

Manage Bandwidth with Unprecedented User Visibility

The EX Series is the industry's only bandwidth management appliance with identity-based application visibility, helping organizations optimize and secure network traffic through the management of bandwidth by applications and users. The EX Series provides quality of service, instant application and user visibility, security, scalability and reliability. These capabilities are built upon a secure and high performance platform for an unmatched solution to optimize the network edge.



The A10 Networks EX Series - Secure Bandwidth Management

Application Bandwidth Manager

► Comprehensive Protocol Support

Maximize bandwidth with support for over 100 business applications to ensure that the most critical network traffic receives the highest priority across WAN links. The EX provides automatic application protocol classification, comprehensive policies and traffic controls such as rate shaping, rate limiting, selective dropping and priority marking.

► Application Protocol Classification

Application protocol classification techniques extend above simple Layer 3 and 4 (IP and port) combinations. Using A10's deep packet inspection techniques enables the EX to identify application protocols for positive application identification. These techniques enable the EX to identify application protocols that use port hopping, port tunneling, and encryption.

► Innovative User Based QoS Policies

Allocate bandwidth and network application access transparently to a user based solely on their user ID. Practically any corporate data store such as Active Directory, SQL database and LDAP is available when connecting to an A10 ID Series appliance. Traditional QoS policies based on Layer 3-7 traffic classification can also be used to control bandwidth consumption.

► Bandwidth Utilization Reports

Bandwidth utilization reports quickly identify top protocols, and users consuming too much bandwidth. Graphical real-time and historical reports with drill down capabilities are available from the web user interface. PDF or XML formatted reports may be exported manually or emailed periodically on a configurable schedule.

Instant Application & User Visibility

► Identity-Based Application Visibility

Know who is doing "what" and "when" by monitoring application activity and user identities for a variety of Instant Messaging (IM), file transfer, and email applications.

► High Level Data Leakage Monitoring

Application visibility allows a comprehensive log of application data and a free form text search engine to pinpoint data of interest. In the case of a file transfer the search flexibility allows viewing of application data to see the original location, filename, user actions to the file and source IP address (or user ID). EX strikes the balance between useful information and administration overhead.

Traffic Optimization

► Link Load Balancing

Supporting multi-homed networks with fine-grained load balancing across two or more WAN links to help increase WAN capacity, ensure link level redundancy and optimize network traffic over the

WAN. EX uniquely enables load balancing by application protocol. This allows mission critical applications to use highly available dedicated links and non-critical applications such as web surfing or multimedia to use links with lower service level agreements.

► Compression (site-to-site)

Providing improved delivery times of traffic over the WAN while reducing overall bandwidth requirements.

Security, Scalability and Reliability

► Network IPS

Identifying network anomalies before they impact your internal machines. Providing real time protection against attacks such as Distributed Denial of Service (DDoS), port scans, address sweeps, protocol misuse and malformed packets.

► Performance

Delivering up to 2Gbps (EX 2000) and up to 500Mbps (EX 1000) of aggregate throughput and rate shaping/limiting capabilities, based on an optimized, purpose-built, high performance processing architecture.

► Flexible Deployment Options

Integrating into existing network infrastructures with support for both transparent and gateway modes, allowing fail open or closed configurations. Transparent mode also means no network configuration is changed for seamless deployment.

EX Series Features

» Bandwidth Manager

- **Rate Shaping**
 - ◆ Minimum Rate, Maximum Rate, Priority, Configurable Queuing, DSCP Marking
- **Rate Limiting**
 - ◆ Bandwidth Based Conform or Exceed
- **QoS**
 - ◆ Pre-defined and User Configurable Traffic Classes
 - ◆ Hierarchical Policies for Traffic Classes
 - ◆ Flexible Binding of Policies to Interfaces
- **IP-to-ID API Enabled to ID Series Appliances**
- **Bandwidth Monitoring and Reporting**
 - ◆ Identity-based for High Visibility
 - ◆ Top User and Top Traffic Class Reports
 - ◆ URL Tracking
 - ◆ Customizable Reports in PDF or XML Format
 - ◆ Scheduled Reports Sent Via Email or Manually Exported Out
- **Alerts Based on Customizable Thresholds**
- **100+ Application Classes Supported**
 - ◆ VoIP - H323, Megaco, MGCP, RTCP,
 - ◆ SIP, Skinny, Skype, T120, Vonage
 - ◆ Security - ISAKMP, Socks, SSL
 - ◆ Session - CVS, Login, MAPTIP, REXEC, RTelnet, SSH, Telnet, TelnetS, Who
 - ◆ P2P - Ares, BitTorrent, Cspace, Dijer, DirectConnect, eDonkey-eMule, FreeCast, Gnutella, KaZaA, Krawler, PPLive, PPStream, Share, SoulSeek, TVAnts, WinMX, Xunlei
 - ◆ Multimedia - Abacast, CNNrtsp, FreeCast, iTunes, Motion, MSMMS, Quicktime, RTP, RTSP, Shoutcast, PPLive, PPStream, TV Ants

