

# **Cisco Prime Infrastructure 3.9.1 Release Notes**

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# Introduction

This is the first maintenance release for Cisco Prime Infrastructure 3.9.

You can install Cisco Prime Infrastructure 3.9.1 on Cisco Prime Infrastructure 3.9 and Prime Infrastructure 3.9 Update 01. Prime Infrastructure 3.9.1 file PI\_3\_9\_1-1.0.21.ubf is approximately 276 MB. The downloading time depends on the available network connection in the enterprise environment. Ensure that you have adequate bandwidth and are not running into high latency issues.

# **System Requirements**

For more details on the system requirements, see Understand System Requirements section in the Cisco Prime Infrastructure 3.9 Quick Start Guide.

## **Installation Guidelines**

The following sections explain how to install the maintenance release.

## **Before You Begin Installing the Maintenance Release**

You can install Prime Infrastructure 3.9.1 on top of 3.9 or 39 + 3.9 Oracle Patch on Upgrade or 3.9 Update 01 from Software Download page.

If you need support for Catalyst 9800 16.12.x version, you will need to install PI\_3\_9\_Oct\_Oracle\_patch-1.0.8.ubf patch before you install of PI 3.9.1. For instructions to install the Oracle Patch, see Installing Cisco Prime Infrastructure System Patch 3.9 section in the *Cisco Prime Infrastructure* 3.9 Administrator Guide.

Since the maintenance release is not removable, it is important to have a way to revert your system to the original version in case hardware or software problems cause the maintenance release installation to fail.

To ensure you can do this, take a backup of your system before downloading and installing this UBF maintenance release.

If the backup is a Prime Infrastructure 3.9 backup, restore the backup on Prime Infrastructure 3.9 server before applying the 3.9.1 release.

Similarly, if you are running Prime Infrastructure 3.9 in a Virtual Machine (VM) and your organization permits taking VM snapshots, stop Prime Infrastructure and use the VMware client to take a VM snapshot before applying this maintenance release. Store the snapshot in an external storage repository, and restore from the snapshot if the maintenance release installation is unsuccessful. For more details, see Restore an Application Backup in the *Cisco Prime Infrastructure 3.9 Administrator Guide*.

To restore the backup of the Prime Infrastructure 3.9 installation, follow these steps:

1. Install Prime Infrastructure 3.9 from an OVA or ISO distribution.

- 2. If you have a prior Prime Infrastructure 3.7.x or 3.8.x backup, restore this backup.
- **3.** Clear the Cache and log in to Prime Infrastructure GUI again and proceed with the Prime Infrastructure 3.9.1 upload.

If you are installing this release as part of a High Availability (HA) implementation, see Before You Begin Setting Up High Availability in the *Cisco Prime Infrastructure 3.9 Administrator Guide*.

### **Installing the Release from Local Storage**



#### Caution

If you have a High Availability (HA) environment, remove the HA setup before proceeding to install this release. For more details, see Installing the Maintenance Release in High Availability Mode.

Make sure that you have completed the recommended preparation steps given in Before You Begin Installing the Maintenance Release.

To install Cisco Prime Infrastructure 3.9.1 from the local storage, follow these steps:



Note

You can only install Cisco Prime Infrastructure 3.9.1 by manual download from Cisco.com and upload and install through Cisco Prime Infrastructure UI.

#### **Procedure**

- Step 1 Download the Prime Infrastructure 3.9.1 UBF PI\_3\_9\_1-1.0.21.ubf from Home > Products > Cloud and Systems Management > Routing and Switching Management > Network Management Solutions > Prime Infrastructure > Prime Infrastructure 3.9 > Prime Infrastructure Patches-3.9.1 and save the file in your local system.
- **Step 2** Log in to Prime Infrastructure 3.9 server.
- Step 3 Choose Administration > Licenses and Software Updates > Software Update.
- **Step 4** Click **Upload** and browse to the location where you have saved the maintenance release file. Click **OK** to upload the file.
- Step 5 In the Status of Updates pane, click the Files tab and check whether PI\_3\_9\_1-1.0.21.ubf is listed under FileName column.
- Step 6 In the Critical Fixes pane, click Install.
- Step 7 Click Yes in the pop-up dialogue box to install Cisco Prime Infrastructure 3.9.1. It may take approximately 1 hour for the installation process to complete.

**Note** Do not manually restart the server while the installation is in progress.

You can verify the release installation from Prime Infrastructure Login under Critical Fixes by clicking View Installed Updates and also by logging into the server and choosing Administration > Software Update. You should see a listing for the release in the Updates tab, with Installed in the Status column.

### Installing the Maintenance Release in High Availability Mode

Download **PI\_3\_9\_1-1.0.21.ubf** from Home > Products > Cloud and Systems Management > Routing and Switching Management > Network Management Solutions > Prime Infrastructure > Prime Infrastructure 3.9 > Prime Infrastructure Patches-3.9.1 and save the file in your local system.

