

## VISIBILITY AND OPTIMIZATION FOR NETWORKED APPLICATIONS

Blue Coat PacketShaper is part of the Application Delivery Network (ADN), an infrastructure that provides complete application visibility, acceleration and security. PacketShaper supports ADN with unmatched visibility to optimize WAN performance. With PacketShaper, you can automatically classify and measure network applications, provide quality-of-service (QoS) provisioning to control traffic and increase WAN capacity with compression capabilities.

Critical applications need to move at the speed of business. Blue Coat PacketShaper provides WAN Optimization functionality through a series of modules – monitoring, shaping and compression.

### FEATURES

#### Monitoring Module

Before you can optimize application performance, you need an accurate picture of network traffic. Blue Coat PacketShaper automatically classifies and measures network applications, providing the insight of a probe but with deeper, application-intelligent Layer 7 Plus visibility. In addition to delivering network and application utilization and performance data, the Monitoring Module validates common protocols and tracks what happens to each connection established by each application. Monitoring also breaks down traffic per application and per site at a granular level, recording peak and average utilization rates, bytes transmitted, availability, utilization, top talkers/listeners, network efficiency and much more.

Once traffic has been identified, PacketShaper monitors performance – over 100 stats per application class – in real time. Track how much bandwidth applications are using, the response times of key applications broken down by network and server delay and key stats like TCP Healthy, efficiency and retransmissions to aid troubleshooting. Targeted packet traces can be captured for use with protocol analysis tools.

Voice level intelligence tracks Mean Opinion Scores (MOS), jitter, delay and

loss for voice and video conferencing traffic over Real Time Protocol – for real traffic in real time.

All of these capabilities can integrate into your performance management environment, including intelligent thresholds and alerts when problems are about to occur.

- > Identify and classify applications with Layer 7 Plus technology. Monitor performance in real time and the information you need to solve performance issues.

#### Shaping Module

The Blue Coat PacketShaper Shaping Module provides QoS provisioning. This helps control traffic and assures that latency-sensitive, customer-critical applications get the bandwidth they need to perform at their peak, while preventing recreational traffic from consuming too much bandwidth. With patented TCP rate control, the Shaping Module

can guarantee per flow bandwidth and automatically enforce appropriate transfer rates for computers at the far end of the network to deliver true bi-directional QoS.

- > Fix critical application performance issues by allocating bandwidth to ensure applications perform.

#### Compression Module

The Blue Coat PacketShaper Compression Module instantly increases WAN capacity, improving application performance and user response times. Using a symmetric, application intelligent architecture and multiple data reduction methods, the Compression Module intelligently selects what traffic to compress and which technology to use – increasing capacity from two to ten times, reducing bandwidth usage and minimizing WAN latency.

- > Create more bandwidth from existing physical links and enhance the user experience.

