



## PacketShaper® WAN Application Optimization Solutions

Seventy-four percent of the world's largest companies rely on Packeteer® innovation to solve their WAN application performance problems.

Can you afford to fall behind?



### Customer-critical applications on the network

Successful distributed enterprises depend on collaborative, customer-critical applications to run their business. They can't afford "operational paralysis" due to rigid networks that aren't able to support these applications. The Packeteer PacketShaper is an intelligent overlay that bridges the gap between the network and applications, delivering integrated visibility, control, compression and acceleration in a single device, ensuring optimal application performance and a great user experience.

When you need critical applications to move at the speed of business, there's only one answer.



**Packeteer. Moving Applications at the Speed of Business.**

# PacketShaper

## WAN Application Optimization Solutions

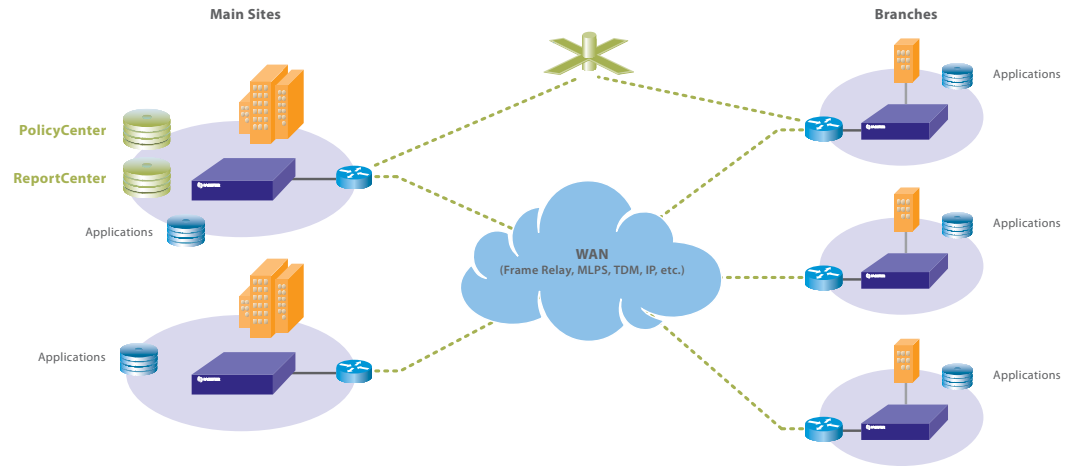
Monitor over 500 applications with Layer 7 Plus visibility

Shape traffic in real-time with flexible policy-based controls

Compress application traffic for increased capacity

Accelerate application throughput for enhanced performance

Control multi-unit PacketShaper deployments with centralized management and reporting



PacketShaper is the only all-in-one modular solution that extends application monitoring, shaping, compression, acceleration and centralized reporting and management capabilities to the edge of the distributed enterprise.

### PacketShaper Monitoring Module

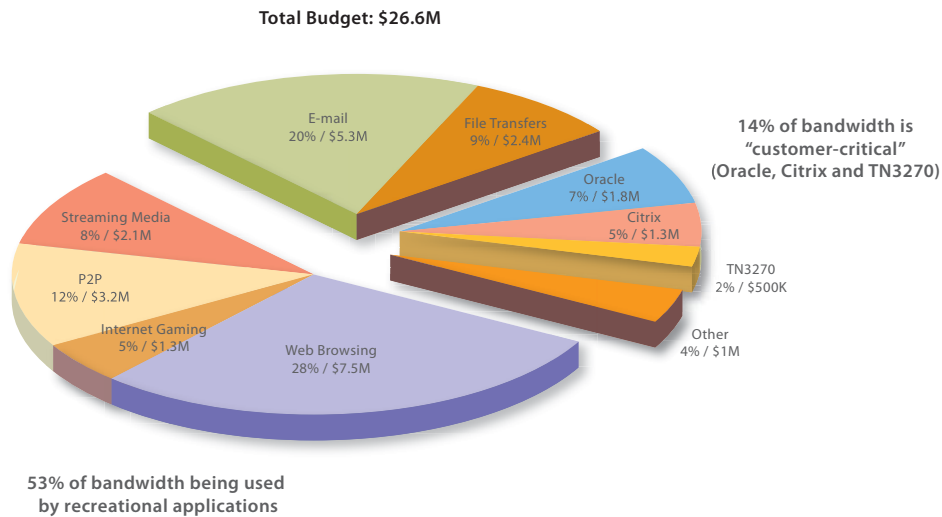
Before you can optimize application performance, you need an accurate picture of network traffic. The PacketShaper Monitoring Module provides deep insight into application traffic so you can identify, measure and manage all traffic types — customer-critical, business, recreational and miscellaneous — even if they're sharing common ports.

