Packeteer's PacketShaper/ISP

PacketShaper® 4500, 6500, and 8500 models accommodate Packeteer's PacketWise ISP edition software to provide vital IP bandwidth provisioning and management solutions for service providers. PacketShaper/ISP enables ISPs to leverage the resource that their subscribers covet most — bandwidth. From Internet access to VPNs, from web hosting to intelligent buildings, PacketShaper and its special ISP edition software ensure reliable and efficient performance across a broad range of services. It's the answer to service providers' demands for a high-capacity solution that delivers differentiated services, ensures fair and equal access, enforces user policies, and improves profit margins through various co-location services.

Expand Bandwidth-based Services

Prevent Subscribers From Using More Than They Paid for

Maximize Total Throughput

Graph Bandwidth Allocation, Network Efficiency, Top Consumers, and More

With PacketShaper 4500/ISP, 6500/ISP, and 8500/ISP, service providers can allocate bandwidth flexibly and cost-efficiently to suit subscribers' budgets and needs. PacketShaper/ISP protects subscribers' critical traffic, enforces user policies, and ensures service-level commitments through layer-7 classification, analysis, reporting, and policy-based control. Subscribers can choose between fixed or scaled bandwidth plans that cap usage at predetermined maximums or swell to suit demand.

Opportunities for Today's Service Provider

PacketShaper 4500/ISP, 6500/ISP, and 8500/ISP enable ISPs to offer new services and achieve greater revenue and mindshare from their subscribers.

Tiered Services — Bandwidth Farming: Expand service offerings based on a flexible variety of bandwidth-allocation schemes including per-subscriber or per-user guarantees, caps, or unlimited bandwidth.

Web-Hosting Services: Enable clients to vary their web sites' performance according to their selection from your tiered service levels. Clients can even vary service levels for multiple sites running off of a single IP address or for different pages within a site.

Multi-Tenant & Multi-Dwelling Units: Share common access connectivity fairly and equally by dividing bandwidth among MTU and MDU tenants.

Enforce User Policies: Set policies and caps to control aggressive bandwidth users who attempt to consume more than their share of bandwidth and disrupt performance for others.

Diffserv and MPLS Marking Sanitization: Police and remark traffic to counter and control users who manipulate packet marking to gain preferential treatment over your other subscribers.

Denial-of-Service Containment: Use PacketShaper/ISP's classification and control features to contain DoS attacks.

Fair & Equal Access: Ensure user equality and controlled performance for content-sharing services such as a fee-based music-sharing service.

PacketShaper/ISP Capacity Specifications							
Model	Control Cap	Max Classes	Max Partitions	Dynamic Partitions	Max Policies	Max IP Hosts*	Max IP Flows* (TCP/Other IP)
4500/ISP	45 Mbps	1,000	1,000	2,000**	1,000	25,000	75,000/25,000
6500/ISP	100 Mbps	2,000	2,000	5,000**	2,000	75,000	200,000/100,000
8500/ISP	200 Mbps	5,000	5,000	20,000**	5,000	200,000	500,000/200,000

**PacketShaper/ISP can support more hosts and flows, however these figures represent the ideal maximums for producing optimal results.*
*** If the number of static partitions is less than the maximum allowed, these unused partitions are available to be used as dynamic partitions.*

Software Specifications

Classification Features

Differentiation based on:

- Application, protocol
- Subnet(s), user(s), server(s), IP Precedence, Diffserv, ISL, VLAN, 802.1p/q, MPLS tag, port, IP or MAC addresses
- URL, Oracle database, published Citrix application, web browser, mime type

Analysis and Reporting Features

- Utilization, network efficiency, bytes transferred
- TCP health, packets, retransmission rates
- Top users, top applications, top web sites
- Retransmissions, errors
- More than 30 other measured variables

Interoperability Features

- XML, Diffserv, IP COS, TOS, LDAP, SNMP, event-based traps
- HP OpenView and PolicyXpert, Micromuse NET-COOL, InfoVista, Concord eHealth, Aprisma Spectrum, and other third-party products
- Integrates smoothly with popular SNMP tools like MRTG

QoS Policy Features

- Bandwidth settings: Min guaranteed; Max allowed
- Choice of explicit bps, relative priority, absolute priority
- Bandwidth settings can apply to individual applications, users, groups, VLANs, or combinations
- Bandwidth settings can apply to aggregate total or each flow/session
- Diffserv and 802.1p/q packet-marking for signaling QoS in network core
- TCP Rate Control
- UDP Rate Control
- Admissions rate control
- Burst priority
- Dynamic Subscriber Bandwidth Provisioning (DSBP)

Hardware Specifications

Dimensions

4500/ISP & 6500/ISP

- Standard 19-inch rack mount
- Height: 3.5 in (8.9 cm); Width: 17.20 in (43.7 cm); Depth: 15.25 in (38.7 cm); Weight: 16 lb (7.26 Kg)

8500/ISP

- Standard 19-inch rack mount
- Height: 3.5 in (8.9 cm); Width: 17.4 in (44 cm); Depth: 17 in (43 cm); Weight: 30 lb (13 Kg)

Power

4500/ISP & 6500/ISP

- 100/240 VAC, 50/60 Hz, 2A
- Dual, redundant, load-sharing power supplies and dual power source connections

8500/ISP

- 100/240 VAC, 50/60 Hz, 6A
- Dual, redundant, load-sharing power supplies, hot-swappable power supplies and dual power source connections

Interface Connections

- Console port: RS-232 (AT-compatible) with male DB-9 connectors
- Network interface:
  4500/ISP & 6500/ISP: 10/100 Mbps Ethernet RJ45
  8500/ISP: 10/100/1000 Mbps Ethernet RJ45
- 2 PCI slots for hw-assisted features

Device Management

- DB-9 console port
- PolicyConsole web-browser interface
- Telnet command-line interface
- SNMP Packeteer MIB and MIB-II support

Agency Approval

- Safety: CAN/CSA-C22.2 No. 1950-95/UL 1950, IEC 60950, EN 60950
- Emissions: BSMI CNS 13438, CE EN55022, C-TICK (AS/NZS 3548), FCC Part 15, VCCI
- Immunity: EN 55024, EN 61000-3-2, EN 61000-3-3

1108.B 11/01 5M

10495 N. De Anza Blvd. - Cupertino, CA 95014
Tel: (408) 873-4400 - Fax: (408) 873-4410 - www.packeteer.com