

FINALLY, UTILIZE THE FULL POWER OF YOUR APPLICATIONS



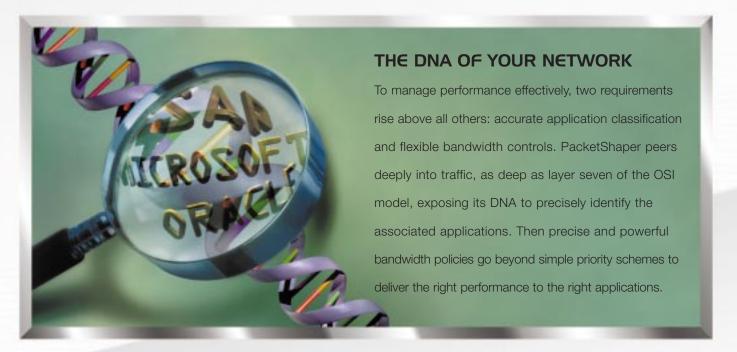
Right now, your company is spending a huge portion of its IT budget on expensive, business-critical applications, only to find them struggling to function efficiently over the Internet and wide-area networks.

What's going wrong? Far too often, these critical applications are fighting with less important traffic

for a limited amount of available bandwidth. This veritable free-for-all not only delays critical information, it wreaks havoc on deadlines and company-wide performance.

Most networks don't actually need additional bandwidth, but rather a means to manage their existing bandwidth efficiently. Packeteer's® PacketShaper® offers that solution. By managing and optimizing existing bandwidth, PacketShaper breaks the neverending cycle of buying more to improve application performance.

in check, while business-critical applications have the bandwidth they require. With the PacketShaper application infrastructure in place, your network is strategically directed, maximizing the power of your business applications.



"We found that
PacketShaper,
which can control
even the most
elusive types of
traffic, remains
the most capable
QoS solution."

— InfoWorld

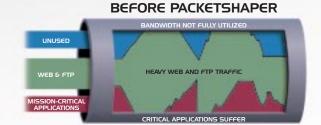
Test Center Comparison

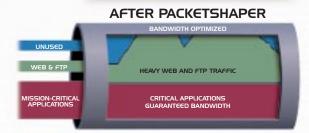
November 1999

PacketShaper is the bandwidth-management solution that provides an "Internet Application Infrastructure" for your existing network. Just as a network infrastructure enables efficient data transfer, an application infrastructure enables efficient application performance. Among other responsibilities, it allocates resources, including bandwidth, according to the needs of the applications and company objectives. It does this by looking at the "application-level DNA" of an organization's traffic and providing the toolset to meet critical service-level agreements for an organization's top applications.

PacketShaper's ongoing management cycle ensures that less urgent traffic, such as file transfers or casual web browsing, is kept

ALIGNING YOUR BANDWIDTH WITH YOUR BUSINESS GOALS





Before PacketShaper, file transfers and casual web browsing can easily dominate wide-area network links, frequently monopolizing their entire capacity. The net result? Mission-critical applications—such as Oracle and SAP—languishing without the bandwidth necessary for acceptable response times.

After PacketShaper, business-critical applications enjoy performance that is not only prompt but also consistent.

Less urgent traffic—such as email and web browsing—still gets through, but at a more reasonable pace. No single application monopolizes the link.

Internet Application Infrastructure from the Leader

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Founded in Silicon Valley, Packeteer is a leading provider of Internet Application Infrastructures—solutions that ensure the quality of experience for users of critical applications. As the line between the Internet and business networks blurs, Packeteer is dedicated to developing solutions that make distributed applications perform. Packeteer applies its extensive expertise in "application DNA," network technologies, and industry trends to develop solutions that stand up to increasingly complex requirements.

Today, Packeteer's products are deployed by leading FORTUNE 1000® companies and service providers worldwide through an established network of more than 100 VARs, distributors, and system integrators in more than 50 countries.

Som€ of th∈ companies now using PacketShaper:



Sony

NEC

Ministry of Defense. Unit∈d Kingdom

Fujitsu

Shell

Banner Health

Sharp

Northwestern Mutual Life

AT&T

Borden Chemical

Standard & Poor's

Lucent Technologies

ABM Industries

U.S. South Pole Station

NTT

Transamerica

Unilever

Hewlett Packard

British Telecom

Hoechst Marion Roussel

J. Walter Thompson

Charter Communications

DISCOVER THE MAXIMUM POTENTIAL OF BUSINESS APPLICATIONS

KEEP COLLABORATION IN BALANCE

other mission-critical applications.

Managing collaboration applications such as

Microsoft Exchange, Novell GroupWise, and

Lotus is a balancing act. PacketShaper keeps

these apps moving to mine their timely

benefits, but controls their tendency to impede

MORE POWER TO YOUR ERP

Don't let poor performance of ERP solutions (such as SAP, Oracle, PeopleSoft, and J.D. Edwards) undermine anticipated productivity gains. Ensure that these core business applications perform efficiently across the network by giving them the bandwidth they require, when they require it.



SMOOTH FLOW FOR SERVER-BASED COMPUTING

Server-based applications such as those running over Citrix and Terminal Server often face performance problems due to bandwidth contention with nonurgent IP traffic as well as their own print jobs. PacketShaper delivers consistent performance, customized for each application.

