

# **Release Notes for Cisco Prime Fulfillment 6.1**

#### 16 August 2011

All documentation, including this *Release Notes for Cisco Prime Fulfillment 6.1* document and any or all parts of the Cisco Prime Fulfillment 6.1 documentation set, *might* be upgraded over time. Therefore, we recommend you access Cisco Prime Fulfillment 6.1 documentation set online at:

http://www.cisco.com/go/fulfillment

You can also navigate to this documentation set by clicking **Help** on the Home Page of the Prime Fulfillment 6.1 product.

The information in this release note provides an overview of this release and helps you understand it at a high level. After reading the *Cisco Prime Fulfillment Getting Started and Documentation Guide 6.1*, please read this release note prior to reading any other documentation for Cisco Prime Fulfillment 6.1.

URLs for base information about Cisco Prime Fulfillment 6.1, a product overview, and suggested reading order of these documents is given in Related Documentation, page 10.

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# Introduction

Cisco Prime Fulfillment is the evolution of Cisco IP Solution Center (ISC) and includes all of the powerful capabilities of that offering, combined with significant enhancements to the user interface, to adding and updating devices and technologies, and to extending the provisioning capability.

Cisco Prime Fulfillment is a management solution for network fulfillment and diagnostics that enables the automation and scaling of complex, policy-driven network provisioning tasks to produce consistent and reliable service deployments. Prime Fulfillment does this by planning, provisioning, and auditing services across core, aggregation, access, and consumer premises equipment devices.

Cisco Prime Fulfillment enables fast deployment and time-to-market of Multiprotocol Label Switching (MPLS) and Carrier Ethernet technologies. In addition, the Prime Fulfillment Traffic Engineering Management (TEM) module is Cisco's exclusive planning and provisioning tool for Cisco MPLS Traffic Engineering-enabled routers. For Diagnostics, use Cisco Prime Diagnostics, which is an automated, decision-tree analysis-based network management module that troubleshoots and diagnoses a wide range of problems in MPLS VPNs.

The Cisco Prime Fulfillment solution has management capabilities for MPLS VPN, L2VPN and Carrier Ethernet, MPLS Diagnostics and MPLS Traffic Engineering. These capabilities that comprise Cisco Prime Fulfillment can be used in a stand-alone or integrated manner.

# System Recommendations and Platform Support

The system recommendations and requirements are listed in Chapter 1, System Recommendations, of the *Cisco Prime Fulfillment Installation Guide 6.1*. That chapter also includes the network devices and related software supported with Prime Fulfillment 6.1. We recommend that you thoroughly review that list before even planning your installation, to be sure you have all the hardware and software needed for a successful installation. We also recommend that you review the section Important Notes, page 7, in this release note in order to be aware of any known system, installation or other issues in the current release.

# **New Features and Enhancements in Cisco Prime Fulfillment 6.1**

Cisco Prime Fulfillment 6.1 is based on ISC 6.0 with the addition of new and changed information that was introduced in ISC 6.0.1.

ISC 6.0.1 added updates for L2VPN and MPLS VPN. See *Release Notes for Cisco IP Solution Center* 6.0.1 for more information on the ISC 6.0.1 release. Information from the ISC 6.0.1 release notes has been included in the Cisco Prime Fulfillment 6.1 documentation set.

Cisco Prime Fulfillment 6.1 includes problems fixed since ISC 6.0.1. See Cisco Prime Fulfillment 6.1 Resolved and Open Caveats, page 9.

Items specific to Cisco Prime Fulfillment 6.1 include the new and changed information as documented in the following sections:

- Common Infrastructure New Features, page 3
- L2VPN New Features, page 5
- MPLS VPN New Features, page 5
- Traffic Engineering Management New Features, page 6
- Diagnostics New Features, page 6

- API New Features, page 6
- Restructuring of the Documentation Set, page 7

### **Common Infrastructure New Features**

All common infrastructure features are explained in the Cisco Prime Fulfillment User Guide 6.1.

This section includes new features for multiple components that were added in Cisco Prime Fulfillment 6.1:

- Graphical User Interface Rebranded, page 3
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- Task Manager Enhancement (New "In Progress" Service Request State), page 5
- Configlet Preview, page 5
- Template Variables, page 5

#### **Graphical User Interface Rebranded**

This release includes a rebranded graphical user interface (GUI). This update aligns with other Cisco Prime applications. The name of the product has changed from Cisco IP Solution Center (ISC) to Cisco Prime Fulfillment.

#### **GUI-based Installation Updated**

The GUI-based installation process has been streamlined and updated. The GUI installer for Prime Fulfillment is supported on Solaris and Linux platforms. The GUI-based installation is now invoked by running the script **install.bin**, located in the Prime Fulfillment home directory (**\$PRIMEF\_HOME**). The command line installer has been ported to Linux as well. See the *Cisco Prime Fulfillment Installation Guide 6.1* for full coverage of installation procedures and updates for this release.

