







# **Application Optimization**

- Optimize any application, including Microsoft SharePoint, Exchange, Lync, Oracle, DNS and more
- Improve web server response times and reduce required servers

## **Cost Effective Scalability**

- High performance reduces legacy ADCs and OPEX
- Virtualization for multi-tenancy and consolidation
- Scale-up with Virtual Chassis (aVCS), no upfront investment
- Handle larger SSL key sizes (2048-bit+)
- More power, Intel Xeon CPU
- · No performance licenses

# Data Center Ready Today, and Tomorrow

- Compact 1U form factor with low power consumption
- Accelerate with SSL offload, RAM caching and compression
- SSL hardware expansion option
- Advanced features; GSLB, aFleX traffic control and aXAPI management
- Native IPv6 and Server Load Balancing Protocol Translation (SLB-PT) support
- No licenses for premium features

## **Built for Uptime and Peace of Mind**

- Redundant power supply capable
- SSD versus HDD (no spinning media)
- Reliable server grade ECC memory
- · High availability
- · Application health checks

 Value: Low Cost Per Connection, Throughput and Session

• Efficiency: Low Power Usage, High Performance

Per Watt (PPW)

• Reliability: Server Class Hardware Platform

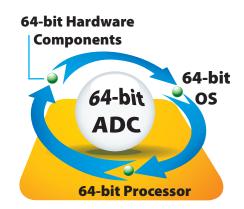
The AX 2500 is a 64-bit 1U Advanced Application Delivery Controller (ADC) in the award winning A10 Networks line of hardware appliances. The AX 2500 offers high value for key Server Load Balancing, Virtualization and IPv6 Migration projects. The AX 2500 also has the option to add an expansion card for additional SSL or compression performance.

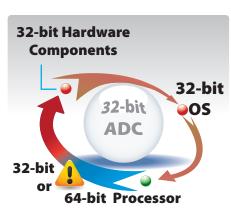
Like all AX Series hardware appliances, maximum performance and advanced software features are included, ensuring no budget surprises or need to purchase licenses during unforeseen peak loads.

The AX 2500 offers 11 Gbps of throughput, and 300,000 Layer 4 connections per second (L4 CPS) while consuming a maximum of 250 Watts, which translates to 1,200 L4 CPS per Watt in a 1U platform.

Reliable operation with maximum uptime can be guaranteed with high quality hardware specifications and components, including a PCI expansion slot for additional SSL or compression performance. The AX 2500's server grade processor, Error Correcting Code (ECC) memory and solid-state drive (SSD) deliver data center robustness, all backed by world class support.

The AX 2500's reliability and performance provide scalability for enterprise class applications.





64-bit platform ensures maximum scalability







#### **AX Series Features**

# **Application Delivery Features**

- Comprehensive IPv4/IPv6 Support
- Advanced Layer 4/Layer 7 Server Load Balancing
  - ♦ Fast HTTP, Full HTTP Proxy
  - High-performance, template-based Layer 7 switching with header/URL/ domain manipulation
  - Comprehensive Layer 7 application persistence support
- Comprehensive load balancing methods
  - Round Robin, Least Connections, Weighted RR, Weighted LC, Fastest Response, and others
- aFleX deep packet inspection and transformation for customizable, application-aware switching
- Advanced Health Monitoring
  - Comprehensive Protocol Support -ICMP, TCP, UDP, HTTP, HTTPS, FTP, RTSP, SMTP, POP3, SNMP, DNS, RADIUS, LDAP
  - ◆ TCL Scriptable Health Check Support
  - High Availability Active-Active, Active-Standby configurations with sub-second failover
  - SIP Load Balancing for VoIP and other rich-media applications
  - STARTTLS support for Secure Email (POPS, SMTPS, IMAPS) & LDAPS
- Spam Filter Support high-speed application of very large black/white lists
- Firewall Load Balancing (FWLB)
- Global Server Load Balancing (GSLB)
- Transparent Cache Switching (TCS)
- Link Load Balancing (LLB)
- Diameter AAA Load Balancing

