



# Uplinx® Provisioning System for Cisco Unified Communications

## Product Overview

The Uplinx® Provisioning System for Cisco Unified Communications (UC) is a comprehensive solution for reducing the time taken for an organisation to undertake its moves, adds, changes and deletions (MACDs) across all its deployed Cisco UC technologies. Through a single customisable interface, all provisioning activities associated with a user can now be commissioned via a single mouse click.

By simplifying the interface for provisioning and removing the need for staff to log onto production servers, the Uplinx® Provisioning System now allows highly skilled resources to concentrate on more advanced tasks while leaving the day-to-day MACDs to less skilled staff such as helpdesk resources saving an organisation both time and money.

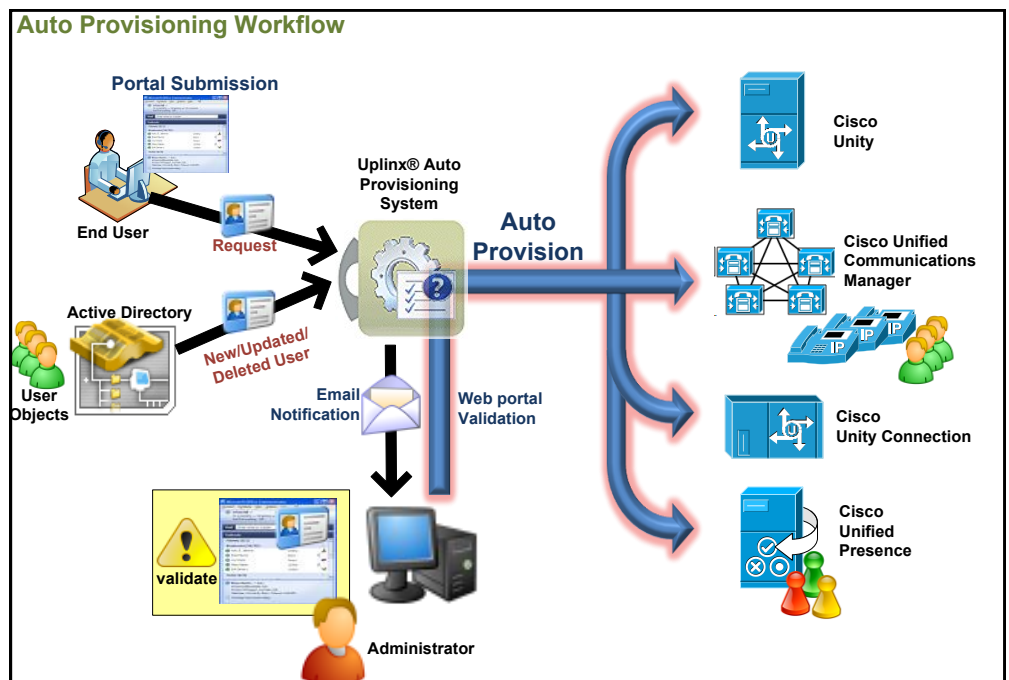
Typically, tasks associated with creating a new user such as configuring a phone extension, user profile, voicemail, and presence profile can take up to 20 minutes for a skilled resource as several configuration objects with a multitude of advanced settings per object need to be setup on each individual UC system. The objects then need to be linked to each other in the correct order or the provision will fail. When multiple UC elements exist in an organisation, then several servers need to be accessed, each with different logins and differing specialised configuration objects.

By using the Provisioning System, all these activities are undertaken from a single location significantly reducing the time to undertake a MACD and removing any human error along the way to ensure MACDs work first time—every time!

## Benefits

Benefits gained by deploying the Uplinx® Provisioning System for Cisco Unified Communications include:

- ◆ Standard MACDs can now be *delegated to help desks or basic skilled staff* freeing up highly skilled staff.
- ◆ *A single customisable interface* that only provides editable fields that are relevant. *Eliminate configuration mistakes.*
- ◆ *Reduction in MACD processing times* through a single customisable interface that only provides editable fields that are relevant to a specific site or UC deployment.
- ◆ Leverage *re-use of information* from other systems such as *Active Directory and CUCM* reducing data entry times through pre-population whilst also minimising data entry errors.