#### Deployment on Linux/UCS/VMware

As well as still being available for Solaris platforms, support for Prime Fulfillment is added on Linux/UCS/VMware platforms. Specific platforms supported include:

- Red Hat Enterprise Linux, version 5.3 (64-bit Edition)
- VMware virtualization, including running the embedded database.
- Linux UCS B-series blade servers.
- Linux UCS C-series chassis.

# <u>Note</u>

Cisco Prime Fulfillment Traffic Engineering Management (TEM) is supported on Solaris only.

### **Command Line Interface (CLI) Changes**

In Prime Fulfillment there is no requirement to run the **vpnenv.sh** script to source the environment, as in previous releases. CLI commands do not need to be run from within the **\$PRIMEF\_HOME/bin** directory. Instead CLI commands are prefixed by **prime.sh**, a script located in the Prime Fulfillment home directory (**\$PRIMEF\_HOME**). For example, use the following command to run the **stopall** command from the Prime Fulfillment home directory:

#### ./prime.sh stopall

See the Cisco Prime Fulfillment Installation Guide 6.1 for other examples of using the prime.sh script.

#### **LDAP Authentication Support**

Support is added for user authentication against and LDAP server, using LDAPv2 and LDAP3.

### **Oracle 11g Support**

Prime Fulfillment has been enhanced to support deployments on the Oracle Database 11g Enterprise Edition (Release 10.2.0.1.0, 64-bit Production). Oracle Database 10g continues to be supported. Specifically, the following version of Oracle Database are supported:

- Oracle Database 10g Enterprise Edition (Release 10.2.0.1.0, 64-bit Production)
- Oracle Database 11g Enterprise Edition (Release 11.2.0.1.0, 64-bit Production)

The upgrade tool in Prime Fulfillment 6.1 will not take care of Oracle 10g to 11g repository migration. If you are upgrading from ISC 6.0 or an earlier version of Oracle 10g, then the version of Prime Fulfillment 6.1 will also be Oracle 10g. If you want to migrate to Oracle 11g, then you need to transfer your existing repository (prior to Prime Fulfillment 6.1) to Oracle 11g. This can be done using Oracle import/export utilities. After that, you need to upgrade to Prime Fulfillment 6.1. For detailed information on upgrading and repository migration issues, see the *Cisco Prime Fulfillment Installation Guide 6.1*.

### **Cisco Configuration Engine 3.5 Support**

Support has been added for Cisco Configuration Engine version 3.5.

### XDE/PAL Technology replaces the Provisioning Engine for L2/L3 Provisioning Blades

As Prime Fulfillment moves towards a more flexible approach to service provisioning, XDE/PAL technology is replacing the current provisioning driver. This facilitates a flexible provisioning layer. For information about how XDE is supported in Prime Fulfillment 6.1, see Appendix D, "Prime Fulfillment XDE SDK," in the *Cisco Prime Fulfillment API Programmer Guide 6.1*.

### Task Manager Enhancement (New "In Progress" Service Request State)

A new state, In Progress, is added to Status column in the Service Request Manager window. Whenever a service request is requested for deployment, irrespective of its current state, it displays the In Progress state. The In Progress state is an intermediate state between Requested and Deployed. Whenever multiple service requests are concurrently requested for deployment, they all display the state of In Progress.

Note

In some cases, the In Progress state may not appear if the service request transitions from Requested to Deployed more quickly than the screen refreshes. The faster the server, the greater is the chance this will happen.

### **Configlet Preview**

Users can preview the configlet(s) that will be sent to a device (or devices) for a selected service request *before* the device is actually provisioned. This allows the user to check that the service request is generating the expected configlet(s), including any templates that may be applied. A Preview Configlets button has been added to the Service Request Manager window. Also, a Preview Configlets link has been added in the Deploy Service Request window. The configlet preview feature is available for service requests in all states except In Progress and Closed.

### **Template Variables**

The following template manager variable has been added for this release:

Repository Variable	Dimension	Description
Uni_Mac_Address	0	Number of MAC addresses allowed for port security.

### **L2VPN New Features**

All L2VPN features are explained in detail in the Cisco Prime Fulfillment User Guide 6.1.



No new features or updates have been introduced in Cisco Prime Fulfillment 6.1.

### **MPLS VPN New Features**

All MPLS features are explained in detail in the Cisco Prime Fulfillment User Guide 6.1.



No new features or updates have been introduced in Cisco Prime Fulfillment 6.1.

