

Unified end-to-end network solutions to make your business more productive

HP Networking for midsize companies

Solution brief

Customer challenge

Businesses are struggling to increase revenue and retain customer loyalty because of constant competitive pressure to innovate quickly and deliver greater value to their customers. Businesses look to technology to help spur growth, improve efficiencies, and stay ahead of the competition.

Businesses are forced to undergo digital transformation to remain competitive and enable new services like supply chain automation, business analytics, manufacturing systems automation, ordering systems, and customer relationship management. The solution to IT sprawl lies in a converged infrastructure where IT silos are brought together into pools of virtualized assets.

It's all about delivering modular, standards-based technologies designed for convergence. The result is an infrastructure that simplifies, integrates, and automates it all: storage, networking, servers, management software, and even power and cooling. Plus, the efficiency gains allow you to shift the bulk of your IT budget from operations to business innovations. The components of an HP Converged Infrastructure deliver the value you need today by positioning you to manage, protect, and grow your business through each pain point and milestone.



The network is the foundation of the converged infrastructure. All systems and applications are interconnected and rely on the network. Today, businesses seem held back by a mix of legacy network infrastructures that are often slow and difficult to expand, lack interoperability, and cost too much for what they deliver. With the booming demand for mobile and fixed access to multiple applications and services, the rapid evolution of wired and wireless technology, and the proliferation of WLAN devices and applications, businesses simply lack the ability to scale their networks efficiently, much less manage and secure them. Due to these rapid changes, businesses that don't adopt a converged infrastructure struggle to remain agile and ensure business continuity. Business owners and finance executives relentlessly seek a clear and documented return on investment for every IT project. The networks must be simple to manage to support such diverse applications and adapt to changing needs, and they must be cost effective to support current and planned business objectives.

Innovative HP solutions

HP is the largest IT company in the world, with a complete portfolio of products ranging from networking to servers, storage, printers, and laptop and desktop PCs. In response to these challenges, HP Networking enables businesses to do more with less. Through a broad portfolio of secure unified networking products and solutions, HP helps businesses to reduce complexity, enhance business agility, and manage costs.

Reduced complexity

The network is the foundation for a converged infrastructure and for advanced applications like unified communications and collaboration. HP simplifies the network with a unified approach: wired and wireless hardware, software, management, and security. Our integrated, easy-to-use management features reduce the time and complexity of planning, deploying, and operating wired and wireless LANs from a single management platform. This eliminates the need to maintain multiple management stations, different device and configuration policies, and access rights; it also prevents the need to learn different command structures that further increase costs.

Security is built into the network fabric, as opposed to it being an afterthought. Identity-driven access control, threat management, and intrusion protection services are available to enforce security throughout the network. Policies are enforced consistently for both wired and wireless users from the same management system. Through unified core-to-edge switches, businesses can enable a consistent command-line interface, common software, and interchangeable modules. In addition, HP enhanced WLAN solutions provide simple and cost-effective migration to IEEE 802.11n environments that scale to deliver near-wire-speed, high-speed WLAN capacity as businesses grow.

Adaptive to change

Business agility is critical to delivering new services to win and retain customers and compete effectively. Instead of proprietary, limited networks, HP Networking solutions are standards based and open for growth and interoperability. With command from the center and control at the edge, HP delivers a virtualized network edge. As users move around the network, user access and control policies are dynamically applied at the point of entry to the network, delivering a consistent security experience no matter how (through wires or wireless) or where (local or remote) users connect to the network. HP Networking delivers a choice of solutions through the HP AllianceONE ecosystem. Harnessing industry-wide innovation with leading vendors, HP AllianceONE offers customers complementary proven solutions for the HP Networking infrastructure.

Designed for efficiency

To do more with less, businesses need robust networking solutions that optimize the total cost of ownership, including the cost of acquisition, operation, maintenance, and the ongoing cost of service and support contracts. HP Networking products set the standards for quality and reliability, and come with warranties you would expect from a brand like HP. From industry-leading lifetime warranties (for as long as you own the product) to competitive one-year warranties, HP Networking product warranties have been developed to complement a broad portfolio of HP services to effectively meet your needs.

