



**IBM System i IP Telephony**

## Highlights

- Deploy a complete IP telephony suite on one easy-to-manage system, or even part of a system, shared with other applications
- Integrate telephony with your e-mail, messaging and business applications based on an open architecture and standards-based solution
- Lower your traditional telephony costs, while improving productivity and collaboration among employees, partners and customers
- Extend the IBM System i™ benefits of simplicity, reliability, integration, vertical growth and security to IP telephony

***i want to communicate when, where and how i want.***

***i want control. i want an i.***

In today's highly competitive business environment, companies everywhere want to extract business advantage from every technology in the enterprise—especially customer-facing communications, such as their telephony systems. Many are looking to IP telephony to find ways to lower costs, simplify network management, and use existing systems and resources while more tightly integrating business applications and customer communication with their voice and data networks.

At the same time, many of these companies face the challenge of an overly complex IT environment. They seek the benefits of an integrated business system that can help them become more responsive to their customers, improve productivity, operate without interruption and secure their data and communications—without large upfront investments in time, skills or money.

With IBM System i IP Telephony, you can get the business benefits and simplicity you seek from both your telephony and IT environments, with one integrated, secure and reliable solution delivered by two industry leaders.

## About IP telephony

What is IP telephony? Simply stated, it is technology that sends voice communication over your data network using Internet Protocol (IP). This is in contrast to traditional phone systems where data and voice networks were totally separate. More companies of all sizes are replacing their traditional phone systems with IP telephony to realize both productivity benefits and infrastructure cost savings.

The reasons for making the switch to IP telephony vary from company to company. However, the most common benefits can be categorized in two areas: Cost savings and business advantage.

Cost savings can be realized by reducing infrastructure and operating costs because IP telephony systems have a single infrastructure across multiple offices for voice and data, and these systems are easier to manage and change with the needs of the business. In addition, companies may experience lower charges for long-distance calling and conference call hosting.

Business advantages are driven by increased productivity and enhanced collaboration among employees, customers and partners. These are achieved through: advanced voice applications, such as contact centers, where organizations can drive customer satisfaction and business revenue; unified messaging, which includes voice mail/email integration and find me/follow me capabilities; and advanced collaborative applications, such as instant messaging, presence, and highly-scalable audio conferencing capabilities. The most significant business benefits emerge when IP telephony is integrated with critical collaboration and business applications throughout the organization. IP telephony solutions built on open architectures and industry standards like Session Initiation Protocol (SIP) provide the most flexibility to connect to the third-party applications your business requires.

### **Realize the benefits of System i IP Telephony**

In the past, companies had to build a complex infrastructure with many servers in order to reap the benefits of IP telephony. But, with System i IP Telephony, there is a better way.

*With IBM System i IP Telephony, you can:*

- *Enjoy the System i benefits of simplicity, reliability, integration, vertical growth and security for IP telephony*
- *Migrate to IP Communications with ease*
- *Integrate compatible, Session Initiation Protocol (SIP)-based applications and devices*
- *Economically expand telephony services to multiple sites*
- *Ensure business continuity*

System i IP Telephony delivers the proven solutions of 3Com®—a leading supplier of secure, converged voice and data networking—on the IBM System i platform, IBM's leading integrated business system. With System i IP Telephony, you can enjoy the benefits you have come to expect from System i—integration, simplicity, vertical growth, and, above all, security and reliability—applied to IP telephony. In this section we will review the overall benefits that System i IP Telephony can deliver, as well as focus specifically on what 3Com's products and the System i platform bring to the solution.

In support of open industry standards and integration, System i IP Telephony is built on SIP. SIP is critical to extending the integration of System i IP Telephony with third-party collaboration and business processing applications you rely on to run your business.

All the applications in the IP Telephony suite can run on a single stand-alone System i5. However, given the critical importance of telephony availability, redundancy is essential. It is recommended that any IP telephony solution include a primary and a backup system (preferably at different sites) to ensure that telephony is continuously available. In addition to availability, the ability of your telephony system to meet your business needs is critical. Individual System i IP Telephony functions are highly scalable, making it easy to add new capabilities as network and business requirements

change. Back-end applications can be conveniently installed on a single system or deployed separately on individual platforms. Key features, including high performance, feature redundancy and failover mechanisms, are as follows:

- **High scalability.** Scales from hundreds to thousands of handsets on a single system.
- **Converged voice and data communications.** Delivers integrated, simultaneous voice and data over the corporate LAN and WAN.
- **Extensive applications.** Includes built-in robust call processing, full IP-PBX feature/functionality, unified messaging and centralized system management.
- **Open architecture.** Standards-based architecture supports traditional PSTN connections and IP telephony protocols and standards and enables easy integration with SIP-enabled 3rd party applications through standard protocols and API's.
- **Multi-site support with centralized administration.** The ability to connect multiple sites and remote workers via the data network allows telephony and messaging services to be delivered and administered from a single location. Likewise, telecommuters can connect via a virtual private network for access to real-time telephony and voice messaging services.
- **High survivability.** The System i IP Telephony solution offers high availability with a required backup system. Each system constantly synchronizes with the other(s) and each phone knows the address of the primary and backup servers to ensure that phone calls can be made and received without interruption.

