described in detail in the [Cisco IP Solution Center Infrastructure Reference, 5.1](#). The new Template Manager functionality also affects L2VPN, MPLS, and APIs, as explained in a new appendix in the [Cisco IP Solution Center Carrier Ethernet and L2VPN User Guide, 5.1](#), the [Cisco IP Solution Center MPLS VPN User Guide, 5.1](#), and the [Cisco IP Solution Center API Programmer Guide, 5.1](#).

The updated templating mechanics differentiates by device type, linecard type, IOS software version, and/or port type (any one of these or any combination of any of these). ISC support of subtemplates is enhanced to support dynamic instantiation of templates based on device attributes.

All templates can be used by other templates as building blocks (a template using other templates is called a super-template).

Templates and data files are only accessible to users with a correct role-based access control (RBAC) role assigned. A data file can also be created during Service Request creation. You can now associate templates and data files to L2VPN, MPLS, VPLS, and FlexUNI/EVC policies.

To remove a template configuration that has been created on-demand using the Graphical User Interface (GUI) or API, ISC now automatically applies a negate template to the existing service if a negate template exists. You can now manually define and associate a negate template to remove commands deployed by a deployment template. This negate template is then automatically sent to the device when a service request is modified to use a device or interface or is decommissioned. This prevents you from needing to manually use the CLI to clean up templates in ISC or manually modify service requests to select the correct negate template during modification operations.

For IOS XR devices, the configlet generated from template data files are Command Language Interface (CLI) commands, not XML. You can download a template configlet using a device console for an IOS XR device.

L2VPN New Features

All L2VPN and Carrier Ethernet features, including the new features since ISC 5.0, are explained in detail in the [Cisco IP Solution Center Carrier Ethernet and L2VPN User Guide, 5.1](#).

The following L2VPN enhancements were added specifically in ISC 5.1:

- [FlexUNI/EVC Support, page 6](#)
- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Provisioning Support, page 6](#)
- [IOS XR Support for Local Connection on E-Line, page 7](#)
- [IOS XR Support for Provisioning a Port Mode Connection for ATM Over MPLS, page 7](#)
- [Manually Defining Names, page 7](#)
- [Template Manager Enhancements, page 7](#)



Note New API variables have been added for the new L2VPN features and are specified in the [Cisco IP Solution Center API Programmer Guide, 5.1](#).

FlexUNI/EVC Support

The Cisco 7600 series routers running on IOS 12.2(33) SRB support the Ethernet Virtual Circuit (EVC) infrastructure on the ES20 and SPA Interface Processor-400 (SIP-400), with Gigabit Ethernet version 2.0 Shared Port Adapters (SPAs). Interfaces on these cards that are configured with EVC infrastructure are referred to as FlexUNI/EVC. FlexUNI/EVC infrastructure provides several benefits to Carrier Ethernet deployment, as follows:

- Flexible frame matching
- Flexible VLAN tag manipulation or translation
- Multiple service on same port and flexible service mapping
- VLAN scale and local significant VLANs

FlexUNI/EVC supports a variety of network configurations, such as the following:

- Provisioning of Ethernet access as a FlexUNI-based Ethernet Wire Service (EWS) interface on the Network-facing Provider Edge (N-PE).
- Interconnecting Ethernet accesses terminating on a single Cisco 7600 N-PE on one or multiple ports in a bridge domain.
- Interconnecting Ethernet accesses terminating on multiple Cisco 7600 N-PEs in a VPLS service.
- Services that combine the existing services with the Ethernet access, including the Ethernet Relay Service (ERS)/EWS inter-working service.
- Provisioning of E-Line services, in which one or both N-PE interfaces are FlexUNI/EVC.
- FlexUNI/EVC policy and service requests deploy L2VPN and VPLS services using the legacy L2VPN commands if deployed against interfaces that do not support the FlexUNI/EVC infrastructure.

The FlexUNI/EVC policy can only be used to create a FlexUNI/EVC service request and not any other existing ISC service request types, such as L2VPN, VPLS, and so on. Likewise, a FlexUNI/EVC service request can be created using only a FlexUNI/EVC policy and not any other existing ISC policies.

IOS XR 3.6.2, 3.7.0, and 3.7.1 Provisioning Support

ISC L2VPN services support IOS XR 3.6.2, IOS XR 3.7.0, and IOS XR 3.7.1 for provisioning. Support is for the Cisco Carrier Routing System-1 (CRS-1) Routers and not for the Cisco 12000 (GSR) Series Routers.

IOS XR Support for Local Connection on E-Line

Local connection on E-Line is now supported for both IOS and IOS XR.

