Embrace the new

The growing adoption of BYOD and rich-media communications is quickly changing the way your employees perform business functions and interact with customers, partners, and colleagues. To be truly productive, your users need secure and reliable access to their business applications and collaboration tools—at all times. Spotty coverage and slow network performance can lead to a poor user experience, resulting in diminished employee productivity, dissatisfied customers, and lost revenue.

The HP 800 Series Unified Wired and Wireless Solution is specifically designed to help you address the ever-increasing demands for wireless LAN (WLAN) scalability, performance, and reliability—while providing high-quality user experiences. The solution increases agility, simplifies management, and lowers costs with integrated wired and wireless network connectivity that enables single-pane-of-glass management, role-based security, and consistent policy enforcement, while preparing your infrastructure for software-defined networking (SDN).

Overcome today’s network challenges

Expanding WLAN usage and increasing traffic densities require more flexible, scalable, and high-performance enterprise WLAN solutions. Your IT administrators face a number of challenges in:

• **Managing growth:** It is tough meeting ever-increasing performance and traffic requirements. You need a network that cost-effectively scales to accommodate the growing number of devices and rich-media communications for which high throughput and low-latency connectivity are essential.

• **Ensuring high service quality:** Optimizing the quality of the end-user experience can be a challenge. You need a network architecture that delivers predictable and reliable end-user experiences, while providing consistent and seamless connectivity—across your wired and WLAN infrastructure.

• **Maintaining security and mitigating risk:** Protecting the integrity of your network, systems, and data becomes tough with unknown devices and guest users presenting a variety of BYOD security challenges. You need to put stringent access controls, usage policies, and security solutions in place to safeguard your assets.

• **Supporting a diverse environment:** It isn’t easy administering a vast array of BYOD devices and technologies. What can help is a unified BYOD management system that provides visibility and control over a wide variety of devices (such as multivendor desktops, laptops, smartphones, and tablets), users, and network segments (such as LAN, WLAN, and WAN).

Boost scalability, performance, and cost savings

The HP 800 Series Unified Wired and Wireless Solution offers a portfolio of wireless options that allow businesses to deliver reliable high-performance network services to the growing number of mobile users—meeting their expectations for BYOD, unified communications, and rich-media applications. The solution enables consistent policy enforcement across wired and wireless networks, helping eliminate swivel-chair management.

The HP 870 and HP 850 Unified Wired-WLAN Appliances deliver scalable performance and a resilient wireless network solution for demanding midsize-to-large enterprise campus environments. With up to 40 percent higher scalability than competitive solutions, the HP 870 Unified Wired-WLAN Appliance provides reliable application performance, supporting up to 30,000 devices. The HP 850 Unified Wired-WLAN Appliance supports up to 10,000 devices, while lowering capital expenditure by 60 percent.

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1 HP 850 Unified Wired-WLAN Appliances will be available in June 2014.
2 Compared to similar Cisco solutions; based on generally available information in data sheets.
3 Compared to the Cisco 5500 Series controller; based on the list price.
For cutting costs further, you can leverage the HP 830 8- or 24-port Gigabit Ethernet (GbE) Unified Wired-WLAN Switch for branch offices. The switch integrates wired and wireless connectivity in a single device. The HP 830 helps eliminate the need for separate wired and wireless access devices, enabling you to cut costs by up to 38 percent.\(^4\) It also enhances scalability by supporting up to 1,000 wireless devices with a single switch.

The HP 800 Series supports 802.1x hot-backup, N+1, N+N, and 1+1 redundancy, offering sub-second failure detection to provide continuity of services in midsize-to-large enterprise networks.

### Deliver unparalleled application performance

The HP 800 Series delivers always-on, nonstop networks that are purpose-built for enhancing application performance, network scalability, and investment protection. The solution utilizes an optimized architecture that supports centralized and distributed traffic-forwarding capabilities, providing application flexibility and enabling access to real-time business applications. Services can be tailored for each application, allowing varying levels of Quality of Service (QoS), so that latency-sensitive applications receive top priority.

Built-in application awareness identifies the type of application and end-user status and applies bi-directional QoS to help ensure priority handling of delay-sensitive voice and multimedia traffic.

\(^4\) Compared to a similar Cisco solution; based on the list price.
Enhance connectivity in dense client environments

HP Wi-Fi Clear Connect features, which are available on the HP 800 Series, help optimize the performance and reliability of the WLAN network. Wi-Fi Clear Connect automatically adjusts the power and channel assignments of access points and mitigates interference from equipment such as Bluetooth gadgets and cordless phones. It also helps ensure high-quality client throughput in dense deployments by intelligently balancing the client load across access points and delivering faster client performance in mixed client environments with airtime fairness.

