



Cisco Prime IP Express 9.0 Release Notes

December 22, 2016

These release notes provide an overview of the new and changed features in Cisco Prime IP Express 9.0, and describe how to access information about the known problems in Cisco Prime IP Express 9.0.

Note: You can access the most current Cisco Prime IP Express documentation, including these release notes, online at:

<http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-ip-express/tsd-products-support-series-home.html>

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Introduction

Cisco Prime IP Express is comprised of these components:

- An Authoritative Domain Name System (DNS) protocol service
- A Caching DNS service
- A Dynamic Host Configuration Protocol (DHCP) service

Cisco offers these components as individually licensed applications or in a mix of suites.

In addition, for IP address management, you can deploy Cisco Prime IP Express IPAM, or you can integrate it with the DHCP and DNS components of Cisco Prime IP Express.

Before you Begin

Before you install Cisco Prime IP Express 9.0, review the system requirements and licensing information available in the *Cisco Prime IP Express 9.0 Installation Guide*.

Note: If you are migrating to Cisco Prime IP Express 9.0 from an earlier version of Cisco Prime IP Express, you must review the release notes for the releases that occurred in between, to fully understand all the changes.

Cisco Prime IP Express DHCP, Authoritative DNS, and Caching DNS components are licensed and managed from the Cisco Prime IP Express regional server. All services in the local clusters are licensed through the regional cluster. Only a regional install requires a license file and only the regional server accepts new license files. Then the regional server can authorize individual local clusters, based on available licenses.

Note: Licenses for Cisco Prime IP Express 8.x are not valid for Cisco Prime IP Express 9.0. You should have a new license for Cisco Prime IP Express 9.0.

Cisco Prime Network Registrar IPAM is licensed separately from Cisco Prime IP Express DHCP, DNS, and Caching DNS. When installing IPAM, you will be asked to install as a separate process using a separate license key. To receive the IPAM license, you must purchase Cisco Prime Network Registrar IPAM, either individually, or as part of a Cisco Prime IP Express suite.

For more details about Licensing, see the License Files section in the Overview chapter of the *Cisco Prime IP Express 9.0 Installation Guide*.

The Cisco Prime IP Express 9.0 kit contains the following files and directories:

- Linux—Red Hat Linux ES 6.5 installation kit.
- Windows—Windows Server 2012 R2 installation kit.
- Docs—Pointer card, Bugs, and Enhancement List.

The Cisco Prime IP Express also ships as a virtual appliance which includes all the functionality available in Cisco Prime IP Express along with the CentOS 7.2 operating system. The Cisco Prime IP Express virtual appliance is supported on VMware ESXi 5.5 or later platforms, CentOS/RHEL 7.2 KVM Hypervisor, and an OpenStack installation running on CentOS/RHEL 7.2. For more details, see the Cisco Prime IP Express Virtual Appliance section of the *Cisco Prime IP Express 9.0 Installation Guide*.

Market Segment Specific Licensing

Cisco Prime IP Express introduced separate licenses for the components (System, DHCP, DNS, and CDNS) in release 8.0. For information on the Cisco Prime IP Express component-based license set, see the License Files section of the *Cisco Prime IP Express 9.0 Installation Guide*.

Cisco Prime IP Express license types are offered specific to market segments. Market-specific licensing generates license keys for use by market segments, that is, Service Provider, Enterprises, Smart Grid, and others. Cisco Prime IP Express features are enabled based on the market segment specific license you choose.

Cisco Prime IP Express currently offers the following two sets of market segment based licenses:

- PNR
- PNR-ENT
- PNR-SG

Note: If the licenses for both market segments are installed, then only the PNR license will be active.

The PNR license offers features designed for the Service Provider market segment, PNR-ENT offers features designed for the Enterprise market segment whereas the PNR-SG license offers features designed for the Smart Grid market segment.

Market Segment Specific Licensing

The regional server which uses the PNR-SG license can be converted to PNR by installing the PNR license. Local cluster licenses will be converted automatically at the next compliance check, or can be manually updated by resynchronizing the local cluster.

For a given market segment license, only the counts from corresponding market segment license will apply.

For example, if the PNR count license is applied when the PNR-SG base license is active, the Right to Use count will not be updated. If the PNR-SG count license is applied when the PNR base license is active, the Right to Use count will not be updated.

