

## Mobility Solutions Extend Cisco Unified Communications

Organizations worldwide have used powerful new technologies such as the Internet, IP communications, and mobility to improve their business processes. But with an explosion of ways to reach fellow employees— -- mobile phone, e-mail messaging, instant messaging, and voicemail -- too often employees still cannot reach one another efficiently. The result is delays in business processes as project participants must wait for returned phone calls or e-mail messages before proceeding.

Cisco® Unified Communications, which includes IP telephony, unified messaging, customer contact, Web and video conferencing, and presence technology, is dramatically helping businesses communicate more efficiently. Now Cisco is extending and enhancing the mobility component of Cisco Unified Communications. The combination is allowing knowledge workers who are mobile -- whether on a retail floor or at an airport or at a Wi-Fi hotspot in a local coffee shop -- to also enjoy the efficiencies and speed of Cisco Unified Communications.

### Introduction

In a survey of the internal communications challenges at 67 enterprises in North America and Europe, a Forrester research report (March 2005) found that project delays occur with high frequency because of the inability to reach decision makers quickly. In 27 percent of the companies surveyed, regular delays occurred weekly or daily, while an additional 51 percent reported project delays arising a few times per quarter. Most notable, however, was the finding that work on critical projects came to a halt in 25 percent of companies because of the inability to reach critical decision makers in real time. For another 63 percent of companies, work progress was slowed. The survey found that only 12 percent of respondents could generally work around the problem.

The Forrester report confirms what many experience daily: the frustration of delayed communications; of playing the back-and-forth game of “phone tag”; or of waiting for responses to e-mail messages. But this inability to reach co-workers or partners in real time transcends personal frustrations. It also results in real delays in completing projects, providing information to clients, or providing approvals in the normal course of business that can have negative business consequences. It can negatively affect an organization’s or company’s ability to be responsive to customer needs and can result in reduced revenue both today and in the future.

### The Role of Mobility

The growing use of mobile devices has not reduced this problem and, in fact, may be exacerbating it. As more people own multiple devices, ranging from laptop computers to mobile phones to mobile e-mail devices, they spend more time managing their communications across different phone numbers, voice mailboxes, and e-mail accounts, limiting their ability to accomplish work efficiently.

A few years ago, the demand for mobility might have applied only to a few employees such as highly mobile workers who needed access to resources wherever they were. Today, the demand for mobile and wireless technologies in business is pervasive. Business sectors across the globe,

from retail businesses to warehouses to field service technicians, have embraced mobile phones, smartphones, personal digital assistants (PDAs), wireless-equipped laptop computers, and other devices for their convenience, portability, and efficiency.

Whether they spend most of their time in an office or on the road, most business professionals carry a mobile phone. According to a recent study by IDC, enterprise telecommunications managers believe that as many as 28 percent of their employees are using a mobile phone as their primary work phone. Also, retail stores not only have IP phones next to cash registers; they may also equip employees with wireless IP phones clipped to their belts for receiving alerts or for running stocking applications. Salespeople working remotely use laptop computers with Wi-Fi and softphones at hotels or airports to download e-mail messages or speak directly with clients or colleagues. Audio conferences are also increasingly conducted over mobile phones, smartphones, or laptop computers running softphone applications.

As mobility is increasingly woven into the fabric of enterprise activities, companies need to make mobile communications more intelligent. This intelligence will allow employees to more easily place calls, screen unwanted calls, use presence to determine whether a fellow employee is available, send text messages as well as voice messages, and consolidate voicemail and messages into one visual interface on their mobile handsets. Intuitive interfaces and integrated features will let employees more easily reach other people and respond to time-sensitive tasks rather than waste time struggling with poorly integrated information or disconnected devices.

### **Cisco Unified Communications and Mobility**

To resolve these challenges, enterprises need a tight coupling of the many types of mobility solutions that employees use with an integrated and secure unified communications system. The Cisco Unified Communications Family of products offers these benefits, combining the convenience, flexibility, and ubiquitous reach of mobile communications with the collaborative, secure, and managed benefits of Cisco Unified Communications.

The key to this integration is the ability to meet the demands of a diverse workforce that requires different device approaches to accomplish different jobs and tasks (Figure 1). Office professionals, for example, who spend most of their time at a desk may be served best with an IP phone and modest mobility capability -- such as the single-business-number-reach feature that rings a mobile phone when the professional steps away from the office. Campus-based employees, on the other hand, such as managers, manufacturing workers, healthcare professionals, and retail associates, who spend significant time in meetings, in operation settings, or away from traditional office environments, may need a different option. This option could include smartphones or wireless IP phones in addition to desktop-based IP phones and single-business-number-reach services. Mobile workers and those who work from a variety of locations may need softphone-equipped laptop computers and feature-rich smartphones -- solutions that combine an intuitive interface with powerful features of integrated directory information, presence, single business number reach, calling features, secure text messaging, and conferencing.