IOS XR Support for Provisioning a Port Mode Connection for ATM Over MPLS

You can provision a port mode connection for asynchronous transfer mode (ATM) over MPLS for IOS XR. You can do this from the L2VPN point-to-point policy editor window through the new PORT option for the Transport Mode attribute.

Manually Defining Names

In this release, you can now manually define names for L2VPN group names and E-Line names for IOS XR service requests.

Template Manager Enhancements

L2VPN supports the new Template Manager enhancements, as described in the [“Template Manager Enhancements”](#) section on page 5.

MPLS New Features

All MPLS features, including the new features since ISC 5.0, are explained in detail in the [Cisco IP Solution Center MPLS VPN User Guide, 5.1](#).

The following MPLS enhancements were added specifically in ISC 5.1:

- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 7](#)
- [Second VLAN Matching \(Q-in-Q\), page 7](#)
- [Template Manager Enhancements, page 7](#)

IOS XR 3.6.2, 3.7.0, and 3.7.1 Support

IOS XR 3.6.2, 3.7.0, and 3.7.1 support have been added for MPLS in this release. Support is for the Cisco Carrier Routing System-1 (CRS-1) Routers and the Cisco 12000 (GSR) Series Routers.

Second VLAN Matching (Q-in-Q)

ISC now provides a method to match the Q-in-Q (also known as stacked VLAN processing) second VLAN on the PE interface. This is supported for both service policy and service request creation. This feature is implemented in the MPLS Link Attribute Editor - Interface window, using the optional attribute Second VLAN ID attribute. This is available on selected platforms.

Template Manager Enhancements

MPLS supports the new Template Manager enhancements, as described in the [“Template Manager Enhancements”](#) section on page 5.

TEM New Features

All Traffic Engineering Management (TEM) features, including the new features since ISC 5.0, are explained in detail in the [Cisco IP Solution Center Traffic Engineering Management User Guide, 5.1](#).

The following TEM enhancements were added specifically in ISC 5.1:

- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 8](#)
- [MPLS IP on a Per Tunnel Basis, page 8](#)
- [Multiple OSPF Areas, Including ABRs, page 8](#)
- [Multiple Users, page 8](#)
- [New Renaming Capabilities, page 8](#)
- [PBTS Support, page 8](#)
- [TE Link Deletion, page 9](#)
- [Tunnel Enhancements, page 9](#)

IOS XR 3.6.2, 3.7.0, and 3.7.1 Support

IOS XR 3.6.2, 3.7.0, and 3.7.1 support have been added for TEM in this release. Support is for the Cisco Carrier Routing System-1 (CRS-1) Routers and the Cisco 12000 (GSR) Series Routers.

MPLS IP on a Per Tunnel Basis

This enhancement provides support for both tunnels that do not need **mpls ip** configured and tunnels that do. This is enabled for both IOS and IOS XR routers.

Multiple OSPF Areas, Including ABRs

ISC TEM now supports multiple Open Shortest Path First (OSPF) areas. Each OSPF area is mapped to a TE provider. MPLS-TE enabled routers, links, and tunnels can be discovered, and managed area by area. Area Border Routers (ABRs) can now be part of the TE network, and can be used as seed routers for TE topology discovery.

Multiple Users

Support for multiple users has been added in this release. Certain restrictions apply, as explained in the [Cisco IP Solution Center Traffic Engineering Management User Guide, 5.1](#).

New Renaming Capabilities

You can now rename the TE provider name, TE policy name, and TE policy owner.

PBTS Support

ISC TEM supports Policy-based Tunnel Selection (PBTS) for IOS XR routers. PBTS is the selection of a tunnel based on a policy, containing criteria such as Class Based Tunnel Selection (CBTS), L2VPN traffic data, Type of Service (ToS), and Quality of Service (QoS). PBTS has a look and feel very similar to the existing CBTS implementation for IOS routers.

TE Link Deletion

You can now delete TE links from the ISC repository.

Tunnel Enhancements

You can now set the tunnel description and tunnel identifier.

MDE New Feature

All MDE features, including the new features since ISC 5.0, are explained in detail in the *Cisco MPLS Diagnostics Expert 2.1.3 Failure Scenarios Guide on ISC 5.1* and the *Cisco MPLS Diagnostics Expert 2.1.3 User Guide on ISC 5.1*.

The following MDE enhancement was added specifically in ISC 5.1:

- [IOS XR 3.6.2, 3.7.0, and 3.7.1 Support, page 9](#)

IOS XR 3.6.2, 3.7.0, and 3.7.1 Support

IOS XR 3.6.2, 3.7.0, and 3.7.1 support in both the PE and Core router roles have been added for MDE in this release. Support is for the Cisco Carrier Routing System-1 (CRS-1) Routers and the Cisco 12000 (GSR) Series Routers.

