Cisco Prime Infrastructure 3.3 Release Notes

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This document contains the following sections:

Introduction

Cisco Prime Infrastructure is a network management tool that supports lifecycle management of your entire network infrastructure from one graphical interface. Prime Infrastructure provides network administrators with a single solution for provisioning, monitoring, optimizing, and troubleshooting both wired and wireless devices. Robust graphical interfaces make device deployments and operations simple and cost-effective.

- For information on server and web client requirements, see the *Understand the System Requirements* section of the *Cisco Prime Infrastructure 3.3 Quick Start Guide*.

- For information about installing this release of Prime Infrastructure, see the *Installation Options* section in the *Cisco Prime Infrastructure 3.3 Quick Start Guide*

- For information about upgrading from previous releases of Prime Infrastructure, including the list of versions from which you can upgrade, see the *How to Perform an Inline Upgrade* section of the *Cisco Prime Infrastructure 3.3 Quick Start Guide*.

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- For detailed information on licensing, see the *Cisco Prime Infrastructure 3.x Ordering and Licensing Guide*.

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:

Step 1 If you have configured your mail server, go to Step 4.

Step 2 Choose **Administration** > **Settings > System Settings** > **Mail and Notification > Mail Server Configuration**.

Step 3 In the Mail Server Configuration page, enter the mail server details, then click **Save** 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 **OK**.

Supported Devices

To see the list of devices supported in this release of Prime Infrastructure:

Step 1 Log in to Prime Infrastructure.

Step 2 Click the wheel icon at the top right, then click **Supported Devices**.

For detailed information on the software compatibility for the Cisco wireless devices, see the following URL:

http://www.cisco.com/en/US/docs/wireless/controller/5500/tech_notes/Wireless_Software_Compatibility_Matrix.html

Note Prime Infrastructure does not support non-admin virtual device context (VDC) on Nexus devices.

Supported Wireless LAN Controller Hardware Models

Table 1 lists the Prime Infrastructure supported devices for switches, WLCs, Access Points (APs), ISEs, and MSEs.

Table 1   *Supported Device Matrix for Switches, Cisco WLC, MSE, ISE, and AP*

Supported Switches	Supported Controllers	Supported MSE Devices	Supported ISE Devices	Supported Lightweight APs	Supported Autonomous APs	Remarks
Catalyst 3560 Series Switches [Cisco IOS Release 12.2(50)SE] Catalyst 3650 Series Ethernet Stackable Switch* Catalyst 3750 Switches [Cisco IOS Release 12.2(50)SE] Catalyst 3850 Series Ethernet Stackable Switch* Catalyst 3550 Series Ethernet Stackable Switch Catalyst 4500 Switches [Cisco IOS Release 12.2(50)SG]*	Cisco 3504 Wireless Controller Cisco 8540 Wireless Controller Cisco 8510 Wireless Controller Cisco 5520 Wireless Controller Cisco 5508 Wireless Controller Cisco 4400 Series Wireless Controllers Cisco 2504 Wireless Controller Cisco Flex 7510 Wireless Controllers Cisco Virtual Controller Cisco Wireless Service Module (WiSM) Cisco Wireless Service Module 2 (WiSM2) Cisco Wireless Controller on Cisco Services-Ready Engine (WLCM2 on SRE) Catalyst 3750G Integrated Wireless LAN Controller Cisco 5760 Wireless LAN Controller	Cisco 3355 Mobility Services Engine Cisco MSE Virtual Appliance	Cisco ISE 2.3 Cisco ISE 2.2 Cisco ISE 2.1 Cisco ISE 2.0 Cisco ISE 1.4 with the required patch[1] Cisco ISE 1.3 Cisco ISE 1.2	Cisco Aironet 3800i AP Cisco Aironet 3800e AP Cisco Aironet 3800p AP Cisco Aironet 3700i AP Cisco Aironet 3700e AP Cisco Aironet 3700p AP Cisco Aironet IW 3700 AP Cisco Aironet 3600i AP Cisco Aironet 3600e AP Cisco Aironet 3600p AP Cisco Aironet 3500i AP Cisco Aironet 3500e AP Cisco Aironet 3500p AP Cisco Aironet 2800i AP Cisco Aironet 2800e AP Cisco Aironet 2700i AP Cisco Aironet 2700e AP Cisco Aironet 2700p AP Cisco Aironet 2600i AP Cisco Aironet 2600e AP Cisco Aironet 1850i AP Cisco Aironet 1850e AP Cisco Aironet 1830i AP Cisco Aironet 1815i AP Cisco Aironet 1815w AP Cisco Aironet 1815t AP Cisco Aironet 1815m AP Cisco Aironet 1810 OfficeExtend Series AP Cisco Aironet 1810w AP Cisco Aironet 1700i AP Cisco Aironet 1700E AP Cisco Aironet 1600i AP Cisco Aironet 1600e AP Cisco Aironet 1572IC AP Cisco Aironet 1572EAC AP	Cisco Aironet 3700 Series APs Cisco Aironet 3600 Series APs Cisco Aironet 3500 Series APs Cisco Aironet 2700 Series AP Cisco Aironet 2600 Series APs Cisco Aironet 1700 Series APs Cisco Aironet 1600 Series APs Cisco Aironet 1550 Series APs Cisco Aironet 1530 Series APs Cisco Aironet 1260 Series APs Cisco Aironet 1140 Series APs Cisco Aironet 1040 Series APs Cisco Aironet 702I Series APs Cisco Aironet 800 Series ISR Cisco Aironet 1310 and 1410 Bridges,	*Also acts as Cisco Wireless Controller.