Cisco Prime IP Express 9.0 requires 9.0 licenses for DHCP and DNS authoritative services. These licenses are applied system-wide and support both 9.0 local clusters and existing 8.x local clusters. Cisco Prime IP Express 9.0 supports earlier versions of the DNS caching license for existing 8.x local clusters. 9.0 local clusters require 9.0 licenses. If you are using the Cisco Prime IP Express 8.x platform, you can purchase upgrade licenses. Versions released prior to Cisco Prime IP Express 8.x are not eligible for upgrade licensing and are directed to the Cisco Prime IP Express 9.0 full license.

PNR Licenses

The PNR license provides all the features available for the Cisco Prime Network Registrar release you install.

PNR-ENT Licenses

The Cisco Prime IP Express (PNR-ENT) license offers all the PNR features with the exception of (identified as not necessary for Enterprise market):

- Tenants
- TCP Listeners (DHCP Features - Dynamic Lease Notification, Bulk leasequery, Active leasequery/ Client Notification)
- Trivial File Transfer Protocol (TFTP)
- Regional subnet utilization history

Note: Before you install Cisco Prime IP Express 9.0, review the system requirements and licensing in the *Cisco Prime IP Express 9.0 Installation Guide*.

PNR-SG Licenses

The PNR-SG license offers all the PNR features with the exception of (identified as not necessary for Smart Grid Implementations):

- Tenants
- External Authentication (RADIUS and Active Directory (AD))
- DHCP Extensions
- Lightweight Directory Access Protocol (LDAP)
- TCP Listeners (lease notification)
- Trivial File Transfer Protocol (TFTP)
- Regional lease history
- Regional subnet utilization history
- Bring Your Own Device (BYOD)

Note: Before you install Cisco Prime IP Express 9.0, review the system requirements and licensing in the *Cisco Prime IP Express 9.0 Installation Guide*.

Interoperability

Cisco Prime IP Express 9.0 uses individual component licenses. This allows users to purchase and install DHCP services, Authoritative DNS and Caching DNS services, and IPAM services individually, or as a suite.

When you purchase the full set of Cisco Prime IP Express components, you receive a license package for IPAM, and a separate license for Cisco Prime IP Express DHCP and DNS components (Authoritative and Caching DNS).

Customers ordering the DDI bundle would obtain a quantity one of the Caching DNS when they acquire the DNS authoritative license. If they need additional DNS caching licenses they are ordered based on Server count since DNS caching is a server based license.

To install and manage DHCP, DNS, and Caching DNS licenses, you must establish a regional server. The regional server is used to install, count, and manage licensing for these components. The Cisco Prime Network Registrar IPAM license is installed separately and does not use the regional server.

The synchronization between version 9.0 and pre-9.0 local clusters must be done from a 9.0 regional cluster. Cisco Prime IP Express 9.0 protocol servers interoperate with versions Cisco Prime IP Express 8.2 or later.

Note: If you are upgrading to 9.0 from 8.2 and later, note that failover supports DHCPv6, DHCPv4, and only simple failover (back office and symmetrical configurations are no longer supported).

Caution:

- By the nature of the EDNS0 protocol, Cisco Prime IP Express 9.0 DNS servers interoperate with earlier versions of Cisco Prime IP Express DNS (and third party DNS vendors). EDNS0 defines the interoperability with DNS servers that do not support EDNS0. Cisco Prime IP Express 9.0 DNS adheres to the RFC and consequently interoperates with earlier versions of Cisco Prime IP Express.
- Following table shows the compatibility matrix for IPControl/IPAM with CPIPE DHCP/DNS as of the time of Cisco Prime IP Express 9.0 release. For the latest information, see the release notes of the latest IPAM release.

Table 1 Compatibility Matrix

IPControl	IPAM	CPIPE
7.x	8.1.3	8.2 and earlier versions
8.x	8.3	8.3 and earlier versions
9.x	9.0	9.0 and earlier versions

New Features and Enhancements

This section describes the features added in Cisco Prime IP Express 9.0:

- [End to End IPv6 Support, page 5](#)
- [Windows Server 2012 R2 Support, page 5](#)
- [DNS Push Notifications, page 6](#)
- [Weighted Round Robin for Resource Records, page 6](#)
- [Multiple DHCPv6 Option Instances, page 6](#)
- [Dashboard in Regional Web UI, page 6](#)
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End to End IPv6 Support

Prior to 9.0 release, Cisco Prime IP Express used IPv4 network for inter-cluster (local-local and local-regional) communication and external authentication with RADIUS server. Cisco Prime IP Express 9.0 supports deployment over IPv6, as IPv4 is in the final stages of exhausting its unallocated address space.

