



## **Cisco Prime Collaboration Provisioning Install and Upgrade Guide 12.6SU3**

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# CHAPTER 1

## Plan Your Installation

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- [Cisco Prime Collaboration Provisioning Overview, on page 1](#)
- [Deployment Modes, on page 3](#)
- [Distributed Setup, on page 4](#)
- [Cisco Prime Collaboration Provisioning Licensing, on page 4](#)
- [Installation Requirements, on page 7](#)

## Cisco Prime Collaboration Provisioning Overview

Cisco Prime Collaboration Provisioning provides a scalable web-based solution to manage your company's next-generation communication services. It manages IP communication endpoints and services in an integrated IP telephony, video, voicemail, and unified messaging environment that includes Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity (not applicable for Cisco Prime Collaboration 11.0 and later versions), Cisco Unity Express, Cisco Unity Connection, and analog gateways.



### Note

- Throughout this document, any reference to Cisco Unified Communications Manager can also be understood to refer to Cisco Unified Communications Manager, unless explicitly noted.
- Video provisioning is supported for endpoints registered to Cisco Unified Communications Manager only. Cisco Prime Collaboration Provisioning does not support video endpoints registered to Video Communication Server (VCS).

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Cisco Prime Collaboration Provisioning provides the following features:

- Provisioning for initial deployments and implementations.
- Ongoing operational provisioning and activation services for individual users.
- A single, consolidated view of users across the organization. It provides a set of business-level management abstractions, which are policy-driven by using automation, for managing user services across the Cisco Unified Communications applications.
- Templates, which allow you to define standard configurations for reuse. Batch provisioning permits the rollout of large numbers of users at the same time.
- The ability to configure policies regarding delegation and interaction with other business-level services.

By using this policy and standard configuration approach, you can provision and activate user services easily. At the same time, it retains the overall ability to manage and provide services that use the underlying Cisco Unified Communications applications.

Refer [Cisco Prime Collaboration 12.X Data Sheet](#) for more details on the features and benefits of Cisco Prime Collaboration Provisioning.

Cisco Prime Collaboration Provisioning permits standard services (for example an endpoint, line, or voice mail) to be ordered for a user (the owner of the individual endpoint, line, or voice mail). You can also order Cisco Jabber Services for Tablet, Desktop, Android, BlackBerry, and iPhone. Cisco Prime Collaboration Provisioning processes all changes to the underlying Cisco Unified Communications applications as service requests or orders.

Cisco Prime Collaboration Provisioning creates an order to make a user-level change (to an endpoint, a line, and so on), or an IP communications-level infrastructure change (such as provisioning a new calling search space or route pattern). All orders in the system are tracked and viewable, both across orders and by username or ID. The order records show who initiated the order, the times of various process steps, and what the order contained.

Cisco Prime Collaboration Provisioning allows delegation of the order management capability so that requests for service additions, changes, or deletions can be done without requiring an underlying knowledge of the voice applications that are delivering those services. Cisco Prime Collaboration Provisioning provides the same service management experience, regardless of the technology delivering the Cisco Unified Communications services.

### Terms Used in This Guide

- **Device**—Includes all applications such as Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Instant Messaging and Presence (IM&P), and Cisco Unity Connection. Also includes infrastructure components such as ISR Gateway devices, Cisco IOS Router.
- **Processor**—A proxy for each instance of a device.
  - A Call Processor is a proxy for each instance of Cisco Unified Communications Manager and Cisco Unified Communications Manager Express.
  - A Unified Message Processor is a proxy for each instance of Cisco Unity (not applicable for Cisco Prime Collaboration 11.0 and later versions), Cisco Unity Express, and Cisco Unity Connection.
  - A Unified Presence Processor is a proxy for each instance of IM and Presence.
- **Endpoint**—Includes all active software and hardware voice, video, and collaboration devices with which the users interact. For example, phones (99xx, 88xx, 79xx, 78xx), tablets, Telepresence devices, Cisco Jabber clients, personal Telepresence units (DX series, EX series, MX series, SX series), mobile devices running Cisco Jabber, and so on.
- **User**—A person for whom an active IP Telephony service has been enabled. A user in Prime Collaboration Provisioning also represents an entity that can access Prime Collaboration Provisioning to perform various activities.
- **Service**—Service is the settings and integration needed to perform a series of functions expected by the user. For example, providing an endpoint service implies that the user will be able to perform dial out, ring, allow answering, have speed dials, forward to voicemail, transfer, conference and so on.
- **Domains**—Domains are groupings of users. One or more system users can be authorized to manage services for users within the Domain. In addition, rules or policies may be set on a Domain; those rules



and policies will apply to services for users in that Domain. Common policies can also be applied on operations within a Domain. A domain administrator handles moves, adds, changes, and deletes (MACD) for users in that domain. Advanced Provisioning supports assigning individual administrators to individual groups.

- **Service Areas**—Service Areas are groupings within a Domain that are used to structure and manage the required IP telephony and messaging services across geographic, organizational, or technological boundaries. The Service Area typically acts as a service offering location, or site, and provides a template mechanism that determines provisioning attribute values used during order processing. A Service Area also handles Cisco Unified CM partitioning and class of service by directing which location, device pool and route partition assignments to use for any user provisioned into that Service Area.
- **User roles**—User roles provide policy enforcement, controlling which products and services are allowed to be ordered for different types of users such as contractors, executives or sales persons. They are also used in a filtering process that controls what choices are presented to order administrators at order time. The User Role setup also determines what services are ordered and which service templates are applied for a given user type during the Automatic Service Provisioning process. An administrator may create many User Roles to define different levels of services. The default user roles are: Employee, Executive and Room.
- **Service Templates**—Service Templates are a convenience for administrators setting up devices or ordering services for an end-user. Service Templates allow small or large amounts of settings to be collected into a single template which can be applied to endpoints or services. This saves time over setting many individual attributes and provides accuracy to prevent missed attributes or typos in attribute fields. Service Templates can leverage keywords and keyword truncation to customize line text displayed on endpoints. Service Templates contain provisioning attributes for a service and enables you to configure service attribute settings using provisioning attributes. Provisioning attributes are configuration settings that are applied to a service during activation.

## Cisco Prime Collaboration High Availability

Cisco Prime Collaboration supports high availability (HA) through the VMware vSphere HA feature. You do not need an additional Cisco Prime Collaboration license to configure HA. For details on how to configure the virtualization layer HA for Cisco Prime Collaboration, see the [VMware vSphere HA for Cisco Prime Collaboration white paper](#).

## Deployment Modes

You can install Cisco Prime Collaboration in two modes—Standard and Advanced. The installation process for both these modes are the same.

### Cisco Prime Collaboration Provisioning Standard

This deployment mode is a single cluster node with almost all the Cisco Prime Collaboration Provisioning Advanced capabilities except the following:

- User group delegation.
- Multicluster capability.
- Ability to create administration roles.

- Workflow.
- Northbound API support.

### Cisco Prime Collaboration Provisioning Advanced

This deployment mode provides features such as delegation to individual domains, advanced batch provisioning in addition to the features listed above.

For information on the number of endpoints that you can manage in each deployment model, see [System Requirements](#).

For more details on available features, see the Standard and Advanced Prime Collaboration Provisioning section of [Cisco Prime Collaboration Provisioning Guide - Standard and Advanced](#).

You can download the Cisco Prime Collaboration OVA deployment file based on the maximum number of endpoints that you want to manage:

- Small OVA—up to 3000 phones
- Medium OVA—up to 20,000 phones
- Large OVA—up to 150,000 phones

## Distributed Setup

Cisco Prime Collaboration Provisioning Advanced provides two types of setups for large deployments: Standalone and Distributed.

In a Standalone setup, all application and database services run on the same server. In a Distributed setup, the application and database services run on two different servers providing scalability and flexibility. The encrypted data transfers between the servers ensure secured data transmission.

For information on configuring Cisco Prime Collaboration Provisioning in a distributed setup, see [Configure Cisco Prime Collaboration Provisioning OVA, on page 16](#).

## Cisco Prime Collaboration Provisioning Licensing

Cisco Prime Collaboration Provisioning is a licensed software product that is secured to the MAC of the virtual machine. The product license enables the features and endpoint quantities for the Cisco Prime Collaboration Provisioning that you choose to install. You can order a license based on the collaboration management options required, and the quantity of the endpoints.

### Access to the Software Image, PAK, and License File

The product numbers ordered for Cisco Prime Collaboration Provisioning are: R-xxx and L-xxx. When you order the product numbers, an email is sent to your ship-to email address. This email contains the instructions on how you can access the Cisco eDelivery site so that you can download the software images and license Product Authorization Keys (PAKs).

The software image is downloaded and installed on the virtual machine. The license PAK ID from the ESD site allows you to access the Cisco Licensing Site. You can access the Cisco Licensing Site and associate the

virtual machine MAC address to a license key or keys that are then installed on the virtual machines. These license keys activate the Cisco Prime Collaboration software to be used in a production environment. These license keys also convert a trial installation into a production environment.



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**Note** Cisco Prime Collaboration Provisioning requires that you have an individual license file. When the PAK is emailed to you, a license file is created for you to download. After you download the license file, you must register it with the Cisco Prime Collaboration Provisioning server.

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### Migration of Traditional Licenses to Smart Entitlement

If you want to upgrade to the Smart Licensing version of the product, then you are able to initiate the migration through the [License Registration Portal](#) or [Cisco Smart Software Manager](#). You can self-initiate this process by downloading and installing the Smart Licensing version of the software and registering the device to a Smart Account using a Registration Token. The migration of any entitlements tracked by Cisco automatically migrates to the Customers Smart Account. You will also be able to initiate the migration of unused classic PAKs to Smart Accounts for future consumption by products in Smart Mode. This process is available through the [License Registration Portal](#) or [Cisco Smart Software Manager](#).