Documentation Enhancements

In this release, in addition to all the new features and updates since ISC 5.0, the documentation set has been enhanced to include:

- New configlets in a “Sample Configlets” appendix for each of the *Cisco IP Solution Center Carrier Ethernet and L2VPN User Guide, 5.1*, the *Cisco IP Solution Center MPLS VPN User Guide, 5.1*, and the *Cisco IP Solution Center Traffic Engineering Management User Guide, 5.1*.
- Addition of new helpful hints and answers to frequently asked questions, including information about ECHO mode, in Appendix E, “Troubleshooting” in the *Cisco IP Solution Center Installation Guide, 5.1* and in Appendix B, “Troubleshooting MPLS VPNs” in the *Cisco IP Solution Center MPLS VPN User Guide, 5.1*.
- More information about using the Unique Route Distinguisher (RD) in provisioning MPLS Service Requests has been added in Chapter 2, “Setting Up the ISC Services,” of the *Cisco IP Solution Center MPLS VPN User Guide, 5.1*.

Problems Fixed in ISC 5.1

Customer-found problems that were fixed in ISC 5.1 since ISC 5.0 are indicated in three tables, so those who have upgraded to different Maintenance Releases since ISC 5.0 can find what has been fixed since the upgrade. The information is presented as follows:

- [Customer-found Problems Fixed Specifically in ISC 5.0.1, page 10](#)

- [Customer-found Problems Fixed Specifically in ISC 5.0.2, page 11](#)
- [Customer-found Problems Fixed Specifically in ISC 5.1, page 11](#)



Note There were no customer-found problems fixed specifically in ISC 5.0.3.

Customer-found Problems Fixed Specifically in ISC 5.0.1

Table 1, “Customer-found Problems Fixed Specifically in ISC 5.0.1,” describes all the customer-found problems that were fixed specifically in the ISC 5.0.1 Maintenance Release.

Table 1 *Customer-found Problems Fixed Specifically in ISC 5.0.1*

CDETS Number	Subject
CSCsi21088	New U.S. daylight saving change in 2007 is not working.
CSCsi22136	MPLS audit error reported when static route uses metric 1 with no CE policy.
CSCsi24435	Template data file settings are retained from one Service Request to the next.
CSCsj13427	Template variables plus data files are not in sorted order.
CSCsj35593	Open Shortest Path First (OSPF) processes are mistakenly limited to 28 for PE-CE routing.
CSCsj42526	Need to be able to optionally disable the Select All Service Requests check box for non-admin users.
CSCsj45405	MDE does not report Interior Gateway Protocol (IGP) routes missing when a Core IP ping failure occurs.
CSCsj89707	PE-PE test needs to accept a loopback name and to resolve it to an address.
CSCsk00839	Discovery fails for TEM when time stamps are used in IOS XR device prompts.
CSCsk01001	When creating Named Physical Circuits (NPCs) and trying to select an interface from a device, some interfaces are missing.
CSCsk37009	Unable to provision an asynchronous transfer mode (ATM) subinterface on Cisco 800 series routers.
CSCsk40839	When a description is entered in the VPN routing/forwarding instance (VRF) description field, the audit fails.
CSCsk51886	In MDE Failure Scenario FS-026, null incorrectly appears, rather than the IOS or IOS XR command required to clear the specified prefix in the Recommended Action portion of the results.
CSCsk53209	Interface description should contain the Service Request identification number.
CSCsk75470	Unable to view task log details when using Secure Hypertext Transfer Protocol (HTTPS).
CSCsk76938	When a Service Request is modified to move between PEs, the max-paths command is incorrectly removed on the source.
CSCsk96439	IOS XR 3.6 support not available.
CSCsl03093	IPv6 options appear when selecting non-Ethernet interfaces.
CSCsl22111	Layer 3 Service Request using NPCs does not save.

Table 1 *Customer-found Problems Fixed Specifically in ISC 5.0.1 (Continued)*

CDETS Number	Subject
CSCs122879	Unable to cleanly remove one interface from an IOS XR router that is running IPv4 Open Shortest Path First version 2 (OSPFv2). All interfaces are removed.
CSCs124122	Point-to-Point Protocol (PPP) encapsulation rejected for IOS XR devices.
CSCs129336	ISC is not properly cleaning up links.
CSCs130131	Virtual type terminal (VTY) login to Cisco device fails when using custom username prompt.
CSCs130519	No configuration file is created for multilink interfaces.
CSCs192154	ISC needs to export extra template variable BGP_NBR_IP_ADDR.