### **Traffic Engineering Management New Features**

All Traffic Engineering Management (TEM) features are explained in detail in the *Cisco Prime Fulfillment User Guide 6.1.* 

In this release, the TEM feature TE Incremental Discovery has been added. TE Incremental Discovery, Traffic Engineering (TE) discovery tasks are run in increments whenever changes occur in the network, such as when a new device or link is added. For large networks, an incremental discovery runs in a much shorter time than a full discovery. With this new implementation, if a new device is added to the network, a device discovery task can be created specifically to add the new device. Likewise, if a new link is established, a link discovery task can be created.



Cisco Prime Fulfillment Traffic Engineering Management (TEM) is supported on Solaris only.

### **Diagnostics New Features**

All Prime Diagnostics features are explained in detail in the Cisco Prime Fulfillment User Guide 6.1.

In this release, the name of the MPLS Diagnostics Expert (MDE) component has been changed to Prime Diagnostics.

### **API New Features**

All API features are explained in detail in the *Cisco Prime Fulfillment API Programmer Guide 6.1* and the accompanying *Cisco Prime Fulfillment API Programmer Reference 6.1*.

New features added in Prime Fulfillment are generally available via both the GUI and APIs. The following API enhancements were added in Prime Fulfillment 6.1:

- API MPLS VPN Enhancements, page 6
- API TEM, page 6

#### **API MPLS VPN Enhancements**

MPLS VPN API feature documentation added:

- VRF Object non-editable at the policy level: Prime Fulfillment now supports setting the Use VRF Object flag to editable/non-editable at the policy level.
- UNI MAC address: This optional attribute is now supported via NBI for L3 service blades. It is already supported in the GUI. This is an optional attribute, and it is editable. This attribute can only be used when Standard UNI Port is enabled.
- New and updated XML examples, both for policies and service requests, illustrating the use of the new features.

### **API TEM**

TEM API feature documentation added:

- TE Incremental Discovery:
  - Device Discovery

- Link Discovery

For more information about these features, see Traffic Engineering Management New Features, page 6.

• New XML examples have been added, illustrating the use of this feature.

### **Restructuring of the Documentation Set**

The Prime Fulfillment documentation set has been updated and reorganized in this release as follows.

- The name of the documentation set has changed from the Cisco IP Solution Center documentation set to the Cisco Prime Fulfillment documentation set. All book titles has been changed to reflect the new product naming scheme in this release. For additional information on this name change, see Graphical User Interface Rebranded, page 3.
- The following guides, which were separate books in previous releases, have been consolidated into a single user guide:
  - Infrastructure Reference Guide
  - L2VPN and Carrier Ethernet User Guide
  - MPLS VPN User Guide
  - Traffic Engineering Management User Guide
  - MPLS Diagnostics Expert User Guide
  - MPLS Diagnostics Expert Failure Scenarios Guide

The content from these guides has been reorganized into parts within the *Cisco Prime Fulfillment* User Guide 6.1.

- Conceptual information previously located in other guides has been consolidated into the new guide *Cisco Prime Fulfillment Third Party and Open Source Copyrights 6.1.*
- The following books retain the same basic structure as their equivalent counterparts in previous releases:
  - Cisco Prime Fulfillment Getting Started and Documentation Guide 6.1
  - Cisco Prime Fulfillment Installation Guide 6.1
  - Cisco Prime Fulfillment Third Party and Open Source Copyrights 6.1
  - Cisco Prime Fulfillment API Programmer Guide 6.1
  - Cisco Prime Fulfillment API Programmer Reference 6.1

## Important Notes

This sections lists known caveats and issues to be aware of in this release. These are listed in the following categories:

- Installation Notes, page 8
- Web Browser Support, page 8
- Issue with Importing Template Data Using the importExportTemplateDB.sh Script, page 8

### **Installation Notes**

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

### Web Browser Support

- 1. Prime Fulfillment GUI is supported by the following browsers:
  - Firefox browser version 3.6.x.
  - Internet Explorer (IE) version 8.0.
- 2. The recommended screen resolutions for both browser windows are:
  - 1024 x 768 pixels
  - 1280 x 1024

To view fonts and colors correctly, the system display must be set to use a color quality of at least 32-bits.

- **3.** The Java Runtime Environment (JRE) version 6 (update 23) or later must be configured on the system running the browser.
- 4. The JAVA\_HOME environment variable must be set to the JRE directory
- The zoom functionality only works properly in the Prime Fulfillment GUI if the Firefox browser menu option View > Zoom > Zoom Text Only is unchecked.
- 6. You cannot have two Prime Fulfillment user sessions running on the same browser. This is caused by the session ID being used for both, which causes the screen context to be lost.
- 7. Adobe Flash player (version 10.3.183.7) and its plug-in have to be installed to support the web browser and allow viewing of the main bar and charts in the GUI.
- 8. If the Service Request Chart (pie chart) displays both very large and very small numbers, the pie section representing very small numbers is also very small and consequently difficult to access.

