The mobilization of applications, bring-your-own-device (BYOD), public hotspot access and software-as-a-service are driving substantial opportunities for managed service providers (MSPs) to help organizations deploy end-to-end mobility solutions with value-added services.

These trends have already motivating most businesses to consider outsourcing their wireless networking needs. The typical enterprise wireless LAN (WLAN) has become almost like a carrier network that delivers mobility services to many different users, devices and locations.

Consequently, MSPs are taking advantage of this growing business opportunity by delivering mobility, managing Wi-Fi access and operating the wireless infrastructure for customers as Managed Mobility Services.

From WLANs for small businesses, branch offices and enterprise campuses to hotspots and hot zones in public venues, Aruba’s cost-effective managed mobility solutions give MSPs the high performance and reliability to satisfy the most demanding customers.

Aruba’s extensive Wi-Fi portfolio addresses the challenges of deploying and remotely managing wired and wireless networks. In fact, Aruba designed the zero-touch provisioning capabilities of Aruba Instant™ controllerless WLANs specifically for MSPs.

And perhaps most importantly, Aruba managed mobility solutions maximize the profit potential for MSPs with a combination of low capital and operational expenditures, and a rich assortment of value-added services.

**OPPORTUNITIES AND CHALLENGES**

IT organizations are now facing some daunting challenges. They often lack the internal resources and know-how to design, deploy and manage secure, high-performance WLANs that enable true enterprise-wide mobility.

As a result, IT organizations are in an ongoing struggle to keep pace with advances in enterprise mobility and access infrastructure technology in an attempt to leverage any potential benefits they can squeeze out of it.

This situation presents an enormous opportunity for MSPs. Outsourcing provides IT with a predictable cost model for delivering mobility services and greater value from its investment in the network access infrastructure.

IDC estimates that 10% of WLANs are currently being provided as Managed Mobility Services, and expects this market will grow annually at more than 20% annually. In the United States alone, the need is creating a $1 billion market for MSPs.
Managed Service Providers

But this lucrative opportunity is not without its challenges. To succeed, MSPs must be able to support virtually any WLAN deployment scenario. This requires a quick-to-deploy solution that can be remotely managed.

It must also exhibit exceptional long-term reliability, support a wide range of value-added services to drive incremental revenue, and provide context-aware security and quality of service (QoS) based on user identity, device, location, time of day and application.

In short, MSPs need a managed mobility solution from Aruba.

**WIRELESS AS A SERVICE**

Aruba’s unified wired and wireless architecture – built on a foundation of deployment simplicity, maximum performance, reliability, context awareness and centralized management – enables MSPs to successfully deliver managed services to enterprises anywhere in the world.

The Aruba MSP solution scales from the smallest branch office to the largest extended campuses and includes an extensible management framework that provides end-to-end network visibility across multiple sites and multiple customer locations.

**Aruba Mobility Controllers** are ideal for large campus Wi-Fi installations that require centrally-managed encryption, policy enforcement and IPv4/IPv6 network services. Mobility Controllers maintain configurations and automate software updates for all Aruba APs.

**Aruba Instant** is ideal for distributed Wi-Fi networks at many different sites. In an Instant WLAN, one AP is dynamically-elected to manage other APs, and the free zero-touch Aruba Activate™ service automates first-time configuration and enables cloud-based inventory management.

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Aruba provides a complete WLAN solution that enables MSPs to be successful and profitable offering Managed Mobility Services.
Aruba Activate eliminates the need to manually provision and configure every Instant AP and requires no IT assistance to deploy. As a result, Aruba Activate can reduce deployment time and costs by up to 65%.

For a unified access infrastructure, Aruba Mobility Access Switches work with Mobility Controllers to eliminate the need to manage and provision separate wireless and wired access policies. With power-over-Ethernet capabilities, they are ideal for providing wired connectivity to Aruba APs, IP phones, printers, desktop clients and WAN routers.

Control the air
One challenge with Managed Mobility Services is ensuring dependable network operation even under adverse RF conditions.

Aruba Adaptive Radio Management™ technology enables MSPs to maximize Wi-Fi client behavior and keep APs away from RF interference. With ARM™, Wi-Fi clients associate with the best channel, frequency and AP, making it today’s most effective RF management technology.

