Convergence that makes sense—bringing together voice and data networks
Why not a single, unified network?

It’s no surprise that converged voice and data networks are rapidly becoming a compelling part of every IT strategy. After all, there are significant advantages in bringing together voice, video, e-mail, instant messaging, business data, and office applications in a single, integrated network. Convergence is not just about cost savings anymore—it also offers the possibility to significantly change the way we do business.

IP telephony has been with us for a while now and has moved beyond the early adopter market. Using IP networks to carry voice traffic is nothing new—telecom providers have been doing this for years. What’s new is that the convergence of applications and devices is driving a change from IP telephony (IPT) solutions to IP communications (IPC) solutions. This makes perfect sense when you consider that today’s IP telephones, for example, are effectively small computers that can be used to access Web applications on a data network as easily as they can make a call. Consider also that many applications we now use can combine voice, text, images, and even video. Bringing these capabilities together via a single, unified network lets us work more flexibly and efficiently—using a phone, laptop, PDA, desktop PC, desktop phone, or other device—and lets us connect to the converged voice and data network from wherever we happen to be.

Think about these key benefits of an IP communications strategy:

- You can respond to the increasingly complex and diverse demands of your business—for communication via the Internet, intranet, and wireless devices, anytime and anywhere.
- You can enhance business efficiency and reduce travel time and expense by implementing easy-to-use voice, video, and Web conferencing tools on your converged network.
- You can enhance business effectiveness and agility by integrating communications applications, such as voice messaging, instant messaging, presence awareness, and collaboration, making them available to users on a wide range of devices in virtually any location.
- You can deliver these applications securely to the most appropriate device for the user at any given time. Follow-me services can ensure important phone calls are routed to the user whether on a desk phone, PDA, or wireless handset. Unified messaging lets a user listen to his voicemail on his laptop even when flying.
- You can reduce support costs and operational complexity while increasing business agility by converging existing voice and data networks and devices.

In helping you design and build a converged voice/data network, HP’s goal is to make your business more agile—ready to meet and embrace change. This is integral to our vision of the Adaptive Enterprise, where business and IT are synchronized to capitalize on change.
The foundation for enhanced business applications

By itself, IP communications can bring many benefits to a business, but it also lays the foundation for two other business applications—customer relationship management (CRM) with IP Contact Centers, and collaboration with unified communications.

The converged IP network, voice applications, and devices that IP communications brings to a business form the basis for multimedia IP Contact Centers, a key business asset for many organizations.

IP communications also provides the infrastructure for collaboration applications, both within a business and with third-party partners and suppliers.

IP Contact Center

HP Services delivers IP Contact Center (IPCC) solutions that provide customers with the highest levels of service. In today’s competitive business environment, customers utilize an ever-increasing number of communication channels to interact with businesses. In order to maintain competitive advantage, businesses are required to consistently and effectively respond to phone, e-mail, and Web customer interactions. At the same time, companies are challenged to manage high contact center IT support costs and decreased agent productivity while still maximizing cross-sell and up-sell opportunities.

Built on an IP communications infrastructure platform, the HP IPCC solution gives companies the power to maximize existing call center investments while providing them with an industry-leading migration path to IP-based, converged networking solutions.

The HP IPCC provides:
• Intelligent call routing
• Network-based routing
• Virtual call center capabilities
• Network-based interactive voice response (IVR)
• Multimedia, Web-enabled call centers

As part of IPCC, HP implements third-party components including voice recording, workforce management, and CRM applications. Acting as your partner, HP incorporates the hosted solution into your existing systems and deploys and manages the agent desktops.

HP partners with industry-leading technology suppliers Cisco Systems and Avaya to deliver our award-winning IPCC solutions.

HP Unified Communication solution

Work is what you do these days, not where you do it. Employees are increasingly mobile and need to be able to work, to be contacted by colleagues and partners, and to share data wherever they are.

Most enterprises rely on a number of different channels and applications for communicating internally and externally: telephony (fixed, mobile), e-mail, fax, video conferencing, instant messaging, short messaging service (SMS), collaboration systems, and CRM.

The choice of communications channel is determined by many factors including industry sector, company culture, and employee circumstances—for example, working in an office, airport lounge, or at home.
The HP Unified Communication solution provides a framework of complementary communication solutions aligned around the same objective: access to voice and data services, anywhere, anytime on any device—thus improving overall communications for an enterprise.