Workaround: Try selecting individual subsections (broken, working, or to be deployed).

**9.** For some operations that last a long time, the browser may issue a message like "Warning: Unresponsive script. A script on the page may be busy ...." Two examples of this are when editing a customer device with many interfaces, and when editing user details, if there are many users.

Workaround: Increase the browser timeout value.

### Issue with Importing Template Data Using the importExportTemplateDB.sh Script

Template data imported by using the **importExportTemplateDB.sh** script only shows up in the Template Manager GUI after the HTTPD or Prime Fulfillment processes are restarted.

One workaround is to manually create a template. Then all the previously imported templates and data files show up. With this workaround, there is no need to restart the HTTPD or Prime Fulfillment processes.

The steps to do this are as follows:

- **Step 1** Import the templates and data files.
- Step 2Check in Template Manager and verify if they show up.Refreshing the browser and logging out/in will not help.
- **Step 3** Manually create a simple template in Template Manager.

As soon as you save and click on **Close**, the Template Manager window gets all the data, and all the previously imported templates, data files now appear.

# **Cisco Prime Fulfillment 6.1 Resolved and Open Caveats**

The following caveat was resolved in software version Prime Fulfillment 6.1:

Caveat Number	Description
CSCtj85065	ISC 5.2.2-004 is not displaying logs in the GUI.
CSCth60135	L3VPN service requests go to Failed Audit state for XR3.9.0 under load conditions.

The following open caveats apply to Prime Fulfillment 6.1:

Caveat Number	Description	
CSCsu08182	VRF "Description" text is not getting populated into PE routers.	
CSCtk98904	Saving a multilink service request using the same device and VRF fails in certain scenarios with BGP multipath configured.	
CSCt188226	Using N-PE LDP terminating loopback interface to create a dual-homed ring causes the service request modification to fail if one of the end-points in service request is part of the dual-homed ring.	
CSCtn04101	Collect config fails on some 7600 devices.	
CSCtn17294	ISC upgrade tool is failing for the credentials other than admin/cisco.	
CSCtn18107	Service request modification from multilink to subinterface fails if device is the same.	
CSCtn59562	MDE returns FS-029.009 message for network without failure.	
CSCtn59613	PE-to-PE (core) test returns "Test aborted due to unrecoverable errors."	
CSCtn19119	Mega-menu appears behind applet.	
CSCtt27059	Issue with Importing Template Data Using the importExportTemplateDB.sh Script. For workaround suggestions, see Issue with Importing Template Data Using the importExportTemplateDB.sh Script, page 8.	

# **Finding Known Problems in Cisco Prime Fulfillment 6.1**

To find known problems in Cisco Prime Fulfillment 6.1, use the following URL:

http://tools.cisco.com/Support/BugToolKit

You must log into Cisco.com.

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.

Use the following search criteria to locate bugs for Prime Fulfillment 6.1:

- Product category: Network Management and Automation
- Product: Cisco IP Solution Center
- Software version: 6.1 (For a list of bugs open against all releases, choose ANY.)

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 Prime Fulfillment, can be accessed at:

http://www.cisco.com/en/US/products/ps11664/tsd\_products\_support\_series\_home.html or at:

http://www.cisco.com/go/fulfillment

The following documents comprise the Cisco Prime Fulfillment 6.1 documentation set:

#### General Documentation (in suggested reading order)

- Cisco Prime Fulfillment Getting Started and Documentation Guide 6.1 http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/roadmap/docguide.html
- Release Notes for Cisco Prime Fulfillment 6.1 http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/release/notes/relnotes.html
- Cisco Prime Fulfillment Installation Guide 6.1 http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/installation/guide/installation.h tml
- Cisco Prime Fulfillment User Guide 6.1

 $http://www.cisco.com/en/US/docs/net_mgmt/prime/fulfillment/6.1/user/guide/prime_fulfill.html$ 

• Cisco Prime Fulfillment Theory of Operations Guide 6.1

http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/theory/operations/guide/theory. html

• Cisco Prime Fulfillment Third Party and Open Source Copyrights 6.1

http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/third\_party/open\_source/copyright/Prime\_Fulfillment\_Third\_Party\_and\_Open\_Source\_Copyrights61.pdf

#### **API Documentation**

- Cisco Prime Fulfillment API Programmer Guide 6.1
  http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/developer/guide/apipg.html
- Cisco Prime Fulfillment API Programmer Reference 6.1
  http://www.cisco.com/en/US/docs/net\_mgmt/prime/fulfillment/6.1/developer/reference/xmlapi.zip



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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