If you are holding an active Cisco Software Support Service (SWSS) contract, then you can convert the traditional licenses to smart entitlements through the Cisco Smart Software Manager at <https://software.cisco.com/#SmartLicensing-LicenseConversion>.

## Cisco Prime Collaboration Provisioning Evaluation

In case of Traditional Licensing mode, Cisco Prime Collaboration Provisioning, by default, is installed in the evaluation mode is valid for 90 days. All the Cisco Prime Collaboration Provisioning advanced licensing features are enabled in this mode. You can do one of the following:

- Directly install Cisco Prime Collaboration in evaluation mode—Go to [Try Cisco Prime Collaboration](#) and click **Download Now**.
- Download the OVA file and follow the installation process—Go to [Cisco Prime Collaboration Software](#) and download the OVA file based on the number of endpoints that you want to manage.



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**Note** In Smart Licensing mode, before the product registers, it is in evaluation mode for 90 days. Once it is registered, it is no longer in evaluation period.

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In case of Traditional Licensing mode, after the expiry of the evaluation period for Cisco Prime Collaboration Provisioning, upload the license file to continue accessing the product.

You cannot move from Standard to Advanced Evaluation mode and also, from Standard or Advanced Evaluation mode to Standard mode. However, if you have an Advanced license file, you can move from Standard mode or Advanced Evaluation mode to Advanced mode. For more details, see the *Managing Licenses* section of the chapter *Setting Up the Server* in the [Cisco Prime Collaboration Provisioning Guide - Standard and Advanced](#).

## Cisco Prime Collaboration Provisioning Standard Licensing

Cisco Prime Collaboration Standard includes a subset of the features available in the Standalone Provisioning module. Cisco Prime Collaboration—Standard does not require a license.

For details on the differences between the Standard and Advanced versions of Cisco Prime Collaboration Provisioning, see the [Cisco Prime Collaboration - Standard and Advanced Offerings](#).

## Cisco Prime Collaboration Provisioning Advanced Licensing

Provisioning provides features such as delegation to individual domains, template support for configuring infrastructure instances, advanced batch provisioning, and so on.

There are two modes of installation—Standard and Evaluation or Advanced. Cisco Prime Collaboration Provisioning Standard is available with Cisco Unified Communications 10.0 and later. Cisco Prime Collaboration Provisioning Advanced is available for all supported version of Unified Communications suites. See [Deployment Modes, on page 3](#) for further details on Provisioning Standard and Advanced licensing features.

Cisco Prime Collaboration Provisioning—Advanced is further categorized as follows:

- Cisco Prime Collaboration Provisioning Image (R-PC-version) license (required to activate in a production network)
- Cisco Prime Collaboration Provisioning Scale (L-PC) license

You can purchase additional licenses based on the number of phones that you are managing. The number of licenses must be the same or greater than the number of endpoints configured in all UCM clusters managed by Cisco Prime Collaboration Provisioning. For details about the additional licenses and part numbers, refer to [Cisco Prime Collaboration Ordering Guide](#). You must have the Cisco partner privilege to access the Ordering Guide.

To register a new license file, log in to Cisco Prime Collaboration Provisioning. For more information, refer to [Cisco Prime Collaboration Ordering Guide](#).

To know the status of your Cisco Prime Collaboration Provisioning license, go to **Administration > License Management**. For more information on Provisioning licensing, refer to [Cisco Prime Collaboration Provisioning Guide](#).



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**Note** Scale licenses are cumulative, that is, you can combine licenses to increase the number of endpoints that you want to manage. Until a scale license is installed, some menu items in the user interface are disabled.

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# Installation Requirements

**Table 1: Installation Requirements**

Requirements	Description
Number of servers	Number of servers required for Cisco Prime Collaboration Provisioning depends on the installation mode. To learn about the installation modes and the required number of servers, see <a href="#">Number of Servers</a> .
Virtualization Requirements	The Cisco Prime Collaboration Provisioning images are in the OVA file format. To learn more about the VMware environment required, see <a href="#">VMware Requirements</a> .
System requirements	System requirements vary based on the number of endpoints that you want to manage. See <a href="#">System Requirements</a> .
Ports requirements	Cisco Prime Collaboration uses several protocols to communicate with other processes and devices. Ensure that the required ports are available for Cisco Prime Collaboration to communicate. For more details, see <a href="#">Required Ports for Prime Collaboration</a> .
Device configurations (Cisco Unified Communications Manager, Voice, and Video endpoints, and so on)	The endpoints and infrastructure devices require certain configurations for the Cisco Prime Collaboration server to communicate. For more details, see <a href="#">Setting Up Devices for Prime Collaboration Provisioning</a> .
Download Images	Cisco Prime Collaboration images are provided on the eDelivery site and on the <a href="#">Cisco.com support software download</a> site. You must have an order for an eDelivery or ESW contract.
User Accounts and Installation Prompts	During installation, you must perform the following: <ul style="list-style-type: none"> <li>• While installing Cisco Prime Collaboration Provisioning, the global admin account is created. You must specify the password for this account.</li> <li>• Specify the virtual machine details.</li> </ul> See <a href="#">Installation Prompts</a> .

## Number of Servers

Number of servers required for Cisco Prime Collaboration Provisioning depends on the installation mode.

**Table 2: Number of Servers as per the Deployment Modes**

Deployment Mode	Number of Server
Standalone	Cisco Prime Collaboration (including the database) is installed on a single virtual machine.
Distributed	Cisco Prime Collaboration and the database are installed on separate virtual machines.  Depending on the number of phones that you want to manage, the OVA size varies. Only large OVAs can be installed on the distributed set up.

For more information about configuring Cisco Prime Collaboration Provisioning, refer to [Configure Cisco Prime Collaboration Provisioning OVA](#), on page 16.

## VMware Requirements

Cisco Prime Collaboration Provisioning images are in the OVA file format.

Ensure that your VMware environment meets the following requirements:

- OVA file is downloaded and saved to the same machine on which the vSphere Client/ vSphere Web Client is installed.
- VMware ESXi is installed and configured on the ESXi host. See the VMware documentation for information on setting up and configuring your host machine.

The VMware vSphere client is Windows-based. Therefore, download and install the client from a Windows system.

After you install the VMware vSphere Client, you can run it and log in to the virtual host. You can log in to the virtual host using the hostname or IP address of the virtual host, the root login ID, and the password that you configured. You can add the host to a vCenter if you want to manage it through vCenter. See VMware documentation for details.

- VMware ESXi server hostname is configured in the DNS server.
- VMware ESXi server is synchronized with the NTP server.

## System Requirements

Cisco Prime Collaboration Provisioning runs on any VMware-certified hardware with ESXi 5.5, ESXi 6.0, ESXi 6.5, ESXi 6.7, and HX TRC 6.0 only. Large deployment models require ESXi 5.0.

You can also deploy OVAs on VMWare hosts running ESXi 6.0, ESXi 6.5, and ESXi 6.7.

**Note**

- The vSphere thick client is not available anymore. Hence, if you are using ESXi 6.5 or later for deployment with the thin client, you need to use the OVA where the file name specifies 'With ESXi 6.5 using Web client'.
- We recommend that you install and run Cisco Prime Collaboration on Cisco Unified Computing System (UCS), which is VMware-certified.
- Cisco Prime Collaboration runs on CentOS 7. This operating system is included with the Cisco Prime Collaboration application and is installed when the Cisco Prime Collaboration OVA is deployed.

The OVA defines the configuration of the virtual machine that includes the CPU, memory, disk, and network resources.

## Virtual Machine Requirements for Cisco Prime Collaboration Provisioning

This table lists the virtual machine requirements for the Cisco Prime Collaboration Provisioning application, based on the number of endpoints that are managed in Cisco Prime Collaboration. Number of vCPUs is based on using 2.7GHz or faster processors for the Medium and Large models.

From Cisco Prime Collaboration Provisioning 12.1, single server setup has been implemented for large server installation. The network adapter type has been changed from E1000 to VMXNET 3.

Managed Endpoints	Number of vCPUs	Min vCPU Reservation	RAM	Memory Reservation	NIC	Disk Space
Up to 3000 endpoints (Small OVA)	1	2 GHz	2 GB	2 GB	1 GB	90 GB
Up to 20,000 endpoints (Medium OVA)	4	10.8 GHz	8 GB	8 GB	1 GB	120 GB
Up to 150,000 endpoints (Large OVA Server)	8	21.6 GHz	16 GB	16 GB	1 GB	150 GB

**Note**

On a Small OVA setup, when number of endpoints or users is close to 3000, if you are facing any performance issue or observing frequent nice process restarts, it is recommended to increase the RAM allocated to the Virtual Machine from 2GB to 3GB.

On a Large OVA setup, when number of endpoints or users is close to 1,50,000, if you are facing any performance issue or observing frequent nice process restarts, increase the RAM allocated to the Virtual Machine from 16GB to 20GB.

For more information on system capacity, see [System Capacity for Cisco Prime Collaboration Provisioning](#).