The following sections describe the changes made in CCM and DNS servers to support communication over IPv6.

DNS IPv6 Support

To support end to end IPv6 support in DNS, following changes are made in Cisco Prime IP Express 9.0:

- For secondary zones, master-servers list is expanded to include IPv6 interfaces/addresses.
- Notify and Transfer requests are sourced from IPv6 interfaces/addresses.
- Notify set includes IPv6 addresses.
- HA DNS communication is allowed over IPv6 interfaces/addresses.

CCM IPv6 Support

To support end to end IPv6 support in CCM server, in Cisco Prime IP Express 9.0:

- You can provide an IPv4 or IPv6 address of regional during installation of local cluster for initial license registration.
- You can provide an IPv4 or IPv6 address of regional after installation of local cluster using “Add Initial License” page in WebUI or **license register** command in CLI, for initial license registration.
- For redundancy, you can provide both IPv4 and IPv6 addresses of regional after installation of local cluster using “List Licenses” page in WebUI or **license register** command in CLI, for license registration.
- You can register local cluster by creating cluster object (using IPv4 and/or IPv6 address) and by performing sync operation from regional cluster.
- You can perform all operations between local and regional (i.e., replicate, push, and pull data) over IPv6 network.
- You can create DHCP Failover and DNS HA pairs using cluster objects. IPv4 and/or IPv6 addresses of cluster are used from cluster objects itself for failover communication.
- Cisco Prime IP Express cluster can communicate with RADIUS and Active Directory (LDAP) servers over IPv6 network for user authentication.
- You can configure IPv6 addresses and links for router and router-interface objects.
- You can configure VPNs for router-interfaces (v4 and v6).

DHCP Failover

In 8.x, failover used TCP over IPv6 if the failover-pair was configured with IPv6 addresses for BOTH partners. In Cisco Prime IP Express 9.0, failover tries to connect using both IPv4 and IPv6 (if both are configured) and uses whichever succeeds first and closes down the other. You can also configure addresses explicitly as 0::0 or 0.0.0.0 to prevent use of a transport (and prevent inheriting the cluster's addresses for use with failover).

Windows Server 2012 R2 Support

In Cisco Prime IP Express 9.0 release, CPIPE can be installed on Windows Sever 2012 R2 and run as a native 64-bit application, which helps in using new technology and in making larger scale configurations.

Note: Windows Server 2008 is no longer supported in Cisco Prime IP Express 9.0.

DNS Push Notifications

Cisco Prime IP Express 9.0 supports DNS Push Notifications feature, a mechanism where a client is asynchronously notified when changes to DNS records occur. This feature allows the Authoritative DNS server to accept TCP connections from DNS Push Notification clients and accept subscription requests for specific DNS record names and optionally record types. Once the subscription is accepted, the client will receive update notifications whenever the subscribed to record is changed. Also, if the record exists at the time of subscription, the client will receive an initial update notification of the existing record.

For more information, see the “DNS Push Notifications” chapter in the *Cisco Prime IP Express 9.0 Caching and Authoritative DNS User Guide*.

Weighted Round Robin for Resource Records

Cisco Prime IP Express 9.0 supports weighted round-robin algorithm, which is used to determine which resource record (RR) is returned in a query response when a nameset is configured with multiple RRs of the same type. To control the response behavior, administrators can set weighted values on these RRs. In addition, the order in which multiple records are returned may be used by client applications and need to be controlled by administrators.

Multiple DHCPv6 Option Instances

Cisco Prime IP Express 9.0 supports configuring multiple instances of a DHCPv6 option (such as the MAP container options) on a policy, which helps to provide multiple options to clients. You can add/edit/delete multiple instances of a single DHCPv6 option on a policy via the web UI, CLI, SDK, and REST API. The server sends the multiple instances of the option to the client when configured and the client requests the option in the Options Request Option (ORO).