Table 1   Supported Device Matrix for Switches, Cisco WLC, MSE, ISE, and AP (continued)

Supported Switches	Supported Controllers	Supported MSE Devices	Supported ISE Devices	Supported Lightweight APs	Supported Autonomous APs	Remarks
Catalyst 6500 Switches [Cisco IOS Release 12.2(33)SXI] and [Cisco IOS XE 03.07.00.E] Cisco NAM 2304 Appliance Cisco NAM 2320 Appliance Cisco IE 2000 Series Switches.	Cisco 5760 Wireless LAN Controller (STACK) The following Cisco Mobility Express Controllers are supported: • Cisco Aironet 2800 AP • Cisco Aironet 3800 AP • Cisco Aironet 1850 AP • Cisco Aironet 1830 AP			Cisco Aironet 1562I AP Cisco Aironet 1562E AP Cisco Aironet 1562D AP Cisco Aironet 1562 PS AP Cisco Aironet 1552C AP Cisco Aironet 1552CU AP Cisco Aironet 1552E AP Cisco Aironet 1552EU APCisco Aironet 1552H AP Cisco Aironet 1542I AP Cisco Aironet 1542D AP Cisco Aironet 1532I AP Cisco Aironet 1200 AP Cisco Aironet 1140 AP Cisco Aironet 1130 AG AP Cisco Aironet 1040 AP Cisco Aironet 700 AP Cisco Aironet 702W AP Cisco Aironet 600 Series OfficeExtend AP		

1.If you are using Cisco ISE 1.4, you must have the patch
ise-patchbundle-1.4.0.253-Patch3-141133.x86_64.tar.gz, which you can get from the following location:
https://software.cisco.com/download/release.html?mdfid=283801620&flowid=26081&softwareid=28380250
5&release=1.4&relind=AVAILABLE&rellifecycle=&reltype=latest.

New Features and Enhancements

This section provides a brief description of new features and enhancements in this release. For more information about the features and benefits, as well as hardware and software specifications, see the Cisco Prime Infrastructure 3.3 Data Sheet at:
http://www.cisco.com/c/en/us/products/cloud-systems-management/prime-infrastructure/datasheet-listing.html

Platform

•   Scheduling Devices to Maintenance state—Allows you to schedule one or more devices to maintenance or managed state in the **Configuration > Network > Network Devices** page.

- Change Audit—Allows you to export audit logs records in Change Audit dashboard in CSV or PDF formats.

- Network Health Dashboard—Reports the health of wireless LAN controllers and clients. Key health metrics such as CPU and memory utilization of WLC and client onboarding, client coverage can be monitored using the new dashboard. You can configure health rules for critical metrics from this dashboard.

- Performance Dashboard—Allows you to export multiple supported dashlets data to a single CSV or PDF format.

- System Monitoring Dashboard > Overview Dashboard

  - The Memory Utilization, Disk Utilization and CPU Utilization dashlets have threshold markers indicated in red color, and a time slider provided at the bottom to zoom-in to a particular time period.

