

Virtualized WLAN Control Plane

Powered by OneFabric™ Control Center

Introduction

IT and the Cloud: two terms that have become inextricably linked as applications migrate off of the laptop and users become increasingly mobile with an expanded portfolio of wireless devices. Gone are the days when IT owned the network and all of the devices that attached to it. The influx of personal networking devices into the workplace, which exemplifies the “consumerization of IT”, has further increased the need for resilient and high performance wireless network connectivity for dense deployments. These so called Bring-Your-Own-Device (BYOD) programs are becoming increasingly popular because they allow individuals to work from the device of their choice - increasing user satisfaction while simultaneously reducing IT equipment acquisition costs. However, these BYOD programs also give rise to new security and management challenges for corporate IT. As wireless networks evolve to become the primary network edge for new devices in the enterprise network, they must continually adapt to the ever-changing needs of mobile users. In this dynamic world, a flexible wireless network that adapts to users’ needs is an invaluable IT asset.

Wireless Controllers and the Cloud

The award-winning Enterasys Wireless Controller family provides a scalable range of solutions that are ideal for managed WLAN deployments supporting demanding voice, video and data applications. Enterasys Wireless Controllers are simple to deploy and manage, yet provide advanced functionality to allow organizations to define how wireless traffic is processed without architectural constraints - and in accordance with business needs. Each controller supports mixed mode deployments of 802.11n and 802.11a/b/g APs, along with the ability for mobile devices to seamlessly roam between wireless controllers and access points – providing scalability and ease of deployment.

Enterasys is proud to introduce the latest enhancement to the wireless management capabilities of its OneFabric Control Center. The V2110 Wireless Services Engine (WiSE) is a virtualized appliance that enables easy deployment in cloud environments and extends all of the cost savings, hardware independence, and resiliency benefits of data center virtualization to the wireless infrastructure. When combined with Enterasys intelligent access points, the OneFabric Control Center provides complete control over the wireless network via the cloud from any local or remote location, thus reducing the costs associated with dedicated appliances and improving the flexibility of the network design and operation. Incorporating a virtualization strategy into the WLAN design reduces energy costs, increases server consolidation and provides a high degree of operational flexibility while reducing ongoing network management requirements. Furthermore, the entire network, including both the wired and wireless components, is managed via a single-pane-of-glass to provide complete visibility and control, which streamlines the management process, enhances security, and reduces operational expenses.

Operational Flexibility

Enterasys Wireless offers unmatched operational flexibility that ensures evolving business needs and operational requirements can be quickly implemented and enforced throughout the entire WLAN. An Enterasys Wireless solution simultaneously supports both a centralized and a distributed network architecture within a single SSID, which provides a cleaner RF environment, improves overall wireless network performance, and reduces the management complexity associated with multiple SSIDs. In addition, an Enterasys Wireless solution operates with or without a controller, enabling customers to determine how to best design their wireless network to suit their business needs. If a controller is desired, customers have the freedom of choice to select a dedicated hardware appliance or a software-based solution that can be installed on an existing server and deployed in the data center or in the cloud, providing great flexibility and further reducing the total cost of ownership.

The Enterasys Wireless solution includes:

- High-performance, enterprise-class, multimedia ready **WLAN Access Points** that address complex, time-sensitive functions such as QoS, encryption, policy enforcement, rate limiting, and dynamic channel selection.

Plus, Enterasys Wireless Access Points are among the only access points available to deliver Wireless Intrusion Prevention (WIPS), which provides continuous scanning, threat classification, rogue AP detection, and countermeasures against possible attacks.
- Scalable **WLAN Controllers** that provide advanced functionality to enable organizations to define how wireless voice/video/data traffic is processed without architectural constraints and in accordance with their business needs.
- **Enterasys Wireless Management Suite** that provides a powerful centralized management platform for the Enterasys Wireless portfolio. As an integrated component of Enterasys Network Management Suite, Wireless Manager consolidates configurations across the entire WLAN to provide global management capabilities. Integrated security across the wired/wireless network enables quick diagnosis and resolution of threats, and real-time, at-a-glance location capabilities detect rogue users and shut down hot spots by exact location, addressing a critical enterprise challenge.

**There is nothing more important
than our customers.**

Infrastructure

A reliable and high performing WLAN is an essential component of a robust network edge that is capable of supporting a BYOD strategy that enables both device density as well as high-bandwidth capacity to each device in support of today's multimedia applications. In some cases, purchasing new hardware and appliance-based systems make sense; however, virtualized software solutions can ease the investment required to enable BYOD.

