# ExtremeWireless™ WiNG VX 9000 Controller

Virtualized Software-Based WLAN Controller

#### **FEATURES**

# COMPREHENSIVE INTEGRATED NETWORK SECURITY SERVICES

Features include: a wired/wireless firewall, a built-in Wireless Intrusion Protection System (WIPS), an integrated IPSec VPN gateway, AAA radius Server, and secure guest access with a captive web portal, MAC-based authentication, 802.11w to secure management frames, NAC support, anomaly analysis, and advanced security services, such as rolebased firewall.

#### **ADVANCED WING 5 OS**

The ExtremeWireless WiNG 5 OS provides the advanced brainpower required to create the "fully network-aware" WLAN, allowing every piece of infrastructure in your wireless network to work together to route every transmission as efficiently as possible.

#### PLUG-AND-PLAY

Fast and easy zero-touch installation plus rule-based access point and NX-7500/NX-5500 adoption from all locations automates equipment discovery and deployment.

#### SIMPLIFIED LICENSE MANAGEMENT FOR LARGE DISTRIBUTED ENTERPRISES

Distribute and use licenses based on actual load per site/location — no need to provision each location individually; eliminates the need to provision devices in both local offices and the NOC with access point licenses.

#### **END-TO-END SUPPORT SERVICES**

Increase uptime and reduce support costs with our optional comprehensive support service offerings.

# Comprehensive Cloud-Ready Wireless Services and a Single Point of Control for Any Size Enterprise

The ExtremeWireless WiNG VX 9000 combines the power of virtualization with Extreme Networks' industry-leading WiNG controller, creating a virtual controller in a class of its own. The cost-effectiveness of virtualization combines with high-performance advanced wireless services, endless scalability, superior deployment flexibility, and centralized management of the entire wireless network through a single windowpane, bringing a new level of simplicity, cost-efficiency, and much needed hardware independence to the wireless LAN.

# Minimize Deployment Cost with Maximum Deployment Flexibility

Not only is the VX 9000 easy to deploy, it also brings a new level of ease to WLAN deployment. The VX 9000 supports virtually any server and all of the leading, commercially available Hypervisors for fast and seamless integration into your existing network infrastructure — without adding any new hardware. In addition, you can run multiple instances of the VX 9000 on a single server, substantially reducing cost, space, and power requirements in the network operations center (NOC). With the ability to run in a private or public cloud, you have the freedom to choose the model that works best for your business — install on your own servers in your NOC or lease a server in the public cloud. And with built-in hierarchical management, equipment discovery and configuration is automated, bringing true plug-and-play simplicity to WLAN deployment.

# Cloud-Ready with Cost-Efficient Infinite Scalability

With the VX 9000, you simply pay as you grow — just purchase the amount of access point licenses you need today and easily add whatever you need in the future. There is no need to purchase a different controller for different access point capacities — each instance of the VX 9000 can support beyond 10,000+ access points, providing a real scalable solution for cloud deployments.

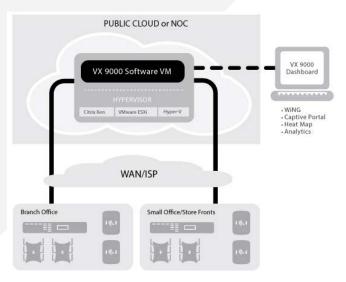
# Achieve Constant Availability — Easily and Cost-Effectively

With virtualization, server resource utilization improves, server management is simplified, and the need for single-purpose appliances is eliminated. In addition, live migration improves service availability — the VX 9000 can be automatically and seamlessly moved in the event of a server issue.



# WiNG 5 Advanced OS Delivers Superior WLAN Performance Right to the Network Edge

The ExtremeWireless WiNG 5 operating system empowers every piece of infrastructure in your WLAN with the intelligence required to work together to route every transmission as efficiently as possible. Now, controllers as well as stand-alone independent access points and adaptive access points adopted by physical or virtual controllers located in remote offices, the network operating center (NOC), or the cloud are all "network-aware." The result? The need to route all traffic through a centralized controller is eliminated — along with the associated congestion and latency. Since all features are available at the access layer, they remain available even when the VX 9000 is offline — for example, due to a WAN outage — ensuring extraordinary site survivability, network resilience, network throughput, and quality of service.



