Beyond converged networks: driving business value through unified communications and collaboration.
Introduction

“Just another day at the office.” Twenty years ago, when the world was round and telephones, face-to-face meetings and travel ruled interactivity, this expression may have evoked thoughts of established routines and predictable interactions with colleagues, customers or partners. In today’s “flat” world, jobs and methods of interaction are, by necessity, much more fluid. Now, people need to routinely work on dynamically constructed teams with colleagues in different cities, across the country or even on different continents. Companies that can help people communicate and collaborate better, faster and cheaper can promote a competitive advantage through their ability to get products to the marketplace faster, complete projects on time and improve customer service. The challenge is overcoming the limitations of traditional, stand-alone data, telephony and video solutions.

Given this challenge, many organizations are seeking communications approaches to help deliver a user experience that unites people across and beyond traditional business boundaries. IBM has a differentiated strategy based on open standards to help organizations address current and future business needs. The IBM Unified Communications and Collaboration (UC2™) strategy can drive exponential business value by integrating communications and collaboration tools into existing business applications and processes. By providing users with a single, simple integrated experience across the applications as well as the communications and collaboration tools they use every day, organizations can develop more dynamic and flexible business systems. Organizations can achieve these benefits without having to replace their existing telephony, video and IT infrastructures or making users’ lives more complicated, even when using solutions from multiple vendors. And, as a result, they can build more flexible, realtime business models that allow them to respond more quickly to emerging marketplace opportunities and competitive threats.
By adopting unified communications and collaboration strategies, organizations can address critical needs such as improving productivity, supporting an increasingly complex and global business network, and facilitating the communications needs of employees no matter where they work or how they prefer to be contacted. IBM can provide the essential software, services, hardware and strategic alliances that organizations need to connect people to applications, data and other people—anytime, anywhere. Using a unified communications and collaboration strategy and modular, standards-based IBM solutions, organizations can simplify and unify business communications, from voice, e-mail and instant messaging (IM) to videoconferencing and Web conferencing, while helping to reduce costs.

This paper highlights key drivers, challenges and characteristics of a unified communications and collaboration strategy. It also examines the IBM UC² vision, including how IBM delivers on this vision and the advantages organizations can realize by teaming with IBM to take converged communications to the next level.
Beyond converged networks: driving business value through unified communications and collaboration.

Highlights

The changing landscape of business communications and collaboration

The convergence of voice, video and data on IP networks is fundamentally changing traditional collaboration and telephony within organizations of all sizes and across most industries. Yet IT managers are in a difficult position because they must find a cost-effective way to transition to a more unified approach without ripping and replacing their existing IT, voice and telephony infrastructures; disrupting the workforce; or requiring significant retraining of their staff. The challenge is to find an approach that is transparent to users and simple for them to learn, facilitates reuse of existing multivendor IT environments, and can deliver demonstrable business value.

Enriching business processes and applications

Because innovation, consistent productivity gains and outstanding customer satisfaction are top priorities for most companies, it’s no longer enough that people can simply engage one another using the telephone or video or e-mail. To simultaneously work faster and deliver more valuable results, people need the ability to work with one another—and even their distributed business network of partners, suppliers and customers—in realtime in the context of their business processes and preferred applications. Although communications and collaboration solutions may take slightly different forms for different industries, their potential to boost productivity is compelling. For example, a healthcare solution provider developed a solution that unifies radiology applications with communications and collaboration tools to speed up the radiology workflow, which can lead to quicker diagnoses and improved care for a lower cost. Physicians and other medical professionals spread across a hospital or even multiple locations can view medical images and collaborate in realtime to diagnose patients.
Improving agility and responsiveness
Companies are increasingly finding that the key to improving productivity, business responsiveness—and innovation—is to deliver collaboration tools in a consistent, simple and meaningful context that accommodates work style preferences. For example, one project manager may communicate with a customer via IM. If the customer asks a question the project manager can't answer, she may broadcast a request for product expertise to a community of colleagues and literally cut and paste the expert's response in an instant message back to the customer. Another project manager may rely more heavily on traditional tools such as the telephone and e-mail to accomplish the same tasks. Either way, people need unencumbered access to the various tools they prefer to use to optimize how much they accomplish. Moreover, office “boundaries” have changed. Mobile workers may use third-party wireless and remote-access infrastructures or move between those infrastructures and company headquarters on a daily basis.

