

How Cisco IT Introduces Presence Information and Cisco Unified Personal Communicator to Employees

Employees save time and get answers faster by knowing when global coworkers are available and how to reach them.

Business Opportunity

Cisco uses its own unified communications applications to increase productivity and responsiveness for a competitive advantage. Two additional tools are currently being deployed:

- **Presence.** Presence information shows whether coworkers are available and how they prefer to be reached. By reducing the time that employees spend calling multiple phone numbers and leaving voicemail, presence increases productivity and makes it faster to get answers.
- **Cisco Unified Personal Communicator.** A desktop application, Unified Personal Communicator saves time by letting employees launch a single application to access all of their frequently used unified communications services, including presence as well as instant messaging, voice message access, click to call, video, conferencing, user directory, and call history. Employees save time from capabilities made possible by the integrated interface, such as one-click launching of conferencing sessions.

Cisco IT Program

In August 2007, Cisco IT established its Unified Communications Program, with the goal of increasing the business value that Cisco gets from its own applications. As one of its initial projects, Cisco IT deployed Cisco Unified Presence Server globally and introduced Cisco Unified Personal Communicator to all employees. "Our goal was to increase productivity by letting employees open just one application to access their most frequently used tools", says Reid Bourdet, IT project manager, Intelligent Network Systems, Cisco. "An integrated unified communications application would also be easier to support."

Cisco IT developed a four-step plan to introduce global presence and Unified Personal Communicator:

- **Upgrade to Cisco Unified Communications Manager 6.1.1.** This version supports the applications that take advantage of presence. An example is Cisco Unified Mobility, which enables single-number reach. Presence enhances single-number reach: If someone calls your desk phone and you answer with your mobile phone, your presence information is updated to show you are on the phone.
- **Deploy Cisco Unified Presence server clusters.** The servers collect employee presence information from the Cisco Unified Communications Manager, which indicates whether the phone is off-hook or on-hook. Presence servers will soon add information from employees' Microsoft Outlook calendars to indicate if they are in a meeting. Cisco Unified Presence servers can also collect presence information from Unified Personal Communicator and third-party applications, using APIs.
- **Enable presence on Cisco Unified Communications Manager.** In essence, this allows Cisco Unified Communications Manager to publish on-hook / off-hook status to its associated Presence servers. In

addition to this step, Cisco enabled each worldwide Presence cluster to publish updates to each other, creating the ability to share presence data globally.

- **Provide Cisco Unified Personal Communicator to employees.** A desktop application, Cisco Unified Personal Communicator saves time by letting employees launch one application to access all of their frequently used unified communications services, including presence, as well as instant messaging, voice message access, click to call, video, and call history. Cisco IT is currently deploying the first customer ship (FCS) version of Cisco Unified Personal Communicator 7.0 software, by region (available as of late August 2008).

In parallel, Cisco completed deployment of Unity 7.0 within a month of FCS in May 2008. Subsequently, voicemail encryption was enabled, so that Cisco Unified Personal Communicator could have Internet Message Protocol (IMAP) access to Unity, for the purpose of enabling Visual Voicemail in the Unified Personal Communicator and other tools.

Upgrading Cisco Unified Communications Manager

In November 2007, the IT team met with operations personnel to develop a schedule for the global upgrade to Unified Communications Manager 6.1.1. Bourdet has managed Cisco Unified Communications Manager upgrades. Since the last upgrade, Cisco offices have extended their office hours because of the global enterprise, leaving less time for upgrades. To complete the upgrade quickly and efficiently, the team made the following decisions:

- Revise the standards document for provisioning phones to account for presence. For example, the Calling Search Spaces must follow a global standard naming convention to facilitate automated provisioning.
- Use bulk provisioning to configure new phones.
- Provision phones after hours. This approach would avoid the slowdowns that can occur if someone attempts to provision new phones at the same time that the Cisco Global Technical Response Center is performing moves, adds, and changes and the Technical Assistance Center (TAC) is also using the administrative interface.

Installing Cisco Unified Presence Server

One Unified Presence server cluster is deployed for each Unified Communications Manager cluster. Each server has a theoretical maximum of 5000 users, so Cisco IT deployed from two to six servers in each cluster, depending on the number of devices supported. "For clusters supporting 8000 or fewer users, we set up two servers with load balancing and failover," says Chris Hartley, IT network engineer for unified communications, Cisco. "If one server goes down, then the client fails over to the second server."

All Cisco Unified Presence servers were installed by June 2008, at about the same time that the Unified Communications Manager 6.1.1 upgrade was complete. They were initially installed with an early field trial (EFT) version of Cisco Unified Presence 7.0, which was upgraded in early September 2008 to the FCS version of Cisco Unified Presence 7.0 software (available as of late August 2008).

Enabling Presence

After installing the Unified Presence servers, Cisco IT enabled presence on the corresponding Unified Communications Manager clusters. "Cisco Unified Presence server acts like a presence aggregator," Hartley says. "Enabling presence licensing on Cisco Unified Communications Manager triggers the Cisco Unified Presence servers to collect information for the enabled users."

Cisco IT is enabling presence for every global Cisco user simultaneously, regardless of when they are scheduled to begin using Unified Personal Communicator. This will enable employees to view presence information for all of their

coworkers, including those who do not yet have Unified Personal Communicator. Presence information is gathered from several sources:

- Cisco Unified Communications Manager indicates whether the phone is on-hook (available) or off-hook (busy).
- Employees enter preference information, such as “Do not disturb.”
- Other sources of presence are also under review

Cisco IT enabled presence on all clusters in July 2008. Any Cisco employee who connects to one of these clusters and has the Unified Personal Communicator application can see presence information for all employees.

Providing Cisco Unified Personal Communicator to Employees

Cisco IT is introducing Unified Personal Communicator to Cisco employees in phases, according to geography. Before introducing Cisco Unified Personal Communicator, the Visual Networking Solutions group made sure the following resources were in place:

- Communications to motivate employees to download the client software
- Training materials, including quick reference guides, checklists, user guides, and short videos developed by the Cisco Information Technology Learning Group
- Discussion forum, which helps users get answers and also allows the team identify potential feature or training issues
- Support through the Cisco Global Technical Response Center

Of key interest is that an EFT version of Cisco Unified Personal Communicator 7.0 was rolled out in a “managed invitation” to several Cisco sites. Feedback helped to fine tune the approach on the above resources. Cisco is now rolling out globally the FCS version of Unified Personal Communicator, with Visual Voicemail enabled.

Results to Date

Cisco is measuring the success of introducing presence and Cisco Unified Personal Communicator in the following ways:

- **Adoption rate for Unified Personal Communicator**
- **Surveys about the end-user experience.** “Rather than asking employees to react to the entire product, we’ll ask them how different features improve their efficiency,” says Hartley. “We have a list of features that we want to ask about, including one-click-to-IM and one-click-to-meeting.”
- **Case loads and discussion forum.** The IT group is closely monitoring case loads and the discussion forum to identify issues, feature requests, and information that should be communicated to employees.

Next Steps

- Finalizing plans to upgrade Communications Manager 7
- Continued deployment of Unified Personal Communicator to all Cisco locations
- Planning the deployment of Unified Application Engines within Cisco.



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