### Blue Coat PacketShaper Dashboard



PACKETSHAPER SERIES	900	1700	3500	7500	10000	10000 ISP****	
<b>Maximum Capacity</b>							
IP Flows (TCP/Other IP)*	5,000/2,500	30,000/15,000	40,000/20,000	200,000/100,000	300,000/150,000	900,000/360,000	
Classes	256	512	1,024	1,024	2,048	5,000	
Dynamic Partitions	**	1,024	1,024	10,000	20,000	20,000	
Static Partitions	128	256	512	512	1,024	5,000	
Shaping Policies	256	512	1,024	1,024	2,048	5,000	
Max # of Matching Rules	640	2,562	2,562	5,120	5,000	12,500	
IP Hosts*	5,000	15,000	20,000	150,000	200,000	400,000	
Active Tunnels	10	15	30	100	1,000	N/A	
<b>Software Options and Upgrades</b>							
Monitoring Only	Yes	Yes	Yes	Yes	Yes	Yes	
Link Speeds with Shaping Options (bps)	512 Kbps 2 Mbps — —	2 Mbps 6 Mbps 10 Mbps —	2 Mbps 6 Mbps 10 Mbps 45 Mbps	10 Mbps 45 Mbps 100 Mbps 200 Mbps	100 Mbps 200 Mbps 310 Mbps 1 Gbps	100 Mbps 200 Mbps 310 Mbps 1 Gbps	100 Mbps 200 Mbps 310 Mbps 1 Gbps
Compression***	2 Mbps	10 Mbps	20 Mbps	45 Mbps	155 Mbps	N/A	
<b>Interfaces</b>							
Network Interfaces (in and out)	Copper: 10/100 Mbps	Copper: 10/100/1000 Mbps	Copper: 10/100/1000 Mbps	Copper: 10/100/1000 Mbps	Copper: 10/100/1000 Mbps Fiber: 1000 Mbps	Copper: 10/100/1000 Mbps Fiber: 1000 Mbps	
LAN Expansion Module (max 2)	Backup fail-to-wire pair built in	N/A	Copper: 10/100/1000 Mbps Fiber SFP	Copper: 10/100/1000 Mbps Fiber SFP	Copper: 10/100/1000 Mbps Fiber SFP	Copper: 10/100/1000 Mbps Fiber SFP	
Interface Pairs	2	1	1 + LEM option	1 + LEM option	1 + LEM option	1 + LEM option	
Out of Band Management	Through backup ports	Yes	Yes	Yes	With LEM	With LEM	
Console Port	All have RS-232 (AT-compatible) with male DB-9 connectors						
<b>Dimensions (All are 19 in. rack mountable)</b>							
Height	1U (1.75 in/4.45 cm)	1U (1.75 in/4.45 cm)	2U (3.5 in/8.89 cm)	2U (3.5 in/8.89 cm)	2U (3.5 in/8.89 cm)	2U (3.5 in/8.89 cm)	
Width	8.66 in (22.00 cm)	17 in (43.18 cm)	17.35 in (44.07 cm)	17.35 in (44.07 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)	
Depth	9.68 in (24.60 cm)	14 in (35.56 cm)	16 in (40.64 cm)	16 in (40.64 cm)	20.25 in (51.43 cm)	20.25 in (51.43 cm)	
Weight	4.50 lbs (2.05 kg)	14 lb (6.35 kg)	18.04 lb (8.18 kg)	20.48 lb (9.29 kg)	33 lb (14.97 kg)	33 lb (14.97 kg)	
<b>Power</b>							
Power Supply	100/240 VAC; 50/60 Hz, 2 A	100/240 VAC; 50/60 Hz, 2.5 A	100/240 VAC; 50/60 Hz, 2.5 A	100/240 VAC; 50/60 Hz, 2.5 A	100/240 VAC; 50/60 Hz, 6 A	100/240 VAC; 50/60 Hz, 6 A	
Dual, Redundant Load Sharing	No	No	No	Yes; Hot-swappable	Yes; Hot-swappable	Yes; Hot-swappable	
<b>Additional Features</b>							
Interoperability	XML, XML and CGI APIs, SNMP MIB, SNMP event traps, HP OpenView, infoVista, CA eHealth, Aprisma Spectrum, Micromuse Netcool						
Device Management	Console access, Web browser interface, Telnet CLI, SNMP Blue Coat MIB and MIB-II support						
<b>Agency Approval</b>							
Safety	IEC 60950-1; EN 60950-1+A11, CAN/CSA-C22 2 No, 60950-1:03; UL 60950-1:03; EN 60825-1,-2 Class 1 Laser						
EMC/EMI	AS/NZS 3548 Class A; AS/NZS 4252.1; ICES-003 Class A; EMC Direct B9/336/EEC; EN 300 386 v1.3.1: 2001 Telecom EMC standard; EMC Directive 73/23/EEC; EMC Directive 93/68/EEC; EN 55022: 1998 Class A; EN 61000-3-2: 1995, A1[98] + A2[98], & prA1 4[00]; EN 61000-3-3:1:1995; EN 55024:1998; VCCI:2002 Class A; KN55022 Class A; KN6100-4-2,3,4,5,6,8,11; GOST-R 60950-2002; GOST-R 5131B.22,24-99; FCC 47 CFR part 15, subpart B Class A; CNS 13438 Class A						

Note: Not all capacity specifications can be maximized simultaneously

\* PacketShaper can support more hosts and flows; these figures represent ideal maximums for producing optimal results; numbers are rounded up or down to the nearest thousand. These maximums represent concurrent flows. Performance may vary due to the number of new flows, traffic type, traffic mix and other conditions unique to each deployment.

\*\* No extra partitions are specifically allocated for dynamic partitions. The 1400 Lite and 1400 have a pool of partitions to be shared between static and dynamic partitions.

\*\*\* Refers to post-compressed traffic rates - maximum compressed throughput specifications for PacketShaper are lower when compression is enabled due to the extra processing power required to compress traffic.

\*\*\*\*PacketShaper 10000 has a configuration option for ISP loads. Previously, ISP editions had been offered as a separate product with unique SKU. Now, the ISP load, which adds class capacity, is available as a configuration option. Note: The ISP load increase capacity for classes and flows, but does NOT provide certain features including compression and response time statistics, among others.