According to a September 2010 IDC report, midsize and large customers surveyed were reporting up to 66 percent lower total cost of networking with HP Networking solutions.¹ And HP Networking is socially responsible, helping reduce energy costs compared to the industry average.²

Following is an example of how HP end-to-end unified networking solutions can help meet specific business needs:

Midmarket solution reference design

A midsize business has its primary IT infrastructure deployed at a single location and potentially remote buildings or offices.

Needs:

- Reliable connectivity for business-critical applications
- Business continuity
- High performance for increasing data amounts and application needs

- Low maintenance requirements due to lack of onsite IT personnel
- Scalability of the network as the business grows
- Flexible and secure connectivity for enhanced workforce productivity
- Protection against IT threats

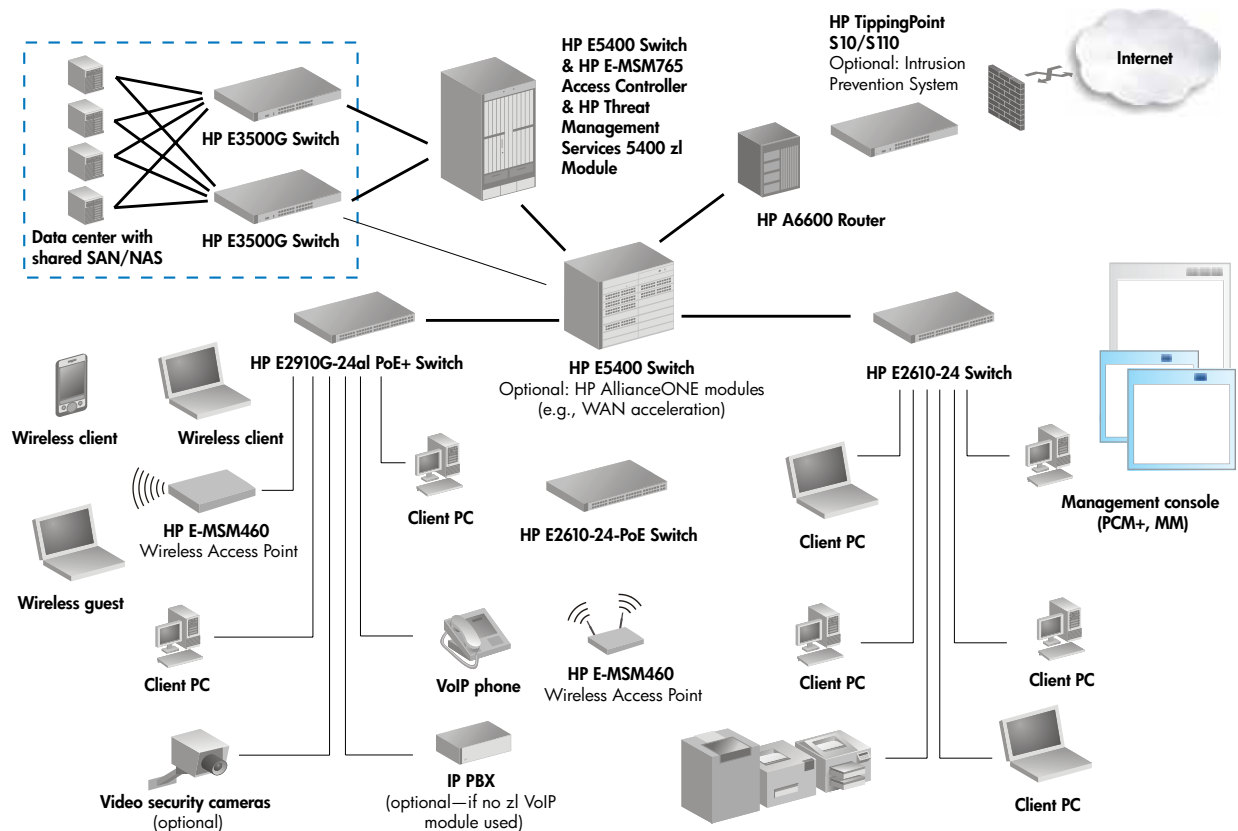
Solution benefits:

- Simplified network management across wired and wireless network with one single, easy-to-use management platform
- Integrate easily with standards-based solution
- Easy to expand with scalable connectivity
- Helps ensure business continuity with highly available networking
- Business agility with HP AllianceONE applications (for example, to enhance WAN performance)
- Intelligent traffic management for optimized usage and user experience

