

Unified Communications for the Small or Autonomous Branch Office

Deploying data and voice capabilities in a single, integrated routing platform to increase productivity, decrease costs, and lower total cost of ownership

Many organizations have successfully lowered their total cost of ownership (TCO) and increased employee productivity by consolidating data networks and implementing networked applications. Today, business conditions are accelerating technology trends that extend “enterprise-like” functions to small and medium-sized offices with a continued emphasis on lowering costs, increasing return on investment (ROI), and boosting productivity.

The widely deployed, proven portfolio of Cisco® Integrated Services Routers (ISRs) provides data routing functions with features such as robust quality of service (QoS), network security, encryption, VPN, firewall, and intrusion detection to address the business needs of small and medium-sized offices. Cisco also has continued to introduce a wide range of network modules and interface cards that have enhanced the business value of the router. These services include content delivery, voice gateway, wireless LAN (WLAN), and a variety of other capabilities (Figure 1).

Figure 1. A Complete All-in-One Solution for Routing, Security, WLAN, Call Processing, Automated Attendant, Voicemail, Interactive Voice Response (IVR) and Time-Card Management Using Cisco Unified Communications Manager Express, Cisco Unity® Express, Cisco Integrated Services Routers, and a Full Portfolio of Cisco IP Phones



Complete Full-Service, All-In-One Solution

Today's savvy businesses are now using their Cisco small- or branch-office router as a single, secure, integrated platform for the deployment of converged data and voice. With Cisco Unified Communications Manager Express and Cisco Unity® Express, you can quickly and easily extend the benefits of IP communications to small- or midsize-office environments. This solution serves offices of 450 users or fewer and enables a robust set of commonly used business telephony features, voicemail, Automated-Attendant, and interactive-voice-response (IVR) capabilities.

By deploying a single platform to address all your data and voice business needs, you can streamline your operations and simplify management, maintenance, and training, resulting in lower TCO.

Cost-Effective Administration

Most small or autonomous branch offices cannot justify the expense of high-level, onsite technical expertise. Cisco therefore offers customers the option of using the industry-standard Cisco IOS® Software command-line interface (CLI) or a web-based GUI for configuration and administration.

You can use the Cisco Unified Communications Manager Express and Cisco Unity Express solution CLI to easily provision and administer your entire data and voice network on a Cisco ISR. The CLI allows an organization's technical staff to configure devices in bulk before or after they are delivered to a small office for initialization from anywhere on the network. This unique feature, not typically provided with entry-level systems, enables you to deploy many sites quickly and efficiently.

Nontechnical employees can add users or make changes to both Cisco Unified Communications Manager Express and Cisco Unity Express by using the simple, integrated web-based GUI. Whether managing through a GUI interface or the CLI, the ability to remotely maintain and troubleshoot greatly eases management and administration for small offices, especially for those with little technical expertise.

Ease Of Use

For employees in a small or medium-sized office, Cisco IP Phone features are very intuitive, thus requiring little training. Using the display of a Cisco IP Phone, the XML capabilities enable you to use a variety of productivity-enhancing applications such as accessing information from the Yellow Pages, deploying time-card functionality, checking airline schedules, and noting student attendance, to name a few. You can configure the system to provide local language and tones support as well.

One-Hundred-Percent Investment Protection

As a small or medium-sized office grows or seeks additional features, it may be advantageous to migrate from a distributed Cisco Unified Communications Manager Express environment to a centralized call-processing model with Cisco Unified Communications Manager.

Your existing investment is 100-percent protected. Your Cisco IP Phones, Cisco routers, Cisco Catalyst[®] switches, analog phones, and fax machines are all carried forward. With just a simple configuration change, your Cisco ISR becomes a redundant call-processing system at the branch office through the Cisco Survivable Remote Site Telephony (SRST) feature at no additional cost.

Your company can also carry its investment in Cisco Unity Express forward as you grow, using it as part of a centralized Cisco Unity deployment and in conjunction with Cisco SRST for survivability in the branch office.