- ◆ Messaging - AIM, GTalk, IRC, IRCS, MSNIM, QQ, YIM
- ◆ File Transfer - CIFS, NetBios, Netware, NFS, Rsync, TFTP
- ◆ Email - BIFF, IMAP, POP3, SMTP
- ◆ Directory Service and Data Base - Bootp, CRS, DNS, Finger, Ident, Kerberos, LDAP, MSSQL, Oracle, Radius, RRP, TACACS, Whois
- ◆ Others - AURP, Ariel, BGP, Day Time, DHCP, Echo, FTP, SFTP, Gopher, HTTP, IPP, NNTP, NTP, Printer, RPC2Portmap, Router, Shell, SNMP, Sun RPC, Syslog, Time, UUCP

» Identity-Based Application Visibility

- **Application Logging and Reporting (IP or ID based)**
 - ◆ File Transfer – FTP, NFS, CIFS
 - ◆ Mail - SMTP, POP3
 - ◆ Instant Messaging – Yahoo, AOL, MSN, QQ
 - ◆ External ID to Internal ID
 - ◆ Augmented with IP-to-ID Correlation

» Traffic Optimization

- **Link Load Balancing**
 - ◆ Round Robin
 - ◆ Weighted Round Robin
 - ◆ Least Connection
 - ◆ Weighted Least Connection
 - ◆ Bandwidth Usage
 - ◆ Round Trip Time
 - ◆ Bandwidth Price
- **Site-to-Site Compression**
 - ◆ Packet Based Compression
 - ◆ Optimize Traffic Transfer across WAN Link
 - ◆ Reduce Traffic Congestion by Up to 50%

» Layer 2 and Layer 3 Support

- **L3 Routing Protocols**
 - ◆ RIP2
 - ◆ OSPF
 - ◆ Static Route
- **L2 Transparent Mode**
 - ◆ Tagged and Untagged Vlans

» IPS Anomaly Protection

- **28 Network Anomaly Types**
 - ◆ DDoS Attacks
 - ◆ ICMP Based Attacks
 - ◆ IP Based Attacks
 - ◆ TCP/UDP Based Attacks

» Management

- **Industry standard Command Line Interface (CLI)**
- **Intuitive Graphical User Interface (GUI)**
- **Localized for Chinese and Japanese**
- **SSH, Telnet, RS-232 Serial Console**

» High Availability

- **Active/Standby**

» Redundancy (EX 2000)

- **Hot Swappable Smart Fans**
- **Redundant Power Supply**
- **Removable Hard Drives with RAID 1 Support**

EX Series Hardware Summary

	EX 2100 / EX2200	EX 1000
Processors	Dual Processor (Dual Core and Single Core Configurations)	Single Processor
Interfaces	8 x 10/100/1000 BaseT (Gigabit Over Copper) + 2 SFP Fiber Ports (EX 2100) 12 x 1000BaseT (Gigabit Over Copper) (EX 2200) Management Through Ethernet Port 1 x RS-232 Serial Console Port	4 x 1000BaseT (Gigabit Over Copper) Management Through Ethernet Port 1 x RS-232 Serial Console Port
Dimensions	3.5 in (H), 17.0 in (W), 24.0 in (D) 8.89 cm (H), 43.18 cm (W), 60.96 cm (D) Weight 35 lbs (17.0 kg), 2 U Rack Mountable	1.75 in (H), 17.0 in (W), 19.5 in (D) 4.45 cm (H), 43.18 cm (W), 49.53 cm (D) Weight 17.6 lbs (8.0 kg), 1 U Rack Mountable
Power Supply	Redundant Power Supply with Smart Fan AC Input Voltage 100 to 240 VAC Frequency 50 to 60 Hz 460 W DC Each Removable	AC Input Voltage 100 to 240 VAC Frequency 50 to 60 Hz Single Power Supply 300W Max
Fan	3 Removable Smart Fans	Single Fan
Flash Memory	128M	128M
Hard Drives	Removable Dual 160G, RAID 1	160G
Regulatory Certification	FCC Class A, UL, CE, TUV, CB, VCCI	FCC Class A, UL, CE, TUV, CB, VCCI
Warranty	90-day Hardware and Software Standard	90-day Hardware and Software Standard