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 traffic down at a granular level, recording peak and average utilization rates, bytes transmitted, availability, utilization, top talkers/listeners, network efficiency and much more.

#### Get an application-intelligent picture of network traffic

- Identify and classify applications with Layer 7 Plus technology
- Audit utilization and performance by links, users or applications
- Track application response times, isolate performance issues and identify server- or network-related issues
- Monitor service-level agreements (SLAs) for critical applications or links
- Access performance diagnostics including connection profiling and server responses (TCP Health), traffic captures, traffic forensic history and more





Breakdown of typical large-enterprise applications running on the WAN.

## PacketShaper Shaping Module

Guarantee bandwidth availability for the applications that drive your business. The PacketShaper Shaping Module provides Quality of Service (QoS) provisioning that helps you control traffic to ensure that latency-sensitive, customer-critical applications get the bandwidth they need to perform at their peak.

With patented TCP rate control, the Shaping Module automatically determines the sending rates of computers at the far end of the network to deliver bi-directional QoS. Then prioritize your business-critical applications — and provision sessions for them — with application-intelligent QoS technology. If recreational applications are tying up your network, the Shaping Module allows you to move them into a folder and partition the bandwidth as you see fit. You can also enhance network security by finding and stopping infected PCs and tracking every flow through the network.

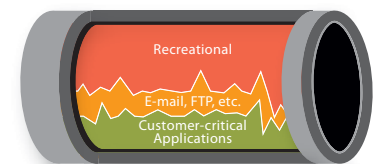
### Ensure QoS for each application at every location

- Fix critical application performance issues by appropriately allocating bandwidth
- Stop the cycle of bandwidth upgrades and streamline the network by controlling recreational and malicious traffic
- Contain the impact of worms, viruses and broadcast storms
- Remove jitter and delay from the network
- Minimize network congestion, queuing latency and inefficiencies that hurt application response times between remote locations

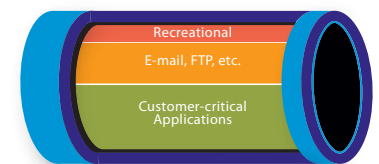
“Packeteer really helped us to pick things up that no one really expected to see. Our business units assured us there were no real ‘rogue’ applications in use, but when we showed them the application performance analysis results, they could see with their own eyes that unapproved applications were being used.”

— Jim Mourilyan, global infrastructure architect, Cadbury Schweppes

#### Without PacketShaper



#### With PacketShaper



## PacketShaper Compression Module

The 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.

Automatically setting up tunnels between devices and maintaining reliability of compression exchanges, the Compression Module utilizes several different compression technologies — high efficiency, low-latency algorithms, packet packing, MTU management and header compression — to increase link capacity.

### Increase WAN capacity for customer-critical applications

- Create more bandwidth from existing physical links
- Improve application performance and responsiveness
- Ensure that critical applications receive increased capacity
- Adapt to changing conditions to maximize availability