Robust Features and Functions

Computer Telephony Integration

Cisco Unified Communications Manager Express supports computer telephony integration (CTI) with your customer-relationship-management (CRM) applications, such as Microsoft CRM using the Cisco Unified CallConnector for Microsoft Dynamics CRM. For example, if your staff uses an application to manage contact lists and contact information, when a contact calls, the system can automatically access that contact's record based on the contact's caller ID. This feature streamlines work processes and increases efficiency. Your staff immediately gains personal and order information without having to manually enter individual account information allows employees to both personalize and speed their interactions with important contacts.

Call-Coverage Capabilities

With Cisco Unified Communications Manager Express Basic Automatic Call Distribution (B-ACD), you are greeted with a prompt and then instructions help you automatically route the call. CME B-ACD provides automatic answering and call distribution for calls through the use of interactive menus and local hunt groups.

Call forwarding, call pick up, dual line appearances, and hunt groups help ensure that when a call comes into any office, regardless of office size, it will be answered efficiently to ensure that customers remain satisfied with the service they receive.

Video Telephony

Cisco Unified Communications Manager Express supports video telephony with several video-ready Cisco IP Phones and with Cisco Unified Video Advantage. Video telephony not only enhances your experience, it also improves employee efficiency and productivity.

Mobility

With today's mobile workforce, staying connected anywhere and anytime is critical to keeping employees efficient and productive. Cisco Unified Communications Manager Express offers a variety of mobility solutions, including support for wireless IP phones and dual-mode phones such as Nokia dual-mode phones and Research In Motion (RIM) BlackBerry handsets. Additionally, with native single number reach, you can provide a single number to all your contacts to reach you in and out of the office.

Market Industries

Cisco Unified Communications Manager Express offers application integration with multiple applications from different market industries, including retail, finance, manufacturing, and healthcare.

Collaboration Services

Cisco Unified CallConnector supports unified communications collaboration services to provide presence, instant messaging, and conferencing. The application provides telephony integration to the desktop. When Cisco Unified CallConnector Server is added, you get presence and instant messaging features to improve productivity and help reach others optimally.

Integrated Voicemail

When the next-available person cannot answer a call, extending individual voice mailboxes to all employees provides an opportunity to improve customer service and employee productivity, while increasing the professionalism in a small or medium-sized office.

Cisco Unity Express, an optional network module for Cisco Unified Communications Manager Express, offers easy, one-touch access to messages and commonly used voicemail features that enable you to reply, forward, or save messages. To improve message management, you can create alternate greetings, access envelope information, and mark or play messages based on privacy or urgency. Cisco Unity Express supports voicemail boxes for 500 users and it includes 600 hours of voicemail storage - ample capacity for any small or medium-sized business need.

General Delivery Voice Mailboxes

Cisco Unity Express also provides general delivery voice mailboxes, voicemail storage for employees with similar skill sets or job functions. For example, when customers call a retail store, real estate office, or bank with a general question, they may not require the attention of a particular employee. A general delivery mailbox allows the first-available team member to retrieve a message and promptly respond to a customer's needs.

Built-In Automated Attendant

A basic, built-in Automated Attendant for Cisco Unity Express enables you to quickly reach the right person without the assistance of an operator 24 hours a day. A dial-by-name and dial-by-extension directory simplifies self-service, and if you need further assistance, you can easily return to an operator when necessary.

Interactive Voice Response

IVR provides local integration to a broad set of databases, an intuitive scripting environment, and extensive reporting capabilities, for a comprehensive self-service solution. The technology enables self-service for callers, improves customer satisfaction, and lowers operational costs. The Cisco Unity Express optional IVR function allows you to update personal information and preferences, order products, track delivery, check payment status, and request product information, thereby alleviating the burden on the customer service representative or contact center agent.

Time-Card Management

The TimeCardView application creates business application integration with Cisco Unified Communications Solutions, allowing the organization to be more flexible and employees to be more productive. The application allows employees and supervisors to enter and manage time-card data from three different user profiles.

Broadest Range of IP Endpoints

To round out the Cisco Unified Communications Solution, Cisco offers a broad portfolio of IP phones at various price points to meet any application or requirement. When connected to a converged IP network, Cisco IP Phones enable you to place phone calls as quickly and easily as you would using your current phone and with high QoS and security for the most demanding business environments (Figure 2).

