







## **vWLAN** The Power of Virtualization Brought to Wireless

-  **Eliminate the cost and constraints of a physical controller**
-  **Enforce network security at the edge**
-  **Enable cloud-based control**
-  **Provide seamless, cost-effective scaling**



The first and only WLAN solution with control based on VMware™



**Security at the Edge:**  
Why allow unwanted traffic onto your LAN? That's exactly what happens with conventional controller-based WLANs. vWLAN takes advantage of intelligent access points and enforces security policies at the edge. A full stateful firewall is configured and managed centrally but the policy is enforced at the access point.

**Seamless Scaling :**  
vWLAN separates the control and data plane. This allows for separate scaling and greater capacity. Adding more access points (data plane) does not drive an increase in the control plane. Likewise, adding more locations or more users does not require an additional investment in the control plane.

**Reduction in Controller Hardware:**  
Eliminating the physical controller triggers a number of advantages not the least of which is cost. Both the initial capex and the ongoing opex associated with the controller are gone.

**Optimized Performance:**  
With vWLAN, system capacity is no longer determined by the backplane capacity of the controller; rather, capacity is a function of the aggregate throughput of the APs. Typical conventional controller-based WLAN solutions are limited to 20 to 30 Gbps. In a vWLAN implementation, each 802.11n AP adds another 200Mbps of capacity. A large vWLAN implementation can easily reach 300 Gbps.

**Flexibility :**  
Virtualization permits a single application to run independent of the underlying server infrastructure. The inherent flexibility of virtualization comes through to vWLAN. A VMware installation in one city can control access points anywhere in the world.

**Reliability:**  
In vWLAN, an interruption in the control plane does not affect the data plane. vWLAN can be configured in a high-availability arrangement such that a failover can take place with zero packet loss. Reliability is based on the dependency of the data center as opposed to a single-purpose controller.



**Add more users, additional access points, even more locations without adding control hardware.**

**Base your WLAN on the scale and reliability of your data center.**

**Eliminate mobility seams caused by multiple controllers.**

**Control is freed from the LAN, making cloud control possible.**

**Access points discover the control software and automatically self-configure upon installation.**

### Authentication Methods

- Local DB (with optional MAC address enforcement)
- RADIUS and LDAP
- 802.1x, WPA/WPA2
- EAP methods - PEAP, TTLS, TLS, FAST, LEAP, MD5
- MAC Address (including wildcards)
- 802.1x Machine Authentication
- SIP2
- RADIUS Admin Authentication

### Wireless Encryption

- TKIP (128 bit)
- AES-CCM (128 bit)
- SSL encrypted API and HTTPS admin/login page

### Single Box Solution

- Layer 2 and 3 Roaming at the AP
- High Availability (1+1) with Zero Packet Loss

### API

- Web Services Based
- XML/RPC over SSL

### Power

- Power: 300W max
- Input Voltage: 100-240Vrms
- Frequency: 50/60Hz

### Voice

- Vocera
- Cisco
- Sip
- H.323

### Wireless

- DynamicRF
- RFIDS (with Containment)
- Load Balancing
- Fast Roaming (OKC)
- 802.11n (including Packet Aggregation, 40 MHz)

### Ease of Use

- No Proprietary Client Software Required
- Intuitive Web Configuration
- Uses Existing Authentication Servers
- Multiple Custom Login Pages
- Bulk AP, Station, MAC Address Upload
- Single box to manage
- Integrated Guest Access - no client-side software required
- Deploy the APs anywhere (L2, L3, over VPNs)
- Auto-Discovery of Locations, Networks and VLANs

### Temperature

- Operating Temperature: +10° C to +35° C
- Non-Operating Temperature: -40° C to +70° C

### Policy Management

- Role
- Location
- Time/Schedule
- VLAN (802.1q)
- RFC-3576/3580 Tunnel Private Group

### QoS/CoS

- Bandwidth Management (incoming, outgoing)
- Traffic Prioritization
- DiffServ Marking
- Voice Prioritization
- 802.1p support
- Over the Air Fairness

### Management

- Secure Admin Web Page
- Integrated Management Features
- SNMP v2c & v3
- CLI (Serial Port)
- Logical Logging
- Syslog
- Email Notifications
- Reports
- Automated Jobs/Reports/Upgrades
- Heat Maps
- Location of RF Devices

### IP Address Assignment

- Authentication/Quarantined/Remediation Network
- IPv6 client support

### Public Access

- Credit Card Billing
- Guest Access
- RADIUS Accounting
- Session-Timeout
- Walled Garden
- Website Redirect
- iPass™ Client Support
- Boingo™ Client Support

### Secure Client Scanning

- Firewall Enforcement
- AntiVirus Compliance
- Files, Registry and Custom Rules
- Detection of P2P Clients
- Patch Management
- AntiSpyware Compliance