Dashboard in Regional Web UI

Starting from Cisco Prime IP Express 9.0, the Dashboard feature is available on the regional cluster also. It provides System Metrics chart by default. It allows you to display the server specific (DHCP, DNS, and CDNS) charts for various local clusters. This can be configured in the Chart Selections page.

Web UI Enhancements

Cisco Prime IP Express 9.0 supports a new web UI with improved usability that supports:

- New global navigation menu
- Google Chrome browser
- Favorites icon to save the frequently used pages/menus as favorites
- Pin/Unpin icon to pin/unpin the menus and to persist the size of the left pane
- Ability to configure home page of the application
- Ability to set the page size of log pages
- Advanced Filter options to filter the objects as required
- Tree grid in left pane for displaying list of objects

The web UI enhancements in Cisco Prime IP Express 9.0 provide improved look and feel which uses XWT 3.x and Tomcat 8.x.

Command Line Interface Enhancements

The following commands are deprecated or attributes modified in the CLI. For more information, see the *Cisco Prime IP Express 9.0 CLI Reference Guide*.

Deprecated Commands

The following command is deprecated in the CLI:

- `remote-dns` command—Specifies information about remote DNS servers for IXFR

Modified Commands

New attributes are added to, or definitions modified for, the following commands:

- `auth-server` command—Configures a External authentication server
 - Added **ip6address** attribute to the `create` command to allow specifying the IPv6 address for the remote authentication server.
- `client-class-policy` command—Adds DHCP policy information to a client-class
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.


```
client-class-policy <name> addV6Option <opt-name | id>[.<instance>] <value> [-blob]
```
 - Added **-blob** to `setOption`, `setV6Option`, `setVendorOption`, and `setV6VendorOption` commands to allow specifying option data in blob format.
 - Updated `setV6Option`, `getV6Option`, and `unsetV6Option` commands to support DHCPv6 multi-instance options.
- `client-policy` command—Adds DHCP policy information to a client object
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.


```
client-policy <name> addV6Option <opt-name | id>[.<instance>] <value> [-blob]
```
 - Added **-blob** to `setOption`, `setV6Option`, `setVendorOption`, and `setV6VendorOption` commands to allow specifying option data in blob format.
 - Updated `setV6Option`, `getV6Option`, and `unsetV6Option` commands to support DHCPv6 multi-instance options.
- `cluster` command—Configures the local and remote clusters
 - Added **ip6address** attribute to the `create` command.
- `dhcp-address-block-policy` command—Edits a DHCP policy embedded in an address-block
 - Added **-blob** to `setOption` and `setVendorOption` commands to allow specifying option data in blob format.
- `dns` command—Configures and controls the DNS server
 - Updated `getStats` command to include **dns-pn** statistics.
 - Updated `activity-counter-log-settings` attribute to include logging for **push-notifications**.

Command Line Interface Enhancements

- Added the following attributes:
allow-any-query-acl, edns-max-payload, mem-cache-size, notify, notify-source-ip6address, packet-log-settings, packet-logging, pn-acl, pn-conn-ttl, pn-max-conns, pn-max-conns-per-client, pn-port, pn-tls, push-notifications, restrict-query-acl, restrict-xfer, restrict-xfer-acl, server-log-settings, transfer-source-ip6address, update-acl, and xfer-rr-meta-data
- Deprecated the following attributes:
hybrid-localhost-only, log-settings, and max-udp-payload-size
- lease command—Manage DHCP lease objects
 - Updated list and listbrief commands to support:
 - macaddr**=<value>
 - cm-macaddr**=<value>
 - reservation-lookup-key**=<value> [**-mac**|-**string**|-**blob**] (Added to search v4/v6 reservations by lookup key)
- lease6 command—Manage DHCP lease6 objects
 - Updated list and listbrief commands with **-reservation-lookup-key**=<value> [**-mac**|-**string**|-**blob**] to search v4/v6 reservations by lookup key.
- license command—Views and updates license information
 - Updated **license register** command to register local cluster with regional cluster using IPv4 or IPv6 address.
 - Added the following new command to specify both IPv4 and IPv6 address of regional cluster.
license register cdns | dns | dhcp [,...] <regional-ip> <regional-ipv6> [<regional-port>]
- link-policy command—Edits a DHCP policy embedded in a link
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.
prefix-policy <name> addV6Option <opt-name | id>[.<instance>] <value> [-blob]
 - Added **-blob** to setV6Option and setV6VendorOption commands to allow specifying option data in blob format.
 - Updated setV6Option, getV6Option, and unsetV6Option commands to support DHCPv6 multi-instance options.
- link-template-policy command—Edits a DHCP policy embedded in a link-template
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.
link-template-policy <name> addV6Option <opt-name | id>[.<instance>] <value> [-blob]
 - Updated setV6Option, getV6Option, and unsetV6Option commands to support DHCPv6 multi-instance options.
- prefix-policy command—Edits a DHCP policy embedded in a prefix
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.
prefix-policy <name> addV6Option <opt-name | id>[.<instance>] <value> [-blob]
 - Added **-blob** to setV6Option and setV6VendorOption commands to allow specifying option data in blob format.
 - Updated setV6Option, getV6Option, and unsetV6Option commands to support DHCPv6 multi-instance options.
- prefix-template-policy command—Edits a DHCP policy embedded in a prefix-template
 - Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.