Protecting the value of existing multivendor systems
Most companies have acquired their IT, telephony and video infrastructures incrementally on a regional or branch office level at different points in time. As a result, these companies run—and therefore must support and maintain—multiple infrastructures and IT platforms from multiple vendors. Companies must find ways to leverage and better manage the various multivendor infrastructures they have today. Moreover, when mergers or acquisitions occur, the faster the companies can marry disparate communications and collaboration infrastructures, the faster they can optimize combined strengths, productivity and costs.
The next step: finding the right communications and collaboration strategy
Faced with these challenges, many organizations are pursuing new communications strategies. To get started, some companies are simply reducing costs by updating their aging telephony infrastructure with IP telephony solutions. Others are focused on improving productivity by adding advanced capabilities such as IM, Web conferencing and videoconferencing to improve collaboration and productivity. To optimize investments when choosing a solution and charting a strategy, it’s important to consider how business needs will change over time, how difficult it will be to implement new capabilities and functionality, how well the new capabilities will integrate with existing tools, and how the new capabilities will affect the user experience. From a cost and benefit perspective, an ideal solution should make it relatively simple to add and push out new functionality to users. And the new functionality should integrate smoothly with the user interface to minimize training needs and costs.

Taking convergence to the next level: unified communications and collaboration
A unified communications and collaboration strategy allows organizations to provide capabilities such as realtime presence awareness (which enables users to easily identify, locate and contact colleagues who are also online), enterprise IM, Voice over IP (VoIP), video chats and Web conferencing and make these capabilities accessible to users through a consistent, familiar experience. Convergence on the front end provides a consistent user experience and shields users from the complexity of underlying technologies, while coexistence on the back end provides an optimal way to manage existing and planned IT and VoIP investments.
For end users, a unified communications and collaboration strategy delivers flexibility. It can help create a security-rich infrastructure that allows employees to respond more quickly and efficiently by connecting, communicating and collaborating with individuals or groups. Moreover, the strategy enables employees to communicate just about whenever they want, in realtime:

- Using presence awareness to find their contact’s availability.
- Using their preferred means of contact—voice, video, text or any combination.
- Using virtually any platform—computer, phone, mobile or wireless device, or network appliance.
- Relying on a security-enhanced infrastructure that protects but doesn’t inhibit necessary communication.

Beyond increased flexibility and productivity, a unified communications and collaboration strategy can help reduce IT operating and support costs. IBM research estimates that advanced audioconferencing in a converged network environment can save as much as 35 percent over the cost of traditional approaches. In fact, IBM realizes significant annual savings in phone and travel costs from its use of IM and Web conferencing.

What’s more, IT managers who embrace the idea of unified communications and collaboration are positioned to reap the greatest benefits for their organizations. They are putting themselves in place to change the way employees interact with one another. At the same time, these adopters are consolidating and standardizing business and communications processes, which can lead to
Highlights

**Competitive differentiation through superior customer service is just one potential benefit of a unified communications and collaboration strategy.**

significant improvements in employee productivity. Above all, they are building the infrastructure required to fundamentally change the way organizations interact with customers, partners and suppliers—enabling their organizations to differentiate themselves from the competition with unique business processes and superior customer service.

For example, an automobile insurance company provided its adjusters with a solution that enables them to complete the entire accident claims process, including contacting the customer and colleagues through a single interface. Using an easy-to-follow workflow, customer care call center representatives can pull up the customer’s information and add notes about the accident and then contact an adjuster in the field using her or his preferred communication method. The field adjuster can then access the claim and continue the process, including obtaining a map to the accident location and submitting photos and other details over his or her wireless device. The field adjuster can even consult with an auto repair shop with a video-share-enabled device for help with the assessment. After the assessment is complete, the call center representative is alerted and can use a VoIP phone to call the customer to follow up simply by clicking on his or her number on the screen. The unified solution enables employees to work more efficiently and effectively together to provide faster, more accurate service to customers, helping to improve customer satisfaction while increasing productivity and reducing costs.
An effective unified communications and collaboration framework must be comprehensive yet flexible enough to adjust to users, existing computing and telephony investments, and core business processes. Beyond offering a wide selection of capabilities, ideal unified communications and collaboration solutions:

- **Enrich processes and adapt to user preferences by integrating into the environment that’s best suited for a given task.**
- **Span a continuum, including document-, e-mail-, realtime-, application- and Web-centric environments.**
- **Integrate into all existing business processes and business applications.**
- **Embrace multivendor IT, video and telephony environments deployed in the enterprise.**
- **Transform the experience beyond simple collaboration to a virtual work environment.**
- **Establish a security-rich exchange of information among parties.**

**A closer look at IBM unified communications and collaboration solutions**

IBM offers the essential software, services, strategic alliances and hardware elements companies need to help people stay connected to applications, data and one another anytime, anywhere. So users can find an expert, reach out within and beyond business boundaries, and collaborate more easily than ever. As a result, your organization can improve productivity, speed responsiveness and lower operational costs while creating a more user-friendly work environment that’s easier to manage, extend and enrich.

In addition to technology, IBM offers cost-effective professional services designed to optimize the communications and collaboration infrastructure for each organization’s unique business needs, as well as for growth and change. IBM can provide a comprehensive suite of integrated communications services that assist you in combining existing technology investments with new solutions to better support successful implementations. We can also help you gather requirements,
design a reliable solution, create a phased implementation plan, implement new software and hardware, and manage projects. Moreover, IBM offers automated end-user support services that can help lower the total cost of ownership (TCO) for IT while potentially boosting overall end-user productivity. And our professional security services augment the security of confidential information and conversations to assist you with addressing regulatory and business policies.

A unified platform for virtually all your communications and collaboration needs

IBM Lotus® Sametime® software, the 2007 Product of the Year according to Unified Communications magazine, is a marketplace-leading platform for unifying voice, data and video communications and collaboration, offering integrated IM and Web conferencing capabilities. It serves as the single communications and collaboration platform on users’ desktops, providing the proven security features, reliability and scalability businesses require. In fact, more than 20 million people worldwide—including users working for four of the five most profitable companies in the world and 29 of the Global Fortune 50—use Lotus Sametime capabilities every day to gain instant access to people and information. By relying on this IBM software, they are bringing together geographically dispersed teams and improving individual and team productivity.

With open-standards-based Lotus Sametime software, companies can choose the features that make the most sense for business needs, including IM, presence awareness, Web conferencing, VoIP, instant desktop sharing and broadcast

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**IBM Lotus Sametime software is a marketplace-leading platform for unifying voice, data and video communications and collaboration; it also provides integrated IM and Web conferencing capabilities.**
IBM is working with leading providers of telephony, audio and video services to offer Lotus Sametime users an even greater variety of integrated features.

- **Click-to-call and click-to-conference capabilities.** Select one or more names from the contact list to initiate a call.
- **Aggregated telephony presence.** See whether a contact is currently on the phone or available.
- **Call management.** Receive alerts for incoming calls; take action (for example, redirect to a mobile phone); and view incoming, outgoing and missed calls—all from your desktop.
- **Multipoint video integration.** Launch a video session with one or more participants.
- **Softphone integration.** Enable PCs to act as telephones—with all the controls available in an office phone system.
- **Web conferencing audio integration.** Allow participants to click a button to have the audio feature call them to join a conference and identify the active speaker, and provide moderators with sophisticated controls (for example, call, mute or eject participants; adjust volume; and lock meeting).
- **Web conferencing audio/meeting scheduling.** Automatically reserve an audio conference number and Web conference when scheduling a meeting.
- **Unified messaging.** Receive voicemails and then replay, delete or forward them from within the IBM Lotus Notes® or Lotus Sametime client.

And because Lotus Sametime software is an Eclipse technology–based platform, organizations can integrate complex environments without locking themselves in to proprietary solutions. IBM works with leading independent software vendors (ISVs) to support a large ecosystem of solutions that leverage this model to help ensure that companies have an ever-increasing selection of capabilities.
to choose from in the future. And organizations can develop or acquire solutions that integrate easily into their unified communications and collaboration environment. For example, one ISV offers a plug-in for Lotus Sametime that enables realtime, instant translation across multiple languages during one-to-one or conference chats.

**Flexibility to integrate multivendor environments**

IBM solutions are designed to meet the needs of virtually any IT environment—whether it includes a telephony infrastructure from a single vendor or multiple communications technologies from a variety of vendors. And organizations can consolidate on the Lotus Sametime platform without having to migrate or completely replace back-end systems. As a result, companies can begin realizing benefits almost immediately.