## Client Machine Requirements for Cisco Prime Collaboration Provisioning

Attributes	Values
Display Resolution	1440 x 900
Supported Browser	<p>The following browsers are supported in Cisco Prime Collaboration Provisioning:</p> <ul style="list-style-type: none"> <li>• Mozilla Firefox 60 and later</li> <li>• Windows Internet Explorer 11 and Microsoft Edge</li> <li>• Google Chrome 68 and later</li> </ul> <p>Prime Collaboration provides a self-signed certificate (HTTPS). To allow access of the Prime Collaboration client, ensure that security is set to either medium or low in Internet Explorer and perform the following:</p> <ul style="list-style-type: none"> <li>• Ensure that you enable cookies in the browser</li> <li>• Ensure that you set one of the following locales for Prime Collaboration Provisioning: <ul style="list-style-type: none"> <li>• English-United States [en-us]</li> <li>• Arabic-Saudi Arabia [ar-sa]</li> <li>• Chinese-China [zh]</li> <li>• Chinese-Taiwan [zh-tw]</li> <li>• Danish-Denmark [da]</li> <li>• Dutch-Netherlands [nl]</li> <li>• French-France [fr]</li> <li>• German-Germany [de]</li> <li>• Italian-Italy [it]</li> <li>• Japanese-Japan [ja]</li> <li>• Korean-Korea Republic [ko]</li> <li>• Portugese-Brazil [pt-br]</li> <li>• Russian-Russia [ru]</li> <li>• Spanish-Spain [es-es]</li> <li>• Swedish-Sweden [sv-se]</li> </ul> </li> <li>• Ensure that you disable the popup blocker if you have installed it, as Prime Collaboration uses popup dialog boxes at several instances.</li> </ul>



Attributes	Values
Environment	<p>Clients must be able to access Cisco Prime Collaboration:</p> <ul style="list-style-type: none"><li>• From outside the firewall, refer to your firewall documentation for information on how to configure client access.</li><li>• Across a Virtual Private Network (VPN), the VPN tunnel must connect the client and a VPN router or similar device. See <a href="#">Required Ports for Prime Collaboration</a>.</li></ul>





## CHAPTER 2

# Pre-Installation Tasks

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- [Download Cisco Prime Collaboration Provisioning, on page 13](#)
- [User Accounts, on page 14](#)
- [Installation Prompts, on page 14](#)

## Download Cisco Prime Collaboration Provisioning

Cisco Prime Collaboration images are provided on the eDelivery site and on the [Cisco.com support software download](#) site. You must have an order for an eDelivery or ESW contract.



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### Important

Download the OVA file on a machine where the vSphere client is installed. To ensure that the downloaded OVA file is not corrupt, you must verify if the Message Digest 5 (MD5) Checksum of the OVA file matches with the value in the download site. To view the MD5 Checksum of the OVA file available in [Cisco.com support software download](#) site, hover your mouse over the filename.

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To install Cisco Prime Collaboration Provisioning, download the Cisco Prime Collaboration Provisioning OVA file based on the maximum number of endpoints that you want to manage.

You can configure the Cisco Prime Collaboration Provisioning application for the following types of deployment models:

- Cisco Prime Collaboration Provisioning OVA for a small deployment—For up to 3000 phones
- Cisco Prime Collaboration Provisioning OVA for a medium deployment—For up to 20,000 phones
- Cisco Prime Collaboration Provisioning OVA for a large deployment—For up to 150,000 phones

The OVA file format is `cpc-provisioning-<version number>-<build number>-<deployment type>_SIGNED.ova`; where, the version number is the Cisco Prime Collaboration release number 12.6 and the deployment type is small, medium, or large.

You must have a valid Cisco.com user account to download the files.

See [Setting up Devices for Cisco Prime Collaboration Provisioning](#) for information about setting up the devices in your network for Cisco Prime Collaboration.

# User Accounts

For Cisco Prime Collaboration, specify various passwords at different instances.

- **globaladmin**—Special account which can be used to initially access and configure the Cisco Prime Collaboration Provisioning User Interface.
- **globaladmin password**—Password to access Cisco Prime Collaboration Provisioning UI.

In Cisco Prime Collaboration Provisioning, **globaladmin password** is used for the postgres administrator (to perform backup and restore operations).

# Installation Prompts

During installation of Cisco Prime Collaboration Provisioning, specify the virtual machine details.

We recommend that you know the values for the following parameters, before configuring the virtual appliance:

- **IP address**—IP address of the virtual appliance
  - For Distributed setup**—IP addresses of the Database and Application servers
- **IP default netmask**—Default subnet mask for the IP address
- **Host Name**—Host Name of the virtual appliance
- **IP default gateway**—IP address of the default gateway
- **Default DNS domain**—Default domain name
- **Primary nameserver**—Primary name server. You may add the name server. To configure several name servers, enter **y**.
- **Primary NTP server[time.nist.gov]**—Primary NTP server. To enter a secondary NTP server, enter **y** at the next prompt. One NTP server is required during installation to timestamp logs and set the system time initially. Up to four more NTP servers can be added through the Administration settings after installation.



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**Note** To configure a tertiary NTP server, enter **y** at the next prompt after you specify a secondary NTP server. Cisco Prime Collaboration Provisioning supports up to three NTP servers at the time of installation.

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- **Time zone**—Time stamp that is displayed on the user interface is the server time. By default, the configured time zone is UTC. For a list of supported time zones, see [Supported Timezones for Prime Collaboration](#).
- **global admin password**—Password for the global administrator.



## CHAPTER 3

# Installation Tasks

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- [Cisco Prime Collaboration Provisioning Installation, on page 15](#)

## Cisco Prime Collaboration Provisioning Installation

You require one virtual machine to install and configure a standalone Cisco Prime Collaboration Provisioning setup. A distributed setup requires two virtual machines, one each for the database and application servers. The distributed setup is available only for a large OVA deployment in Advanced Prime Collaboration Provisioning. You can configure the virtual appliance after deploying the OVA file.

For more information on configuring OVA, see [Configure Cisco Prime Collaboration Provisioning OVA, on page 16](#).

## Deploy Cisco Prime Collaboration Provisioning OVA

### Before You Begin

Ensure that requirements listed in [Installation Requirements, on page 7](#) and [System Requirements, on page 8](#) have been met.

### Procedure

---

- Step 1** Launch VMware vSphere Client and select **File > Deploy OVF Template**.
- Step 2** In the **Deploy OVF Template** window, click **Deploy** from file.
- Step 3** Click **Browse** and navigate to the location where you have saved the Cisco Prime Collaboration Provisioning OVA file. Click **Next**.
- Step 4** In the **OVF Template Details** window, verify the details about the OVA file, including the product name, version, and the size, and then click **Next**.  
  
Ensure that the Publisher field in the OVF Template Details window displays Cisco Systems, Inc with a green check mark next to it.
- Step 5** Click **Accept** to accept the end-user license agreement. Click **Next**.
- Step 6** In the **Name and Location** window, specify a name and location for the template that you are deploying. The name must be unique within the inventory folder and can contain up to 80 characters. Click **Next**.

- Step 7** In the **Disk Format** window, select **Thick provisioned format** to store on the virtual disks, and then click **Next**.
- Step 8** Verify the options in the **Ready to Complete** window, and then click **Finish** to start the deployment.  
The deployment takes about 30 minutes to complete. Check the progress bar in the **Deploying Virtual Appliance** window to monitor the task status.
- Step 9** Click **Close**.  
The virtual appliance that you deployed appears in the left pane of the vSphere Client, under the host.

## Configure Cisco Prime Collaboration Provisioning OVA

### Procedure

- Step 1** Start the virtual machine by right-clicking the virtual appliance and selecting **Power > Power On**.
- Step 2** In the virtual appliance Console, enter **setup** at the localhost login prompt.
- Step 3** Enter the required parameters at the prompts and press **Enter** to bring up the next parameter. Refer to [Installation Prompts, on page 14](#).
- Step 4** Specify the Prime Collaboration Provisioning version for installation when prompted:
- Standard Prime Collaboration Provisioning
  - Advanced Prime Collaboration Provisioning (with 90-day evaluation)
- Enter 1 for the Standard version and 2 for the Advanced version.
- Note** The default installation version is Standard.
- Step 5** To install the Standard version, go to Step 10. To install the Advanced version, proceed to the next step.
- Step 6** Specify the setup type when prompted:
- Standalone
  - Distributed
- Enter 1 for the Standalone setup and 2 for the Distributed setup.
- Note**
- The default Prime Collaboration Provisioning setup type is Standalone.
  - The distributed setup is available only for a large OVA deployment in Advanced Prime Collaboration Provisioning.
  - The distributed setup allows installation of the Application and the Database Servers on two different servers.
  - Configure the Database Server before the Application Server.
  - Ensure to use the same OVA for both the servers.
  - For snapshot revert in a distributed setup, perform the steps provided in the [Snapshot Revert in a Distributed Setup, on page 24](#) section.

**Step 7** For Standalone setup, go to Step 11. For Distributed setup, proceed to the next step.

**Step 8** Select the type of the server:

1. Database Server
2. Application Server

**Note** Install the Database Server before installing the Application Server.

Enter **1** to configure the current server as the Database Server.

**Step 9** Enter the IP address of the Application Server.

The virtual machine reboots.

**Step 10** Perform the following steps to configure the Application Server:

- a) Deploy the Application Server. Refer to [Deploy Cisco Prime Collaboration Provisioning OVA, on page 15](#).
- b) Configure the Application Server by following Steps 1 to 3.
- c) Enter **2** to configure the current server as the Application Server.
- d) When prompted, enter the IP address of the database server that is already configured.

The virtual machine reboots.

**Step 11** After completing the installation, wait approximately 30 minutes for the Cisco Prime Collaboration Provisioning processes to be listed on the console.

**Step 12** Log in to the Application Server to verify the installation. Refer to [Verify Cisco Prime Collaboration Provisioning Installation, on page 21](#).

**Note** Your account is locked after three consecutive unsuccessful login attempts. For the root user, the account is automatically unlocked after 10 minutes and for other user accounts after 12 hours.