- ◆ Automatic detection of added/changed/deleted users in the enterprise through the *Active Directory change tracker*.
- ◆ *Full reporting* on provisioning activities. Allows for *SLA tracking*.
- ◆ Ensures compliance as change staff can only edit fields that are configured to be visible and editable.
- ◆ Provides *workflow* for a help desk with:
  - ❖ Notification by email of changes in Active Directory and submitted requests
  - ❖ Records changes and requests
  - ❖ Pre-fill email to notify requester



## Single Console for Telephony Administrators

The Uplinx® Provisioning System allows for all components of a Cisco UC environment to be provisioned from a single web based console screen. The interface is customisable based on the different UC components deployed within an environment as well as on a per user and per site basis. The presented console screen then ties all elements together such as user commissioning requests, detected AD changes, phone assets, AD users, and other UC parameters ensuring that all commissioning requests are completed quickly (in seconds) and correctly (correct order).

## Leverage existing data

Existing information either found by the AD Change Tracker, manually selected from AD or the Phone Asset database, or data from submitted requests by users is gathered and used to pre-populate the appropriate fields on the administrative console which allows the phone admin to quickly process the change or request by avoiding time consuming data entry and minimising errors introduced through repetitive manual data entry.

The Submitter Screen is the central workspace for all commissioning actions.

## Compliance

By limiting the number of fields available to be changed within each of the UC components configuration tabs and via data validation rules, the Provisioning System ensures compliance of an Enterprises UC standards.

## Reporting/Track SLAs

The Provisioning System provides built in reporting allowing an enterprise or outsourcer to track details based on the number of MACDs received and the number processed. Detailed job logs and an activity report per user or time period are also available.

## Role Based Provisioning

All configuration management and monitoring is performed on the WebGUI of the Uplinx® Enterprise Directory system and can be accessed by any web browser.

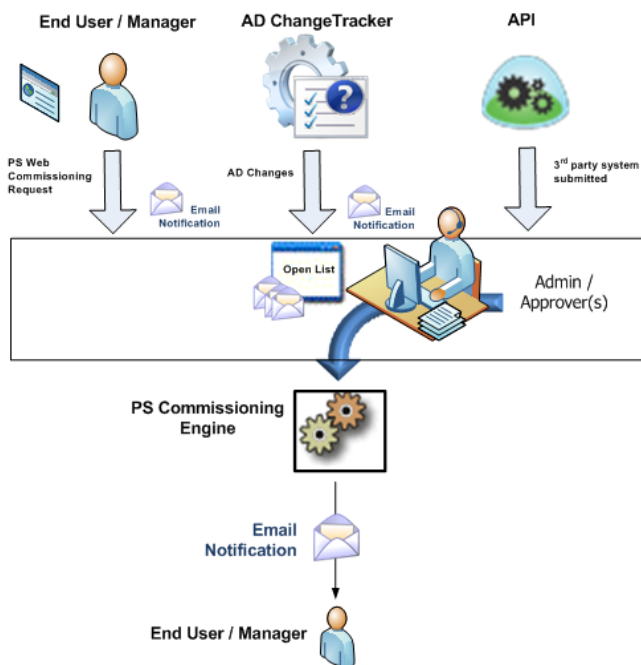
Multiple administration and operational users can be configured to access the system via role based administration. Every action on the system is logged and reports can be generated on performed actions.



## Workflow

The Uplinx Provisioning System incorporates a workflow to notify the phone administrator by email of user submitted commissioning requests or changes found in Active Directory.

During this process, information is gathered which allows the phone admin to quickly process the change or request by re-utilizing this information to pre-populate fields, avoiding time consuming data entry in various locations during provisioning.



## Email Notifications

After processing a commissioning request, the system can pre-populate an email based on templates to send an email to a job submitter to notify them of the receipt of their job, the received job details for their validation, and finally the completion of their job.