HP partners with industry-leading vendors such as Microsoft®, Cisco Systems, Alcatel, and Avaya to bring the world-class HP Unified Communication solutions to our customers.

Working with leading technology providers

HP has chosen to work with leading technology providers in delivering the HP Unified Communication solution to enterprise customers, ranging from specialized voice systems providers to the leading enterprise software vendors. Customer requirements and existing systems dictate the technology and vendor solution for maximum outcome.

On average, 50% to 70% of all building blocks for a unified communication solution are already in the company—for example, PBX or e-mail systems—but in most cases they are not used optimally. HP integrates and configures the existing solution components with new ones into a standards-based framework. A unified communications strategy is therefore more of an evolution than a revolution. On the one hand, this protects your investments, makes the existing solution considerably more powerful and more efficient, and—not to be overlooked—reduces costs.

About HP IP communications services

HP delivers a complete portfolio of IPC services, addressing all aspects of the convergence lifecycle. Services include:

The HP Adaptive Network Architecture (ANA)

A key component of our IPC solution is HP’s patent-pending Adaptive Network Architecture (ANA), which enhances network security and allows the use of security best practices while reducing the cost of security policy management and increasing network availability and performance to support business-critical IPC applications. ANA essentially organizes the network into logical, business-oriented compartments to control which services and applications are available to users; it then extends these logical compartments across the virtual network regardless of the physical location of resources, and enables efficient and effective management of layer 3 network security controls using a centralized policy management tool. The ANA methodology, tools, processes, and best practices enable more secure, controlled IPC pilots and accelerate introduction of IPC services into production, increasing security and reducing risks associated with IPC applications.

In addition, we pride ourselves on providing the best customer experience and customer value possible. HP’s rigorous Professions program builds awareness of the qualities and capabilities required for our consultants to deliver the highest levels of customer satisfaction—in business consulting, program management, solution architecture, and service management.
IPC Navigator
This service helps you and your employees understand the benefits of convergence and formulate a converged technologies deployment roadmap. HP experts guide you through the convergence business benefits and technology to show how you can fulfill business strategies, reduce costs, improve productivity, and enhance communication with customers, employees, and partners. The final step in this service is the creation of a customized high-level roadmap/blueprint for convergence in your organization.

IPC Readiness Assessments
As you prepare for convergence, these services help you assess the readiness of several key aspects of your business and IT environment. Assessments can include:
• Business review
• Network topology analysis
• Data network analysis
• Voice network analysis
• Design review
• Security audit
A written summary report is provided by HP at the conclusion of the assessment phase.

IPC Architecture, Planning, and Design
This service assists you with all aspects of planning and designing your IP communications environment. Deliverables include these documents:
• Architectural profile report
  – Logical and physical topology needs
  – High-level functional network design
  – Service levels and capacity planning description
  – Areas of concern or potential conflict
• Design documents
  – Topology
  – Interfaces
  – Hardware selections
  – Detailed logical network
  – ROI model
• Planning documents
  – Philosophy for roll out
  – Training and development plans for technicians and users
  – Change management and business cycle issues
  – Task lists and timelines

IPC Pilot Service
This service covers the planning, configuration, installation, operational assistance, and technical support necessary to conduct a 60-day evaluation of IPC technology. The IPC pilot is an overlay to a company’s existing telephony and computing infrastructure and will not disturb the ongoing operation of any of these systems.

IPC Installation and Startup
This service handles all aspects of installing and starting up the HP IPC solution.

IPC Remote Monitoring
HP assists you in remotely monitoring all key components of the IPC solution. When properly managed, this monitoring can prevent 90 percent of network problems and 40 percent of hardware/software problems.

Features of the service include:
• Secure IPC Web portal that provides key metrics (jitter, latency, etc.) and reports on the specific IPC solution
• Quarterly reviews with HP consultants to recommend improvements

IPC Solution-Level Support
This service provides ongoing support by a single HP team with expertise in CallManager, Windows®, LAN support, and hardware problem identification. The key advantage of this service is that “one call does it all”—support requests are not passed off to multiple different support teams, and there is no need to start all over again. You receive fast and efficient problem resolution.

Solutions for real-world use
Across the globe, you can find our IPC solutions at work in many different industries.