For companies with 100 to 1000 employees, IBM offers System i IP Telephony Express, attractively-priced solutions containing the System i platform and IP telephony software and licenses from 3Com. System i IP Telephony Express solutions are packaged and priced for 100, 250, 500 and 1,000 users and can be ordered with or without a secondary System i for high-availability requirements. System i Business Partners provide 3Com IP telephony handsets and gateways to deliver a total IP telephony solution.

### About the 3Com IP Telephony Solution

The 3Com IP Telephony solution is a comprehensive, exceptionally flexible, reliable, and manageable communications system that can increase business productivity, improve customer relationships, and reduce costs. The solution includes three major components: IP telephony applications suite, media gateways and SIP-based IP phones. Together they provide the components for secure, high-performance voice communications, while simplifying multi-site deployment and workforce flexibility.

3Com IP Telephony has the processing capacity to support organizations of any size with the reliability and functionality of large carrier-class systems because the call control engine that drives the solution was developed originally to address the needs of carrier deployments. And, because the solution architecture offers an incremental upgrade path, companies can add sites when ready by interconnecting them via IP. In addition, new users are added easily by administrators and IP phones are made operational by simply plugging them into a network port.

3Com IP Telephony enables companies to implement a next-generation, multimedia IP communications system that uses the Internet Engineering Task Force (IETF) Session Initiation Protocol (SIP) standard. It supports a rich set of productivity-enhancing applications while providing the phone features of a traditional phone system. The IP Telephony module, which is a component of the 3Com Convergence Applications Suite, also lets organizations migrate to an open, IP-based communications system in increments that best fit business objectives. The module supports centralized administration, configuration, and management that can lower installation and operating costs and optimize IT staff as the system is implemented throughout an organization. To ensure business continuity, the module offers a distributed, replicated architecture to ensure full-function telephony at any site even during a WAN failure.

### *Economically Expand Services to Multiple Sites*

3Com IP Telephony offers a distributed multi-site architecture that allows it to meet the needs of organizations of all sizes. Businesses will be able to deploy the solution on larger, centralized System i platforms for campus sites or on distributed smaller System i platforms located in the branches of a multi-site organization.

### *Ensure Business Continuity*

Regardless of where users are located, their profiles are replicated to a secondary system for maximum resilience. In the unlikely event of a local system failure, service automatically continues from the backup system, which may be installed at the same site or at a separate location. In addition, a distributed architecture ensures that remote sites do not lose telephony services even if the WAN fails and the sites become isolated.

### *Extend Investments with Standards-based Solutions*

The 3Com Convergence Applications Suite can deliver messaging, conferencing, presence, and contact center capabilities throughout the entire organization. Since these applications are based on the SIP industry standard they are compatible with SIP-based software and equipment available from a range of vendors—allowing companies to choose the right technologies for their business. As part

of the 3Com Voice Solutions Partner Program, 3Com regularly conducts third-party interoperability tests and performs rigorous testing of selected devices and applications.

### *Centralize Management to Lower Costs*

All the communications servers running the 3Com IP telephony modules can be managed centrally to lower expenses and staffing requirements. Even though multiple servers may be deployed throughout an organization's network, local support can be minimized and system changes and updates can be done from a single location.

### *Migrate to IP Communications with Ease*

System i IP Telephony can be deployed as an overlay to traditional Private Branch Exchanges (PBXs) by using 3Com gateways for interconnections. This allows the enterprise to integrate advanced SIP-based applications while maintaining an existing telephony infrastructure. Sites and extensions can then be migrated to IP telephony as the existing PBXs become obsolete or the organization expands to new facilities. In addition to digital gateways, 3Com offers analog gateways to support legacy devices such as fax machines, analog phones, modems, and intercoms.

## **About System i**

Experience the benefits that the IBM System i family can provide your company—helping you to install new capabilities faster, maintain IT more easily and reduce operating costs, freeing up people and resources to focus on business growth and innovation. The new System i5 product line—the latest generation of System i, based on IBM's tenth generation of 64-bit processor technology—can help create an environment where your business processes are integrated across the value-chain, and your employees are able to quickly respond to any customer or partner demand, market opportunity, or external threat.

With System i, everything you need to run your business applications is integrated into a single system. With the announcement of System i IP Telephony, you can now integrate your IP Telephony

applications on this system, too. The database, security, performance tuning, backup, reporting, communications, Internet connectivity and file and printing serving are built in. The System i platform is designed to be easy to operate and maintain. By embracing open standards, the System i platform gives you broader choices and a greater capability to use the system you already have instead of buying a new server for every application. System i supports applications running on IBM i5/OS®, Microsoft® Windows®, Linux®, IBM AIX 5L™, Java™, IBM WebSphere® and IBM Lotus® Domino® environments—all at the same time and all on one highly-reliable system. Built-in security features on the System i family can help businesses meet regulatory requirements and safeguard critical data across all of these application environments.



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