## CHAPTER 4

# Post Installation Tasks

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- [Log in to Cisco Prime Collaboration Provisioning, on page 19](#)
- [Get Started with Cisco Prime Collaboration Provisioning, on page 20](#)
- [Verify Cisco Prime Collaboration Provisioning Installation, on page 21](#)
- [Generate Certificate Signing Request \(CSR\), on page 23](#)
- [Uninstall Cisco Prime Collaboration Provisioning, on page 24](#)
- [Troubleshooting Account, on page 24](#)
- [Snapshot Revert in a Distributed Setup, on page 24](#)

## Log in to Cisco Prime Collaboration Provisioning

You can invoke Cisco Prime Collaboration using the client browser.

### Before you begin

Ensure that you have a browser that supports Cisco Prime Collaboration Provisioning. For more information on supported browsers, see [System Requirements](#).

### Procedure

---

**Step 1** Open a browser session from your machine. .

For a standalone mode, Specify the IP address of the Cisco Prime Collaboration Provisioning application.

**Step 2** Enter either of the following:`http://IP Address` OR `https://IP Address`

**Note**

- For Cisco Prime Collaboration Assurance, HTTPS has been enabled by default; whereas, for Cisco Prime Collaboration Provisioning, HTTP has been enabled by default.

To enable HTTPS for Cisco Prime Collaboration Provisioning, configure OpenSSL packages that are packaged with the Cisco Prime Collaboration Provisioning OVA. See [Enabling SSL for Prime Collaboration Provisioning](#).

- You can use either the IP address or the hostname of the Cisco Prime Collaboration Provisioning server. We recommend that you use the hostname if you have configured it in DNS.
- Troubleshooting Account CLI is supported only through SSH; Telnet is not supported. The port used for Cisco Prime Collaboration Provisioning is 22.

Based on the browser you are using, you see one of the following:

- In Windows Internet Explorer, **the Certificate Error: Navigation Blocked** window.
- In Mozilla Firefox, **the Untrusted Connection** window.
- In Google Chrome, **the Privacy Error: Connection is not private** window.

These windows appear because Cisco Prime Collaboration uses a self-signed certificate.

**Step 3** Remove the SSL certificate warning.

The **Cisco Prime Collaboration login** page appears.

**Step 4** In the **Cisco Prime Collaboration login** page, you must log in for the first time as a global administrator, using the same credentials that you specified during the installation.

The dashboard data is populated only after you perform tasks listed in the following table.

## Get Started with Cisco Prime Collaboration Provisioning

After you install Cisco Prime Collaboration Provisioning, perform the tasks listed in the following table:

	<b>Task and Description</b>	<b>Navigation in Cisco Prime Collaboration Provisioning Application</b>	<b>Reference Section/Chapter in Cisco Prime Collaboration Provisioning Guide - Standard and Advanced</b>
Step 1	(Optional if you are evaluating the product or have installed the product in standard mode) Register a new license file.	<b>Administration &gt; License Management</b>  We recommend that you add a license file through the user interface.  <b>1. Administration &gt; License Management &gt; Add License Files</b>  The system validates the license file and updates the license. The updated licensing information appears on the <b>License Status Information</b> window ( <b>Administration &gt; License Management</b> ).  <b>Note</b> If the license status is not refreshed after a few minutes, manually refresh the <b>License Management</b> window to view the updated license status.	Setting Up the Server

	<b>Task and Description</b>	<b>Navigation in Cisco Prime Collaboration Provisioning Application</b>	<b>Reference Section/Chapter in Cisco Prime Collaboration Provisioning Guide - Standard and Advanced</b>
Step 2	Add, configure, and synchronize call processors and message processors.	<b>Infrastructure Setup &gt; Getting Started Wizard</b> <b>Infrastructure Setup &gt; Infrastructure Configuration</b>	Managing Devices
Step 3	Set up domain deployment: <ul style="list-style-type: none"> <li>• Create domains and assign call and message processors</li> <li>• Create service areas</li> <li>• Configure rules</li> <li>• Synchronize domain</li> </ul>	<b>User Provisioning</b>	Managing Domains and Service Areas Synchronizing Processors, Users, and Domains Managing Users
Step 4	Create and deploy templates to configure Cisco Unified Communication Manager or infrastructure configuration.	<b>User Provisioning</b> , or <b>Infrastructure Setup &gt; Configuration Template</b>	Configuring Templates in Provisioning
Step 5	Assign user roles to a service area.	<b>Provisioning Setup &gt; Domain &gt; Service Area &gt; Edit</b>	Managing Users
Step 6	Add a new user.	<b>User Provisioning &gt; Add</b>	Managing Users
Step 7	Provision user services.	<b>User Provisioning</b>	Managing Orders

## Verify Cisco Prime Collaboration Provisioning Installation

Perform the following procedure to verify whether Cisco Prime Collaboration Provisioning is installed properly.

### Verify Cisco Prime Collaboration Provisioning Installation 11.x

#### Procedure

- 
- Step 1** In a browser, specify the IP address of the server on which Cisco Prime Collaboration Provisioning (standard or advanced) is installed. The login page is displayed. Log in with global administrator credentials.
- Step 2** Log in to the Provisioning server using the SSH service and with the CLI administrator that you created during OVA configuration. By default, this username is admin.
- Step 3** Display the processes that are running.
- show application status cpcm**

**bash : no job control in this shell httpd** denotes httpd service

**nice.sh** denotes Nice service

**startcupm.sh** denotes Jboss service

**postmaster/su** denotes Postgres service

```
STAT PID USER COMMAND ELAPSED
```

```
=====
```

```
Ss 629 root httpd 02:11:38
```

```
S 613 root nice.sh 02:11:38
```

```
S 610 root startcupm.sh 02:11:38
```

```
S 608 root su 02:11:38
```

The parameters in the COMMAND column are the processes that are running on the Cisco Prime Collaboration Provisioning server (standard or advanced). If you do not see the processes running, enter the following commands to restart the Cisco Prime Collaboration Provisioning services:

**admin#application stop cpcm**

**admin#application start cpcm**

These commands take one or two minutes to stop or start the Cisco Prime Collaboration Provisioning services.

**Step 4** You can verify if the installation is complete and successful, by checking if the JBoss service is running. In the SSH terminal, run the following command:

**ps - aef|grep startcupm**

You can also check at what time the JBoss service was started, in the following location (in the last line of the log file):

```
/opt/cupm/sep/logs/jboss.log
```

If the JBoss service is running, see [Log in to Cisco Prime Collaboration Provisioning](#), to get started with the Cisco Prime Collaboration Provisioning application.

## Verify Cisco Prime Collaboration Provisioning Installation 12.x

### Procedure

- 
- Step 1** Log in to the Cisco Prime Collaboration Provisioning server as globaladmin.
  - Step 2** Go to **Administration > Logging and Showtech**.
  - Step 3** Create a troubleshooting user, and obtain the response string by mailing challenge string to the Engineering Team.
  - Step 4** Log in as troubleshooting user to the Troubleshooting UI.  
With the Troubleshooting UI, the user can check the services, create the console account, and access the Prime Collaboration Provisioning CLI.

**Step 5** Go to **Administration > Process Management**.

**Step 6** Verify if all the servers are running:

- PostgreSQL (Database)
  - Apache (Web Server)
  - JBOSS (Application Server)
  - NICE (Configuration Engine)
  - Troubleshooting Application
- 

## Generate Certificate Signing Request (CSR)

### Procedure

---

**Step 1** Go to micro service page, and then create a troubleshooting user. For creating a troubleshooting user, refer to [Create a Troubleshooting Account](#).

**Step 2** Generate the Console Account, and then login to the CLI account.

**Step 3** Go to `cd /opt/cupm/httpd/bin`

**Step 4** To generate the CSR, enter:

```
./openssl req -new -key <keyName>.key -out <csrName>.csr
```

**Step 5** Enter the appropriate details when prompted, such as:

**Country Name:** *<Country>*

**State/Prov:** *<State>*

**Locality:** *<Locality>*

**Organization name:** *<Org>*

**Organizational unit name:** *<unit>*

**Common name:** *<hostname>.<companyname>.com*

**Step 6** The generated CSR is available in the location `/opt/cupm/httpd`.

---

# Uninstall Cisco Prime Collaboration Provisioning

## Procedure

---

- Step 1** Log in to the vSphere Client and connect to the ESXi server that is running the virtual appliance that you want to uninstall.
- Step 2** Right-click the application and choose **Power > Shut Down Guest** (or choose **Power Off**).
- Step 3** Right-click the application and in the **Confirm Delete** window, choose **Delete from disk**.
- 

## Troubleshooting Account

For information on creating and accessing a troubleshooting account, see [Create a Troubleshooting Account, on page 47](#) and [Access Troubleshooting Account or Console Account, on page 51](#).

## Snapshot Revert in a Distributed Setup

For snapshot revert in a distributed setup, we recommend you to perform the following steps to avoid the inconsistent application behaviour such as Provisioning services not available as expected and blank UI on the Application server:



---

**Note** Snapshots of both database server and application server must have been taken at the same time. CLI access through the console account must be enabled before taking the VM snapshots.

---

1. Revert the snapshot for the database server.
2. Revert the snapshot for the application server.
3. Reboot the application server instance on the VM and wait for the login page to display in the browser.



---

**Note** If **Access Denied** error is displayed, repeat step 3.

---



# CHAPTER 5

## Plan Your Upgrade

- [Supported Upgrade Versions](#), on page 25
- [Migration from Cisco Unified Communications Management Suite](#), on page 29
- [Feature Support After Upgrade — Cisco Prime Collaboration Provisioning](#), on page 29
- [Cisco Prime Collaboration Provisioning Migration —12.1](#), on page 30
- [BackUpTool12\\_1Migration tool](#), on page 32

## Supported Upgrade Versions

The following table lists the release versions and how you can either upgrade or migrate other supported versions to arrive at the given version.