Government
Cities and states typically face maintenance and support challenges caused by having multiple departments running on disparate technology platforms. By merging voice and data into one IP network, governments can ease the delivery of services through a single, unified infrastructure.
Education
School districts are increasingly turning to enhanced IP communications solutions to replace tedious handwritten tasks. Scheduling, attendance tracking, hall passes, and certain security functions can be integrated into applications that streamline the administrative processes and save money. By deploying IP phones in dormitory rooms throughout campuses, universities are able to generate advertising revenue from locally supported student services—from bookstores to pizzerias.

Healthcare
Converged voice and data networks allow healthcare providers to access, manipulate, and archive voice, text, and display information in ways that can help cut costs and enhance productivity. Several third-party developers have turned to HP for help in creating tools that transform their phones into interactive devices that give doctors, nurses, pharmacists, and medical staff access to scheduling, medical records, and lab reports via IP phones or other mobile devices.

Finance
To remain competitive, today’s banks must transform the front office into a sales/service unit that offers financial products and value-added services via the customer’s channel of choice. By combining several networks into one, banks can efficiently move all channels into the branch—ultimately providing better service, simplified operations, greater choice, and reduced support costs.

Manufacturing
Achieving a balance between supply and demand is crucial to any manufacturer. Converged voice and data networks can significantly speed up communications across the extended manufacturing environment, enabling dramatic improvements in service levels, supply and demand control, price fluctuations, and distribution processes. Automotive, retail, pharmaceutical, and technology manufacturers rely on HP IPC solutions to reduce the risk associated with unpredictable demand and uncertain availability.

The HP advantage
With HP, you can choose from a full range of design, maintenance, and management services for converged voice and data networks. HP can remotely monitor all or part of your network, or you can manage your environment on your own using HP OpenView software. By partnering with industry leaders—and drawing upon our own extensive expertise—we provide the most comprehensive IPC services available today.

Leadership in innovation
Innovation is at the heart of HP. Each year, HP technological innovation delivers approximately $75 billion in new products, services, and business solutions and secures thousands of patents. HP is at heart a technology company, fed and fueled by progress and innovation.

“With this [HP IPC solution], HP Services met our communications needs and helped us reduce our costs dramatically. Hence, we did not have to acquire a switchboard and manager for every single office. Without their help, we wouldn’t have obtained the same results in terms of time and efficiency.”
Irvin Valencia, Director of IT, Tequila Herradura
Key components of the HP innovative advantage include:

- A wealth of technology, tools, and best practices poised for global delivery
- A position among the top three consulting and system integration providers worldwide (according to IDC)
- Key partnerships with industry leaders, including Microsoft, Cisco, Avaya, Alcatel, Nortel, Ericsson, and others
- Extensive multivendor expertise—integration skills with Microsoft, UNIX®, and Linux® platforms; mobility, mail, and messaging applications; business and call center systems
- 69,000 service professionals with unmatched technical expertise in 170 countries, including:
  - 5,000+ consultants on J2EE and .NET
  - 6,500 Linux specialists
  - 1,200 solution architects
  - 23,000 Microsoft trained specialists
  - 5,000 Microsoft certified engineers
  - 7,500 Internet/network consultants
  - 18,000 UNIX-experienced engineers
  - 5,300 OpenVMS engineers
  - 2,100 project management professionals
  - 10,000+ software professionals
- HP’s patent-pending Adaptive Network Architecture (ANA), integrated into IPC solutions, enhances IPC security, reduces the cost of security policy management, and accelerates deployment of IPC applications.

**Best-in-class network expertise**

HP has these Cisco credentials:

- First-ever Cisco Global Certified Partner with multinational certifications in all five Cisco theaters
- Cisco Global Commerce Specialization
- Cisco Global System Integrator
- Cisco Global Support Partner
- Cisco Gold Certified in 41 countries
- Cisco Silver Certified in 10 countries
- Cisco Premier Certified in 6 countries

HP has additional capabilities:

- Strategic services relationship with Cisco that resulted in “co-branded” support offer
- 79 Advanced Technology Provider Designations across the globe
- 172 specializations
- More than 5,000 Cisco Career Certifications
- 192 Cisco Certified Internetworking Experts (CCIE)

**For more information**

To learn more about how the HP Services team can assist your organization in designing and supporting converged voice and data networks, visit [www.hp.com/services](http://www.hp.com/services).