Cisco Unified Provisioning Manager 2.2

Product Overview

Cisco® Unified Provisioning Manager (UPM) is a component of the Cisco Unified Communications Management Suite, consisting of Cisco Unified Provisioning Manager, Cisco® Unified Operations Manager, Cisco® Unified Service Monitor, and Cisco® Unified Service Statistics Manager. Designed specifically for managing Cisco Unified Communications solutions, the Cisco Unified Communications Management Suite offers comprehensive provisioning, monitoring, and troubleshooting capabilities throughout the solution lifecycle.

Cisco Unified Provisioning Manager is a provisioning application for Cisco Unified Communications initial deployments and implementations. With automated processes for initial deployment and “day-2” additions and changes, Cisco Unified Provisioning Manager facilitates rapid installation and maintenance of Cisco Unified Communications components. With this tool, Cisco customers have achieved 10:1 productivity improvement for time to deployment.

Figure 1. Cisco Unified Provisioning Manager GUI

Cisco Unified Provisioning Manager significantly speeds deployments, which reduces the ongoing costs and expertise required to manage the changes that occur once the network is operational. A knowledgeable administrator is able to configure policy at various levels that will enforce who is able to do delegated management; for whom that delegation applies; how business-level services apply to voice and messaging applications; and which types of end users (subscribers) are permitted to use which standard services.

Through the use of this policy and standard configuration approach, provisioning and activation of subscriber services are greatly simplified, while the overall ability to manage and provide services that make use of the underlying Cisco Unified Communications applications is retained. Costs are reduced, time to dial tone is reduced, and errors are practically eliminated. Subscribers are more satisfied, and your IP communications professionals have more time to focus on higher-value activities than repetitive operational issues.

Features and Benefits

Business-Oriented Approach with Workflow Automation

Cisco Unified Provisioning Manager permits standard services (phone, line, and voicemail, for example) to be ordered for subscribers (the owner of the individual phone, voicemail, or other service). Cisco Unified Provisioning Manager processes all changes to the underlying Cisco Unified Communications applications as an order. An order may be created to make a subscriber-level change (to a phone or line, for example) 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 subscriber name or ID. A simple wizard-driven approach is used for ordering services. Cisco Unified Provisioning Manager permits delegation of the order management capability so that requests for service additions, changes, or cancellations can be done without requiring an underlying knowledge of the voice applications that are delivering those services. Cisco Unified Provisioning Manager provides the same ordering experience regardless of the technology delivering the Cisco Unified Communications services.

Infrastructure Templates

Configuration templates provide the ability to autoconfigure the Cisco Unified Communications voice infrastructure in a consistent way. Templates can be created to initially configure or reconfigure Cisco Unified Communications components. When pushing a template to a device, users may specify an optional keyword list, which defines the values of the keywords to be used (replaced) during the provisioning operation. Optionally, templates can be nested to form larger templates or can be scheduled for a later time. The Cisco Unified Provisioning Manager template capability permits the definition of standard configurations that can be used in situations such as rolling out new offices, locations, remote sites, or organizational overlays.

Batch Provisioning

Subscriber services may be ordered using the web interface on an individual basis for a single subscriber. However, when deploying a large number of services, it is often desirable to combine these together into a single batch, which can be scheduled to run at a later time. Cisco Unified Provisioning Manager permits a single batch to contain multiple types of orders: add, change, or cancel. It also permits multiple types of services to be specified in a single batch operation; for example, a batch can contain a combination of phone and voicemail additions or changes. Batches can be run immediately upon uploading to Cisco Unified Provisioning Manager or may be scheduled for execution at a later time.

Role-Based Access

Cisco Unified Provisioning Manager provides two dimensions to roles, depending upon whether the person is a user of the system or a subscriber of services. User roles define access to certain functions exposed through the web interface to an administrator of the system. The subscriber role refers to the role that a subscriber will have within an organization; the role dictates the services for which subscribers are entitled. User roles and subscriber roles are configurable by the administrator.

