

## VISIBILITY AND OPTIMIZATION FOR NETWORKED TRAFFIC

Unmatched auto-detection of both applications and Web content categories makes Blue Coat PacketShaper a complete visibility and control solution for today's Web-heavy traffic. PacketShaper lets you measure network application performance, categorize and manage Web traffic based on its content, guarantee quality-of-service (QoS) for preferred applications and content, and contain the impact of undesirable traffic.

Critical applications need to move at the speed of business. With Blue Coat PacketShaper, you can monitor and control application performance – even Web 2.0 applications – while managing the increasing volume of Web traffic based on content categories.

### FEATURES

#### Monitoring

Before you can optimize application performance, you need an accurate picture of network traffic. The Monitoring Module, which delivers the core functionality of Blue Coat PacketShaper, automatically classifies and measures network traffic by application and – in the case of Web traffic – by content category. This unmatched visibility into network traffic gives you the insight of a probe but with far more sophistication. It leverages PacketShaper's application-intelligent Layer 7 Plus visibility and its integration with WebPulse, Blue Coat's real-time content categorization service. In addition to reporting on network and application utilization and performance, the Monitoring Module validates common protocols and tracks what happens to each connection established by any application.

As the proportion of Web-based traffic continues to increase, PacketShaper provides invaluable management of Web 2.0 applications such as Facebook, YouTube, and WebEx. All Web content requested by users is categorized under 80 logical headings such as Collaboration, Games, and Social Networking. This latest advance in Web visibility helps you assess the impact of

recreational Web surfing, security threats such as malware and phishing, and undesirable content that can raise legal and compliance concerns.

Once traffic has been identified, PacketShaper monitors performance – over 100 stats per application class – in real time. PacketShaper tracks the bandwidth consumed by applications and Web content categories, the response times of key applications by network and server delay, and key stats like TCP health, efficiency and retransmissions to aid in troubleshooting. PacketShaper also powers targeted packet traces for use with protocol analysis tools.

Real-time performance metrics include mean opinion score (MOS), jitter, delay, and loss for voice and video conferencing traffic over RTP. All these capabilities can integrate into your performance management environment, providing intelligent thresholds and alerts when problems are about to occur.

-> Identify and classify both applications and Web content. Monitor performance in real time and gather the evidence you need to solve performance issues.

#### Shaping

PacketShaper does more than just monitor and measure application performance and Web content. The Shaping Module provides powerful QoS tools to protect preferred applications and Web content categories while containing the impact of undesirable traffic. With PacketShaper, you can:

-> Guarantee bandwidth to latency-sensitive applications such as voice, video and VMware

-> Allow access to social network sites like Facebook, but squeeze games like Farmville

-> Prioritize Web traffic to speed important content, but restrict recreational downloads

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 bidirectional QoS.

-> Protect the best, contain the rest. Align network content with your priorities by speeding up or slowing down applications and Web content categories.

#### Compression

Some types of network traffic make inefficient use of available bandwidth. By optimizing traffic in real time, the Compression Module instantly increases WAN capacity, improving application performance and user response times. Using a symmetric, application-intelligent architecture, the Compression Module identifies compressible traffic and applies the appropriate compression technology, increasing capacity from two to four times, reducing bandwidth usage, and minimizing WAN latency.

-> Reclaim wasted bandwidth from existing physical links. Enhance the user experience.



PACKETSHAPER SERIES	900	1700	3500	7500	10000   10000 ISP****	12000   12000 ISP****	
<b>Maximum Capacity</b>							
IP Flows (TCP)*	5,000	30,000	40,000	200,000	300,000   900,000	450,000   1,300,000	
IP Flows (UDP)*	2,500	15,000	20,000	100,000	150,000   360,000	225,000   500,000	
Classes	256	512	1,024	1,024	2,048   5,000	2,048   5,000	
Dynamic Partitions	**	1,024	1,024	10,000	20,000   20,000	20,000   20,000	
Static Partitions	128	256	512	512	1,024   5,000	1,024   5,000	
Shaping Policies	256	512	1,024	1,024	2,048   5,000	2,048   5,000	
Max # of Matching Rules	640	2,562	2,562	5,120	5,000   12,500	12,500   20,000	
IP Hosts*	5,000	15,000	20,000	150,000	200,000   400,000	300,000   600,000	
Active Tunnels	10	15	30	100	1,000   N/A	1,000   N/A	
<b>Software Options and Upgrades</b>							
Monitoring Only	Yes	Yes	Yes	Yes	Yes	Yes	
Link Speeds with Shaping Options	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 —	500 Mbps 1 Gbps No limit ****	—
Compression***	2 Mbps	10 Mbps	20 Mbps	45 Mbps	155 Mbps   N/A	155 Mbps   N/A	
<b>Interfaces</b>							
Onboard Ports (Pairs)	Copper: 2x10/100 Mbps	Copper: 1x10/100/1000 Mbps	Copper: 1x10/100/1000 Mbps	Copper: 1x10/100/1000 Mbps	Copper: 1x10/100/1000 Mbps Or, Fiber: 1x1000 Mbps	Copper: 1x10/100/1000 Mbps	
LAN Expansion Modules	Backup fail-to-wire pair built in	N/A	Up to 2 dual-port modules Copper: 10/100/1000 Mbps Fiber: SFP	Up to 2 dual-port modules Copper: 10/100/1000 Mbps Fiber: SFP	Up to 2 dual-port modules Copper: 10/100/1000 Mbps Fiber: SFP	Up to 1 dual-port module Copper: 10/100/1000 Mbps Fiber: SFP Copper: 10 Gbps  Or, up to 1 four-port module Copper: 10/100/1000 Mbps Fiber: SFP	
Out of Band Management	Through backup ports	Yes	Yes	Yes	With LEM	Yes, + Direct Standby port	
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)	1U (1.69 in/4.30 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)	16.93 in (43.0 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)	27.44 in (69.70 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)	36.5 lb (16.5 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, IBM Tivoli, 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.

\*\* No extra partitions are specifically allocated for dynamic partitions. The PS900 has 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 and 12000 have a configuration option for ISP loads, which adds capacity for classes and flows but does NOT provide certain features including compression and response time statistics, among others.

\*\*\*\*\*No limit - PacketShaper will not artificially limit the maximum throughput. Actual throughput is typically 1-1.6 Gbps, but will vary significantly based on flow rates, class size, features enabled, and others factors.

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