## PacketShaper Acceleration Module

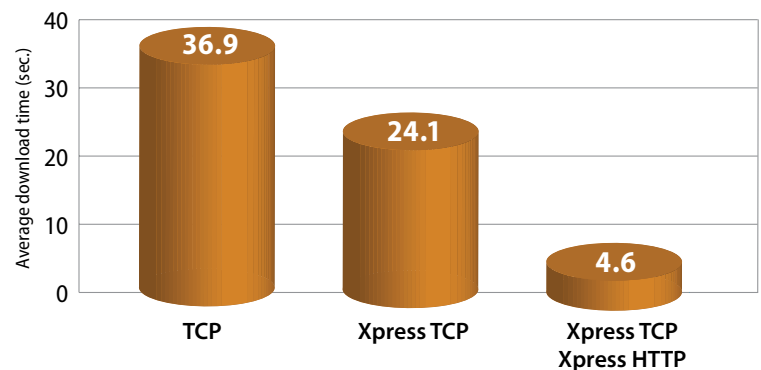
The PacketShaper Acceleration Module allows applications to increase their flow rates to speed completion of big jobs and heals problems created by high-latency environments. By building on patented PacketShaper application intelligence, the Acceleration Module speeds Web applications, time-sensitive transaction response times and file transfers — so LAN-oriented applications finally have the freedom they need to run efficiently over the WAN.

Working in concert with the Monitoring, Shaping and Compression Modules, the Acceleration Module adds more application performance capabilities to PacketShaper appliances. Using the Packeteer Xpress TCP and Xpress HTTP technologies, the Acceleration Module enables network and IT managers to reclaim bandwidth lost to latency and inefficient protocol behavior.

### Enhance application performance

- Optimize WAN application performance and link utilization
- Speed the performance of applications slowed by WAN latency
- Increase the flow rates for key bandwidth-hungry applications
- Accelerate TCP over high-bandwidth and high-latency links
- Deliver HTTP and XML/HTTP more quickly to remote locations

### Transaction-based application: high-latency



Xpress HTTP accelerates customer-critical Web applications — history queries, order entry payments and others — by 5-10x over high-latency links

“PolicyCenter and ReportCenter are critically important capabilities for an enterprise like ours that maintains multiple branch offices. Without having to rely on branch office IT support to deploy PacketShaper appliances, we’re driving down our total cost of ownership significantly. Packeteer has allowed Jenny Pruitt & Associates to increase WAN performance without increasing our cost for bandwidth.”

— *Scott Bennett, IT director,  
Jenny Pruitt & Associates*

## PolicyCenter® Software

PolicyCenter software lets you manage thousands of PacketShaper appliances from a single console. PolicyCenter Auto Deployment technology allows you to drop a PacketShaper into a remote site and automatically configure the unit — from basic IP information to full policy configuration. Simplify large deployments and rollouts across the globe.

### Auto-deployment and centralized control

- Control multi-unit PacketShaper deployments from one console
- Manage your entire network through a single, intuitive interface
- Auto-deploy and configure multiple remote PacketShaper appliances in minutes
- Distribute software updates and plug-ins to all your PacketShapers
- Apply global or unique policies based on location, function or other criteria
- Reduce administrative overhead and lower total cost of ownership (TCO)

## ReportCenter™ Software

ReportCenter software simplifies enterprise-wide application performance reporting with an intuitive, centralized view of what’s running on your network. Keep business on track with central correlation, storage and reporting of performance metrics for multi-unit PacketShaper deployments. Extensive predefined and custom reports — including centralized application performance, service-level tracking and organization-wide reporting with drill-down and customization capabilities — can be automatically distributed. A two-tier collection and management architecture helps you easily scale large global PacketShaper deployments. Detailed troubleshooting information is available with per flow records, compatible with Cisco Netflow format or extended with Packeteer application and performance information.

### Centralized visibility and performance reporting

- Centrally collect, correlate, navigate, store and report on critical performance information across your entire network
- Navigate the wealth of information provided by your PacketShapers by scanning high-level exceptions and sorting best and worst performers
- Examine specific cross-sections of traffic on your network by grouping information by geography, business unit, application or any other logical basis
- Analyze very specific information at an extremely detailed level by performing custom queries and filtering out irrelevant data
- Leverage the built-in custom reporting wizard and script XML templates to create just the right report for any situation

## Packeteer Support, Training and Certification

PacketCare™ is a comprehensive suite of service and support options designed to help you take a proactive approach to maintenance and prevent productivity loss. Multiple levels of service and support packages ensure there is an appropriate level of coverage available for every organization. Packeteer offers technical training to those whose responsibilities include the installation, configuration and day-to-day management of Packeteer products. A standard training program combined with two available levels of certification ensure that you get maximum benefit from your investment in Packeteer.

