Convergence technology has come a long way since the early days of voice over Internet Protocol (VoIP). Enterprises that delayed investment in VoIP over concerns about lack of return on investment (ROI) and immature technology are now reaping the benefits of patience. Today, convergence technologies are stable and provide reliable, high-quality service. Industry standards for VoIP and other convergence technologies are established, cost less to implement, and offer a solid ROI.

As a result, many enterprises today are implementing voice, video, and data over a single, converged network to simplify and streamline their communication systems. Converged networks are now commonly used to support business environments where employees and customers are demanding access to advanced applications, new ways of collaborating, and even mobility with voice over wireless LAN (VoWLAN)—not just VoIP. Forward-thinking companies understand that convergence is, without a doubt, an inevitable evolution of enterprise networks. And by implementing convergence technologies to support current and future requirements, organizations can realize the benefits of convergence today.

HP ProCurve Networking offers affordable convergence solutions designed to simplify deploying and managing secure, multiservice voice, video, and data networks across the enterprise. The HP ProCurve convergence strategy leverages and extends the value of your investment in infrastructure—even into wireless environments. These solutions, which are based on current and evolving industry standards, offer the same quality and reliability that are designed into all HP ProCurve Networking products. And they provide robust management capabilities for easy support and maintenance.
Kongsberg Simrad slashes costs with hp procurve networking

When Kongsberg Simrad, a leading marine electronics company, moved into new headquarters, the company took advantage of the opportunity to implement a new telephony system. Kongsberg needed a solution that would reduce intercompany communications costs across 24 international sites.

Kongsberg Simrad selected HP ProCurve Networking to provide an end-to-end solution that combined its computing and telephony into one data network. HP designed and installed a Mitel Voice-over-IP system that runs on a high-performance HP ProCurve network.

Kongsberg’s 500 employees can now make all telephone calls between its sites within the IP network—and essentially do all of its telephony for free. Today the company enjoys a reliable, easy-to-maintain solution that’s cost-effective to run and install.

Given the current economic pressures to reduce costs, many businesses are implementing a single, converged, IP-based network because it costs less to operate and manage. The VoIP component of a converged network, for example, enables you to:

• reduce support (i.e., adds, moves, changes), maintenance, and equipment costs
• lower network carrier costs because you need only one carrier
• reduce internal administration costs for telephony and network management by implementing a single IT network for all communications
• reduce multisite communications costs
• simplify vendor management by eliminating the need for a separate telephony company

But the benefits of convergence go far beyond the cost savings resulting from IP telephony. As the foundation for deploying new revenue-generating applications, businesses can use a converged network to:

• simplify and streamline communications systems
• lower costs with a single network
• easily deploy new revenue-generating applications such as user-defined communications and unified messaging
• increase employee productivity through more robust communications such as IP video solutions, distance learning, and voice over wireless LAN
• improve the productivity of your workforce by providing advanced applications such as desktop videoconferencing
• easily deploy new network devices through Power over Ethernet (PoE) capabilities

Once implemented, a converged network offers tremendous opportunities to benefit your business. But how you choose to leverage a converged network will be shaped by the current and future needs of your particular business.
focus on critical success factors

While there’s no longer any question that VoIP and convergence technologies are ready for enterprise adoption, ensuring a successful convergence solution requires choosing a solution provider focused on the following critical success factors:

• IP quality of service (QoS) to ensure clear transmissions
• asset protection via an infrastructure that makes it easy to implement new technologies into your current network—and grow as new technologies emerge
• interoperability to provide the power of choice among leading IP telephony vendors
• security that addresses the new risks associated with IP telephony
• reliability and resiliency to ensure network reliability and uptime
• standards-based solutions that will, for example, allow you to leverage PoE for IP phones, wireless access points, and other network devices

the hp procurve networking solution

HP ProCurve Networking offers affordable convergence solutions that are based on industry standards and are designed to simplify the deployment and management of secure, multiservice voice, video, and data networks across the enterprise. The HP ProCurve convergence strategy leverages and extends the value of your infrastructure investment well into the future—and provides a platform for mobility solutions that are secure, reliable, and cost-effective.

Every HP ProCurve Networking convergence solution is founded upon the HP ProCurve Networking Adaptive EDGE Architecture™, a networking strategy that enables intelligent, capable, convergence-ready networks. Equally important, the Adaptive EDGE Architecture overcomes the limitations of centralized, host-based security by moving critical access enforcement to the network edge, where traffic enters and users connect. With the Adaptive EDGE Architecture, network access controls based on user, group, time, and location are located where they can most effectively process user requests—while protecting the network center and freeing it to accommodate growing network demands. This approach also adds network intelligence to the edge, ensuring the QoS of your converged network.

the power of choice

HP is leading the charge for interoperable, open-industry standards; and as a result, HP offers the greatest flexibility in convergence solutions and IP telephony partners. HP ProCurve Networking solution options include the following:

• end-to-end hp procurve/Mitel convergence solutions: For customers seeking a single-source, end-to-end convergence solution, HP ProCurve leverages its longstanding relationship with Mitel Networks, an industry leader in telephony solutions, to provide an IP telephony system that runs on HP ProCurve products. Through extensive testing, HP ProCurve has verified the superior voice quality and latency of the HP ProCurve Networking and Mitel Networks solution.