**Table 3: Supported Upgrade Versions**

Release	Migrate	Upgrade
11.x	NA	NA
12.1	11.1 and higher versions to 12.1	NA
12.2	NA	12.1 to 12.2
12.3	NA	<ul style="list-style-type: none"><li>• 12.1 to 12.3</li><li>• 12.2 to 12.3</li></ul>
12.4	NA	<ul style="list-style-type: none"><li>• 12.1 to 12.4</li><li>• 12.2 to 12.4</li><li>• 12.3 to 12.4</li></ul>
12.5	NA	12.4 to 12.5
12.6	NA	12.5 to 12.6

Release	Migrate	Upgrade
12.6SU1	NA	<ul style="list-style-type: none"> <li>• 12.5 to 12.6SU1</li> <li>• 12.6 to 12.6SU1</li> </ul>
12.6 SU2	NA	<ul style="list-style-type: none"> <li>• 12.5 to 12.6 to 12.6SU1 to 12.6SU2</li> <li>• 12.5 to 12.6SU2</li> <li>• 12.6 to 12.6SU2</li> <li>• 12.6 to 12.6SU1 to 12.6SU2</li> <li>• 12.6 SU1 to 12.6 SU2</li> </ul> <p><b>Note</b> While doing the long path upgrade from Cisco Prime Collaboration Provisioning version 11.6 take the snapshots in the intermediate paths or contact Technical Assistance Centre (TAC) for the right upgrade procedures, best practices and troubleshooting.</p>



Release	Migrate	Upgrade
12.6 SU3		<ul style="list-style-type: none"> <li>• 12.5 to 12.6 to 12.6 SU1 to 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> <li>• 12.5 to 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> <li>• 12.6 to 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> <li>• 12.6 to 12.6 SU1 to 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> <li>• 12.6 SU1 to 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> <li>• 12.6 SU2 to ES 14 patch install to 12.6 SU3</li> </ul> <p>ES 14 patch installable is PCP_12.6_ES14-12.6-3039.src.rpm .</p> <p><b>Important</b> Mandatory prerequisites for upgrading to Cisco Prime Collaboration Provisioning 12.6 SU3:</p> <ol style="list-style-type: none"> <li>1. Follow the upgrade paths given above to install from Cisco Prime Collaboration Provisioning 12.1 to 12.6 SU2.</li> <li>2. Install 12.6 SU2 patches <ul style="list-style-type: none"> <li>• If you do not have any 12.6 SU2 ES patch installed on the server earlier for example, 12.6 SU2 ES11 or 12.6 SU2 ES12 or 12.6 SU2 ES13, then install PCP 12.6 SU2 ES13 and then install the ES 14 patch (PCP_12.6_ES14-12.6-3039.src.rpm).</li> <li>• If you have any 12.6 SU2 ES patch already installed on the server, then proceed with ES 14 patch installation. Install the ES 14 patch (PCP_12.6_ES14-12.6-3039.src.rpm).</li> </ul> </li> <li>3. Upgrade to Cisco Prime Collaboration Provisioning 12.6 SU3.</li> </ol>



**Note**

- Cisco Prime Collaboration Provisioning supports the upgrade of versions 12.1, 12.2, 12.3, 12.4, 12.5, and 12.6.
- Direct upgrade from Cisco Prime Collaboration Provisioning 11.x to 12.x is not supported. You can migrate from 11.1 and higher versions to 12.1 and then upgrade to 12.2, 12.3, or 12.4.
- Direct upgrade from Cisco Prime Collaboration Provisioning 12.4 to versions above 12.5 is not supported. You can upgrade from 12.4 to 12.5 and then upgrade to 12.6 and above.
- We recommend that you install the Cisco Prime Collaboration Provisioning 12.1 692 build before migration. However, if you have already installed Cisco Prime Collaboration Provisioning 12.1 475 build, you can apply ES on the same build and proceed with the upgrade.
- The Upgrade Manager Patch (UpgradeManagerPatch-12.3-2.tar.gz) is mandatory for 12.3 to upgrade to another release.
- While upgrading to Cisco Prime Collaboration Provisioning 12.3 from earlier versions, ensure that there is no Unified Communications Manager release before 10.5(2) present in the server.
- Unified Communications Manager 10.x, Instant Messaging and Presence 10.x, and Cisco Unity Connection 10.x devices are not supported from Cisco Prime Collaboration Provisioning 12.6SU3 onwards.  
Upgrade will not proceed if the 10.x versions of these devices are present in the server. To proceed with the upgrade, update the 10.x versions of the devices to the respective supported versions.
- After upgrading to Cisco Prime Collaboration Provisioning 12.6SU3, if you are not redirected to the login page after 25 minutes, we recommend that you open the login page in a separate tab.
- For more information on migration, refer to [Cisco Prime Collaboration Provisioning Migration —12.1](#).

## Inline Upgrade from Release 12.3 to 12.4

Perform the following steps for in-line upgrade from Prime Collaboration Provisioning 12.3 to 12.4:

### Procedure

- 
- Step 1** Take a snapshot of the 12.3 Server.
  - Step 2** Download the Upgrade Manager patch file (UpgradeManagerPatch-12.3-2.tar.gz) from the Cisco site to your Desktop.
  - Step 3** Upload and Install the patch file from **Administration > Updates > Application Software Updates**.
  - Step 4** Wait for the Upgrade Manager patch to complete the Installation and Prime Collaboration Provisioning Login screen to appear.
  - Step 5** Log in to Prime Collaboration Provisioning and perform in-line upgrade with release 12.4 upgrade App Bundle.
-

## Upgrading Distributed Setup from 12.6 to 12.6SU1

### Before you begin

For CentOS upgrade on remote DB server, enable the console account for both database and application servers.

### Procedure

- 
- Step 1** Access the database server CLI using the console account and edit the following to add the **NOPASSWD** field for the console account created for database server:
- ```
sudo vi /etc/sudoers <console username> ALL=(ALL) NOPASSWD: ALL
```
- Step 2** Upload the Prime Collaboration Provisioning AppBundle in the Application server. On the popup message window, click **No** to restrict the initiation of upgrade.
- Step 3** Access the application server CLI and provide the database console account details in **db\_passwd.properties** file located at the path `/localdisk/PCProvisioning-AppBundle-Upgrade-*` and save.
- The following are the database console account details:
- ```
db.ts.user=<db_console_user>
db.ts.password=<db_console_password>
```
- Step 4** Go to Application Software Updates page (**Administration > Updates**). Select the uploaded Prime Collaboration Provisioning Appbundle and click **Install**. You are redirected to Prime Collaboration Provisioning login page after the upgrade (approximately 30 minutes).
- 

## Migration from Cisco Unified Communications Management Suite

### For Cisco Prime Collaboration 11.0 and earlier

The data migration from Cisco Unified Communications Management Suite to Cisco Prime Collaboration 11.0 is not supported directly. If you want the data to be migrated to Cisco Prime Collaboration, see the "Migrating from Cisco Unified Communications Management Suite" chapter in [Cisco Prime Collaboration Upgrade and Migration Guide](#).

After migration, upgrade to any of the supported upgrade versions and then to Cisco Prime Collaboration 11.0.

## Feature Support After Upgrade — Cisco Prime Collaboration Provisioning

### For Cisco Prime Collaboration 11.0 and earlier



---

**Note** When you upgrade from Evaluation mode, Standard mode, Advanced mode, and Cisco Prime Collaboration 10.x and 11.0, all the settings that you had set up in Cisco Prime Collaboration Provisioning are kept intact. You need not re-create them in Cisco Prime Collaboration 11.0. See the [Cisco Prime Collaboration Provisioning Guide](#) for information about features available in Standard and Advanced mode.

---

#### For Cisco Prime Collaboration 11.1 and later



---

**Note** When you upgrade from Evaluation mode, Standard mode, Advanced mode, and Cisco Prime Collaboration 10.x and 11.0, all the settings that you had set up in Cisco Prime Collaboration Provisioning are kept intact. There is no need to re-create them in Cisco Prime Collaboration 11.x. For more information on the features available in Standard and Advanced mode, see [Cisco Prime Collaboration Provisioning Guide](#).

---

#### For Cisco Prime Collaboration 12.6SU3 and later



---

**Note** Unified Communications Manager 10.x, Instant Messaging and Presence 10.x, and Cisco Unity Connection 10.x devices are not supported from Cisco Prime Collaboration Provisioning 12.6SU3 onwards.

Upgrade will not proceed if the 10.x versions of these devices are present in the server. To proceed with the upgrade, update the 10.x versions of the devices to the respective supported versions, or delete them from Cisco Prime Collaboration Provisioning.

---

## Cisco Prime Collaboration Provisioning Migration —12.1

You can migrate from Cisco Prime Collaboration Provisioning 11.1 and above to 12.1 either through **Dashboard** or **Administration > Updates > Launch Migration Tool** in the Cisco Prime Collaboration Provisioning user interface. You can migrate to Cisco Prime Collaboration Provisioning 12.1 in two ways:

- Running System—Select this option to migrate from a running Provisioning server.
- Migration File—Select this option to migrate from a file created by command-line migration backup tool, BackUpToolFor12\_1Migration.