### Physical Dimensions

- Height: 1.67 in / 42.42mm
- Width (without rails): 16.93in / 430.02mm
- Depth: 20 in / 508.00mm
- Maximum weight: 33lbs / 15kg

### Warranty

- Hardware: 1 year parts/labor\*
  - Software: 90 days\*
- \*Extended with support contract

### Product Safety Compliance

- UL60950 - CSA 60950 (USA/Canada)
- EN60950 (Europe)
- IEC60950 (International)
- CB Certificate & Report, IEC60950 (report to include all country national deviations)
- GS License (Germany)
- GOST R 50377-92 - License (Russia)
- Belarus License (Belarus)
- Ukraine License (Ukraine)
- CE - Low Voltage Directive 73/23/EEE (Europe)
- IRAM Certification (Argentina)
- GB4943 - CNCA Certification (China)
- BSMI certification (Taiwan)

### Product EMC Compliance

- FCC (Class A Verification) - Radiated & Conducted Emissions (USA)
- ICES-003 - (Canada)
- CISPR 22 - Emissions (International)
- EN55022 - Emissions (Europe)
- EN55024 - Immunity (Europe)
- EN61000-3-2 - Harmonics (Europe)
- EN61000-3-3 - Voltage Flicker (Europe)
- CE - EMC Directive 89/336/EEC (Europe)
- VCCI Emissions (Japan)
- AS/NZS 3548 Emissions (Australia/New Zealand)
- BSMI CNS13438 Emissions (Taiwan)
- GOST R 29216-91 Emissions (Russia)
- GOST R 50628-95 Immunity (Russia)
- Belarus License (Belarus)
- Ukraine License (Ukraine)
- RRL MIC Notice No. 1997-41 (EMC) & 1997-42 (EMI) (Korea)
- GB 9254 - CNCA Certification (China)
- GB 17625 - (Harmonics) CNCA Certification (China)

### Registrations / Declarations

- UL Certification (US/Canada)
- CB Certification (International)
- CE Declaration of Conformity (CENELEC Europe)
- GS Certification (Germany)
- FCC/ICES-003 Class A Attestation (USA/Canada)
- VCCI Certification (Japan)
- C-Tick Declaration of Conformity (Australia/New Zealand)
- BSMI Certification (Taiwan)
- GOST R Certification/License (Russia)
- Belarus Certification/License (Belarus)
- Ukraine Certification (Ukraine)
- RRL Certification (Korea)
- IRAM Certification (Argentina)
- CNCA Certification (China)
- Ecology Declaration (International)

## Product Ordering Information



### vWLAN Server

vWLAN-APL-000-00-0	Bluesocket vWLAN Server.
vWLAN-APL-IBM-00-0	Bluesocket's IBM-Branded vWLAN Server.
vWLAN-APL-VMW-00-0	Bluesocket VMware Ready Virtual Server ESX/ESXi.
	All vWLAN Server require a license and support 0 APs by default..

### vWLAN AP Licenses

vWLAN-LIC-000-T1-0	Tier 1 license pricing for purchases of 1 through 50 access point licenses.
vWLAN-LIC-000-T2-0	Tier 2 license pricing for purchases of 51 through 100 access point licenses.
vWLAN-LIC-000-T3-0	Tier 3 license pricing for purchases of a minimum of 101 access point licenses.
	All vWLAN AP licenses are per Access Point for all vWLAN Servers, at either initial purchase or future expansion and include Guest Access license.

### BlueSecure Access Points

BSAP-1800-000-00-0	BlueSecure Access Point BSAP-1800; Dual Band (2.4GHz/5GHz) 802.11a/b/g/n with internal MIMO antenna array. No external antenna connectors. Includes wall/ceiling mount kit. Recessed ceiling mount kit for suspended ceilings sold separately.
BSAP-1840-11N-00-0	BlueSecure Access Point BSAP-1840; Dual Band (2.4GHz/5GHz) 802.11a/b/g/n with 6 RPSMA Jack connectors for external antennas. No internal antenna. Includes wall/ceiling mounting kit. Requires external antennas sold separately.
BSAP-1840-000-00-0	BlueSecure Access Point BSAP-1840; Dual Band (2.4GHz/5GHz) 802.11a/b/g with 6 RPSMA Jack connectors for external antennas. No internal antenna. Includes wall/ceiling mounting kit. Requires external antennas sold separately.
BSAP-1840-11N-LIC-00-0	BlueSecure Access Point BSAP-1840 802.11n Upgrade License. Only valid with prior purchase of BSAP-1840- 000-00-0.
	All BlueSecure Access Points require IEEE 802.3af class 3 PoE or 12 volt DC Power adapter, both sold separately.



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