Streamline unified network and access management

HP Intelligent Management Center (IMC) enables single-pane-of-glass management, which simplifies and automates the management of increasingly complex wired and wireless networks. IMC also enables comprehensive management of multivendor environments; and it coordinates the flows and services across security, mobility, and access. Your IT administrators can establish and enforce granular and consistent network access policies for wired and wireless users to protect your IT assets, mitigate risks, improve network availability, and ensure regulatory compliance.

For granular network and application access, IMC manages user-access control and identity-based policies to help your IT managers overcome the complex security challenges associated with BYOD. It supports wired and wireless device onboarding, provisioning, and monitoring. A self-registration portal, provided by the IMC, for guests and personally-owned devices automates the onboarding process and uses advanced device fingerprinting to reduce the administrative burden, so that you can support your organization’s BYOD initiatives with speed and ease.

The IMC Endpoint Admission Defense (EAD) module integrates with Citrix XenMobile and MobileIron Mobile Device Management (MDM) applications to provide the mobile device posturing required to verify that all endpoint devices accessing the corporate network are healthy and compliant with access policies. IMC relies on the posturing data returned from the MDM server to determine compliance and extend consistent access policies.
Leverage a simple way to print and share—with Apple Bonjour

The HP 800 Series makes it easy to deploy Bonjour in large campus environments—without impacting the performance, security, or efficiency of your network. The HP solution offers:

• **Bonjour gateway:** This simplifies the discovery of Bonjour services across subnets and VLANs by relaying Bonjour traffic between interfaces connected to the controller. When you enable the Bonjour gateway, traffic can be exchanged between subnets. This allows your wireless iOS users to discover and use printers or Apple TV devices located on different subnets.

• **HP Zerocast:** This enhances the performance and efficiency of your wireless network by removing the network congestion caused by Bonjour’s heavy reliance on multicast. It keeps track of Bonjour responses and queries and selectively forwards these announcements to interested wireless devices. With Zerocast, your access points only send service requests to devices that can receive them. Similarly, service responses will only be unicasted to devices that have requested the service in the last seven seconds. Moreover, all the decisions are made by the access points, improving the scalability of your network significantly.

• **Access control:** With Bonjour traffic filtering your network, administrators can control how inbound or outbound Bonjour announcements are handled. Filtering can be applied to a virtual service community (VSC), group of access points, or user profile, as required.

> The Apple Bonjour component of the HP 800 Series will be available in June 2014.
Gain from robust security and threat protection

HP helps you take a unified, multilayer approach to security by reducing security holes and risks, offering peace of mind for you and your users. With the IMC User Access Manager (UAM), you can enforce uniform security policies and assign consistent access privileges across the entire enterprise network. The IMC EAD module provides comprehensive device-admission-control capabilities that help mitigate security risks associated with BYOD. The IMC User Behavior Auditor module gives your administrators detailed visibility into user activity to assess productivity, audit compliance, and isolate security threats.

That’s not all. The HP 800 Series provides integrated wireless intrusion detection and prevention (IDS/IPS) and enables virtual service domains to deploy security policies by department or location. Integrated wireless IDS/IPS detects and blocks wireless threats with predefined policy-based security and enables packet-trigger containment via knowledge-base heuristics. It uses classification and mitigation techniques to block unauthorized wireless traffic without disrupting the performance of authorized wireless devices. Finally, an embedded firewall provides role- or SSID-based access to protect clients from outside attacks and restrict access to specific network resources.

Know that your investments are protected

With over 50 switch models supporting OpenFlow, a complete SDN architecture, and an open SDN ecosystem, HP continues to lead SDN enablement. By extending SDN to the WLAN through OpenFlow-enabled access points, HP is enabling organizations to leverage new SDN applications across the wired and wireless network. OpenFlow support delivers investment protection, as it does not require you to rip and replace your existing infrastructure. You can enable it with a free software upgrade.

OpenFlow on the access points will be available in 2015.
5 ways HP makes mobility simple, yet powerful

1. **Mobile centricity:** The HP 800 Series delivers a flexible high-performance network solution to help your organization move to a highly mobile-centric business environment.

2. **Uniform user experience:** Unified access control provides a consistent user experience, regardless of the access method—wired or wireless.

3. **Scalability:** The HP 800 Series delivers wire-speed performance for wireless users and scales to meet the demands of midsize companies to very large corporations.

4. **Simplified management:** With multivendor single-pane-of-glass management, IMC helps you simplify network management and onboarding, provisioning, and monitoring of mobile devices, including personally-owned devices.

5. **Lower costs:** The HP 800 Series delivers superior performance at a lower total cost of ownership. You can save capital through better network utilization, with no need to overprovision. What’s more, industry-leading warranties and support options help reduce the lifetime costs of your HP network.

Learn more at

hp.com/networking/wireless