prefix-template-policy <name> **addV6Option** <opt-name | id>[.<instance>] <value> [-**blob**]

- Added **-blob** to setV6Option and setV6VendorOption commands to allow specifying option data in blob format.
- Updated setV6Option, getV6Option, and unsetV6Option commands to support DHCPv6 multi-instance options.

■ **policy** command—Specifies DHCP policy information

- Added the following new command to allow adding an additional instance of a DHCPv6 multi-instance option.

policy <name> **addV6Option** <opt-name | id>[.<instance>] <value> [-**blob**]

- Added **-blob** to setOption, setV6Option, setVendorOption, and setV6VendorOption commands to allow specifying option data in blob format.
- Updated setV6Option, getV6Option, and unsetV6Option commands to support DHCPv6 multi-instance options.

■ **reservation** command—Configures DHCPv4 reservations

- Added the following new command to search v4/v6 reservations by lookup key.

reservation listbrief [-**macaddr**=<mac-addr>]
 [-**lookup-key**=<lookup-key> [-**mac**|-**blob**|-**string**]]
 [-**vpn**=<vpn-name>] [-**count-only**]

■ **reservation6** command—Configures DHCPv6 reservations

- Added the following new command to search v4/v6 reservations by lookup key.

reservation6 listbrief [-**lookup-key**=<lookup-key> [-**mac**|-**blob**|-**string**]]
 [-**vpn**=<vpn-name>] [-**count-only**]

■ **router** command—Configures a router

- Added the following new command:

router <name> **listInterfaces**

■ **scope-policy** command—Adds DHCP policy information to a scope

- Added **-blob** to setOption and setVendorOption commands to allow specifying option data in blob format

■ **scope-template-policy** command—Edits a DHCP policy embedded in a scope-template

- Added **-blob** to setOption and setVendorOption commands to allow specifying option data in blob format

■ **vpn** command—Defines a logical VPN within which other DHCP objects may be configured

- Added **-force** to the delete command.

■ **zone** command—Configures a DNS zone

- Added **-primary** and **-secondary** options to list, listnames, and listbrief commands.
- Updated the addRRR command as follows:

zone <name> **addRRR** [-**sync**] [-**unprotected**] <name> [<ttl>] [**IN**] <type> <data> [<attribute>=<value> ...]

- Added **modifyRRR** command to set the specified attributes for the matching resource record.

SDK Compatibility Considerations

- Added **push-notifications** attribute which enables or disables DNS Push Notifications for the zone.
- zone-dist command—Configures zone distributions
- Added **push-notifications** attribute which specifies how the 'push-notifications' property should be set on the secondary zones.
- zone-template command—Configures a zone template
- Added **push-notifications** attribute which enables or disables DNS Push Notifications for this zone.

SDK Compatibility Considerations

The SDK client includes a static version of the data dictionaries which may not match the target server version. This can create compatibility issues for clients that manage multiple server versions. In Cisco Prime IP Express 9.0, two new conversion methods, `convertObject` and `convertObjectList` are added to the `Session` class to manage objects for different server versions. The `convertObject` method converts an object from one product compatibility version to another. The `convertObjectList` method converts a list of objects from one product compatibility version to another. The `Session.getServerCompatibilityVersion` method can be used to obtain the server product compatibility version. The value 0 may also be used to indicate the current server product compatibility version.

