

ProCurve Mobility Solution

Secure Unified Wired and Wireless Access

ProCurve's unified solution enables the deployment of business applications across the entire network, offering a seamless user experience, enhanced productivity, and reduced IT lifecycle costs.

Introduction to mobility

Wireless LAN technologies have matured over the last few years, allowing them to make inroads into the workplace, initially in communal areas such as meeting rooms and more recently across the campus. Concerns over security and complexity of management have been two of the key hurdles that have kept enterprises from fully embracing wireless. The trend of office computing is moving from desktop to laptop computing, and with the popularity of smart handheld devices, organizations are now embracing the value of a mobile workforce. Mobile computing is increasingly an integral part of business operations.

According to a Forrester Research survey conducted in June 2007, "planned adoption of in-house WLANs continues to grow in the Europe, Middle East and Africa region, with 46 percent of European enterprises having already adopted a WLAN, while 30 percent have an interest in deploying, suggesting a continuing trend towards more widespread adoption." According to Gartner's Wireless LAN Equipment Forecast, "Global spending on the enterprise Wireless LAN market is expected to increase by 8 percent compound annual growth rate (CAGR) between 2005 and 2010."

While the benefits of wireless are compelling, there are many potential pitfalls in deploying wireless within the workplace. Enterprises report that their main challenges when deploying wireless technology are security, reliability, and management complexity. A comprehensive security strategy that protects the network, regardless of access method is critical. Enterprises are struggling to align these requirements with their business objectives and budget constraints.

The case for a unified wired and wireless solution

The initial generation of wireless LAN used autonomous access points (APs), configured and managed independently. This provided a solution where access was required for a few localized zones; however, management complexity prevented many organizations from deploying these APs across the campus. In order to reduce this complexity, much of the intelligence within the AP was migrated to a centralized WLAN controller, allowing the operator to manage and secure many thin-APs from one point.

This first phase of consolidation provided some benefits, but typically it still required a management and security system separate from the one that was used to manage and secure the wired network. With wireless LANs becoming mission critical, leading vendors are now making mobility solutions an integral part of their wired network solution. The industry is moving from an overlay network, where wireless was considered as a separate network, to one where the wired and wireless network appears as a single network access layer. Adding wireless connectivity should not require a different network. It's just another way of accessing your existing one.

The benefits of a unified wired and wireless solution are compelling. Adding a supply-chain application or voice-enabled application does not require a separate network. The users need seamless access to inventory databases, customer shipment information, customer relationship management (CRM), and other business applications independent of how they connect to the network. Unification enables the deployment of business applications across the entire network, offering a seamless user experience, enhanced productivity, and reduced IT lifecycle costs.