ARM airtime fairness algorithms ensure equal access for all devices, while airtime performance protection prevents slower clients from monopolizing available bandwidth. Together they maximize the quality of service experienced by all of the users, all of the time.

To clear the air, the same Aruba APs that provide Wi-Fi access can act as spectrum analyzers that continuously scan and analyze the air for all sources of RF interference. Spectrograms provide visualizations of the entire RF spectrum from the MSP’s network operations center.

Reliable and secure Wi-Fi access
The promise of reliability is contingent upon security, and Aruba has that covered with integrated wireless intrusion protection and the ICSA-certified stateful Policy Enforcement Firewall™.

Integrated wireless intrusion detection and prevention reduces deployment and management costs by using APs to simultaneously serve clients and contain wireless threats, eliminating the need to deploy more costly intrusion detection systems with dedicated sensors.

Additionally, automatic threat mitigation protects the network from unauthorized clients and ad hoc networks by continuously scanning the RF environment, centrally evaluating forensic data, and actively containing rogues and locking down device configuration.

With Aruba Policy Enforcement Firewall, network access is based on user roles, what devices they use, time and location, and what applications they access. This contextual information about user, device, time, location and application is used to enforce network-wide policies.

Differentiated value-added services
Context-awareness ensures a high-quality experience for all users by effectively managing the network traffic. Through deep-packet inspection, delay-sensitive voice and video traffic is given priority treatment, while other applications are guaranteed fair bandwidth allocation.

Furthermore, if certain users monopolize too much airtime or consume too much bandwidth, their sessions can be throttled back or blocked if necessary to ensure that other users get their fair share.

As a result, Aruba WLANs are ideal for optimizing your customer’s mission-critical enterprise applications. For unified communications, Aruba application-awareness capabilities ensure 75% better Microsoft Lync performance than the competition.

Bring your own device
For customers that have BYOD initiatives in place, the Aruba ClearPass Access Management System™ delivers unparalleled simplicity for managing and securing network access across wireless, wired and VPNs.

ClearPass makes it easy to support both IT-issued and bring-your-own mobile devices. By centralizing access policies network-wide, ClearPass automates differentiated user and device access, policy management, and mobile device provisioning and onboarding.

To simplify and streamline visitor access at public hotspots and BYOD access to corporate Wi-Fi networks, MSPs can rely on ClearPass Guest, which automates the creation and expiration of temporary user accounts and scales to support thousands of concurrent users.

Aruba ClearPass Guest skins create a corporate- and organization-branded user experience.

ClearPass Guest enables visitors and employees with mobile devices to self-register for network access. Once registered, ClearPass Guest delivers account login credentials to users via SMS text or email. Accounts can be set to expire automatically after a specific number of hours or days.

Featuring compliance and auditing capabilities as well as LDAP/Active Directory integration, ClearPass Guest can serve as a value-added platform for customized branding, credit card billing, advertising and multilingual content.
End-to-end network visibility and management

One of the most important aspects of carrier-class Managed Mobility Services are centralized management from the MSP’s network operations center and visibility into what’s happening on multiple customer networks at different geographic locations.

Aruba’s AirWave™ gives MSPs the end-to-end visibility and simple, centralized control to manage mobile users that connect to every customer network across multiple locations – all from the MSP’s network operations center.

With AirWave, MSPs have visibility into everything that affects service quality, including Wi-Fi coverage, APs, controllers and the wired network. It also streamlines network operations with user location and mapping, real-time monitoring, proactive alerts, historical reports, and troubleshooting.

Designed for comprehensive visibility across the entire access network, AirWave also manages multiple generations of products from leading vendors – from fat APs to thin, and from legacy 802.11b gear to the latest Wi-Fi-enabled mobile devices.

THE BOTTOM LINE

Aruba offers the industry-leading technology that MSPs need to successfully roll out Managed Mobility Services. Any mobile network – large or small, private or public – will benefit from Aruba’s many advantages, including rapid deployment, automated zero-touch provisioning, ease of scalability, and end-to-end visibility and centralized control.

And there is one other important benefit – Aruba offers a remarkably low total cost of ownership. Along with low capital and operational expenditures and value-added incremental revenue, the bottom line with Aruba is simply a better bottom line for MSPs.

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