• interoperable hp procurve switching infrastructure: To give you the flexibility to choose the IP voice solution vendor that best suits your needs, HP ProCurve Networking provides an interoperable switching infrastructure compatible with platforms offered by Cisco, 3Com, Nortel, Avaya, NEC, and Shoreline Communications, to name a few. Only HP ProCurve offers you this level of flexibility and interoperability in convergence solutions.

Whatever your choice, the HP ProCurve Networking team will help you plan, design, provision, install, and manage your network for the integration of voice, video, and data. Unlike our competitors, HP offers free network design and verification services through HP Design Centers. The result is a solution that leverages your current investments and is highly available, affordable, secure, easy to use, and interoperable. And we support your HP ProCurve solution with our legendary multivendor services and support as well as our industry-leading, lifetime warranty on most HP ProCurve products.
designed to ensure your success

HP ProCurve Networking convergence solutions have been designed to address all of the critical success factors for convergence networks. Key features of HP ProCurve solutions include the following.

quality of service

HP ProCurve Networking convergence solutions offer unparalleled QoS features to provide traffic control and prioritization, as well as to control the delay and minimize the jitter that can impair transmissions. These features include:

• **provisioning**: HP ProCurve switches provision the network so that congestion is eliminated in all but the most extreme cases
• **control**: HP ProCurve switches use networking techniques to eliminate unwanted traffic, such as VLANs, IGMP (multicast), and traffic and protocol filtering
• **prioritization**: HP ProCurve switches prioritize critical traffic in order to provide predictable throughput—even under extreme conditions—using Layer 2 (IEEE 802.1p) and Layer 3 (IP Type of Service [IP TOS], IP precedence and differentiated services)

investment protection

HP ProCurve Networking provides a comprehensive convergence solution that allows customers to grow with current and future products without wholesale product replacements. HP ProCurve’s flagship 5300xl series chassis will be upgradable to 802.3af PoE and includes advanced QoS features with an affordable Layer 3 functionality to the edge. As part of your solution, HP ProCurve also includes free network management software and a lifetime HP product warranty for minimal investment risk.

Bartow County Schools improve communications and lower costs

Bartow County Schools in Cartersville, GA, needed a new infrastructure for 16 remote sites and a central office. Because they needed to improve communication between school sites, the central office, and parents, the district wanted a solution that would meet this need and lower its communications costs at the same time.

HP ProCurve Networking implemented an end-to-end convergence solution with HP ProCurve 5300 switches at the edge and the Mitel 3300 IP telephony network. Bartow chose HP because it offered the industry-leading lifetime warranty, hassle-free support, and exceptional ease of use compared to other vendors. And the solution was reasonably priced.

The school district has benefited from improved communications between sites and the central office. And parents are happy because they can always get through to the school their children attend—without waiting. The district also expects a 40–45% savings on its total voice communication bill.
VoIP—a convergence solution

interoperable

HP ProCurve Networking solutions are industry-standards-based, not proprietary, thereby allowing you to easily integrate them into your existing heterogeneous networks while protecting your infrastructure investments. In addition, HP ProCurve provides you with a convergence-ready IP infrastructure that is interoperable with a wide range of IP telephony vendor solutions. This interoperability also ensures that your solution can easily accommodate new technologies as they emerge. To ensure cross-vendor interoperability, HP ProCurve performs voice quality testing with leading IP telephony solutions.

secure

Thanks to the Adaptive EDGE Architecture, HP ProCurve security solutions support appropriate user access at the network edge, which maximizes overall network performance while leveraging your current investment in user authentication systems. HP ProCurve Networking’s intelligent, EDGE-enabled switches allow you to easily deploy user and security applications at the point where the user connects. The switch immediately recognizes who the users are and the types of services and access for which they are authorized, thus personalizing the network for them at the point of entrance. This also means that any unauthorized traffic is stopped at the point at which it is trying to connect—not after it has entered the infrastructure. As a result, you can expand the value and reach of your applications and data, and you can also increase the productivity and efficiency of your employees without risking the integrity of your network.
available

HP ProCurve Networking solutions feature a fault-tolerant design and the best service and support in the industry, including free phone and 24 x 7 Web support. Furthermore, the Adaptive EDGE Architecture supports high availability and reliability by freeing core resources previously dedicated to managing user access security. Our commitment to network reliability is backed up by HP ProCurve’s lifetime product warranty. Together, these features help to ensure continuous connections and application persistence for your users on a 24 x 7 basis.

easy to use

HP ProCurve offers free network design services through HP Design Centers that simplify the development of your convergence solution. The HP ProCurve products built into your network design are easy to implement, hot swappable, and based on industry standards to enable fast, easy network provisioning and expansion. HP ProCurve products also provide more integrated features and functionality compared to our competitors, which helps reduce the cost and complexity of the HP ProCurve product line. For example, HP ProCurve products include easy-to-use management software and embedded intelligence to automatically diagnose and resolve many common network problems.

affordable

With the best price/performance in the industry and a lower total cost of ownership, HP ProCurve Networking solutions offer more for your money. In addition to offering a simpler product line and more robust capabilities, HP ProCurve solutions have been engineered for affordability using HP-patented technology that reduces both current and future costs. In addition, customers can purchase affordable, incremental hardware and software upgrades to extend the life of existing HP ProCurve products—and scale to meet growing demand. HP ProCurve solutions are also backed by HP’s lifetime warranty for superior protection.
for more information

For more information about HP ProCurve Networking and convergence solutions, please visit www.hp.com/go/hpprocurve or contact your local reseller.