

## Cisco Unified Provisioning Manager 1.0

### General

**Q. What is Cisco® Unified Provisioning Manager?**

**A.** Cisco Unified Provisioning Manager is part of the Cisco Unified Communications Management Suite. It provides a secure, reliable, and scalable Web-based solution to manage changes for a company's critical next-generation communications services. Cisco Unified Provisioning Manager 1.0 manages provisioning of initial deployments and ongoing operational activation for IP communications services, in an integrated IP telephony, voicemail, and unified messaging environment.

Cisco Unified Provisioning Manager 1.0 manages the following Cisco products:

- Cisco Unified CallManager
- Cisco Unity®
- Cisco Unified CallManager Express
- Cisco Unity Express
- Cisco Unity Connection

Features in Cisco Unified Provisioning Manager 1.0 include:

- Web-based processing of subscriber service requests
- Pre-built configurations of subscriber products
- Tracking and reporting on subscriber assets
- Management of line numbers, phone sets (including Cisco IP Communicator), subscribers, and related unified messaging components
- Definition and enforcement of configurable business policies for processing of subscriber requests
- Helpdesk assistance or end-subscriber self-care
- Wizards that simplify the request interface
- Automated interaction with Cisco Unified CallManager, Cisco Unity, Cisco Unified CallManager Express, Cisco Unity Express, and Cisco Unity Connection for subscriber, phone, and line creations, modifications, or deletions
- Consolidated view and management of multiple Cisco Unified CallManager, Cisco Unity, Cisco Unified CallManager Express, Cisco Unity Express, and Cisco Unity Connection systems
- Auto population and ongoing synchronization of data from Cisco Unified CallManager, Cisco Unity, Cisco Unified CallManager Express, Cisco Unity Express, and Cisco Unity Connection for both system configuration and subscriber information
- Template based provisioning of Infrastructure configuration components within Cisco Unified CallManager, Cisco Unified CallManager Express, and Cisco Unity Express
- Batch order processing for any add, change, or delete supported manually

Cisco Unified Provisioning Manager 1.0 includes an extensive inventory model that provides the capability to manage:

- Subscribers (owners of the phone and voicemail services)
- Call and message processors (Cisco Unified CallManager and Cisco Unity, for example)
- Voice features
- Messaging features
- Phone number management policy
- Phone set management policy

**Q. What versions of the Cisco Unified Communications applications are supported?**

**A.** Table 1 shows the versions of applications supported in Cisco Unified Provisioning Manager 1.0.

**Table 1.** Applications Supported in Cisco Unified Provisioning Manager 1.0

Product	Version
Cisco Unified CallManager	4.0(2), 4.1(3), 4.2(1), 5.0(4)
Cisco Unified CallManager Express	3.3, 3.4, 4.0
Cisco Unity	4.0, 4.1, 4.2
Cisco Unity Express	2.1, 2.2, 2.3
Cisco Unity Connection	1.1.1

**Note:** see the Cisco Unified Provisioning Manager Supported Devices Table for versions that have been certified in testing

## Security

**Q. What type of access control does Cisco Unified Provisioning Manager support?**

**A.** Cisco Unified Provisioning Manager permits Web login access based on having a permitted user login and associated user roles within the system. User roles define access to certain functions for that user of the system, and are pre-defined. Many of the roles apply only within a specific IP telephony domain (Table 2).

**Table 2.** User Roles

Role	Function
Ordering	Permits user to create and place service orders for subscribers, within the policy defined by the system configuration
Advanced ordering	Permits user to over-ride system-determined policies
Assignment	User may participate in phone assignment during service activation
Advanced assignment	User may specify a specific phone MAC address during the order process
Shipping	User may participate in verifying that physical shipment of a product has occurred
Receiving	User may participate in verifying that physical receipt of a product has occurred
Maintenance	User can perform purging and export of certain system objects
Approval	User is responsible for approving orders within a domain
Administration	User has all administrative access except assigning other administrators

**Q. Can I delegate some functions to sub-administrators in my organization?**

- A.** Cisco Unified Provisioning Manager uses the concept of IP telephony domains and service areas. Domains are groupings of subscribers. For each grouping, one or more system users can be permitted to order services for subscribers within that domain. In addition, rules or policies may be set on a domain; those rules and policies will apply to services for subscribers in that domain.

Service areas are groupings within an IP telephony domain that are used to structure and manage IP telephony and messaging services. The service area typically acts as a service offering location and provides a template mechanism that determines provisioning policies and values used during order processing. This allows administrative users to configure service areas; this helps ensure that service orders follow company policy and best practices for subscriber service activation.

**Q. How are changes to Cisco Unified Communications applications tracked?**

- A.** Cisco Unified Provisioning Manager processes all changes to the underlying Cisco Unified Communications applications as service orders. An order may be for a subscriber-level change (to a phone or line for example), or for an IP-telephony-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 subscriber. The order records show who initiated the order, the times of various process steps, and what the order contained.