**Note** The following scenarios are not supported in 12.1 migration features:

- If Cisco Prime Collaboration Provisioning 11.x server is configured with SSO setup, then the same configuration does not work in Cisco Prime Collaboration Provisioning 12.1 server after migration, the user needs to configure the SSO again in the 12.1 server after the migration.
- If Cisco Prime Collaboration Provisioning 11.x server is enabled with FIPS mode, then the same configuration does not work in Cisco Prime Collaboration Provisioning 12.1 server after migration, the user needs to enable FIPS mode after the migration.
- If a user is having their own certificated in Cisco Prime Collaboration Provisioning 11.x server, then the same certificate does not get copied to Cisco Prime Collaboration Provisioning 12.1 server as part of migration, the user needs to upload the certificate in 12.1 server after the migration.

### Before you begin

Ensure that you have:

- Taken a database backup of your existing 11.1/11.2/11.5/11.6 as suitable.
- New license files for 12.1. The license files must be updated after upgrade is complete.
- You must take a snapshot of Cisco Prime Collaboration Provisioning 12.1 Virtual Machine instance before starting the migration, and this snapshot can be deleted after the successful 12.1 migration.

## Migration from Running System

You must provide the following server information:

### Procedure

**Step 1** Enter **Server IP Address** and **11.x's root Password**.

**Step 2** Click **Next** to take a backup of the database.

**Note** Time taken to backup database depends upon the size of PCP database.

**Step 3** Click **Begin Migration** to complete the process.  
Once the migration is complete, you are redirected to the login page.

**Note** After migrating from Cisco Prime Collaboration Provisioning 11.x to 12.1, the 11.x server will not be accessible. The Administrator must manually restart the services to enable 11.x server up and running.

## Migration Using Migration File

You must provide the location of the migration file.

## Procedure

---

**Step 1** Select **SFTP** or **FTP** as suitable.

**Step 2** Enter the following details.

- IP Address—IP Address of the server, where the back-file is saved
- Port—Disabled for FTP by default
- Path— The user needs to provide the path along with the file name
- Username— The back-up server's FTP/SFTP login username
- Password— The back-up server's FTP/SFTP login password

**Step 3** Click **Next** to download the back-up file.

**Step 4** Click **Begin Migration** to complete the process.

Once the Migration is complete, you are redirected to the login page.

**Note** You may have to repeat these steps to take the back-up from BackUpToolFor12\_1Migration

---

# BackUpTool12\_1Migration tool

The BackUpTool12\_1Migration tool is used for taking the back-up from 11.1 and above version of the Prime Collaboration Provisioning before doing the Migration on 12.1 version of Prime Collaboration Provisioning.



---

**Note** This is applicable if the **Migration using Migration file** option is chosen, while doing the migration.

---

1. Download the File BackUpTool12\_1Migration.sh from same location, where ova's are uploaded.
2. Copy the above mentioned file to /opt, that is the BackUpTool12\_1Migration.sh on 11.1 and above version of the Prime Collaboration Provisioning
3. Go to /opt directory using the `cd /opt`
4. Change the permissions of the file using the command `chmod 775 BackUpTool12_1Migration.sh`
5. Execute the script `./BackUpTool12_1Migration.sh`. The backup gets stored in /opt directory by the name `backupData.tar.gz`
6. Copy the above created backup file manually to the SFTP/FTP server.



## CHAPTER 6

# Pre-Upgrade Tasks

---

- [Backup and Restore, on page 33](#)
- [Downgrade Deployment Model, on page 37](#)

## Backup and Restore

Cisco Prime Collaboration Provisioning allows you to backup your data and restore it. You can schedule periodic backups using the Provisioning UI ([Schedule Backup Using the Provisioning User Interface, on page 35](#)).



---

**Note** **For upgrading Cisco Prime Collaboration Provisioning 12.4 and later releases**

In Cisco Prime Collaboration Provisioning 12.4, backup and restore requires a mandatory password for enhanced security. Hence, after the upgrade to 12.4, all scheduled backup jobs from 12.x fail. Once upgrade from 12.x to 12.4 is complete, you can cancel all the previously scheduled and saved jobs. The admin has to either reset the password and schedule the backup again or delete the scheduled backup job and reschedule it on 12.4. You can view the upgrade logs for the appropriate message.

---

There are two backup and restore scenarios; select the set of procedures that matches your scenario:

- Backup and restore with the same installation or a new installation. For this scenario, see [Schedule Backup Using the Provisioning User Interface, on page 35](#).



---

**Note** When backing up files, place the files on a different file server. Also, burn the backup data onto a CD.

---

Cisco Prime Collaboration Provisioning allows you to back up system data and restore it on a different system in the event of total system failure. To restore the backup from another system, the following prerequisites must be met:

- Ensure that the server to which data is restored has the same MAC address as that of the system that was backed up (the IP address and the hostname can be different).

- If you are unable to assign the MAC address of the original system (the one that was backed up) to another system, contact the Engineering Team for information on a new license file (for a new MAC address).
- The procedure to backup and restore data on a different system is the same as the procedure to backup and restore data on the same system.

## Back Up Provisioning Database from Console CLI — 11.x and below

This procedure requires that you have administrator level access to the Provisioning database (the PostgreSQL database).

### Procedure

**Step 1** Login as troubleshooting user using SSH with port 22

**Step 2** Navigate to the `/opt/cupm` folder and enter the following command:

```
sudo ./cupm-app-service.sh stop
```

**Step 3** Stop Apache, JBoss, and NICE Services using the following commands:

```
ps -aef | grep startcupm
ps -aef | grep nice
kill -9 <startcupm process ID>
kill -9 <nice process ID>
```

**Step 4** Go to the directory using the command:

```
cd /opt/postgres/pghome/bin
```

**Step 5** Run the following command:

```
sudo ./pg_dumpall -o -Upmadmin > /<backup_directory_name>/<backup_file_name>
```

where,

- *pmadmin*—postgres user id
- *backup\_directory\_name*— For sudo user, the directory name is `/home/<sudo User directory>`. For Example: If sudo user is 'testuser' , directory name will be `/home/testuser/`
- *backup\_file\_name*—Backup will be created with this file name.

**Step 6** In a backup folder, make copies of the following files and directories:

- `/opt/cupm/sep/dfc.properties`
- `/opt/cupm/sep/ipt.properties`
- `/opt/cupm/sep/dfc.keystore`
- `/opt/cupm/jboss/server/cupm/conf/login-config.xml`
- `/opt/cupm/jboss/server/cupm/deploy/dfc-ds.xml`



- /opt/cupm/sep/ipt/.system/.pcprandom.key

**Step 7** Start Apache, JBoss, and NICE Services using the following commands:

```
cd /opt/cupm
sudo ./cupm-app-service.sh start
```

---

## Schedule Backup Using the Provisioning User Interface

You can create periodic backups of the Provisioning database using the Provisioning User Interface. You must be logged in as an administrator to perform the backup.

### Before you begin

The prerequisites for a successful SFTP backup for a non-root user are as follows:

- The backup folder is manually created in advance.
- The backup folder has the group or owner as root.
- The backup folder has the correct read and write permissions.

Before performing the upgrade, ensure to take a snapshot of the existing setup.

### Procedure

---

**Step 1** Choose **Administration > Backup Management**.

**Step 2** In the Backup Management page, click **New**.

**Step 3** Enter a backup title in the Create New Backup page.

**Step 4** From the Backup Connection drop-down list, select SFTP, FTP, or Local to save your backup files.

a) If you select SFTP or FTP, provide the following details:

- IP address of the server where the backup files need to be saved.
- Path to the backup location and port details (for SFTP only).

**Note** The backup location is relative to the specified SSH user home directory. The relative path must contain directory details (for example DIRNAME or DIRNAME 1 / DIRNAME 2), to avoid backup in root directory.

- Username and password information. Testing the SFTP or FTP password is optional.

**Note** Taking backup through SFTP on another PCP server in FIPS mode is not supported.

b) If you select Local, the backup files are saved to the CUPM local directory.

**Note** Ensure that the destination path for SFTP, FTP, or Local is not given as “opt/backup”

- Note** If backup fails, verify whether the temporary backup folder "**backup**" is present at /opt. If present, delete it:
- a. Create a console account from the troubleshooting web application.
  - b. Log in to console and delete the content of the /opt/backup folder and then the backup folder.
  - c. Trigger the backup again.

**Step 5** For a local backup, select the number of backup files you want to save on your local machine from the Backup History drop-down list.

The default value is 2. By default, you can save two recent backup files. You can save up to 9 recent backup files.

**Step 6** Enter the scheduling details to schedule a backup.

The time displayed is the server browser time. The default recurrence type for a new backup job is None. After a backup job is created with default settings, the backup will start immediately.

**Step 7** Enter email address to receive status notification for the scheduled backup. You can enter multiple email addresses separated with a comma.

**Step 8** Click Save. The scheduled backup appears in the Backups table on the Backup Management page.

**Step 9** Click Run Now, to run a backup immediately.

---

Prime Collaboration Provisioning enters maintenance mode before backup starts. A notification will be displayed for all logged-in users stating that the users will be logged out of Prime Collaboration Provisioning 10 minutes before the scheduled backup starts. Users must save their work and log out before the backup starts, else they will be logged out automatically, and will not be able to access Prime Collaboration Provisioning.

The backup table provides information on the status and history of each backup job. The Next Run Time option provides details on the next periodic schedule.

The Last Run Status column shows the status of the last run backup job. The status of a backup job can be Scheduled, In Progress, Success or Failed.

When a backup job reaches the scheduled time, the last run status changes to Scheduled. After entering into maintenance mode, that is after 10 minutes, the status will change from Scheduled to In Progress.

After the backup job is complete, the status is either Success or Failure.

To know about the history of any backup job, click **Run History Count**, and open the dialog box. You can view the start time, end time, status and file size of the backup. You can delete the run history logs. The backed up files are not deleted when the backup logs are deleted.