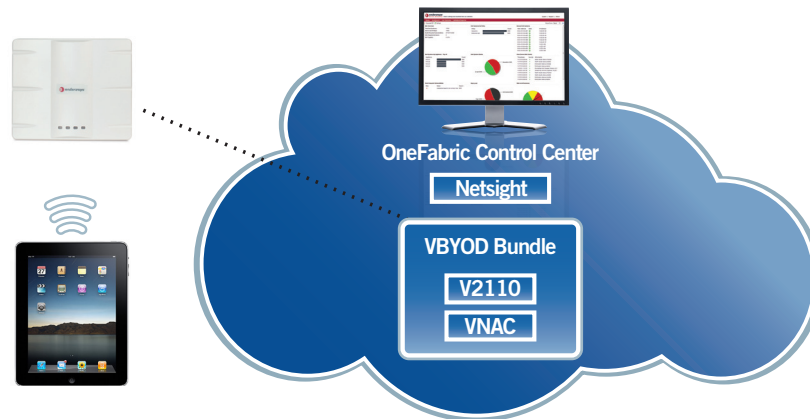
One of the most important aspects of a BYOD program is user and device authentication. Enterasys offers a virtualized access control solution, which is designed to detect, profile, authenticate, assess and authorize any wired or wireless device that attempts to access the network. Once a user and device is authorized, a pre-configured policy can be assigned, which determines each user's access privileges. This authentication process distinguishes between authorized users, registered devices and guests and completely automates the process of providing appropriate levels of access to each user according to their identity and device, which guarantees security and reduces ongoing operational expenses.

Enterasys provides advanced infrastructure flexibility by offering both physical and virtual solutions, including a new Virtualized-Bring-Your-Own-Device (VBYOD) bundle that includes two key pieces of software: a V2110 Wireless Services Engine and an access control gateway. This bundled solution is designed to support customer environments with up to 500 devices; however it can be scaled to larger environments with the addition of licenses or software components.

Virtual BYOD Components

The Enterasys VBYOD bundle combines two virtualized software solutions: the V2110 and NAC virtual appliances.

- The V2110 is a Wireless Services Engine that provides management for 8 APs, and can be scaled to support 120 APs. The V2110 offers all of the same features and capabilities as the Enterasys Wireless physical controllers, and is supported on VMware.
- The NAC appliance provides device profiling as well as user and device authentication, guest registration and authentication portals, and dynamic policy assignment.



V2110 Ordering Info

Wireless Services Engine	
WS-V2110-8-NAM	V2110 Wireless Services Engine for NAM (FCC) Regulatory Domain. Base of 8 APs, expandable to 120 APs in 16 AP increments (WS-C20XCAPUP16).
WS-V2110-8-ROW	V2110 Wireless Services Engine for Rest-of-World Regulatory Domain (verify country availability before ordering). Base of 8 APs, expandable to 120 APs in 16 AP increments (WS-C20XCAPUP16).
Capacity Licenses	
WS-C20XCAPUP16	WLAN controller capacity upgrade for V2110. Increases capacity of WLAN controller by 16 access points.

VBYOD Bundle Ordering Information

Wireless Services Engine Bundles	
WS-VBYOD-NAM	Virtual BYOD Bundle for NAM (FCC) Regulatory Domain. One V2110 License and One V-NAC/500 end-system license.
WS-VBYOD-ROW	Virtual BYOD Bundle for Rest-of-World Regulatory Domain (verify country availability before ordering). One V2110 License and V-NAC/500 end-system license.

V2110 System Requirements

Wireless Services Engine V2110	
Virtual Platform	VMware ESX™ / ESXi™ 4.1 server
Virtual Machine CPUs	4 cores or higher
Virtual Machine Memory	2GB or higher
Virtual Machine Storage	25GB of thick-provisioned hard drive space or higher
Virtual Network Interfaces	Two data ports and one management port

V-NAC System Requirements

Virtual NAC Gateway	
Virtual Platform	VMware ESX™ / ESXi™ 4.1 server
Virtual Machine CPUs	4 cores or higher
Virtual Machine Memory	12GB or higher
Virtual Machine Storage	40GB of thick-provisioned hard drive space or higher
Virtual Network Interfaces	Two data ports and one management port

Additional Requirements and Recommendations

In addition to the VBYOD software bundle:

- Enterasys requires the addition of the OneFabric Control Center (Netsight) to operate the VBYOD solution
- Enterasys recommends Access Points AP3610 and AP3620 for the Wireless edge
- Enterasys recommends Switching products B5, C5 and K-series for the Wired edge

Contact Us

For more information, call Enterasys Networks toll free at **1-877-801-7082**, or +1-978-684-1000 and visit us on the Web at enterasys.com



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