# PacketShaper

## WAN Application Optimization Solutions



PacketShaper Complete Series	1200	1400 Lite	1400	1550	1700	2500	3500
<b>Maximum Capacity</b>							
IP Flows (TCP/Other IP)*	4,000 / 2,000	4,000 / 2,000	5,000 / 2,500	5,000 / 2,500	30,000 / 15,000	5,000 / 2,500 (128k-6M link) 20,000 / 10,000 (10M link)	40,000 / 20,000
Classes	64	64	256	256	512	512	512
Dynamic Partitions	**	**	**	**	1,024	512	1,024
Static Partitions	32	32	128	128	256	256	256
Shaping Policies	64	64	256	256	512	512	512
Max # of Matching Rules	320	320	640	640	2,562	1,280	2,562
IP Hosts*	5,000	5,000	5,000	5,000	15,000	10,000	20,000
Active Tunnels	5	5	10	10	15	30	30
<b>Software Options and Upgrades</b>							
Monitoring Only	N/A	Yes	Yes	Yes	Yes	Yes	Yes
Link Speeds	128 Kbps 512 Kbps 2 Mbps — — —	128 Kbps 512 Kbps 2 Mbps — — —	128 Kbps 512 Kbps 2 Mbps — — —	128 Kbps 512 Kbps 2 Mbps — — —	512 Kbps 2 Mbps 6 Mbps 10 Mbps 45 Mbps —	128 Kbps 512 Kbps 2 Mbps 6 Mbps 10 Mbps —	512 Kbps 2 Mbps 6 Mbps 10 Mbps 45 Mbps —
Compression***	2 Mbps	2 Mbps	2 Mbps	2 Mbps	20 Mbps	4 Mbps	20 Mbps
<b>Interfaces</b>							
Network Interfaces (in and out)	Copper: 10/100 Mbps	Copper: 10/100 Mbps	Copper: 10/100 Mbps	Copper: 10/100 Mbps	Copper: 10/100/1,000 Mbps	Copper: 10/100 Mbps	Copper: 10/100/1,000 Mbps
LAN Expansion Modules (max 2)	N/A	Backup pair built in	Backup pair built in	N/A	N/A	10/100 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps
Out-of-Band Management Port	No	Through backup ports	Through backup ports	No	Yes	With LEM	Yes
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)	1U (1.75 in/4.45 cm)	1U (1.75 in/4.45 cm)	1U (1.75 in/4.45 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)
Width	17 in (43.18 cm)	16.97 in (43.10 cm)	16.97 in (43.10 cm)	17 in (43.18 cm)	17 in (43.18 cm)	17 in (43.18 cm)	17.35 in (44.07 cm)
Depth	14 in (35.56 cm)	10.63 in (27.00 cm)	10.63 in (27.00 cm)	14 in (35.56 cm)	14 in (35.56 cm)	14 in (35.56 cm)	16 in (40.64 cm)
Weight	11 lb (4.99 kg)	12.79 lbs (5.80 kg)	12.79 lbs (5.80 kg)	11 lb (4.99 kg)	14 lb (6.35 kg)	16 lb (7.36 kg)	18.04 lb (8.18 kg)
<b>Power</b>							
Power Supply	100/240 VAC; 50/60 Hz, 2 A	100/240 VAC; 50/60 Hz, 5 A	100/240 VAC; 50/60 Hz, 5 A	100/240 VAC; 50/60 Hz, 2 A	100/240 VAC; 50/60 Hz, 2.5 A	100/240 VAC; 50/60 Hz, 2 A	100/240 VAC; 50/60 Hz, 2.5 A
Dual, Redundant Load Sharing	No	No	No	No	No	No	No
<b>Additional Features</b>							
Interoperability	XML, XML and CGI APIs, SNMP MIB, SNMP event traps; HP OpenView, InfoVista, Concord eHealth, Aprisma Spectrum, Micromuse Netcool						
Device Management	Console access, Web browser interface, Telnet CLI, SNMP Packeteer 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 I Laser						
EMC/EMI	AS/NZS 3548 Class A; AS/NZS 4252.1; ICES-003 Class A; EMC Directive 89/336/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), & prA14(00); EN 61000-3-3:1995; 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 51318.22-99, -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 1200, 1400 Lite, 1400 and 1550 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