¹ "ROI of a complete networking portfolio: delivering value from the network edge to the core," IDC white paper, sponsored by HP in September 2010

² Miercom awarded the HP Networking division with the Certified Green Standard on eight switches in its product line in March 2009.
<http://www.miercom.com/?url=reports/&v=23&tf=0&st=v>

Figure 1: Reference design for midmarket end-to-end network solution



Solution features:

- Single pane of glass to manage and help secure the network with HP PCM Plus software and snap-in modules for advanced wireless or security management
- High availability for server connections and business-critical applications
- Consistent and standards-based network design for future scalability and investment protection
- Modular design for scalability and residence at the core with stackable flexibility at the edge
- PoE/PoE+ capability for VoIP phones, WLAN access points, and surveillance cameras devices
- Choice of applications hosted inside the network switch, such as for unified communications (Aastra, Avaya, and Microsoft®), application acceleration (Riverbed), or real-time location-based services (AeroScout, Ekahau)
- Built-in network security with standards-based security features integrated within the products, enhanced by integrated enhanced wireless security (HP E-MSM765 zl Mobility Controller) and the HP Threat Management Services zl Module for the HP E5400 zl Switch Series

Solution components

Network core:

- HP E54xx zl or HP E82xx zl modular switch
 - Enterprise-class rich features and integrated security
 - Unified features for Layers 2 to 4 to segregate traffic
 - Scalable connectivity (10 Mb to 10GbE)
 - Hosted applications on HP AllianceONE Services zl Module
- Power and space savings³
- Growing choice of applications—security, unified communications/VoIP, management, video, and real-time location systems

Access layer:

- HP E2910al fixed-port switch
 - 24- to 48-port scalable connectivity with high-speed uplinks (trunked Gigabit)
 - Layer 2/3 integrated features
 - PoE/PoE+ for VoIP, wireless access points, and other PoE-powered devices
 - Integrated security

Wireless LAN:

- HP E-MSM765zl Mobility Controller
 - Integrated within E54xx and E82xx chassis
 - Supports IEEE 802.11n/a/b/g access points; scales up to 200 devices
 - Advanced Layer 2/3 roaming, guest access, captive portal, PCI-DSS compliant
 - Enhanced architecture with central security and access control
- HP E-MSM460 and HP E-MSM466 Dual Radio 802.11n Access Points
 - Three-spatial-stream access points bringing 802.11n performance to 450 Mb/s per radio and enhancing coverage areas with beam-forming technology—simply one of the highest-performing access points at the moment
 - Operates in the 2.4 GHz and 5 GHz bands, providing backward compatibility for 802.11a/b/g legacy technologies
 - Operates IEEE 802.3af PoE
 - Advanced security and management features in collaboration with the HP MSM controller
 - The HP E-MSM466 Access Point supports a range of antenna options for point-to-point or point-to-multipoint connectivity. This means you can add external directional antennas to the access point, as well as use the 5 GHz band simultaneously for higher-density applications.

³ Source: "HP E5400 zl and E8200 zl Switch Series competitive performance, power consumption, and TCO evaluation vs. Cisco Catalyst 3750-X and 4500 Series," Tolly test report #210152, commissioned by HP in November 2010

Network management:

- The HP PCM+ Management application simplifies maintenance and network monitoring
 - Unified management across wired and wireless networks
 - Easy to use and deploy
 - Autodiscovery, mapping, polling
 - Network analysis and diagnostics
 - Automated policy/configuration management
 - Single management platform with plug-ins for wired, wireless, and security
 - Multivendor device management with SNMP

Network security—perimeter and interior protection:

- HP Threat Management Services zl Module for 54xx/82xx products
 - Network zoning for interior protection and PCI compliance
 - Perimeter firewall and virtual private network to prevent unauthorized access
 - Optional Intrusion Prevention System service for in-depth virus and malware protection
- HP TippingPoint Intrusion Prevention System (S110 IPS)
 - Protects data and applications from attacks and exploits
 - In-line deep packet inspection
 - Zero-day protection with Digital Vaccine Filters

- HP Identity Driven Manager
 - Policy and identity-based network access rights
 - Resilient architecture promotes high availability
 - Integrates with Microsoft Active Directory and NAP

Data center (server pool and storage):

- HP E3500 fixed-port switches
 - Unified features (Layers 2 to 4)
 - 24- to 48-port scalable connectivity (1GbE)
 - Flexible uplink options (supports 10GbE)
 - Integrated security

HP Networking warranty

HP Networking products set the standards for quality and reliability, and come with warranties you would expect from HP. From industry-leading lifetime warranties (for as long as you own the product) to competitive one-year warranties, HP Networking product warranties have been developed to complement a broad portfolio of HP services to effectively meet your needs.