PROTECT HOST-ACCESS APPS

sensitive flows the bandwidth they need for prompt response and employee productivity.

Users miss SNA quality of service when TN3270, TN5250, and web-enabled host access bring legacy applications to the contentious IP network. PacketShaper gives these interactive, delay-

MAXIMIZE INTERNATIONAL WAN LINK THROUGHPUT

International lines are painfully expensive. Eliminate the need for additional bandwidth purchases by maximizing your current bandwidth's efficiency between international facilities.

TYPICAL APPLICATION-ENABLING TOPOLOGY

JITTER-FREE STREAMING MEDIA

Video and Voice-over-IP typically are plagued

by "jitter" and random delays. PacketShaper

per-second required for good reception.

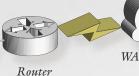
eliminates this stutter and static by giving

streaming media the precise number of bits-



Branch Office









Headquarters

PacketShaper Success Stories

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"PacketShaper lets us target the traffic that is really critical to us and then do something about it."

Troy Taylor, Autodesk

"PacketShaper was the perfect solution to protect our missioncritical traffic while eliminating the need for costly network upgrades."

> Hee-Kwon Lee Korean Exchange Bank Credit Service Company



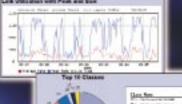
"By taking control of our network we have increased the efficiency of our online business and improved the performance of our internal applications. By doing so, we keep both staff and customers happy."

> John Riley TNT

FOUR STEPS TO MAXIMIZED APPLICATION POWER

CHARTS AND GRAPHS

PacketShaper offers a variety of graphs that highlight average and peak bandwidth usage, perapplication response times, comparisons of actual performance with service-level goals, network efficiency, the slowest servers, and the top applications, users, and websites.



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PACKETSHAPER POLICYCONSOLE

PacketShaper's web-based user interface, the PolicyConsole, gives managers access from anywhere with a password and a standard web browser.



PacketShaper integrates smoothly with existing networks and requires no new protocols, router reconfiguration, topology changes, or desktop changes. Installation is quick and easy—just plug in two cables and fill out a web-based information form. Immediately,

PacketShaper lets you detect traffic types and set policies for traffic based on application type, application content, user, subnet, URL, protocol, and IP precedence bits.

All PacketShaper models stem
from the same core technology
but are tailored for varying
environments—everything from
data centers to branch offices.
Each platform is available in a
number of link-speed options in order
to fit perfectly into any environment.

Monitor-only PacketShapers are available for links where bandwidth controls are not immediately critical, but classification, analysis, and reporting capabilities are necessary. If monitoring reveals a problem, adding PacketShaper's control features is easily accomplished via an on-line software upgrade.

PacketShaper's monitoring and policy-setting features are displayed and controlled through PacketShaper's PolicyConsole, which can be accessed through any web browser. The PolicyConsole is the gateway to PacketShaper's unique four-step solution featuring classification, analysis, control, and reporting.

ANALYZE APPLICATION BEHAVIOR

While Classification reveals what is on the network, Analysis shows how it behaves, helping to identify problems and form management strategy.

PacketShaper tracks average and peak traffic levels, identifies top users and applications, measures

application response time, and evaluates network efficiency.

CONTROL APPLICATION PERFORMANCE

While other steps highlight problems, Control provides the opportunity to fix them. Flexible policies can speed time-critical applications as well as pace non-urgent or bandwidth-intensive traffic. Policies can allocate bandwidth minimums and maximums to individual sessions or to applications as a whole, both inbound and outbound. PacketShaper incorporates Packeteer's patented TCP Rate Control technology, which explicitly manages bandwidth and smooths bursty IP traffic. In contrast to router-based solutions, PacketShaper proactively shapes bi-directional traffic without resorting to queues that induce unnecessary packet loss and retransmissions. The result is consistent prompt, controlled performance for each application.

PACKETSHAPER LINE



PacketShaper ISOO Series

Designed for branch offices and remote sites, supports capacities of up to 2Mbps.

PacketShaper 2500 Series

Designed for large branch offices or small corporate data centers, supports capacities of up to 10Mbps.

PacketShaper 4500 Series

Designed for mid-sized data centers, supports capacities of up to 45Mbps.

PacketShaper 6500 Series

Designed for large data centers, supports capacities of up to 100Mbps.

PacketShaper 8500 Series

High-capacity platform designed for the largest data centers, supports capacities of up to 200Mbps.

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Identifying the traffic competing for bandwidth is the first step towards improving application performance. After all, you can't control what you can't see. PacketShaper discovers and classifies hundreds of types of traffic, often exposing applications that administrators didn't even realize were sneaking onto their network. PacketShaper differentiates applications based on information from layer seven of the OSI networking model—the most precise identification criteria.

CLASSIFY INTERNET TRAFFIC

REPORT ON SERVICE LEVELS

Administrators need continuous feedback.

PacketShaper tracks and reports the ongoing results of the Control step, including: application response times, divided into time spent in transit and time spent on the server; comparisons between actual performance and service-level goals; clients and servers with the worst performance records; and over 30 other per-application statistics and corresponding graphs.