## Commissioning Request Portal

The Commissioning Request Portal page can be easily integrated into an Enterprises Intranet to allow end users or delegated site administrators or similar to submit telephony requests. These received requests can trigger an email (optional) to the phone administrator of that site to process the request. The submitted information will be presented in the Provisioning System GUI with relevant pre-populated fields so as to allow the site admin to quickly process the request and email a completion notification.

## Designed for large multi-cluster environments

In environments where there are multiple CUCM clusters deployed, the Uplinx® Provisioning system can easily be configured to support all UC elements associated to each cluster.

Outsourcers in multi-tenanted environments can configure several sites to serve various customers.

## Automatic Detection of user changes in the Enterprise

Microsoft Active Directory is becoming more and more the "source-of-truth" for an Enterprises user information. The Uplinx® Provisioning System now allows for this strategy to be incorporated into a Cisco UC environment. This is achieved through the Change Tracker process which looks for changes within an AD environment and records the relevant information of these changes in the Provisioning System and emails (optional) a notification to a phone admin to start the workflow. The change will now be waiting in the Provisioning System, with pre-populated fields for a telephony admin to action.

AD Changes Detected		User Submitted Requests				
		Id	Time	Action	On User	On Extension Mobil
<input type="checkbox"/>	<input checked="" type="checkbox"/>	15	17/05/2010 6:44:36 PM	ADD	True	False
<input type="checkbox"/>	<input checked="" type="checkbox"/>	16	17/05/2010 6:45:42 PM	ADD	True	False
<input type="checkbox"/>	<input checked="" type="checkbox"/>	17	17/05/2010 6:50:06 PM	ADD	True	False
<input type="checkbox"/>	<input checked="" type="checkbox"/>	18	18/05/2010 10:07:43 AM	UPDATE	True	True

User submitted requests or automatically detected changes to the users are reported in the submitter screen and email alerts generated.

## Scalability and High Availability

A Provisioning System server is capable of supporting numerous CUCM clusters and associated UC components. The provisioning system can also be virtualised with virtualisation tools being used to provide HA to the system. Multiple Provisioning Systems can be distributed across different regions to support large or multiple CUCM clusters where Active Directory integration is required. All the systems are still managed by the simple to use administration GUI.



## Benefits Summary

The benefits of the Uplinx<sup>®</sup> Provisioning System are:

- ◆ It delivers a single GUI where all aspects of a provisioning request can be handled by less skilled staff such as help desk operators without the need to access each independent UC system.
- ◆ It saves costs by allowing MACDs to be handled faster and with less chance of data entry errors.
- ◆ It allows for Active Directory to be used as the “source-of-truth” to automatically generate provisioning requests. Multiple LDAP sources or AD OUs are supported for providing user data.

ID	Name	Host	Server Type	Base
2	LDAP_OU1	10.5.1.210	CUCM	OU=OU1,DC=iptel,DC=com
6	LDAP_OU2	10.5.1.210	CUCM	OU=OU2,DC=iptel,DC=com
7	LDAP_OU3	10.5.1.210	CUCM	OU=OU3,DC=iptel,DC=com
1	LDAP1	10.5.1.210	CUCM	DC=iptel,DC=com
5	LDAP-Seven	10.27.205.21	CUCM	DC=snl,DC=7net,DC=com,DC=au

Settings for LDAP Server 'LDAP\_OU1'

Name: LDAP\_OU1      Record ID: 2      [Update]

Hostname or IP: 10.5.1.210      [New]

Server Type: Active Directory      [Delete]

Base: OU=OU1,DC=iptel,DC=com      [Search Sub Directories]

Filter: (objectClass=user)

User: IPTEL\administrator

Password: [Masked]

Test: [Test Connectivity ...]

- ◆ Imported data is used to pre-populate defined provisioning fields in the system. Logical rules allow for the data to be groomed to ensure standards are enforced.

User	Phone	UDP	VM	RDP
<b>Device Profile</b>				
- UDP Name	UDP_msmith			
- Description	msmith [Michael Smith]			
- UDP Model	Cisco 7965			
<b>Line #1# (Button 1)</b>				
- Extension	2185			
- Display	Michael Smith			
- Line text on phone	LineText 2185			
- User 1 Associated	msmith			
<b>Intercom #1# (Button 2)</b>				

For **end users** it enhances CUCM by:

- ◆ Providing a Portal for end users to request changes to be made to their UC profiles.