## Managing Backup Jobs

With the scheduled jobs, you can:

- **Edit and Delete:** The Edit and Delete options are disabled during Scheduled and In Progress states. You cannot edit or delete a backup job when the backup is in Scheduled or In Progress state. You can edit only one backup job at a time.
- **Cancel:** You can cancel a running backup job which is in Scheduled or In Progress state only.

# Downgrade Deployment Model

Cisco Prime Collaboration does not support the downgrade of the deployment model; that is, you cannot downgrade from the Cisco Prime Collaboration large deployment model to small deployment model.





## CHAPTER 7

# Upgrade Tasks

---

- [Cisco Prime Collaboration Upgrade Options](#), on page 39
- [Upgrade Cisco Prime Collaboration from the Provisioning User Interface](#), on page 39
- [Troubleshooting Cisco Prime Collaboration Provisioning Upgrade](#), on page 41
- [Installing Cisco Prime Collaboration Provisioning Software Updates](#), on page 42

## Cisco Prime Collaboration Upgrade Options

**For Cisco Prime Collaboration Release 11.5 and below**

Use Cisco Prime Collaboration Provisioning User Interface to upgrade from Cisco Prime Collaboration Provisioning 11.2, 11.3, and 11.4 to Cisco Prime Collaboration Provisioning 11.5.

## Upgrade Cisco Prime Collaboration from the Provisioning User Interface

**For Cisco Prime Collaboration Release 11.5 and later**

You can upload the application bundle and upgrade Cisco Prime Collaboration from the provisioning user interface. Using this feature, you can view the software update history which includes information such as the name of the installation file, description, type of software update, and the status of installation.

### Before you begin

- You must have administrator privilege to perform this task.
- We recommend that you make a full backup of your server. If you do not make a backup, you cannot bring back your old system intact if the upgrade fails, since a rollback is not possible.
- Ensure that the following prerequisites are satisfied before you begin the upgrade process:
  - No order is in released state.
  - No device synchronization is in progress state.
  - No active batch projects.
  - No wizard is in active state.

## Procedure

---

**Step 1** Download the application bundle.

**Step 2** Log in to Prime Collaboration Provisioning as a user with Administrator privileges.

**Step 3** Choose **Administration > Updates**.

**Step 4** Click **Browse** and navigate to the location where you have saved the application bundle.

**Note** The file must be in .rpm format. From Cisco Prime Collaboration Provisioning release 12.5 onward, .tar.gz format is not supported.

Use the actual rpm application bundle file format. If you rename the rpm application bundle file, the system does not allow upgrade.

**Step 5** Click **Upload**.

The updated file is listed in the updates table with the status **Ready to Install**.

**Step 6** Select the required entry from the table.

**Step 7** Click **Install Now**.

**Note** When upgrading from 11.2 to 11.5, ignore the confirmation popup message "*Prime Collaboration Provisioning 11.2.0-523 will now be installed. All services are restarted during this time.*" and click **Yes** to continue upgrading to 11.5.

**Step 8** Once the validation is successful, you are redirected to a page with the message **Upgrade in progress** displaying the status of the upgrade. Click **View Debug Logs** to view the detailed upgrade log.

After successful installation, you will be redirected to the provisioning login page.

---

## What to do next

After upgrading Cisco Prime Collaboration Provisioning, perform the following post upgrade tasks:

- For Cisco Prime Collaboration Provisioning 11.x, the vCPU reservations are increased. Thus when you are upgrading to Prime Collaboration Provisioning 11.x, power off the instances of the server. Manually increase the vCPU reservation and power on the instances of the server. For more details on vCPU reservation, see [Virtual Machine Requirements for Cisco Prime Collaboration Provisioning, on page 9](#).
- If a session is already open in the browser, clear the browser cache and refresh the browser before you start using the upgraded application.
- It is recommended that you perform the following synchronization:
  - Domain synchronization
  - Infrastructure synchronization
  - Subscriber or User synchronization

# Troubleshooting Cisco Prime Collaboration Provisioning Upgrade

- **Issue:** Snapshot revert on the VM instance, Time is not getting updated

**Recommended Action:**

Once you revert the snapshot on the VM instance, you can do either of the following options:

- Reboot the PCP VM instance(Shut down Guest and Power On)
- Run the following two commands on CLI by logging in with Troubleshooting account:
  - **sudo timedatectl set-ntp true**
  - **sudo systemctl start ntpd**

Wait for 10 seconds.

After following any one of the above options, try executing the date command on CLI and verify whether the correct date and time are displayed.

- **Issue:** Upgrade sequence completes in few seconds with a message, Domain/Device/Ldap sync in progress, could not do the upgrade.

**Recommended Action:**

- Make sure that the prerequisites are satisfied and continue with the upgrade process.
- Clear the in-progress activities listed in the message.

- **Issue:** After Upgrading, the provisioning UI still shows the older Mega-menu.

**Recommended Action:** Perform one of the following actions:

- Reboot the VMware Instance.
- Clear the browser cache.
- Open the provisioning application in a new browser.

- **Issue:** If you upload a new production license file when the standard license file is already present, the authorization role does not list individual domains because of the presence of the standard license file.

**Recommended Action:**

- Delete the standard license file from /opt/cupm folder.

- **Issue:** Migration from 11.x to 12.1, if the migration is not successful.

**Recommended Action:**

- Revert the snapshot of the PCP 12.1 application before migration.
- Access the troubleshooting account, and check the PCP processes.

# Installing Cisco Prime Collaboration Provisioning Software Updates

## For Cisco Prime Collaboration Release 11.2 and later

You can upload and install service packs and software update patches from the provisioning user interface. Using this feature, you can view the software update history which includes information such as the type of software update, description, and when the software update was installed. You can also view the readme documents related to the software updates by clicking the document icon against the description of the respective software update file.

To upload and install software updates:

### Before you begin

You must have administrator privilege to perform this task.

### Procedure

---

**Step 1** Choose **Administration > Updates**.

**Step 2** Click **Browse** and navigate to the location where you have saved the software update file.

**Note** The file must be in .rpm format. From 12.5 onward, .tar.gz format is not supported.

**Step 3** Click **Upload**.

The updated file will be listed in the updates table with the status **Ready to install**.

**Step 4** Click the required element from the table.

**Step 5** Click **Install Now**.

You will be redirected to a static page with the message **Restart is in progress**. After successful installation, you will be redirected to the provisioning login page.

---

You can also uninstall the software updates. To uninstall software update, select the required update file from the table and click **Uninstall**. When you click **Uninstall**, software update is uninstalled and rolled back to the previous state.





## CHAPTER 8

# Post Upgrade Tasks

- [Upgrade Cisco Prime Collaboration Provisioning from Small to Medium Deployment Model, on page 43](#)
- [Upgrade Cisco Prime Collaboration Provisioning Server from Small or Medium to Large Deployment Model, on page 43](#)

## Upgrade Cisco Prime Collaboration Provisioning from Small to Medium Deployment Model

After you manually upgrade the system requirements (vRAM, vCPU, vDISK, and so on), you must run the following scripts as a troubleshooting user:

1. Execute the `memorymodel.sh` file under `/opt/cupm`:

```
./memorymodel.sh medium "-Xms512m -Xmx1024m -XX:MaxPermSize=256m  
-server" "-Xms512m -Xmx1024m -XX:MaxPermSize=256m" simple all
```

2. Execute `cpcmdiskutil.sh` under `/opt/cupm`:

```
./cpcmdiskutil.sh /dev/sda
```

3. Restart the server(VMware instance).



**Note** If you want to support endpoint count as per the upgraded deployment model in Cisco Prime Collaboration Provisioning, you must add a scale license.

## Upgrade Cisco Prime Collaboration Provisioning Server from Small or Medium to Large Deployment Model

1. Back up the database from the Cisco Prime Collaboration Provisioning application by following the procedures provided in [Cisco Prime Collaboration Provisioning Guide](#).
2. Deploy a large OVA as the server. If it is a distributed setup, deploy both application and database servers. For more information on deploying and configuring the OVA, refer to [Cisco Prime Collaboration](#)

**Provisioning Installation.** Ensure that the globaladmin password is the same as the password that you provided during the deployment.

- a. Copy the licenses from the old server to the new server.
  - b. If you use the MAC address of the existing Cisco Prime Collaboration Provisioning server, then update the MAC address using the VMware client for this VMware instance.
  - c. If you use a new MAC address for server, then you must rehost the licenses in the `/opt/cupm/license` directory to match the new server VM.
3. Perform the following steps from the Troubleshooting Account. For information on creating a Troubleshooting Account, see [Create a Troubleshooting Account, on page 47](#).
  4. Stop provisioning services in the server.
    - a. Go to the `/opt/cupm` folder.  
Execute **`sudo ./cupm-app-service.sh stop`**
    - b. Ensure that Apache, JBoss, and NICE services are stopped.  
**`ps -aef | grep standalone`**  
**`ps -aef | grep nice`**
    - c. Stop any running process.  
**`kill -9 standalone process id`**  
**`kill -9 nice process id`**
    - d. Check whether the nice process is still holding on the postgres connection.  
**`ps -aef`**
    - e. Look for the process:  
**`/opt/cupm/jvm/bin/java -server -classpath /opt/cupm/sep/lib/dom.jar`**
    - f. Stop any running nice process.  
**`kill -9 Process-Id found earlier`**
    - g. Wait a minute to make the resources, such as ports, to become free.
  5. Restore the database in the server using the backed-up database file taken from Step 1. For details, see the section Restoring Database in the server section in the [Cisco Prime Collaboration Provisioning Guide](#).
  6. Stop and then start the provisioning services in the server.
    - a. **`cd /opt/cupm`** folder.  
**`sudo ./cupm-db-service.sh stop`**
    - b. Wait 30 seconds before starting the database services
    - c. Start the database services.  
**`cd /opt/cupm`**  
**`sudo ./cupm-db-service.sh start`**

7. Copy the following files from the original Cisco Prime Collaboration Provisioning server to the newly deployed server
  - a. `/opt/cupm/sep/dfc.properties`
  - b. `/opt/cupm/sep/dfc.keystore`
  - c. `/opt/cupm/jboss/standalone/configuration/standalone-full.xml`
8. Change the directory to `/opt/cupm/sep` and edit the `dfc.properties` file using the vi editor
  - a. **`cd /opt/cupm/sep`**
  - b. **`vi dfc.properties`**
  - c. Change the property `dfc.memory.model=medium` to **`dfc.memory.model=large`**
  - d. Change the property `dfc.postgres.host=localhost` to **`dfc.postgres.host=IP of server Database`**
  - e. Save changes and exit the editor
9. Start application services in the server.
  - a. Change directory to `/opt/cupm` to start the application services
  - b. **`cd /opt/cupm`**  
**`sudo ./cupm-app-service.sh start`**  
The system is now ready to be used.