Figure 2. Cisco IP Phone Portfolio



The new generation of intelligent Cisco Unified IP Phones is entirely display-based and offers straightforward user features and customization capabilities directed by changing business needs. Display-based phones help you with prompts for how to use the phone and access a directory, and XML-display capacities allow for the display of non telephony information. Cisco Unified IP Phones extend beyond simple dial-tone replacement to advanced feature sets that support a wider business IP communications environment including data, voice, and video.

The Fastest and Simplest Way to Enable IP Communications in Your Small or Medium-Sized Offices

Together, Cisco Unified Communications Manager Express and Cisco Unity Express provide a simple, consistent, distributed architecture that can be easily replicated for multiple small branch-office locations across an enterprise network (refer to Figures 3 and 4).

Figure 3. Standalone Office

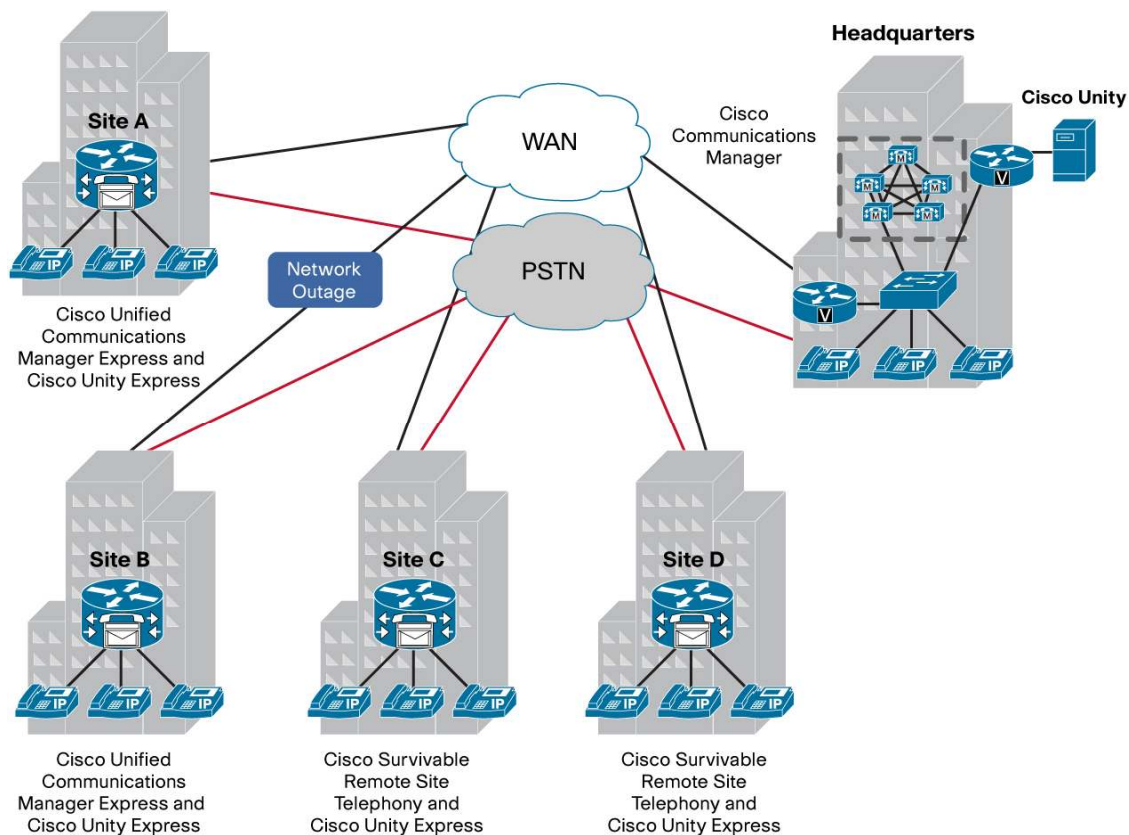


Figure 4. VoIP and Data-Connected Offices

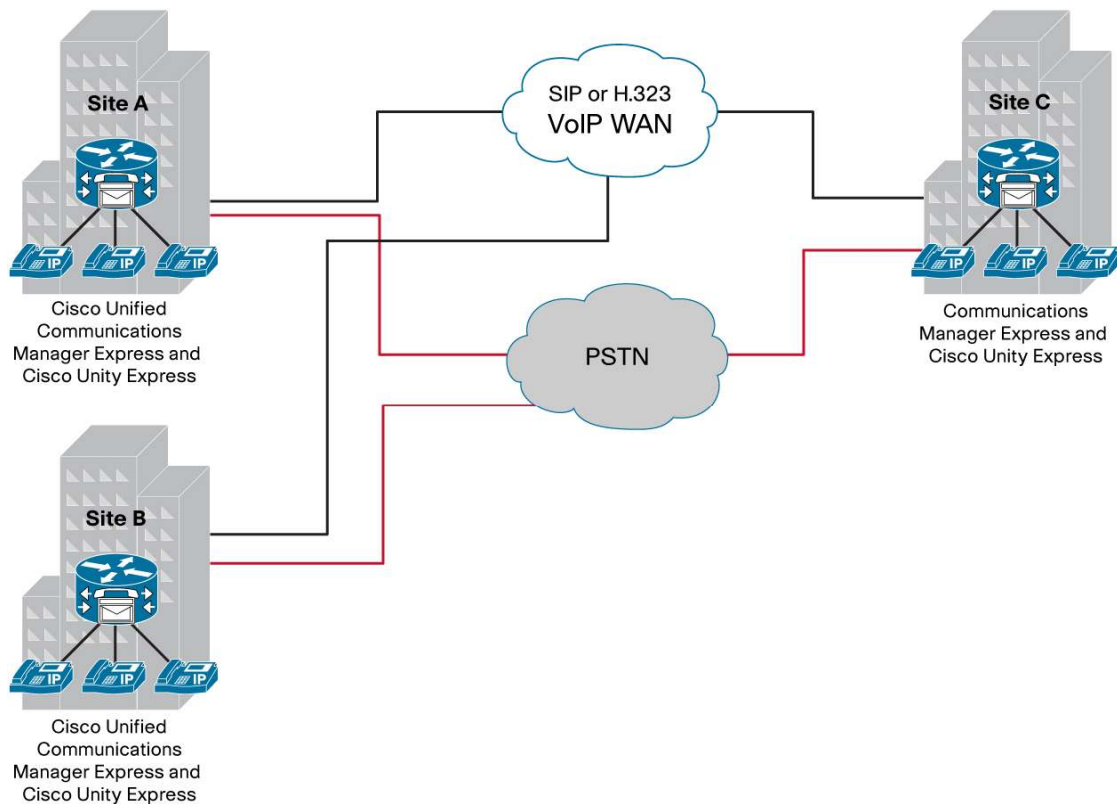


Table 1 lists the features of the Cisco Unified Communications Manager Express with Cisco Unity Express solution.

Table 1. Features of Cisco Unified Communications Manager Express with Cisco Unity Express