To facilitate the integration and management of complex, multivendor environments, IBM provides an open, extensible solution with rich, out-of-the-box capabilities that easily integrate with and add value to a broad range of third-party and custom applications. We foster strategic relationships with major equipment suppliers and network service providers worldwide, including alliances with telephony providers such as 3Com, Alcatel-Lucent, Avaya, Cisco, InterCall, Nortel and Siemens as well as audio and video providers such as Avistar, Motorola, Polycom, RADVISION and TANDBERG.

**Design and integration services for rapid deployment**

IBM provides services that have been proven to speed deployment of the Lotus Sametime platform. So organizations can accelerate their unified communications and collaboration project—from installation and integration to changing business culture requirements.
For example, IBM can provide services to help organizations:

- **Plan, design and build a comprehensive unified communications and collaboration solution** to bring together e-mail, voice, video and fax messaging applications into a single in-box, which users can access with their phones, Web browsers or e-mail clients.

- **Access trained network consultants who have extensive experience in designing and integrating multivendor converged communications and wireless networks and solutions**—including those on a global scale—to help companies proactively manage challenges and opportunities as they move applications onto the IP network.

- **Assess, plan and design** the best converged network and IP telephony applications to address your needs, from determining business requirements and vendor-neutral planning, to assessing your internal processes and policies, to making network recommendations.

- **Deliver a security-rich, integrated solution** that can also include support for end users.

Virtually unmatched expertise in business communications

Initially, companies that implement unified communications and collaboration solutions derive value from integrating business applications and business processes. The breadth and depth of IBM industry expertise and communications solution practices make IBM exceptionally qualified to help businesses find the right opportunities to realize these quick results.

What’s more, IBM’s leadership comes from extensive hands-on experience. IBM has helped transform business communications for hundreds of medium and large international organizations worldwide—including its own enterprise communications system with 110,000 users and 500,000 communications devices running on VoIP.
Through these experiences, IBM has learned firsthand how to leverage converged communications to simplify IT environments while enhancing communications and collaboration across a dispersed and mobile workforce. Moreover, IBM understands the critical link between enhancing employee productivity and customer service as well as how to reduce the overall cost of doing business.

Flexible systems—add only what you need, when you need it
IBM systems provide innovative features and the high levels of performance needed to support business-critical communications and collaboration solutions. From 1-way to 64-way servers, IBM systems offer scalability and easy, modular growth. IBM also offers advanced virtualization technology that can help organizations divide one powerful system into numerous smaller ones to meet specific application or workload requirements. Virtualization is especially beneficial as organizations add new applications for communications services because it provides a way to flexibly add new capabilities without the need for additional servers. Moreover, features on IBM POWER6™ systems, such as Live Application Mobility and Live Partition Mobility, enable IT teams to complete maintenance just about anytime they want—even in the middle of the day—without affecting key applications or processes.

Access to a complete solution from a single provider
With operations in more than 160 countries worldwide, IBM offers the virtually unmatched global reach and economies of scale you require. It has proven competency in managing large-scale, geographically dispersed organizations with mission-critical networks that require responsive onsite support 24 hours a day, 7 days a week. And IBM’s award-winning research and development teams are extending its technologies to new devices—from IBM, other IT vendors and IBM clients—to enable new capabilities and new ways for users to collaborate through applications and functions. What’s more, through a diverse range of cost-effective, creative financing solutions, IBM can help you integrate complex IT solutions—including hardware, software and services from IBM and third parties—into a single financing contract with a single periodic invoice.
For more information

When it comes to choosing a new communications and collaboration strategy, IT managers are confronted by a host of difficulties. Choosing a solution that can flex as business needs change. Driving more business value from existing multivendor environments. And optimizing how people interact, whether they’re in the office or on the road—all while controlling costs. Using the groundbreaking IBM UC² strategy, IBM can provide the open technology, consulting services and strategic relationships organizations need to streamline communications and improve the way people work. So your company is better poised to achieve the agility, productivity and cost savings it needs to stand out from the competition. What do you have to lose?

To find out more about how IBM can help your organization adopt an IBM UC² strategy, visit:

ibm.com/lotus/uc2