Applications Programming Interface

The Unified Provisioning Manager API provides a web services interface, using Simple Object Access Protocol (SOAP) over HTTPS, for submitting provisioning requests from external applications or gathering provisioning, inventory, or auditing information from the Unified Provisioning Manager database. Integration with Unified

Provisioning Manager can be for various reasons, including integrating into business, directory, or security systems. Some typical examples:

- Integration with front-end business applications such as human resource systems that contain employee information, or existing web service portals that consolidate various IT services across an enterprise
- Integration with back-end systems to manage non Cisco or legacy voice applications
- Custom/branded web interface for subscriber self-service provisioning and password management

The general features Unified Provisioning Manager provides are listed in Table 1.

Table 1. Features and Benefits

Feature	Benefit
General	
Virtualization	UPM can be deployed with other Unified Communications or management applications in a virtualized/blade server environment including Cisco UCS
Northbound API	Allows integration with custom applications, web service portals, and human resources systems for automated provisioning
Active Directory integration	Subscribers and administrators can authenticate against Active Directory. Additionally, subscribers can be synced into UPM based on filter criteria and automatically be placed into the appropriate UPM domains. Each domain can be synced to a different Active Directory source.
Audit trail	Orders for subscriber and infrastructure changes placed through UPM are tracked and can be referenced to determine what was changed, who changed it, and when.
Infrastructure Configuration (Day-1 Support)	
Template-based provisioning	Consistent, rapid deployment of new infrastructure elements or sites
Consolidated view of Unified Communications devices	Single view of a subscriber and the subscriber's services
Role-based access	Delegation of infrastructure management and move, addition, change, and delete (MACD) functions to domain administrators and domain help desk personnel
Provisioning policy settable at several levels	Automated provisioning based on preset policies for services, service areas, and subscriber types
Inventory tracking	• Access to information about all services, devices, and subscribers • Inventory that can be searched and reported on
Autopopulation/synchronization	Easy addition of Unified Provisioning Manager to an existing Cisco Unified Communications network
Additions and Changes (Day-2 Support)	
Subscriber Services Wizard	Simplified policy driven day 2 provisioning interface
Domain administration capability	Allows different administrators to manage different groups of subscribers
Batch provisioning	• Mass user additions or changes • Consistent approach for easier system maintenance
Order workflow	Allows functional areas, such as finance, warehouse, or shipping, to be added to the provisioning process.

Products Managed by Cisco Unified Provisioning Manager 2.2

Cisco UPM manages Cisco Unified Communications Manager and the Cisco Unified Communications Manager side of Presence provisioning and Unified Mobility, as well as client provisioning for Cisco Unified Personal Communicator, Cisco Unity® servers. Cisco Unified Communications Manager Express, Cisco Unity Express, and Cisco Unity Connection. UPM can also sync to the Cisco Presence server to get presence settings and manage subscribers' presence settings. This release also adds support for dual-mode phones.

Note: See the Cisco Unified Provisioning Manager Supported Devices Table for specific versions that have been certified in testing at http://www.cisco.com/en/US/products/ps7125/products_device_support_tables_list.html.

System Requirements

Table 2 lists the system minimum requirements of Unified Provisioning Manager 2.2. Unified Provisioning Manager may be deployed in either a physical or a virtualized environment.