## CHAPTER 9

# Troubleshooting

---

- [Create a Troubleshooting Account](#), on page 47
- [Change the IP Address on the Provisioning Server \(Single Setup\)](#), on page 47
- [Change the IP Address on the Provisioning Server \(Distributed Setup\)](#), on page 49
- [Access Troubleshooting Account or Console Account](#), on page 51
- [Generate Console Account using Troubleshooting User](#), on page 51

## Create a Troubleshooting Account

### Procedure

---

- Step 1** From Micro service page:
- a) Go to **https:// <PCP ip server>:28080/index**, example: **https://10.65.198.101:28080/index**. Navigate to the URL for accessing micro service PCP page.
- Step 2** From PCP
- a) Login to PCP
  - b) Go to **Administration > Logging and ShowTech**. In Troubleshooting Account field, provide User ID, and Select duration from **Expires In** dropdown, and then click **Create Account**.

On creating a Troubleshooting user, challenge string is generated, using this we can generate a response which acts as password for a Troubleshooting user. Contact the Engineering Team for generating a response string.

**Note** Login to PCP as Troubleshooting user, then start micro service page from **Troubleshooting>Launch**. Also, Sep admin can be accessed under Troubleshooting menu.

---

## Change the IP Address on the Provisioning Server (Single Setup)

The following procedure is applicable for Cisco Prime Collaboration Provisioning 12.3 and later releases.

1. Call Technical Assistance Centre (TAC), and get the troubleshooting account access.

2. Generate the Console Account, and then login to the CLI account.
3. In OS, change the configuration file `sudo/etc/sysconfig/network-scripts/ifcfg-eth0` that stores network config settings specific to the new IP address.
4. Restart the network services using the command `sudo service network restart`.
5. To verify IP address change, issue the command `sudo ifconfig` and check for updated IP in the response.
6. Update the file `/etc/resolv.conf` with the DNS of the new IP address.
7. Update `/etc/hosts` file with new server IP and hostname.
8. Set the hostname in Cisco Prime Collaboration Provisioning server by running the command `sudo hostnamectl set-hostname <HOSTNAME>`.

The following procedure is applicable for Cisco Prime Collaboration Provisioning 10.0 and later releases.

1. Log in to the server as troubleshooting user through SSH and enter:

```
admin# conf t
admin(config)# interface GigabitEthernet 0
admin(config-GigabitEthernet)# ip address <ipaddress> <subnet mask>
```

2. Enter **y** when the following message is displayed: Changing the IP may result in undesired side effects on any installed applications. Are you sure you want to proceed? [y/n] y
3. Log in as troubleshooting user with the new IP address and enter:
 

```
admin(config)# ip default-gateway <a.b.c.d>
admin(config)# ip domain-name <new_domain>
admin(config)# ip name-server <a.b.c.d>
admin(config)# hostname <new_name>
admin(config)# exit
admin# write memory
```
4. Log in as troubleshooting user with the new IP address.
5. Update the Nice system record in postgres:
  - Log in to postgres.
  - Goto `cd /opt/postgres/pghome/bin`
  - Enter `./psql -Uadmin -d cupm`
  - Enter the global admin password
  - Enter `Select * from nicesyseng;`
  - In the console output, check if any entries contain your old IP address (in the host column). If there are any entries, delete them by executing the following query: `delete from nicesyseng where host='<old_ip_address>';`

- Exit the postgres by entering `\q`

6. Reboot the server.

## Change the IP Address on the Provisioning Server (Distributed Setup)

The following procedure is applicable for Cisco Prime Collaboration Provisioning 12.6 SU1 and later releases.

### Procedure

	Command or Action	Purpose
<b>Step 1</b>	<a href="#">Modify the IP Address of the Database Server in a Distributed Setup.</a> , on page 49	To modify the IP address of the database on the Cisco Prime Collaboration Provisioning distributed setup.
<b>Step 2</b>	<a href="#">Modify the IP Address of Application Server in a Distributed Setup.</a> , on page 50	To modify the IP address of the application server on the Cisco Prime Collaboration Provisioning distributed setup.

## Modify the IP Address of the Database Server in a Distributed Setup.

Use this procedure to modify the IP address of the database server in a distributed setup.

### Procedure

- 
- Step 1** Get the troubleshooting account access from the TAC.
- Step 2** Generate the console account and login through the CLI account.
- Step 3** On the OS, change the below configuration file that stores the network configuration settings specific to the new database IP address:
- ```
sudo vi /etc/sysconfig/network-scripts/ifcfg-eth0
```
- Step 4** Update the file `sudo vi /etc/resolv.conf` with the DNS of the new database IP address.
- Step 5** Update the file `sudo /etc/hosts` with the new database server IP address and hostname.
- Step 6** Run the command given below to set the hostname in Cisco Prime Collaboration Provisioning server :
- ```
hostnamectl set-hostname <HOSTNAME>
```
- Step 7** Follow the steps to add the details of the new application server IP in the file `pg_hba.conf` :
- Open the file `pg_hba.conf` :
 

```
sudo vi /opt/postgres/pghome/data/pg_hba.conf
```
  - Add the following at the end of the file:
 

```
host all all <New Application server IP>/32 md5
```

- Step 8** Restart the database server.
- Step 9** Run the command `ipconfig` to verify the IP address change and check for the updated IP in the response generated.
- Step 10** Execute the command given below to accept communication on port 5432 (default port for postgres) :
- ```
sudo iptables -I INPUT 1 -p tcp --dport 5432 -j ACCEPT
```

## Modify the IP Address of Application Server in a Distributed Setup.

Use this procedure to modify the IP address of the application server in a distributed setup.

### Procedure

- Step 1** Get the troubleshooting account access from the TAC.
- Step 2** Generate the console account and login through the CLI account.
- Step 3** On the OS, change the below configuration file that stores the network configuration settings specific to the new application IP address:
- ```
sudo vi /etc/sysconfig/network-scripts/ifcfg-eth0
```
- Step 4** Update the file `sudo vi /etc/resolv.conf` with the DNS of the new application IP address.
- Step 5** Update the file `sudo /etc/hosts` with the new application server IP and hostname.
- Step 6** Run the command given below to set the hostname in Cisco Collaboration Provisioning server :
- ```
hostnamectl set-hostname <HOSTNAME>
```
- Step 7** Update the file `/opt/cupm/sep/dfc.properties` with
- ```
dfc.postgres.host=<database-server-new-ip-address>
```
- Step 8** Update the file `/opt/cupm/jboss/standalone/configuration/standalone-full.xml` with
- ```
<connection-url>jdbc:postgresql://<database-server-new-ip-address>:5432/cupm</connection-url>
```
- Step 9** Restart the application server.
- Step 10** Run the command given below to check the readiness of the database:
- ```
sudo /opt/postgres/pghome/bin/pg_isready -p 5432 -h <database-server-new-ip-address>
```
- Response:
- ```
<database-server-new-ip-address>:5432 - accepting connections
```
- Step 11** Execute the command given below in the database server, if Step10 does not give any response :
- ```
sudo iptables -I INPUT 1 -p tcp --dport 5432 -j ACCEPT
```
- Step 12** Run the command `ipconfig` to verify the IP address change and check for the updated IP in the response.
- Step 13** On the completion of the above steps, wait for a few minutes till the Cisco Prime Collaboration Provisioning Login page comes up on the application server IP.



## Access Troubleshooting Account or Console Account

When Prime Collaboration Provisioning User Interface is inaccessible, you can verify the status of the server from the micro service page.



---

**Note** We can access Troubleshooting account from micro service page: `https:// <PCP ip server>:28080/index`.

---

1. Go to micro service page, create a troubleshooting user. For creating a troubleshooting user, refer to [Create a Troubleshooting Account](#).
2. Login from micro service page, go to Process Management to verify the status of Prime Collaboration Provisioning services.



---

**Note** Console account can be created to access CLI account of Prime Collaboration Provisioning.

---

## Generate Console Account using Troubleshooting User

Follow these steps to generate a console account using troubleshooting user

1. In PCP micro service page under Console Account, we generate a console account user by providing username and password.
2. From console account, you can access CLI of PCP server.



- 
- Note**
- In PCP 12.1, there is no access to CLI/SSH as root, so the user created through console account can access this privilege.
  - If troubleshooting user is created using trouble shooting UI, and the Cisco Prime Collaboration Provisioning database is not up and running, then the user will be available only through the troubleshooting UI and not through the Cisco Prime Collaboration Provisioning UI.
-