To install the downloaded PI\_3\_9\_1-1.0.21.ubf in High Availability mode follow the below prerequisites:

• Make sure that you have completed the recommended preparation steps given in Before You Begin Installing the Maintenance Release.



Note

Prime Infrastructure 3.9.1 can be applied only in primary and secondary standalone servers. The server will restart automatically once the installation is complete. The restart typically takes 25 to 35 minutes. You cannot apply Prime Infrastructure 3.9.1 when HA is enabled.

• If you are installing Cisco Prime Infrastructure 3.9.1 on High Availability (HA) paired servers, you will get an error message.

For more details, see Remove HA Via the GUI in the Cisco Prime Infrastructure 3.9 Administrator Guide.

• Continue the patching once HA removed completely. For more details, see the How to Patch New HA Servers section in the *Cisco Prime Infrastructure 3.9 Administrator Guide*.

## Troubleshooting Maintenance Release Installs in High Availability Implementations

If you are unable to apply this maintenance release in a High Availability (HA) implementation, check whether your network bandwidth, throughput and latency meets the network requirements recommended in Network Throughput Restrictions on HA section in the *Cisco Prime Infrastructure 3.9 Administrator Guide*. In a few cases, continued or intermittent throughput problems can cause a complete failure. If you believe this has occurred, contact Cisco TAC for support.

If you are unable to verify that this maintenance release has been successfully installed on a Prime Infrastructure server, or one or both of the servers fails to restart properly after installing the maintenance release, you may need to re-image the server as explained in Before You Begin Installing the Maintenance Release before continuing.

In all cases, you can use the backup-logs command on one or both servers to get information on the source of the failure. For more information, see the backup-logs section in the *Cisco Prime Infrastructure 3.9 Command Reference Guide*.

# **New Features and Enhancements**

This section provides a brief description of new features and enhancements in Cisco Prime Infrastructure 3.9.1.

#### Wired

#### **Prime Data Migration Tool**

Prime Data Migration Tool is now available in 3.9.1. This tool helps you to migrate your Cisco Prime Infrastructure 3.9.1 data to Cisco DNA Center.

You can launch the Prime Data Migration Tool from the Prime Infrastructure 3.9.1 home page from:

**Mega Menu > Cisco DNA Center coexistence** - You can now directly open Cisco DNA Center coexistence from the Mega Menu page.

or

Settings > Getting Started > Cisco DNA Center coexistence - Launch Cisco DNA Center from the Getting Started page.

For more information on using Prime Data Migration Tool in 3.9.1, see the Cisco Prime Infrastructure to Cisco Digital Network Architecture Center Co-existence Guide.

## **Reports**

#### **Client SNR Summary**

This is a new report type that provides a summary of the client SNR for good, average and low SNR category. You can configure the SNR category range from the Client settings page (Administration > System Settings > Client and User > Client).

## **Port Reclaim Report**

This report displays the unused ports based on the last usage time. It displays port information like device name, port description, MAC address, last usage time, and the admin and operational status.

From 3.9.1, this report takes the data directly from the device and displays the actual usage time. In earlier releases, the initial time of the device was taken as the time the device was added to Prime Infrastructure.

### **Daily Unique Client Count**

This report was added in 3.9 to display the daily unique clients and their details. In 3.9.1, this report shows only the daily unique client count. A unique client is determined by the MAC address of the client that connects at least once daily.

#### **Client Count**

This report displays the total number of active clients on your wireless network. The Client Count report displays data on the numbers of clients that connected to the network through a specific device, in a specific geographical area, or through a specific or multiple SSIDs.

In 3.9.1, this report includes roaming clients. By default, roaming client count is disabled. To enable the roaming client count, choose **Administration > System Settings > Client and User > Client** and check the **Roaming Client Count** check box.

### Inventory

This report displays the inventory data for the devices in your network. In 3.9.1, for disassociated access points, a new **Disassociated Date** column is available.

#### AP Radio Downtime Summary

This report shows the time the radio was down for AAPs and Unified APs that are managed by Prime Infrastructure.

In 3.9.1, % of excluded Down time and Excluded Down time for columns and a new filter condition Radio Admin Status Consideration are available.

#### Wireless

#### Cisco IOS/IOS XE Release 17.5

Prime Infrastructure 3.9.1 supports Cisco IOS/IOS XE Release 17.5.

#### **Supported Access Points**

Prime Infrastructure 3.9.1 supports the following lightweight APs:

- Cisco Catalyst 9124AXI Series Unified Access Points
- Cisco Catalyst 9124AXD Unified Access Points

Both these access points have Neighbor Discovery Protocol (NDP) capability (On-Channel and Off-Channel).

## **Neighbor Discovery Protocol (NDP)**

#### **Prerequisites for NDP**

Access Points must be associated with an eWLC controller running Cisco IOS/IOS XE Release 17.5.

#### Information about NDP

NDP is a critical component of Cisco's auto RF feature, Radio Resource Management (RRM). NDP provides over-the-air (OTA) messages between access points. It monitors and manages what each AP sees in the radio frequency (RF). It is how every AP sees other APs in an RF group or neighborhood. NDP forms the basis of many algorithms within Cisco RRM. By default, NDP packets are transmitted off channel on the RHL radio.