Table 2. System Requirements

Server Requirements	Up to 1,000 Phones	Up to 10,000 Phones	Up to 30,000 Phones	Up to 60,000 Phones
CPU	Single 3.0 GHz Intel P4 processor or equivalent	2.33 GHz or higher quad core processor or equivalent	2-machine deployment with a 2.33 GHz or higher quad core processor or equivalent for both the database server and the web/application server	2-machine deployment with a 2.33 GHz or higher quad core processor or equivalent for both the database server and the web/application server
Memory	2 GB RAM	4 GB RAM	4 GB RAM on each machine	4 GB RAM on the web/application server and 8 GB RAM on the database server
Disk space	One 30 GB hard disk	One 60 GB hard disk with SAS or SCSI drives	• One 30 GB hard disk on machine for the web/application server, and • One 80 GB SAS hard drive in a RAID 1+0 configuration for the database	• One 30 GB hard disk on machine for the web/application server, and • One 120 GB SAS hard drive in a RAID 1+0 configuration for the database
Network	100 Mbps network interface card (NIC)	100 Mbps NIC	100 Mbps NIC	1 Gbps NIC

Ordering Information

To place an order, visit the Cisco Ordering Homepage. To download a software image, visit the Cisco Software Center or Cisco Marketplace. New orders require the purchase of the Cisco Unified Provisioning Manager image license and one or more scale licenses to cover the number of phone MAC addresses to be managed. Scale licenses are additive, up to 60,000 for each Unified Provisioning Manager instance, and licenses may be added to an existing Unified Provisioning Manager server over time. Previous 1.x versions of Cisco Unified Provisioning Manager can be upgraded to version 2.2 with an image license plus an upgrade license.

The Cisco Unified Communications Management Suite Ordering Guide, available to Cisco sales staff and to partners, provides instructions on how to order the Cisco Unified Provisioning Manager application or to order management product bundles that deliver significant savings over the individual product pricing. Please contact your account representative for details. Table 3 lists part numbers for Cisco Unified Provisioning Manager.

Table 3. Ordering Information

Product Name	Part Number
Cisco Unified Provisioning Manager 2.2 Image license	L-CUPM-2.2-K9
Cisco Unified Provisioning Manager B 500 add-on phone license	L-CUPM-B-500LIC
Cisco Unified Provisioning Manager B 1000 add-on phone license	L-CUPM-B-1K-LIC
Cisco Unified Provisioning Manager B 2000 add-on phone license	L-CUPM-B-2K-LIC
Cisco Unified Provisioning Manager B 5000 add-on phone license	L-CUPM-B-5K-LIC
Cisco Unified Provisioning Manager B 10,000 add-on phone license	L-CUPM-B-10KLIC
Cisco Unified Provisioning Manager B 20,000 add-on phone license	L-CUPM-B-20KLIC
Cisco Unified Provisioning Manager B 30,000 add-on phone license	L-CUPM-B-30KLIC
Cisco Unified Provisioning Manager B 40,000 add-on phone license	L-CUPM-B-40KLIC
Cisco Unified Provisioning Manager B 50,000 add-on phone license	L-CUPM-B-50KLIC
Cisco Unified Provisioning Manager B 60,000 add-on phone license	L-CUPM-B-60KLIC
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 500 phones	L-CUPM-B-500UPG

Product Name	Part Number
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 1000 phones	L-CUPM-B-1K-UPG
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 2000 phones	L-CUPM-B-2K-UPG
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 5000 phones	L-CUPM-B-5K-UPG
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 10,000 phones	L-CUPM-B-10KUPG
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 20,000 phones	L-CUPM-B-20KUPG
Cisco Unified Provisioning Manager Upgrade 1.x to 2.0 maximum 30,000 phones	L-CUPM-B-30KUPG
Cisco Unified Provisioning Manager API Feature License	L-CUPM-B-API-FL

Cisco Unified Communications Services

Cisco Unified Communications Services allows you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications Solution. Delivered by Cisco and our certified partners, our portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Our unique lifecycle approach to services enhances your technology experience to accelerate true business advantage. For more information about Cisco services, visit Cisco Technical Support Services or Cisco Advanced Services.

For More Information

For more information about Cisco Unified Provisioning Manager, please visit http://www.cisco.com/go/cupm, contact your local account representative, or send an email to the Cisco product marketing group at ask-ipc-management@cisco.com.

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