  - The Backup Information dashlet shows remote backup details.

  - A new dashlet named Database Monitoring is included for displaying top 10 tables with highest number of rows inserted.

- Alarms and Events—Generates an alarm and notifies the same, during the following scenarios:

  - When the status of a background job is failure for three consecutive cycles.

  - When a particular background job does not run for more than expected time.

- Reports—You can **Enable All/Disable All** Sub reports or **Enable/Disable** selected Sub report(s) depending on your requirements. Hover your mouse cursor over Enable/Disable link, to see which reports are enabled/disabled.

- Smart Inventory— Allows only limited features to be collected if the commit id on the device is not changed. Otherwise, full collection of features will happen. Prime Infrastructure will do a major inventory collection and full config archive only when there is a change in the configuration of the device, else only the physical information like images, flash, files, interface status, etc will be collected from the device. If there is no change in the running config of the device, config archive will not be triggered.

Wireless

- Rolling AP Upgrade—You can upgrade your APs' and Controller's software using Rolling AP Upgrade feature. You can create and add to APs to an upgrade group to prevent all Access Points from rebooting simultaneously.

- Copy antenna configuration parameters for radios—You can share antenna configuration parameters amongst radios in Lightweight AP Templates in Cisco Prime Infrastructure 3.3.

- Automatic suppression of Rogue Alarms. Cisco Prime Infrastructure 3.3 will not raise alarms for registered APs (by MAC Address).

- Cisco Prime Infrastructure 3.3 now supports:

  - AP 1815 TSN (83) - for both a & b radios. In addition, this AP can also act as a mobility controller.

  - Monitor mode for 1800 series Access Points. For APs - AP1850E, AP1850I, AP1830I, AP1810W, AP1815W, AP1815I, AP1800I, and AP1815M, monitor mode can be configured using templates, as well as is discoverable in Prime Infrastructure.

- Flex+Bridge mode for APs is now supported on Cisco Prime Infrastructure 3.3 for WLCs 8.0 onwards.

- Network Assurance —For a WLC to communicate with Prime Infrastructure, the WLC needs to have an NA Server CA Certificate for authentication. Cisco Prime Infrastructure 3.3 introduces the ability to Configure Network Assurance, generate and upload CA certificates, and download certificates to controllers. Prime Infrastructure 3.3 supports Network Assurance for AireOS 8.6 controllers.

  – Client Health Scoring - New health rules for calculating client experience scores.

  – WLC Health Scoring - Define health rules for CPU and memory utilization of WLCs.

  – Network Dashboard Enhancements - New Dashlets are added health monitoring:

  - Clients with bad onboarding score

  - Clients with bad coverage

  - Access points availability trend

  - Top N APs with coverage issues

  - Top N APs with onboarding issues

- New Site Maps—New Site Maps features introduced in Cisco Prime Infrastructure 3.3:

  – Client Playback

  – NextGen Map Charts

  – GeoMap AP Placement

  – DXF Layer support for CAD images

Operations Center

- AP tab support—Allows you to view the **Unified AP** and **Third Party AP** tabs when youselect any of the location groups in Device Group pane in the **Monitor > Managed Elements > Network Devices page.**

- Viewing software updates—Allows you to view software update status such as latest patch and its version in the **Monitor > Monitoring Tools > Manage and Monitor Servers** page.

- Notification Receiver and Alarm Notification Policy support—Allows you to create and customize Alarm Notification Policy in the **Monitor > Monitoring Tools > Alarm Notification Policy** and **Administration > Settings > System Settings > Alarms and Events> Notification Policies** pages.

Fault and Polling

- Syslog Viewer—The **Monitor > Monitoring Tools > Syslog Viewer** page includes **Take SnapShot** tab to view the static syslogs.

- Alarm Policy—The **Monitor > Monitoring Tools > Alarm Policies** Page includes a new policy named **System** and a new tab named **Action Options**. For more information, See the section *Create A New Alarm Policy* in the Cisco Prime Infrastructure 3.3 User Guide.

UI Enhancements

- Device 360 Degree View—Includes the **Show All** button to view all the instances of memory utilization of the device.

- Advanced Search—Includes **Change Audit** as new search category.

Important Notes

This section contains important notes about Prime Infrastructure.