Cisco Prime IP Express Bugs

For more information on a specific bug or to search all bugs in a particular Cisco Prime IP Express release, see [Using the Bug Search Tool, page 11](#).

This section contains the following information:

- [Resolved Bugs, page 10](#)
- [Enhancement Features, page 11](#)
- [Using the Bug Search Tool, page 11](#)

Resolved Bugs

[Table 2 on page 10](#) lists the key issues resolved in the Cisco Prime IP Express 9.0 release.

Table 2 Resolved Bugs in Cisco Prime IP Express 9.0

Bug ID	Description
CSCul47444	DNS HA main may stop communicating with its partner under load
CSCuq06650	Regional replica update fails to get changes
CSCus11114	Permanent v4 leases have incorrect renewal and rebinding times
CSCus91865	DHCP server runs out of memory
CSCut62270	force-dns-update attribute has no effect when enabled
CSCut75188	Authoritative DNS upgrades of large DBs are very slow
CSCut93837	DHCPv6 option 75 krb-principal-name incorrectly defined
CSCut96009	Zone host sync is limited to 1000 rrsets
CSCuu72087	TXT records of forward zones in ha pair are not deleted on lease expiration
CSCuv07501	CDNS may return wrong data when DNS64 is enabled
CSCuw16396	DNS fails to upgrade RRs when AUTHZONE.db file size larger than 2 GB

Table 2 Resolved Bugs in Cisco Prime IP Express 9.0 (continued)

Bug ID	Description
CSCUw21671	CDNS crashes or hangs with RPZ enabled when using redirect
CSCUz70511	Web UI missing CNRSNMP debug settings
CSCvb88357	Cleanup web UI “Synchronize Failover Pair” table

For the complete list of bugs for this release, see the [cprn_ipx_9_0-buglist.pdf](#) file available at the product download site. See this list especially for information about fixes to customer-reported issues.

Enhancement Features

[Table 3 on page 11](#) lists the key enhancement features added in the Cisco Prime IP Express 9.0 release.

Table 3 Enhancement Features Added in Cisco Prime IP Express 9.0

Bug ID	Description
CSCti93847	Shadow backups should be put in <datadir>.bak directory
CSCtn97323	CLI should prompt to create initial admin
CSCUu72039	Update DHCPv6 processing to support RFC 7550 (Stateful Issues)
CSCUu78928	tactool should allow exporting without RRs
CSCUw27316	Allow prefix template prefix-name expression to use the link's name
CSCUx73191	Support configuring multiple option instances for DHCPv6
CSCUy39530	Add support for lease state database compression
CSCvb26291	Deprecate router-interface's cable-dhcp-giaddr attribute
CSCvb86405	Increase default size of ADNS mem-cache-size variable

For the complete list of enhancement features added in this release, see the [cprn_ipx_9_0-enhancements.pdf](#) file available at the product download site.

Using the Bug Search Tool

Use the Bug Search tool to search for a specific bug or to search for all bugs in a release.

1. Go to <http://tools.cisco.com/bugsearch>.
2. At the Log In screen, enter your registered Cisco.com username and password; then, click **Log In**. The Bug Search page opens.

Note: If you do not have a Cisco.com username and password, you can register for them at <http://tools.cisco.com/RPF/register/register.do>.
3. To search for a specific bug, enter the bug ID in the Search For field and press **Return**.
4. To search for bugs in the current release:
 - a. Click the **Search Bugs** tab and specify the following criteria:
 - b. In the Search For field, enter Prime IP Express or Prime Network Registrar 9.0 and press **Return**. (Leave the other fields empty.)

Related Documentation

- c. When the search results are displayed, use the filter tools to find the types of bugs you are looking for. You can search for bugs by status, severity, modified date, and so forth.

Note: To export the results to a spreadsheet, click the **Export All to Spreadsheet** link.

Related Documentation

See [Cisco Prime IP Express Documentation Overview](#) for a list of Cisco Prime IP Express 9.0 guides.

Accessibility Features in Cisco Prime IP Express 9.0

All product documents are accessible except for images, graphics, and some charts. If you would like to receive the product documentation in audio format, braille, or large print, contact accessibility@cisco.com.

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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This document is to be used in conjunction with the documents listed in the [Related Documentation, page 12](#) section.

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