	Cisco Unified IP Phone 6901 and 6911 Models	Cisco Unified IP Phone 6921, 6941, and 6961 Models	Cisco Unified IP Phone 7921 and 7925 Models	Cisco Unified IP Phone 7942, 7945, 7962, and 7965 Models	Cisco Unified IP Phone 7975
Alternate greeting capability	Yes	Yes	Yes	Yes	Yes
Access voicemail messages	Yes	Yes	Yes	Yes	Yes
Automatic assignment of free directory numbers to new IP phones	-	Yes	Yes	Yes	Yes
Automated Attendant	Yes	Yes	Yes	Yes	Yes
Caller ID	-	Yes	Yes	Yes	Yes
Call forwarding	Yes	Yes	Yes	Yes	Yes
Call history (including missed calls)	-	Yes	Yes	Yes	Yes
Call pickup on hold	-	Yes	Yes	Yes	Yes
Call pickup ringing variations	-	Yes	Yes	Yes	Yes
Call timer	-	Yes	Yes	Yes	Yes
Call transfer	Yes	Yes	Yes	Yes	Yes
Call waiting	Yes	Yes	Yes	Yes	Yes
Configurable system message	-	Yes	Yes	Yes	Yes
Distinctive ringing	-	Yes	Yes	Yes	Yes
Directory-number overlays for parallel hunting	Yes	Yes	Yes	Yes	Yes
Do not disturb	-	Yes	Yes	Yes	Yes
European date formats	-	Yes	Yes	Yes	Yes
Extension login for toll-bar override	-	Yes	Yes	Yes	Yes
Extension mobility	-	-	Yes	Yes	Yes
Flexible auto-line selection	-	Yes	Yes	Yes	Yes
General delivery voice mailboxes	Yes	Yes	Yes	Yes	Yes
Hold and resume	Yes	Yes	Yes	Yes	Yes
Hunt-group login	-	Yes	Yes	Yes	Yes
Huntstop support	-	Yes	Yes	Yes	Yes
Integration of H.450.x Call Transfer and Forwarding	Yes	Yes	Yes	Yes	Yes
Intercom	-	-	Yes	Yes	Yes
IP phone URL provisioning	-	Yes	Yes	Yes	Yes
GUI support and customization	Yes	Yes	Yes	Yes	Yes
Languages and internationalization	-	Yes	Yes	Yes	Yes
Live record	-	Yes	Yes	Yes	Yes
Local and voice-over-IP (VoIP), private-branch-exchange (PBX), public-switched-telephone-network (PSTN), and ISDN calls	Yes	Yes	Yes	Yes	Yes
Local call-back busy subscriber	-	Yes	Yes	Yes	Yes
Local directory search	-	Yes	Yes	Yes	Yes
Local XML-based speed dial	-	Yes	Yes	Yes	Yes
Music and tone on hold	Yes	Yes	Yes	Yes	Yes
Night service bell	-	Yes	Yes	Yes	Yes
On-hold timeout alert	-	Yes	Yes	Yes	Yes

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On-hook dialing	-	Yes	Yes	Yes	Yes
Paging	-	Yes	Yes	Yes	Yes
Per-call caller ID blocking	Yes	Yes	Yes	Yes	Yes
Push-to-Talk (PTT)	-	-	Yes	-	-
Secondary dial tone	Yes	Yes	Yes	Yes	Yes
Secure communications (Secure Real-Time Transport Protocol [sRTP])	-	Yes	Yes	Yes	Yes
Silent and feature ring options	-	Yes	Yes	Yes	Yes
Single number reach	-	Yes	Yes	Yes	Yes
Shared-line appearances	-	Yes	Yes	Yes	Yes
Speed dial	-	Yes	Yes	Yes	Yes
Speed-dial programming from IP phone	-	-	Yes	Yes	Yes
Syslog message support for phone registration and deregistration	Yes	Yes	Yes	Yes	Yes
Telephony Application Programming Interface (TAPI) support	-	Yes	Yes	Yes	Yes
Text label support on IP phones	-	Yes	Yes	Yes	Yes
Three-party conference	-	Yes	Yes	Yes	Yes
Eight-party impromptu conference	-	Yes	Yes	Yes	Yes
Thirty-Two-Party Meet-Me conference	-	Yes	Yes	Yes	Yes
Time and date display	-	Yes	Yes	Yes	Yes
Time-card application	-	-	Yes	Yes	Yes
Time of day, day of week, and date-based call blocking	Yes	Yes	Yes	Yes	Yes
Top-line description	-	Yes	Yes	Yes	Yes
Two-line per-button support	-	Yes	Yes	Yes	Yes
Video telephony	-	Yes	Yes	Yes	Yes
Visual message waiting indication	-	Yes	Yes	Yes	Yes
Voicemail integration	-	Yes	Yes	Yes	Yes
Voicemail standard features: Message reply, forward, save, and marking	-	Yes	Yes	Yes	Yes
Voicemail storage (600 hours)	-	Yes	Yes	Yes	Yes
VoiceView Express	-	-	Yes	Yes	Yes

For organizations interested in quickly deploying integrated data and voice communications at remote locations, Cisco Unified Communications Manager Express with Cisco Unity Express allows customers to easily enable feature-rich branch- or small-office call-processing and voicemail functions to their existing or new Cisco ISR.

Unlike many small-office standalone call-processing solutions - which lack the ability to fully integrate data and voice connectivity on a single platform - Cisco solutions can help you lower your TCO by providing integrated voicemail and embedded call functions directly into Cisco IOS Software, providing a truly integrated solution.



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