- Prime Infrastructure is available on the Cisco Unified Computing System (UCS) Appliance. Prime Infrastructure 3.3 is not supported on the PRIME-NCS-APL-K9 (also known as "Gen 1"). Prime Infrastructure 3.3 is supported on PI-UCS-APL-K9 (also known as Gen 2, UCS based).

- Compliance is supported on the Professional virtual appliance (OVA), Standard OVAs and the Gen 2, UCS-based physical appliance only. It is not supported on: Express, Express Plus, OVAs that have been resized to Professional or Standard, Gen 1 physical appliances. If you are running Prime Infrastructure on an unsupported OVA or physical appliance and want to enable Compliance, you must perform a fresh install of the 3.3 Professional OVA or Standard OVA or Gen2 UCS appliance, then use backup/restore to migrate data from your old server to the new server.

- Starting with Cisco IOS Release 15.2(5)E, Secure Shell (SSH) Version 1 is deprecated. Use SSH Version 2 instead.

- When you upgrade the Prime Infrastructure from Release 3.1.x or 3.2.x to 3.3, you must reconfigure the following System Jobs available under **Administration > Dashboards > Job Dashboard > System Jobs > Infrastructure**:

  – Controller Configuration Backup— Reconfigure this job to resume it from the suspended state.

  – Server Backup—Reconfigure the execution period of this job if the period is other than 1 day (Default period will be set to 1 day after the upgrade).

- The deployment of APIC-EM Release 1.4.x may have TLS handshake failure when integrating with Prime Infrastructure 3.3. This may lead to loss of Application Health and blank QoS/Application charts on the APIC-EM IWAN Application 1.4.x during the integration.

  Use the following workaround to overcome the application health error caused in the IWAN application due to handshake failure:

  – Open a CLI session with the Prime Infrastructure server. See How to Connect vis CLI in Cisco Prime Infrastructure Administrator Guide.

  – Enter the following command to enable the required TLS version:

    ncs run tls-server-versions *tls-versions*

    For example, to enable TLSv1.2, TLSv1.1 and TLSv1.0, enter the following command:

    `PISever/admin#` **ncs run tls-server-versions TLSv1.2 TLSv1.1 TLSv1**

  – Restart the Prime Infrastructure server.

- If you launch Cisco Prime Infrastructure 3.3 from Google Chrome 58.0.3029.96 on Windows 10, the select all check box in Table widgets will not work as expected. If you prefer to use Google Chrome, we recommend you to use Windows 7 or other supported OS, see Web client Requirements in *Cisco Prime Infrastructure 3.3 Quick Start Guide*.

- While creating a new floor or editing an existing floor, if a CAD image file is uploaded as a background floor plan, there may be inconsistencies between how APs, clients, so on are positioned in the legacy maps and the Next Generation maps. If the discrepancies are detected, edit the floor in the legacy maps and upload the CAD file again.

- API Queries - Replace unencoded double-quote characters in API queries with %22 (percent-encoding).

- Use the following workaround if wireless AP provisioning is not working when APIC-EM GA Release 1.5.0.x is integrated with PNP.

- – Uninstall APIC-EM GA Release 1.5.0.

- – Download the APIC-EM iso file (APIC-EM-1.4.3.1009.iso) and APIC-EM upgrade package (apic_em_update-apic-GA5-1.5.0.1368.tar.gz) from Cisco.com.

- – Install APIC-EM GA Release 1.4.3.1009.

- – Once the server is up and running, login to the APIC-EM server as an administrator.

- – Click settings icon.

- – Click **Settings** under **APIC-EM**.

- – In the left panel, click **Update** under **Controller Settings**.

- – Drag and drop the downloaded **apic_em_update-apic-GA5-1.5.0.1368.tar.gz** file to the **Drag & Drop Release Upgrade Package** file area

- • Converting old Email and Trap notification data to new alarm notification policy is supported in the following upgrade/migration scenarios:

  - – 3.0.x to 3.2

  - – 3.1.x to 3.2

  - – 3.1.x to 3.3

  - – 3.2.x to 3.3

  The invalid notification policies existing in Prime Infrastructure 3.2 will not get converted to new policies after migrating to Prime Infrastructure 3.3. You must delete the invalid migrated policies in Prime Infrastructure 3.3 and create new policies.

- • If the email address contains numeric value (e.g. 123456@xyz.com), the email notification sent to the email destination will contain only the alarm instance ID.

