

## AppWall®: Web Application Firewall Technical Product Information

### AppWall OnDemand Switch™ Platforms

AppWall is available on Radware OnDemand Switch platforms as a stand-alone platform or as a module on top of Radware’s application delivery controller (ADC), Alteon. Scalability is achieved by throughput upgrade licenses or with the AppWall clustering feature in conjunction with an ADC.

For detailed specifications of Radware’s Alteon, please refer to the [Radware Alteon Technical Specifications](#).

### AppWall Virtual Appliance

AppWall Virtual Appliance (VA™) is a full-featured AppWall web application firewall (WAF) packaged as a virtual appliance running on a server virtualization infrastructure, providing identical functionality to an AppWall physical appliance, including management, reporting and clustering.

### Attacks Prevented

Full coverage of OWASP Top 10 web application security risks:

- ▶ A1 – Injection
- ▶ A2 – Broken Authentication
- ▶ A3 – Sensitive Data Exposure
- ▶ A4 – XML External Entities (XXE)
- ▶ A5 – Broken Access Control
- ▶ A6 – Security Misconfiguration
- ▶ A7 – Cross-Site Scripting (XSS)
- ▶ A8 – Insecure Deserialization
- ▶ A9 – Using Components with Known Vulnerabilities
- ▶ A10 – Insufficient Logging & Monitoring

Web application attacks prevented:

- ▶ XSS
- ▶ SQL injections
- ▶ OS command injections
- ▶ LDAP injections
- ▶ SSI injections
- ▶ XPath injections
- ▶ Sensitive information leakage (e.g., CCN, SSN, custom defined)
- ▶ Application DoS
- ▶ CSRF
- ▶ Parameter tampering
- ▶ From field manipulation
- ▶ Session hijacking
- ▶ Cookie poisoning
- ▶ Application buffer overflows
- ▶ Brute Force attacks
- ▶ Access to predictable resource locations
- ▶ Unauthorized navigation
- ▶ Web server reconnaissance
- ▶ Directory/path traversal
- ▶ Forceful browsing
- ▶ Hotlink
- ▶ HTTP response splitting
- ▶ Evasion and illegal encoding
- ▶ XML validation
- ▶ Web services method restrictions and validation
- ▶ HTTP RFC violations
- ▶ HTTP request format and limitation violations (size, unknown method, etc.)
- ▶ Use of revoked or expired client certificates
- ▶ File upload violations

### Product Virtualization Requirements – AppWall VA

#### MINIMAL REQUIREMENTS

Logical Disks	1
Disk Space	26GB
vCPUs	2
vRAM	2GB
Network vInterfaces	2

#### RECOMMENDED REQUIREMENTS

vCPUs	4
vRAM	6GB
Network vInterfaces	2
Supported Virtualization Environments	VMware ESX or ESXi 5.0/5.5

Specifications are subject to change without notice.

## Product Specifications – OnDemand Switch Platforms



### OnDemand Switch VL

<b>PERFORMANCE<sup>1</sup></b>	
Available Throughput Licenses <sup>2</sup>	200Mbps, 500Mbps, 1Gbps and 2Gbps
Max Concurrent Established Connections	51,000
Latency	<1 millisecond
<b>INSPECTION PORTS</b>	
10/100/1000 Copper Ethernet	5
GE (SFP)	2
1000Base - SX/LX/ZX Ports	All Gigabit Fiber ports deliver SX/LX/ZX interfaces depending on GBIC
1000Base - SX (850 nm) Operating Distance	<ul style="list-style-type: none"> <li>• 62.5 micron MM fiber .2 m to 275 m</li> <li>• 50 micron MM fiber .2 m to 550 m</li> </ul>
1000Base - LX/ZX Operating Distance	<ul style="list-style-type: none"> <li>• LX: Up to 10 km (6.2 mi)</li> <li>• ZX: Up to 80 km (49.7 mi)</li> </ul>
<b>MANAGEMENT PORTS</b>	
10/100/1000 Copper Ethernet	1
RS-232	1
USB	1
<b>MODE OF OPERATION</b>	
Deployment Modes	<ul style="list-style-type: none"> <li>• Bridge</li> <li>• Reverse proxy – transparent and nontransparent</li> <li>• Cluster deployment</li> </ul>
Policy Action	Block (Active) & Report (Passive)
<b>HIGH AVAILABILITY</b>	
Dual Power Supply	Optional
Cluster Management	Two or more AppWall devices can be clustered. An AppWall cluster is easily managed with the Cluster Management component, ensuring all policies across the entire AppWall cluster are synchronized. (Cluster Manager acting as web application firewall)
<b>PHYSICAL</b>	
Dimensions (W x D x H) mm	<ul style="list-style-type: none"> <li>• 1U, single power supply:               <ul style="list-style-type: none"> <li>o Width: 424 mm (17 in.)</li> <li>o Depth: 457 mm (18 in.)</li> <li>o Height: 44 mm (1.7 in.)</li> </ul> </li> <li>EIA Rack or Stand-alone: 482 mm (19 in.)</li> </ul>
Weight (lb, kg)	7.7 kg (17 lbs)
Power Supply	Auto-range supply: AC: 100–240V 47–63Hz DC: -36--72V
Power Consumption	188W
Heat Dissipation (BTU/h)	641 BTU/h
Operating Temperature	0°C to 40°C (32°F to 104°F)
Humidity (noncondensing)	5% to 95%
Safety Certifications	EN 60950-1:2006, CB - IEC 60950-1, CCC, cTUVus/cULus
EMC	EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3, IEC 61000 4-2 to 4-6, IEC 61000 4-8 & IEC 61000-4-11
Other Certification	CE, FCC Part 15B Class A, ICES-003, VCCI, C-Tick
Warranty	1-year hardware and software maintenance
Support	Certainty Support Program

<sup>1</sup> Actual performance figures may change per network configuration, traffic type, etc.

<sup>2</sup> Capacity is measured as maximum traffic forwarding when no security profiles are configured.

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