**Q. Are secure protocols used to communicate with the managed applications?**

- A.** Cisco Unified Provisioning Manager uses the following protocols to talk to its managed devices:
- Cisco Unified CallManager 4.1, 4.2, and 5.0 are accessible via HTTP or HTTPS
  - Cisco Unified CallManager Express and Cisco Unity Express are accessible via Telnet or SSH
  - Cisco Unity and Cisco Unity Connection are accessible via JDBC

**Provisioning Policy****Q. What is meant by provisioning policy?**

- A.** Cisco Unified Provisioning Manager permits pre-defining various settings that will ultimately be reflected in the operational services for subscribers (how a phone or its lines are configured, for example). These pre-defined settings are called policies. Policies can be set against various objects within Cisco Unified Provisioning Manager. The following objects can have associated policies:

- Domains
- Service areas
- Subscriber types
- Orders

The policies that are set on these objects will be applied at the time of service activation, and will be applied with precedence. For example, it may be desirable that all phones in a domain are permitted to be video-enabled, but one of the service areas in that domain may over-ride that policy and not permit phones to be video-enabled.

Subscribers (people in the organization who have services), are assigned one or more subscriber roles, which determine the policy related to their end services. These roles reflect a subscriber's position or purpose within an organization and determine the services to which they are entitled. Users with administration privileges in the system can add new subscriber roles for a specific customer domain. They can also associate product catalogue items to a given subscriber role (defined for a specific domain) determining the products that can be ordered by users who have that subscriber role. Out of the box, Cisco Unified Provisioning Manager supports the following subscriber roles:

- Contractor
- Employee
- Executive
- Manager
- Operator
- Senior manager

**Q. Which objects and attributes in Cisco Unified CallManager are available to be set through Cisco Unified Provisioning Manager?**

- A.** Cisco Unified Provisioning Manager performs both Day 1 and Day 2 provisioning. Day 1 provisioning is typically related to implementing new devices, applications, or locations. An example would be a new Cisco Unified CallManager Express deployment to a new location, or activating services for a new office on an existing CallManager cluster. Day 2 provisioning involves making changes to individual subscriber services during the lifetime of the IP communications services.

Cisco Unified Provisioning Manager provides a template capability, often used in Day 1 rollouts, that permits configuring IP communications infrastructure objects within Cisco Unified CallManager. Examples of these objects are device pools; calling search spaces; route lists, groups, and patterns; and translation patterns.

Cisco Unified Provisioning Manager also includes provisioning attributes. These attributes can be set and associated to domains, service areas, and subscriber types. Provisioning attributes are categorized within the following categories:

- Line attributes
- Phone attributes
- Extension Mobility phone attributes
- Extension Mobility line attributes
- Messaging attributes

The full list of infrastructure objects and provisioning attributes is extensive. See the Cisco Unified Provisioning Manager User Guide for details:

[http://www.cisco.com/en/US/products/ps7125/products\\_user\\_guide\\_book09186a00807bd204.html](http://www.cisco.com/en/US/products/ps7125/products_user_guide_book09186a00807bd204.html).

## Platform

### Q. What hardware is required to run Cisco Unified Provisioning Manager?

**A.** Cisco Unified Provisioning Manager will run on a customer-provided PC that meets the requirements listed in Table 3.

**Table 3.** Table 3 Hardware Requirements for Cisco Unified Provisioning Manager

Server Requirements	Up to 1000 Phones	Up to 10,000 Phones	Up to 30,000 Phones
<b>CPU</b>	Single 3.0-GHz Intel P4 processor	Single 3.0-GHz Intel P4 processor	2-machine deployment with both: 1 single 3.0-GHz Intel P4 processor for Web and application servers 1 single 3.0-GHz Intel P4 processor for database
<b>Memory</b>	2 GB RAM	4 GB RAM	4 GB RAM on each machine
<b>Disk space</b>	1 x 30-GB hard disk	1 x 60-GB hard disk	1 x 30-GB hard disk on machine for Web and application servers, and 1 x 80-GB hard disk on machine for database
<b>Network</b>	100 Mbps NIC	100 Mbps NIC	100 Mbps NIC

### Q. Will Cisco Unified Provisioning Manager run on a Cisco media convergence server platform?

**A.** Yes. Cisco Unified Provisioning Manager will run on an MCS server with 1 CPU.

## Licensing

### Q. How is Cisco Unified Provisioning Manager priced?

**A.** Like all Cisco Unified Communications Management Suite products, Cisco Unified Provisioning Manager is priced in a tiered manner, with tiers based on the number of managed endpoints (phones).

## For More Information

For more information about Cisco Unified Provisioning Manager, visit

<http://www.cisco.com/go/cupm>, contact your local account representative, or send an email to the product marketing group at [ask-ipc-management@cisco.com](mailto:ask-ipc-management@cisco.com).