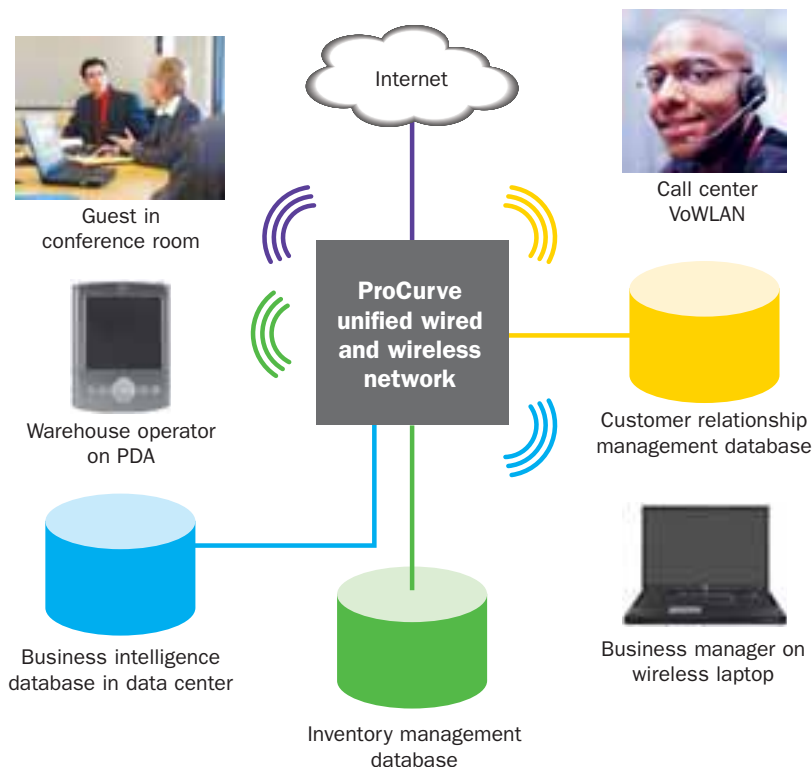
Benefits of unification

- Deliver compelling business applications on the unified network: wired or wireless, it behaves the same, enhancing user productivity.
- Enables users with seamless access to data through one unified network. Users can move within the network and get consistent access to information regardless of how they access it.
- A single, unified network can easily adapt to changing business needs quicker than a disparate set of overlay networks.
- A single set of security policies can be applied to the entire network, giving enterprises comprehensive security enforcement and monitoring ability.
- The same management tools and applications work across wired and wireless infrastructure, eliminating the need to train operational staff to support distinct wired and wireless infrastructure.
- A highly integrated central console enables unified device management, configuration management, and visibility throughout the network.
- High availability and redundancy is pervasive throughout the network to help keep the business running.

The ProCurve vision is to deliver a network that adapts to user, application, and organization needs. An intelligent network recognizes users connecting to the network—either wired or wireless—and enforces access policies based on a user at the edge of the network. The network adapts in prioritizing sometimes sensitive traffic on the wired and wireless network such as support of voice calls from a SpectraLink handset. All parts of the network infrastructure—including switches, routers, wireless access points, and management solutions—possess the appropriate levels of performance and intelligence to meet current conditions while adapting flawlessly to whatever future application needs arise.

The ProCurve mobility solution is a highly integrated solution based on the ProCurve Adaptive Network vision. It delivers secure unified wired and wireless access for enterprises to deploy advanced services. It is a comprehensive solution with flexibility of architectures, advanced features, and a rich set of functionality that uniformly apply to the entire network. Security is pervasive across the entire network. The cohesive network can be managed with a single highly integrated management platform. Our solution enables enterprises to effectively manage network lifecycle costs, while at the same time increasing security and flexibility, and simplifying management of their entire network.

Solution architecture



Highlights of our solution

Seamless access with unification

ProCurve mobility solutions are an integral part of the unified network. Regardless of how users connect, they get seamless access with a consistent experience across the entire unified network.

Business continuity

Run mission-critical applications and business operations over a highly available network. ProCurve radio ports, blades, chassis designs, and software features enable a highly available framework to ensure fault transparency to user and business-critical applications such as voice, video, point of sale, just-in-time manufacturing software, and wireless scanners.

Unified security

Implement consistent security policies across wired and wireless access while avoiding duplication and without compromising the integrity of the policies. Policies can be dynamically enforced at the edge of the network.

Advanced services

Deliver Internet-only access or highly controlled and sophisticated guest access control to your vendors, partners, and contractors with features including time-of-day access, location of access, and duration of access. Deploy advanced voice-enabled applications and services.

Unified management

Highly integrated management platform delivers a single pane of glass to manage wired and wireless infrastructure. Use a single platform to gain network visibility, enforce security, and manage devices and configurations as well as predictive visualization of wireless infrastructure.

Flexibility

Scale your network as your business grows with flexible licensing. Wireless Edge Services Modules (WESMs) can be implemented in multiple chassis, giving you a choice of switch chassis, that best meets your business need. Our solutions are based on industry standards and integrate easily with other standards-compliant networks.

Services

We deliver industry-leading lifetime warranty[♦], with next business day onsite product replacement with no charge to our customers. Download firmware updates as long as you own the product. We help you manage your network lifecycle costs.