# **Acceleration & Security Features**

- HTTP Acceleration & Optimization
  - ◆ HTTP Connection Multiplexing
  - HTTP Caching
  - HTTP Compression
- SSL Acceleration
  - ♦ Hardware-based SSL Offload
  - Support for all TCP Protocols SSL Termination, SSL Bridging (SSL Initiation)
- SSL Session ID Reuse
- SYN Cookies, IP Anomaly Detection
- Connection Rate Limiting/Connection Limiting
- DNS Application Firewall

# **High Performance, Scalable Platform**

- ACOS Operating System
  - ◆ Multi-core Support
  - Linear Application Scaling
  - Linux on Control Plane
- ACOS on Data Plane

# Networking

- Integrated Layer 2/Layer 3
- Transparent Mode/Gateway Mode
- Routing Static Routes, IS-IS (v4/v6), RIPv2/ng, OSPF v2/v3, BGP4+
- VLAN
- Trunking
- Access Control Lists (ACLs)
- Traditional IPv4-->IPv4 NAT/NAPT
- IPv6-->IPv6 NAPT

#### IPv6 Migration/IPv4 Preservation

Full native IPv6 management and feature support

- SLB-PT (Protocol Translation), SLB-64 (IPv4<->IPv6, IPv6<->IPv4)
- Application Level Gateways (ALGs) for FTP, TFTP, RTSP, PPTP, SIP, ICMP, DNS
- Carrier Grade NAT (CGN), Large Scale NAT (LSN), NAT444, NAT44
- NAT64/DNS64, DS-Lite, 6rd

#### Management

- Dedicated Management Interface (Console, SSH, Telnet, HTTPS)
- Web-based Graphical User Interface (GUI) with Language Localization
- Industry-standard Command Line Interface (CLI) Support
- SNMP, Syslog, Alerting
- Port Mirroring
- REST-style XML API (aXAPI)

#### Virtualization

- Virtual Chassis System (aVCS)
- SoftAX Virtual Appliance (separate)
- Multi-tenancy with Application Delivery Partitions (ADPs)
  - ♦ Role Based Administration (RBA)
  - ♦ Partition Based Management
  - ♦ L2/L3 Virtualization
- Hypervisor acceleration and management integration

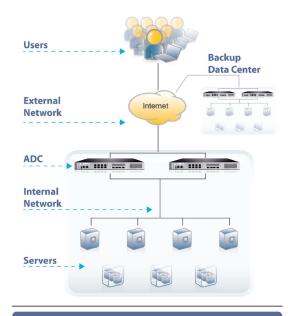
## **Carrier-grade Hardware**

- Advanced hardware architecture
- Hot swap Redundant Power Supplies
- Hot swap smart fans
- Solid-state drive (SSD) and Compact Flash
- Error Correcting Code (ECC) memory
- SSL or Compression Expansion Card Slot



# **AX 2500 Hardware Summary**

| 5                         | AX 2500   |
|---------------------------|---|
| Processor                 | 1 x Quad-core   |
| Memory                    | 6 GB  |
| Ethernet Interfaces       | 8 x 1 Gb Copper, 4 x 1 Gb (SFP)   |
| Management Interface      | 1 Dedicated   |
| Console Port              | 1 Console Interface   |
| Solid-state Drive (SSD)   | Yes   |
| Compact Flash             | Yes   |
| Power Supply              | Dual 400 W RPS included,<br>100 – 240 VAC, Frequency 50 – 60 Hz                                   |
| Max Power Consumption     | 250 W   |
| Operating Temperate Range | 0° – 40° C  |
| Dimensions                | 1.75 in (H) x 17 in (W) x 21.8 in (D)<br>1U Rack Mountable  |
| Unit Weight               | 25 lbs  |
| Regulatory Certification  | FCC Class A, UL, CE, TUV, CB, VCCI, NEBS<br>Level 3, FIPS 140-2 (FIPS model must be<br>purchased) |
| Standard Warranty         | 90-day Hardware & Software  |



Application Delivery Landscape