Provisioning System - Commissioning Request

Please enter your telephony change or commissioning request and we will get back to you shortly:

**Telephony Request**

Please select a site: UCT7 (ADsync)

I would like to UPDATE one  User and / or  Extension Mobility Profile

Existing Computer User ID: Jsmith

Extension: 2185

Name of Phone User: John Smith

Phone Information:  I have a phone with MAC: [ ] what is this?  I don't have a phone

Please add more details about your request here: Please change my extension to 2186

**Your Contact Details**

Name: John Manager

Phone Number or Mobile: 034534534333

Address: [ ]

- ◆ MACDs can be quickly provisioned.

For the **Enterprise** the following benefits are delivered :

- ◆ Cost savings by improved productivity of highly skilled UC engineers.
- ◆ Faster times for the provision of MACDs.
- ◆ Portal allows staff to log their own requests.
- ◆ Active Directory can be used as the “source-of-truth” for generating provisioning requests.



## Benefits Summary

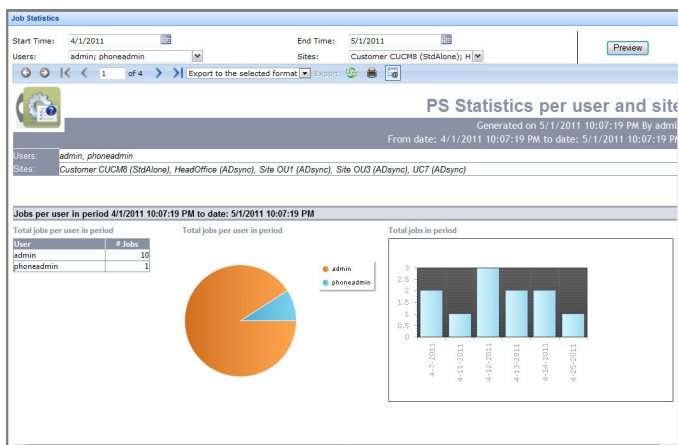
For an **IT department**:

- ◆ Making it easier for support staff to process MACDs
- ◆ Email alerting for new jobs.
- ◆ IT can hand over the support of MACD telephony requests to a generalist helpdesk.

For **Outsourcers**:

The Uplinx® Provisioning System is an ideal solution for outsourcers as it provides MACD tracking via its reporting engine which can be used for SLA accountability. Reports can be generated based on the number and type of MACDs serviced as well as the average time taken to provision a MACD request.

Access to the system is based on roles and locations allowing for the system to be used to support regions and functions with their own help desks.



## Licensing

The Uplinx® Provisioning System is licensed based on the number of phones configured on CUCM and the number of CUCM clusters that need to be supported. Maintenance and support subscription ensures compatibility with new Cisco releases.

## Supported Environments

The Uplinx Provisioning System supports the following Cisco Unified Communications components:

- ◆ Cisco Unified Communications Manager (CUCM)
- ◆ Cisco Unified Presence Server (CUPS)
- ◆ Cisco Unity Connection (CUC)
- ◆ Cisco Unity Enterprise

It also supports the following Microsoft server products:

- ◆ Active Directory 2003 and later
- ◆ Exchange 2010 (Mailbox and Unified Messaging for voicemail)
- ◆ Lync 2010 for presence and RCC setups for Cisco

with the following telephony end user objects:

- ◆ Cisco CUCM User
- ◆ Phone and Extensions
- ◆ Device Profiles and extensions
- ◆ Voicemail
- ◆ Mobility (Remote Destination Profiles)
- ◆ CUPS (CUPC, MOC)

## System Requirements

The Uplinx® Provisioning System will run on:

- ◆ Windows 2008 R2 (x64) Server with IIS
- ◆ SQL Server 2008 (Express or Server)
- ◆ Virtualised environments

### Contacts:

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REF0003-005-EN March 2012