Solution features

Ease of use

- Intelligent wireless devices enable users to roam within the network and provide a consistent experience and seamless access
- Automatic channel conflict resolution, and power adjustments for optimal wireless coverage

Advanced application support

- Guest access—wireless edge services grant vendors and guests appropriate access to the network without compromising security
- Voice application support—automatic client load-balancing, SpectraLink SVP support
- Application prioritization—traffic prioritization for critical applications

Security

- Command from the center and enforcement at the network edge with intelligent edge devices stops security threats before they enter the network
- Identity-driven access to customize controls and protect business assets
- Network Immunity Manager recognizes network anomalies, responds to threats, and validates the integrity of devices

Operational flexibility

- Standards-based solution enables easy integration into existing network
- Common tools and applications for wired and wireless infrastructure
- Dual-radio design to support multiple bands simultaneously
- WESM can be used within different switch chassis for optimal equipment sparing strategy

Reliability and high availability

- Network-level redundancy with optional redundant wireless edge services module
- Self-healing features to ensure high availability of wireless access
- Leverage high-availability features of ProVision switches

Regulatory compliance

- Automatic configuration for country compliance
- Detailed network visibility and rich reporting capabilities

Manageability

- Single management platform to manage wired and wireless infrastructure enhances operational efficiency
- Support of multivendor environment gives flexibility to pursue dual-vendor strategy

[♦] For as long as you own the product, with next-business-day advance replacement (available in most countries). The following products and their related family modules have a one-year warranty with extensions available: ProCurve Routing Switch 9300m Series, ProCurve Switch 8100fi Series, ProCurve Access Control Server 745wI, and ProCurve Network Access Controller 800. For details, refer to the ProCurve Software License, Warranty, and Support booklet at www.hp.com/rnd/support/warranty/index.htm

Products to implement the ProCurve mobility solution

- Core and edge switches
 - ProCurve Switch 5400zl series
 - ProCurve Switch 8212zl
 - ProCurve Switch 5300xl series
- Wireless Edge Services zl Module or Wireless Edge Services xl Module
- Radio Ports 210, 220, or 230 (requires WES zl or xl Modules)
- Wireless Access Points 530, 420, or 10ag
- Broad choice of indoor and outdoor antennas (for Access Points 530 or 420)
- PoE-enabled switches (optional)
 - ProCurve Switch 2610-48-PWR
 - ProCurve Switch 2610-24-PWR
 - ProCurve Switch 2610-24/12PWR
 - ProCurve Switch 3500yl-24G-PWR
- Management software
 - ProCurve Manager Plus (PCM Plus) or ProCurve Manager (PCM free version, with a 30-day trial of PCM Plus)
 - ProCurve Mobility Manager (PMM) for more advanced wireless planning and management
 - Airwave Management Platform (AMP) for tens of thousands of APs and multivendor environment)
 - Web-based management included on all access points
- For enhanced security
 - ProCurve Identity Driven Manager (IDM) for identity-driven access
 - ProCurve Network Immunity Manager (NIM) for threat management
 - ProCurve NAC 800 for sophisticated access control

For more information

To learn more about ProCurve Networking, please visit www.procurve.com

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Summary

Adoption of mobility within enterprises continues to grow. According to a Forrester Research survey conducted in late 2006, "Fifty-eight percent of North American enterprises indicated that they planned to increase their spending on WLANs—with 27% planning for a significant increase." With the technology maturing, enterprises are embracing wireless to enable business for mainstream applications. Companies are extending business applications and optimizing workflow over wireless technology. Industry is moving from a special wireless network (overlays) to a highly integrated and unified network to enable business applications and simplify management.

The ProCurve mobility solution delivers secure, unified wired and wireless access for enterprises to deploy advanced services over a highly integrated network. It is a comprehensive solution with flexibility of architectures, advanced features, and a rich set of functionality that uniformly apply to the entire network. Regardless of how the users connect, ProCurve delivers a secure unified network.

¹ Chris Silva, "Tackling Ubiquitous Enterprise Mobility," Forrester, June 2007 (based on 165 respondents).

² Christian Canales, "Forecast: Wireless LAN Equipment, Worldwide, 2009–2010," Gartner, June 2006.

³ Chris Silva, "WLAN Adoption in the Enterprise 2006." Forrester, November 2006.