You can configure the NDP mode from the controller as:

- Auto /On-Channel (Serving channel)
- Off-Channel (RHL radio)

NDP capability of the AP can be:

- On-Channel (Serving channel)
- Off-Channel (RHL radio)
- Both

#### **Configuring NDP in Prime Infrastructure**

1. To configure the NDP mode from the controller in Prime Infrastructure:

 $\label{lem:choose Configuration > Network > Network Devices > Device Groups > All Devices > xxx\_eWLC controller > 802.11a parameters or 802.11b parameters > .$ 

Choose the **RRM Neighbor Discover Mode** from the drop-down list.

2. To create an RF profile and provision it on to multiple controllers using the template:

Choose Configuration > Wireless technologies > Cisco Catalyst 9800 Configuration > .

In the **RF Profile Detail** window, choose **NDP** and the **Channel Width** from the drop-down lists.

**3.** To configure the RRM Neighbor Discover Mode in a configuration template and provision it onto multiple controllers:

Choose Configuration > Templates > Features & Technologies > Controller > 802.11a/n/ac/ax or 802.11b/g/n/ax > Parameters > .

Choose the **RRM Neighbor Discover Mode** from the drop-down list.

**4.** To view or verify the configured NDP capability and NDP mode of an AP:

Choose Configuration > Network > Network Devices > Device Groups > Device Type > Unified AP >  $xxx_9105AXW > 802.11a/n/ac/ax >$ .

# **Resolved Caveats**

The following caveats were resolved in Prime Infrastructure Release 3.9.1. You can view additional information about these caveats in the Bug Search Tool.

#### **Table 1: Resolved Caveats**

Identifier	Description
CSCvx38670	Inconsistent display of New and Moved label for groups in the group tree.
CSCvx60363	'Cisco' is missing in the 'Cisco DNA Center coexistence' launching page in PI 3.6.x Prime Data Migration Tool Update 01.
CSCvw97473	AP count mismatch in PI 3.8.1 due to missing fragment exception.
CSCvx00470	QuoVadis root CA decommission on NCS.
CSCvx10199	Device name with DNS suffix exceeds 32 characters in LWAP template page.
CSCvx14999	PI 3.9 HA registration with VIP causes network traffic issues to active IP and VIP.
CSCvx23875	PI 3.8/3.9 C9800 17.3.1 FIPS mode fails to verify credentials.
CSCvx62477	Logrotate process does not rotate logs in /var/log/audit in PI 3.9.
CSCvx82664	Evaluation of NCS for OpenSSL March 2021 vulnerabilities.
CSCvw80212	PI 3.8: Cannot move devices between instances from Ops Center if device is added by DNS name.
CSCvw84325	PI may not render the background street maps in selected screens.
CSCvx16113	Jobs dashboard may be slow to load in PI 3.8.1.
CSCvx17133	Error message appears when you generate the Client Count report.
CSCvx32583	Unable to configure static IP address for APs from PI GUI.
CSCvx44111	AP BLE beacon exception occurs when you try to set or unset static IP for APs in an AireOS controller.
CSCvx50785	Devices fail inventory collection when NTP index is set for an AP group.
CSCvx52959	PI 3.9 NCS diag page is inaccessible after restoring a backup from an earlier release.

Identifier	Description
CSCvx58650	PI 3.x: Notification destination SNMPv3 configuration item \"HMAC-SHA\" disappears.
CSCvx58963	Unnecessary events appear in the Events tab for EoGRE events.
CSCwa47327	Evaluation of ncs for Log4j RCE (Log4Shell) Vulnerabilities - CVE-2021-44228, CVE-2021-45046, CVE-2021-45046, CVE-2021-45105, CVE-2021-44832, CVE-2021-4104.

# **Submitting Feedback**

Your feedback will help us improve the quality of our product. You must configure the email server and then enable data collection to configure the feedback tool. To send your feedback, follow these steps:

## **Procedure**

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Step 1	If you have configured your mail server, go to Step 4.
Step 2	$Choose \ \textbf{Administration} \\ > \textbf{Settings} \\ > \textbf{System Settings} \\ > \textbf{Mail and Notification} \\ > \textbf{Mail Server Configuration}.$
Step 3	In the Mail Server Configuration page, enter the mail server details, then click <b>Save</b> to save the configuration settings.
Step 4	Choose Administration > Settings > System Settings > General > Help Us Improve.
Step 5	In the Help Us Improve Cisco Products page, select Yes, collect data periodically, then click Save.
Step 6	Click the Settings icon, then select Feedback > I wish this page would.
Step 7	Enter your feedback, then click <b>OK</b> .

## **Related Documentation**

You can access additional Cisco Prime Infrastructure documentation at:

http://www.cisco.com/en/US/products/ps12239/tsd\_products\_support\_series\_home.html

# **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at:

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

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