Customer-found Problems Fixed Specifically in ISC 5.0.2

Table 2, “[Customer-found Problems Fixed Specifically in ISC 5.0.2](#),” describes all the customer-found problems that were fixed specifically in the ISC 5.0.2 Maintenance Release.

Table 2 *Customer-found Problems Fixed Specifically in ISC 5.0.2*

CDETS Number	Subject
API:	
CSCs157013	Multiple NBI sessions cause thread deadlock.
MDE:	
CSCs196376	Access Circuit Backdoor routing might be incorrectly identified as a problem with the Border Gateway Protocol (BGP) vpnv4 next-hop for a Virtual Private Network (VPN) route.
CSCso42483	MDE aborts during label-switched path (LSP) visualization when device interaction fails.

Customer-found Problems Fixed Specifically in ISC 5.1

Table 3, “[Customer-found Problems Fixed Specifically in ISC 5.1](#),” describes all the customer-found problems that were fixed specifically in ISC 5.1, not an ISC 5.0.x Maintenance Release.

Table 3 *Customer-found Problems Fixed Specifically in ISC 5.1*

CDETS Number	Subject
Documentation:	
CSCsm79010	Discovery documentation needs to include warnings that ISC cannot discover service which land on Port-Channel UNI interface and that you should not assign routers as P routers during the role assignment for L2VPN discovery.
CSCso59788	Incorrect configlets are specified for the Cisco 3750 router.
CSCsq34538	Question the description of discovery using Simple Network Management Protocol version 3 (SNMPv3) information.

Table 3 Customer-found Problems Fixed Specifically in ISC 5.1 (Continued)

CDETS Number	Subject
CSCsq57171	Virtual Private Network Solutions Center (VPNSC), the predecessor to ISC, is End-of-Life and therefore should not be mentioned in the documentation.
CSCsq76049	Incorrect start time saved.
Infrastructure:	
CSCsj00977	ISC does not show logs under the Task Manager.
CSCsj89714	An MDE device is selected to show a device rather than a provider as the first option.
CSCsk01001	Missing interface when selecting from a NPC window.
CSCsm87841	During discovery, a device out of synchronization exception occurs.
CSCso64927	Editing a device is slow for a non-admin user.
CSCsr17996	Security Policy Engine (SPE) code change for unexpected timeout.
CSCsr18008	Periodic schedule for collect config fails between 12.xx p.m. and 1 p.m.
CSCsu00191	Secure Shell version 2 (SSHv2) performance problem.
L2VPN	
CSCsq13142	VPLS service request goes to invalid state when there is ip multicast in the configuration.
MPLS:	
CSCsj89707	A PE to PE test needs to accept a loopback name and resolve this to an address.
CSCsl02802	The Graphical User Interface (GUI) locks when adding MPLS layer 3 links to the service request.
CSCso55718	Subnets not removed from the port on PEs.
CSCso80452	Wrong IP address is given when creating a second service.
CSCso90335	IP address returns to available pool from aged/free pool for an unmanaged CE.
CSCsq46537	MPLS policy does not allow virtual local area network (VLAN) or Port-Channel as the interface type.
TEM:	
CSCsg53798	Need the ability to remove a Traffic Engineering link from ISC.
CSCsl04046	autoroute metric relative 0 is not applied to IOS XR correctly.
CSCsl39149	Fast Re-Route (FRR), which protects a preconfigured interface on a Cisco CRS-1 router, fails.
CSCsr88194	TEM backup bandwidth issue.

Important Notes

1. All ISC patches are available at: <http://www.cisco.com/cgi-bin/tablebuild.pl/isc>.
2. The supported Sybase and Oracle databases behave differently. All GUI queries are case insensitive for Sybase and case sensitive for Oracle.

3. ISC does not work with pop-up blockers in a web browser. If you have pop-up blockers installed, disable them.
4. When using an external Oracle database, the embedded Sybase database is still automatically launched for SLA support.
5. For all APIs, the Service Request name is unique and therefore, each Create Service Request API call needs to maintain this uniqueness.

Known Caveats in Cisco IP Solution Center 5.1

To find known problems in Cisco IP Solution Center, use the following URL:

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl

You must log in to CCO.

You can search for specific bugs or search for a range by product name. This tool enables you to query for keywords, severity, range, or version.

The results display bug ID and title, found-in version, fixed-in version, and status. The bug ID is a hyperlink to detailed information for the bug ID's product, component, severity, first found-in, and release notes.

The results could be displayed in a feature matrix or spreadsheet.

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

or at:

<http://www.cisco.com/go/isc>



Tip

To copy and paste a two-line URL into the address field of your browser, you must copy 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, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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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