### **Specifications**

SUPPORTED HYPERVISORS AND	CLOUD ENVIRONMEN	τs				
VMware ESXi	Microsoft Hyper-V					
Citrix Xen	Amazon EC2 cloud					
Wing						
CAPACITY (AP)	100	500	1,000	2,000	5,000	10,000
CPU	2 core @2.5 GHz	2 core @2.5 GHz	4 core @2.5 GHz	4 core @2.5 GHz	4 core @2.5 GHz	8 core @2.5 GHz
Memory	4 GB	4 GB	8 GB	8 GB	16 GB	32 GB
Storage	64 GB	64 GB	64 GB	128 GB	128 GB	128 GB
WING + NSIGHT						
CAPACITY (AP / RF DOMAIN)	100	500/1000	1,000/20	2,000/500	5,000/1,000	10,000/500
CPU	8 core @2.5 GHz	12 core @2.5 GHz	18 core @2.5 GHz	24 core @2.5 GHz	24 core @2.5 GHz	24 core @2.5 GHz
Memory (DDR3-L or DDR4)	16 GB	32 GB	40 GB	64 GB	96 GB	128 GB
Storage / Config	500 GB RAID1+0	500 GB RAID1+0	500 GB RAID1+0	500 GB RAID1+0	4 TB RAD1+0 4x 800 GB SSD (SLC)	4 TB RAD1+0 4x 800 GB SSD (SLC)
IOPS	2,000 Sustained Writes	2,000 Sustained Writes	3,000 Sustained Writes	4,000 Sustained Writes	4,000 Sustained Writes	4,000 Sustained Writes
WING + CAPTIVE PORTAL						
CAPACITY (USER ENTRIES)	1 MILLION	2 MILLION				
CPU	6 core @2.5 GHz	12 core @2.5 GHz				
Memory	16 GB	32 GB				
Storage	500 GB	1 TB				
NSIGHT STANDALONE						
CAPACITY (APS/RF-DOMAINS/CLIENTS)	10,000/1,000/ 100K	15,000/1,500/ 150K	20,000/2,000/ 300K	25,000/2,000/ 300K	30,000/2,000/ 500K	40,000/2,000/ 600K
CPU	24 core @2.5 GHz	24 core @2.5 GHz	32 core @2.5 GHz	32 core @2.6 GHz	32 core @2.6 GHz	32 core @2.6 GHz
Memory (DDR3-L or DDR4)	128 GB	128 GB	128 GB	128 GB	256 GB	256 GB
Storage (SSD) / Config	500 GB RAID1+0	1 TB RAID1+0	2 TB RAID1+0 4x 500GB SSD (SLC)	2 TB RAID1+0 8x 500GB SSD (SLC)	2 TB RAID1+0 8x 500GB SSD (SLC)	3 TB RAID1+0 12x 500GB SSD (SLC)
IOPS	3,000 Sustained Writes	4,000 Sustained Writes	4,000 Sustained Writes	4,000 Sustained Writes	4,000 Sustained Writes	8,000 Sustained Writes



#### **Specifications (cont.)**

PRODUCT SKUs				
LICENSES				
VX-9000-APPLNC-LIC	VX-9000 appliance license includes 64 AP adoption license			
VX-9000-ADP-16	16x Adaptive Access Point license pack for VX-9000			
VX-9000-ADP-64	64x Adaptive Access Point license pack for VX-9000			
VX-9000-ADP-256	256x Adaptive Access Point license pack for VX-9000			
VX-9000-ADP-512	512x Adaptive Access Point license pack for VX-9000			
VX-9000-ADP-1024	1024x Adaptive Access Point license pack for VX-9000			



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