

# CISCO SMB CLASS SOLUTIONS IP COMMUNICATIONS - IMPROVE BUSINESS COMMUNICATIONS



**BUSINESS COMMUNICATIONS SOLUTIONS THAT INTEGRATE VOICE AND DATA INFRASTRUCTURES ON A SINGLE NETWORK CAN HELP ENABLE SMALL AND MEDIUM COMPANIES TO ENHANCE PRODUCTIVITY, SIMPLIFY SYSTEMS MANAGEMENT, AND REDUCE OPERATIONS COSTS.**

## Background

In today's rapidly changing business world, organizations are faced with increased competition, pressure on margins, and evolving business models. While traditional areas of concern, such as productivity and customer satisfaction, are more important than ever, newer challenges such as the growth of communications traffic, security and the heightened need for business agility must be factored in as well. To meet these challenges, organizations are looking at technology solutions that can help give them an edge over the competition.

At the forefront of these challenges are businesses' voice networks, which face changing communications requirements and expectations. Like other technologies, voice communications are now moving at Internet speed. Writing down a message and returning a call within 24 hours is no longer acceptable to today's customers. Small and medium businesses need voice solutions that can help meet customer demands.

Businesses are also seeking better ways to manage ongoing expenses related to their voice and data networks. Outsourcing network management is common for growing organizations, but might not be cost-effective for routine administrative tasks. Small and medium businesses need solutions that deliver self-service management for common tasks such as moves, adds and changes.

One of the most effective ways companies can realise these benefits is by migrating to an IP Communications solution that combines voice, data and video infrastructures on a single, converged IP network. An end-to-end IP Communications solution may help deliver cost savings to businesses of all sizes, enabling them to increase productivity by taking advantage of

applications such as unified messaging, rich media conferencing, interactive voice response (IVR), automatic call distributor (ACD), and phone productivity solutions employing Extensible Markup Language (XML).

IP Communications solutions can meet and exceed the availability and resiliency of traditional phone systems, offering the reliability that businesses have come to expect. A proven technology, IP Communications is now widely adopted by large and small enterprises worldwide; many of these companies are realizing the benefits of their decisions just weeks after implementation.

## Challenge

Growing pains are nothing new for most small to medium businesses. As they expand operations to support new customers or enter new marketplaces, companies face numerous strategic challenges.

Many growing companies are already supporting independent networks to handle voice and data communications. As network administrators contend with managing new equipment, applications deployment, staff, and budgets, these separate voice and data networks may become increasingly difficult to scale, manage, and maintain, resulting in higher costs.

Private branch exchange (PBX) installation and upgrades can also be costly, sensitive issues for organizations that are growing or moving to a new office space. And for companies for which a PBX system is reaching the end of its lease, the renewal or replacement process can be slow, frustrating, and expensive.

Businesses that are growing geographically must often support several branch offices, where traditional PBX installations and toll charges can prove to be expensive. Many companies also need the ability to efficiently and affordably accept and route inbound calls without operator intervention, using an automated attendant application. Others maintain call centers distributed throughout many disparate geographic locations, and need solutions to let them integrate Web and back-end systems to help improve responsiveness.

# IP COMMUNICATIONS SOLUTION OVERVIEW

## Solution

An IP Communications solution can help growing companies overcome these business challenges in the short term, while laying the groundwork to take advantage of new opportunities in the future.

A well-planned IP Communications solution should consist of standards-based, fully integrated components that can help companies to protect their existing investments, while adding new features and applications to their networks. Typically, a standards-based solution delivers increased reliability, can integrate smoothly with existing networks, and can be modified or upgraded as business needs change.

A comprehensive, end-to-end Cisco IP Communications solution includes five major components:

- At the heart of the solution is Cisco CallManager call processing software, which manages telephony features and functions while providing support for applications such as unified messaging, rich media conferencing, collaborative contact centers, and interactive multimedia response systems. Cisco offers two IP Communications solutions for small and medium businesses—Cisco CallManager and Cisco CallManager Express. Cisco CallManager Express with Cisco Unity™ Express is an all-in-one solution based on Cisco access routers, and is designed for small business offices with up to 200 users. Cisco CallManager, running on Cisco Media Convergence Servers (MCS), can be scaled to support up to thousands of phones at one or many locations.
- In support of Cisco CallManager is the converged IP network infrastructure, which includes switches with inline power, routers, and other network components such as gateways, services, and software. For companies planning an IP Communications migration, the Cisco MCS 7800 Series MCS offers a high-performance server platform for voice, video, and integrated data that can be cost-effective and easy to deploy. Integrated platforms can be added to an existing data network immediately, then easily enhanced as needed to support advanced services such as IVR, unified messaging, ACD, and XML-based phone productivity applications.
- IP phones that connect to a converged IP network typically enable users to place phone calls as quickly and easily as they would using an analog phone. IP phones can be managed just like any other network device, making it easy to perform telephone moves, adds, and changes with minimal staff, and saving money on network administration. Wired or wireless, they deliver high-quality voice communication and feature LCD display screens to support advanced IP Communications applications. IP phones can also enhance employee mobility, helping to enable users to receive and make calls from wherever they can connect to the network

- Applications such as unified messaging let users access and manage voice mail, e-mail, and fax messages from a single mailbox. Unified messaging helps business professionals manage how and where they want to be reached, helping to enhance communications, productivity, and responsiveness. Multimedia contact centers, integrated customer relationship management (CRM) solutions, and rich media conferencing can help deliver streamlined communications, , and increase employee productivity.
- Management software provides support for IP applications, from basic connectivity, security, and network management to more advanced services.



# IP COMMUNICATIONS SOLUTION OVERVIEW

## Potential Benefits

An end-to-end, standards-based IP Communications solution can help to make cost savings, and provide a converged network foundation, so that small and medium businesses can later deploy innovative IP applications.

Companies may be able to quickly reduce their total costs of network ownership by migrating their voice and data infrastructures to a converged IP network. A combined infrastructure can help organizations to reduce ongoing network administration costs by enabling self-service voice moves, adds, and changes. And in some cases, companies might be able to reduce toll charges and monthly fees for previously dedicated leased voice lines that were used to connect branch offices and teleworkers.

This solution can also help deliver strategic benefits by improving businesses' overall communication, with services such as voice mail and unified messaging. The IP Communications solution can also help enable increased mobile worker productivity so workers can stay productive where ever they have access to the network.

Combining separate data and voice networks in one network can help enable companies to simplify network operations as they build additional value into their networks. With an IP Communications solution, companies might also be able to merge previously disparate support and administrative staffs for voice and data networks. Network support staff productivity has improved significantly at some organizations as a result.

Many Cisco IP Phones also feature pixel-based LCD displays, offering dynamic soft keys that guide a user through call features and functions, and can support additional information services including Extensible Markup Language (XML) capabilities. XML-based services can be customized to provide users with access to a diverse array of information such as stock quotes, employee extension numbers, or any Web-based content.



## Next Steps

The end-to-end Cisco IP Communications solution can be tailored to accommodate businesses of all sizes and types, and is designed to be reliable, scalable, easy to manage and support. With a flexible Cisco IP Communications solution in place, businesses can be well-positioned to adopt new telephony applications & services in the future.



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