**Figure 1.** Different Jobs Require Different Device Approaches

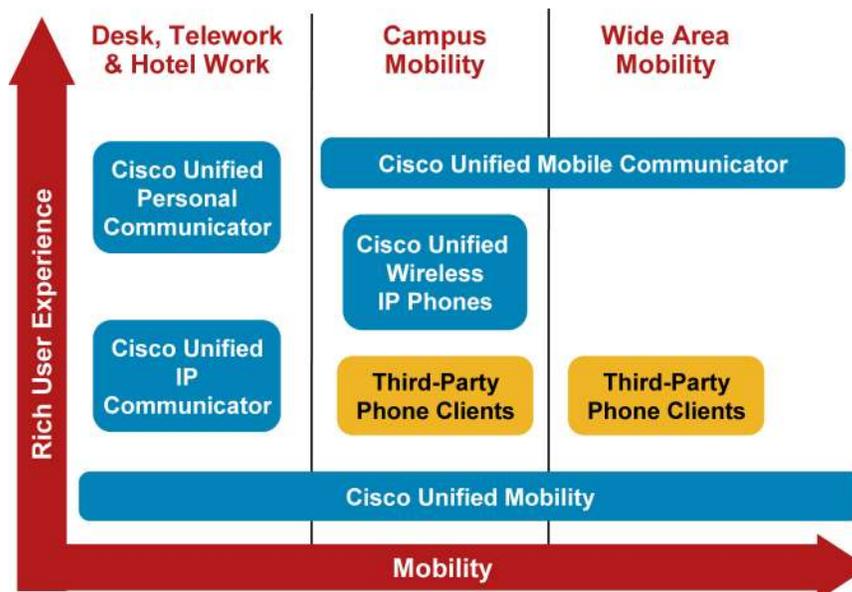


The power of Cisco Unified Communications is that all the phones and devices are part of a system that is secure and managed by the enterprise. The combination of unified communications and mobility greatly enhances employee effectiveness by reducing complexity; supporting the use of a single business number and voice mailbox; allowing employees to transition communications more easily between voice calls, voicemail, e-mail messaging, and instant messaging; and improving an employees' ability to find the desired person or information immediately, wherever they are.

### Mobile Solutions for Cisco Unified Communications

Figure 2 shows the range of mobile solutions available in the Cisco portfolio.

**Figure 2.** Cisco Mobile Unified Communications Portfolio



- Cisco Unified Mobility is a server application that integrates with Cisco Unified Communications Manager and intelligently manages, filters, routes, and places calls between an employee's IP phone and up to four remote numbers such as a home office line or mobile phone. Other Cisco Unified IP phones use Cisco Unified Mobility as a platform to allow mobile employees to consolidate all of their business calls with a single enterprise IP phone number and immediately connect wherever they are working -- a capability also known as single business number reach.
- Cisco Unified Personal Communicator is a desktop or laptop computer application that transparently integrates a wide variety of communications applications and services. With access to the corporate network from the office or on the road, Cisco Unified Personal Communicator connects you to a rich set of unified communication tools. Using dynamic presence information, for example, you can check the availability of colleagues in real time, reducing "phone tag" and improving productivity. You can easily search existing directories to locate important contacts and initiate communications. Video and Web conferencing allows you to exchange ideas face to face and collaborate more effectively with colleagues. You can also view and hear your voice messages quickly and easily.
- Cisco Unified IP Communicator is a Microsoft Windows application that endows desktop and laptop computers with the functions of IP phones, providing high-quality voice calls on the road, in the office, or wherever you can access the corporate network. For remote employees, Cisco IP Communicator provides more than just an office phone extension; it provides access to the same familiar phone and video telephony services you have in the office. This advantage boosts business collaboration and responsiveness and helps organizations keep pace with today's mobile business environment.
- Cisco Unified Wireless IP phones increase enterprise user productivity by providing IP telephone mobility in a campus environment. They are ideal for supervisors on the move within production environments or associates working in the warehouse, on the sales floor, or in the call center where they can talk over a company Wi-Fi wireless network. The solution allows enterprises to take advantage of the extended voice services offered through their office network, reserving their cellular phone for off-campus use and reducing operating expenditures. The Cisco Unified Wireless IP Phone 7921G, for example, is an IEEE 802.11a/b/g wireless IP phone that operates in conjunction with Cisco Unified Communications Manager and Cisco autonomous and unified Wi-Fi-based wireless networks. It delivers secure wireline voice quality and is software-upgradable to protect investments as future feature enhancements become available.
- Cisco Unity offers numerous methods to facilitate anywhere, anytime collaboration from a multitude of devices. For example, the Cisco Unity system has an industry-leading native integration with Blackberry smartphones. When you receive a new voicemail message, you are notified immediately on your Blackberry with a Web link you can click to access the message. This setup allows you to quickly respond to your messages in a timely manner without substantial data charges or battery drain. Even for employees using less-advanced devices, native Cisco Unity capabilities such as speech recognition and interrupted session recovery allow you to access your messages quickly while operating hands-free on mobile networks that are less than fully reliable.