- • Cisco Web Security Appliance (WSA) functionality will work only in Professional and GEN2 configurations.

- • CLI templates and Guest users cannot be deployed from Wireless Configuration Groups.

- • User group task list will be updated due to addition of new tasks after an upgrade. You must update the task list on remote ACS using the new set of task attributes on the upgraded Prime Infrastructure instance for seamless remote authentications.

Open Caveats

Table 2 lists the open caveats in Prime Infrastructure Release 3.3.

Click the identifier to view the impact and workaround for the caveat. This information is displayed in the Bug Search Tool. You can track the status of the open caveats using the Bug Search Tool.

Table 2   *Open Caveats*

Identifier	Description
CSCuy86411	Event window update takes too long when the user moves the scroll bar.
CSCvd22313	Switches and routers are not enabled in alarm summary by default.
CSCvd99402	IPV6 device not supported in Notification Policy.
CSCvf30985	Policy profile rule column remains blank and Policy profile tool-tip shows incorrect information.

Table 2   *Open Caveats*

CSCvg25502	Prime Infrastructure 3.2:Compliance Audit job displays inconsistent output.
CSCvf75659	Unable to remove device from dynamic based group on topology map.
CSCvg58298	Compliance policies that collect data based on the device properties settings do not retain the settings after editing and saving the compliance rule.s
CSCvg60667	Prime infrastructure allows selection of 1000 disassociated list of Access Points but deletes only 500.s
CSCvg66383	Performance Dashboard does not populate the information on Top N Clients, Access Points and controllers.
CSCvg75486	ClientsRSSIOnbBadExp.cdb table is not getting created even though UI shows coverage issues.
CSCvg76604	No upload progress bar while uploading updates using **Copy from server's localdisk** radio button.
CSCvg89443	Import from cisco.com fails while using saved credentials in network device flow alone.

Resolved Caveats

The following caveats were resolved in this release. You can view additional information about these caveats in the Bug Search Tool.

Table 3   *Resolved Caveats*

Identifier	Description
CSCuy69105	**Configuration > Features and Technologies** page hangs for 10 seconds after template creation.
CSCuz60817	Deletion of 5 maps takes long time and Prime Infrastructure logs out due to the inactivity.
CSCva20201	Smart Licensing registration fails with connection error after registering with invalid URL.
CSCvd22761	HA Failback to primary fails in restored server while full database copy is successful.
CSCvd67569	Notification destination when edited with virtual domain value shows an error pops up.
CSCvd88163	Prime Infrastructure 3.2: Taking more time to create job during Configuration template deployment in Upgrade setup.
CSCve53277	Import switch location is not working and no popup is displayed.
CSCve53387	Notification Policy destination tab shows incorrect time duration.
CSCve57369	Voice video Netflow RAW report CDB file is not created and Raw report does not show any data.
CSCve58093	Prime Infrastructure 3.2: App Health error on IWAN App 1.4.2 due to handshake failure.
CSCve60590	Prime Infrastructure 3.2: Lat/long settings of system campus does not work.
CSCve61599	Stopped wcsadmin services does not restart in secondary (at any stage).
CSCve64614	In Read Only mode, Device Group page lists out all the devices from other domains.
CSCve65825	PfR page has issue in displaying time filter in Japanese and Korean Languages.
CSCve66170	Client Spartan Dashlets shows the same data multiple times when the dashlet is viewed for the first time.
CSCve74168	Unable to edit/see Discovery source devices in upgraded server.
CSCve76606	NorthBound Interface encodes the $cWNotificationSourceDisplayName field incorrectly.
CSCve79662	Schedule Overwrite job shows yes for Startup/Running Mismatch.

Table 3　　　*Resolved Caveats*

CSCve83267	Error when accessing aggregation doc from NBI API documentation page.
CSCve85047	The notification policy summary page shows the selected as 0.
CSCve88735	Swim device verification for 500 devices takes 5 to 6 min.
CSCve93208	Restart Prime Infrastructure button is disabled for root user.
CSCvf03671	AP device provisioning is not working with new APIC-EM version 1.5.0.1368 (PNP APP 1.5.0.200 and 211)
CSCvg22251	Inventory report presents only single CDP value even though many CDP values are present in DB.
CSCvg32540	SAM daemon aggregation is failing while inserting records into Hosts table from cdb file.

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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