Many of the products featured above, such as the HP E5400zl, HP E2910al, HP E2610, HP E3500, or HP E-MSM460 switches, come with limited lifetime warranty, which includes next-business-day advance replacement (available in most countries) and includes coverage for fans and power supplies for the entire warranty period.



HP Networking products have legendary HP quality, and our warranty is one way of demonstrating it. The HP Hardware Limited Warranty Statement that contains the terms and conditions for the warranty on HP Networking products can be viewed at www.hp.com/networking/warranty. The warranty period for each of our products is also listed there.

Our warranty, though, is just the beginning of what we include with our products. To help make it easier for you to implement, use, and maintain our products, we also include with our products many support features such as self-help tools that are available 24x7 on the Web, telephone support, email support and electronic case submission, and software releases. Visit www.hp.com/networking/support for details on these support features, and to learn how to contact HP Networking technical support.

HP Network Support Services

HP offers a comprehensive portfolio of Network Support Services to help you manage your network efficiently, mitigate risks and downtime, and increase your business value of technology. You can extend the lifetime warranty coverage of your HP Networking products, and increase the performance and availability of your network infrastructure with our simplified and standardized portfolio of HP Care Pack Services.

Get support levels best suited for your environment—from reactive hardware support that provides advanced levels of repair and replacement response times and 24x7 software support, to integrated and proactive mission-critical service options that proactively address issues before they become a problem. With services like installation, startup, and assessment included in the portfolio, HP takes care of your transactional and per-event service requirements, helping you free up staff to focus on more strategic activities. With HP Network Support Services, we provide a single point of accountability, professional

expertise, and proven customer support experience consistently across the globe.

For more information on other network services offered by HP, please visit www.hp.com/go/networks. For more information on support services, please visit www.hp.com/networking/care-packs. Visit www.hp.com/go/cpc to look up the support level you require.

HP Mid-market Solutions

Regardless of what your business challenges are, one imperative trumps them all: Do more with less. Fortunately, it also echoes a revolution taking place right now. Virtualization, cloud-based software and services, and the convergence of new and existing technologies are making it possible for us to get more done with fewer resources. Costly IT silos are being transformed into end-to-end infrastructures that integrate technical components, automate processes, and simplify technology from purchase to retirement. It's all about delivering modular, standards-based technologies designed for convergence. The result is an infrastructure that simplifies, integrates, and automates it all: storage, networking, servers, management software, and even power and cooling. The efficiency gains allow you to shift the bulk of your IT budget from operations to business innovations. The components of an HP Converged Infrastructure deliver the value you need today by positioning you to manage, protect, and grow your business through each pain point and milestone.

It's the future of IT—available today for your business. HP is a recognized leader of the IT convergence movement. With the world's largest technology portfolio, we have the building blocks and the resources to pull it all together to provide a Converged Infrastructure solution that meets your specific needs. For more information, please visit www.hp.com/go/midbizsolutions.

According to IDC's research of medium- to large-sized organizations, HP Networking helped those organizations surveyed achieve a 466 percent return on investment and an 8.4-month payback period with an integrated family of products designed to be scalable, flexible, and adaptive.⁴

HP Services

Manage and evolve your business so that you can easily handle growth, decrease operational costs, and protect data. Regardless of the business need,

⁴ "ROI of a complete networking portfolio: delivering value from the network edge to the core," IDC white paper, sponsored by HP in September 2010

rely on HP and Authorized Channel Partners to achieve better results. HP offers a wide range of optional services (packaged and custom network lifecycle services) to increase uptime and protect your technology investment. For more information, visit www.hp.com/go/services.

HP Authorized Channel Partners can provide customized design, implementation, and ongoing services to help you achieve your business goals.

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programs to help businesses cost-effectively acquire, manage, and ultimately retire their HP solutions. For more information on these services, please visit www.hp.com/go/hpfinancialservices.

Simplify your network with a unified approach; learn more about the HP Networking end-to-end unified solution at www.hp.com/networking.



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