## Cisco Unified Mobile Communicator—Feature Rich and Highly Mobile

For greater campus or wide-area mobility, the feature-rich Cisco Unified Mobile Communicator offers an array of productivity-enhancing capabilities through an intuitive and easy-to-use interface. This product delivers rich Cisco Unified Communications features such as integrated directories, presence, single business number reach, calling features, voicemail, secure text messaging, and conferencing.

Presence, for example, gives you an at-a-glance, real-time snapshot of your colleagues' availability. By looking at the phone display (Figure 3), you can immediately see who is available and who is busy. By simply selecting a name, you can place a call that typically leads to direct contact rather than voicemail.

Consider the situation of a customer support engineer at a client site who is trying to update a critical piece of enterprise software. The engineer encounters a problem in the code and needs advice about reworking it, requiring a short conversation with another engineer. Typically, the engineer would have to dial several different numbers on a mobile phone and probably leave several voicemail messages and then wait for a response. In this case, the response may not arrive until later that evening or even the next day. However, with the addition of presence information displayed on the mobile handset, the engineer can easily view the availability status of the person being called. The engineer can then select the right person from the directory to dial and reach that person on the first try. This new process saves time for both people; the engineer at the client site gets the information needed to immediately resolve the client problem and the recipient does not have to listen to multiple voicemail messages before responding to the urgent call.

**Figure 3.** Cisco Unified Mobile Communicator



As Figure 3 shows, presence information displayed beside names in the directory reveals who is available (green check mark) and who is busy (blue). It also shows who is offline or unavailable (red). Selecting a name with a green check mark beside it dials a person who is more likely to answer the call.

Other features offered in Cisco Unified Mobile Communicator follow:

- Unified contact list: Search the automatically updated corporate directory (Microsoft Active Directory) and personal contacts (Microsoft Outlook) from one easy-to-use interface to locate contacts quickly. Simply click to call.

- Presence: View real-time availability of other users. A presence-aware directory lets you determine at a glance whether a person is available to talk before actually placing a call.
- Click to call: Dial from the directory with the press of a button.
- Single business number reach: You can provide colleagues with a single number to reach them. They can accept the call with the press of a button and have the call bridged directly to their mobile handset. If busy, you can decline or ignore the call, and the call will be diverted to office voicemail.
- Secure text messaging: Send and receive text messages from the handset. This feature provides an alternate method to reach colleagues who may not be available to talk.
- Voice messages: Access Cisco Unity voicemail messages to view, play back, and delete messages from the mobile handset. Using visual voicemail, you can rapidly identify important messages for playback or callback.
- Conferencing: Receive notification of conference calls on the mobile phone from the Cisco Unified MeetingPlace® solution. By selecting the message, you can dial the conference bridge.
- Call logs: View call logs (missed, received, and placed calls) on the mobile phone, including calls made from or received on the office phone. Select to review missed calls or to easily follow up on a previous call.

### **The Future—Greater Mobility**

The rapid adoption of mobility in the business world and the increasing speed of business together suggest strongly that the future growth of mobile devices and applications will be robust. From mobile workers to semimobile office professionals to managers in manufacturing plants, all mobile employees will require integrated and intelligent communications tools to reduce the clutter of data, voice, instant messaging, and other types of communications. Cisco mobility solutions will continue to be integrated into industry-leading Cisco Unified Communications Solutions to keep mobile professionals at the cutting edge of their businesses.

To learn more about how you can enhance your team's productivity with Cisco mobility solutions and Cisco Unified Communications, visit <http://www.cisco.com/go/mobilecommunicator> or [www.cisco.com/go/unifiedcommunications](http://www.cisco.com/go/unifiedcommunications).

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