## WAN Application Optimization Solutions



PacketShaper Complete Series	6500		7500		9500		10000	
<b>Maximum Capacity</b>								
IP Flows (TCP/Other IP)*	75,000 / 37,500**	75,000 / 37,500**	200,000 / 100,000	400,000 / 200,000	400,000 / 200,000	400,000 / 200,000	400,000 / 200,000	400,000 / 200,000
Static Partitions	256	512	512	512	1,024	1,024	1,024	1,024
Classes	512	1,024	1,024	1,024	2,048	2,048	2,048	2,048
Dynamic Partitions	5,000	5,000	10,000	10,000	20,000	20,000	20,000	20,000
Shaping Policies	512	1,024	1,024	1,024	2,048	2,048	2,048	2,048
Max # of Matching Rules	1,250	2,500	5,120	5,000	5,000	5,000	5,000	5,000
IP Hosts*	25,000	25,000	150,000	200,000	200,000	200,000	200,000	200,000
Active Tunnels	50	50	100	300	300	300	300	300
<b>Software Options and Upgrades</b>								
Monitoring Only	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Link Speeds	2 Mbps	10 Mbps	10 Mbps	45 Mbps	45 Mbps	45 Mbps	45 Mbps	45 Mbps
	6 Mbps	45 Mbps	45 Mbps	100 Mbps	100 Mbps	100 Mbps	100 Mbps	100 Mbps
	—	100 Mbps	100 Mbps	200 Mbps	200 Mbps	200 Mbps	200 Mbps	200 Mbps
	—	—	—	—	—	—	—	310 Mbps
	—	—	—	—	—	—	—	620 Mbps
Compression***	10 Mbps	10 Mbps	45 Mbps	45 Mbps	45 Mbps	45 Mbps	155 Mbps	155 Mbps
<b>Interfaces</b>								
Network Interfaces (in and out)	Copper: 10/100 Mbps	Copper: 10/100 Mbps	Copper: 10/100/1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps
LAN Expansion Modules (max 2)	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps	Copper: 10/100/1,000 Mbps Fiber: 1,000 Mbps
Out-of-Band Management Port	With LEM	With LEM	Yes	With LEM	With LEM	With LEM	With LEM	With LEM
Console Port	All have RS-232 (AT-compatible) with male DB-9 connectors							
<b>Dimensions (All are 19" rack-mountable)</b>								
Height	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)	2U (3.50 in/8.89 cm)
Width	17 in (43.18 cm)	17 in (43.18 cm)	17.35 in (44.07 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)	17.31 in (43.97 cm)
Depth	15.25 in (38.74 cm)	15.25 in (38.74 cm)	16 in (40.64 cm)	19.25 in (48.90 cm)	19.25 in (48.90 cm)	19.25 in (48.90 cm)	20.25 in (51.43 cm)	20.25 in (51.43 cm)
Weight	17 lb (7.71 kg)	17 lb (7.71 kg)	20.48 lb (9.29 kg)	27 lb (12.25 kg)	27 lb (12.25 kg)	27 lb (12.25 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 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	100/240 VAC; 50/60 Hz, 6 A	100/240 VAC; 50/60 Hz, 6 A	100/240 VAC; 50/60 Hz, 6 A
Dual, Redundant Load Sharing	Yes	Yes	Yes; Hot-swappable	Yes; Hot-swappable	Yes; Hot-swappable	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, Concord eHealth, Aprisma Spectrum, Micromuse Netcool							
Device Management	Console access, Web browser interface, Telnet CLI, SNMP Packeteer MIB and MIB-II support							
<b>Agency Approval</b>								
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[www.packeteer.com](http://www.packeteer.com)

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