Packetlogic™ 8000 Platforms

Scalable subscriber experience intelligence and policy enforcement for broadband networks

Designed for the most demanding network deployments

KEY SYSTEM BENEFITS

- Granular awareness for applications with superior accuracy using DRDL™
- Unsurpassed real-time visibility with LiveView™
- Flexible deployment options including support for asymmetric traffic through FlowSync™ and QueueSync™
- Up to 5 Gbps of Subscriber Experience Intelligence for all network access and core technologies

The PacketLogic 8000 platforms set the industry benchmark for appliance-level systems that enable network operators to gain insight into how their networks are performing and take action to improve the subscriber experience.

The PL8840,PL8920, and PL8960 platforms are 2RU appliances offering a range of throughput speeds and capacities—from 32 Gbps up to 70 Gbps of network traffic throughput accessible through either 4 or 6 modular I/O slots configurable from 8 x 10GE or 16 x 1GE channels (PL8840) or 12 x 10GE or 24 x 1GE channels (PL8920, PL8960).

PacketLogic 8000 platforms can be configured to support a range of analytics and policy enforcement functions. They are ideally suited for service provider network deployments supporting high-density subscriber scenarios in a cost-effective, low-energy consumption appliance footprint. All platforms support multiple high-availability options, including configuration synchronization and clustering, for carrier-class availability.

Designed for the most demanding network deployments, PacketLogic 8000 platforms offer the performance and capacity to handle from 1 to 3 million subscribers using many different fully personalized services in a policy enforcement configuration. This enables massive growth without sacrificing service creation flexibility—removing limitations for subscriber provisioning, policy interactions, policy enforcement, charging, application identification, analytics, and congestion management that have constrained network services and profitability.

SUPPORTING HIGH-VALUE USE CASES

Procera's PacketLogic software enables support for a full suite of network intelligence and policy enforcement use cases, including:

- Content-aware services
- Congestion management
- Traffic prioritization
- Attack Mitigation
- Statistics collection
- Volume-based shaping
- Application delivery networking via advanced traffic steering
- HTTP header enrichment

PACKETLOGIC™ 8000 PLATFORMS

PL8840 PLATFORM

PL8920 PLATFORM

PL8960 PLATFORM

POWERFUL ENFORCEMENT CAPABILITIES

The PacketLogic 8000 platforms are turnkey hardware solutions optimized to support Procera's PacketLogic Real-time Enforcer software, delivering unparalleled Subscriber Experience Intelligence with Policy Enforcement capabilities to enhance the subscriber experience.

- **REAL-TIME DYNAMIC LIVEVIEW QUERY ENGINE AND PACKETLOGIC CLIENT** enables sophisticated real-time forensics to manage Quality of Experience, Network Congestion, and Network Security issues.
- **DRDL™ (DATASTREAM RECOGNITION DEFINITION LANGUAGE)** processing to identify properties of individual session flows in real time, enabling operators to create and define services on-the-fly.
- **POLICY-BASED TRAFFIC MANAGEMENT CAPABILITIES,** including asymmetric traffic control, traffic shaping and filtering, traffic flow classification and prioritization, traffic monitoring and packet re-write.
- **ADVANCED PACKET QUEUING,** including parallel queuing to enable more flexible traffic management policies which ensure predictable delay and jitter enabling operators to meet their customers' QoE expectations.
- **STATISTICS GATHERING** for individual flows to enable real-time and historical reporting, including real-time Quality of Experience (QoE) updates.
- **CONTENT INTELLIGENCE** enables network operators, cloud providers, and high-speed enterprises to combine the policy management capabilities of PacketLogic with industry-leading URL content categorization functionality.
- **HTTP Header Enrichment** leveraging PacketLogic's stateful awareness and subscriber awareness.
- **ADVANCED TRAFFIC STEERING** that combines PacketLogic Real-time Enforcer capabilities with Application Delivery Networking functionality to provide a single Application Delivery Controller solution with unmatched performance and scalability, enabling service chaining with subscriber, service plan, charging, and Layer 7 awareness.
- **EVENT BASED TRIGGERS** that automatically change policy in response to specified real-time network traffic conditions by dynamically enabling DoS/DDoS connection limits, traffic shaping or filtering.
- **BGP INTEGRATION** enables Peering and CDN visibility, including QoE metrics Support for Origin-AS and Transit analysis.

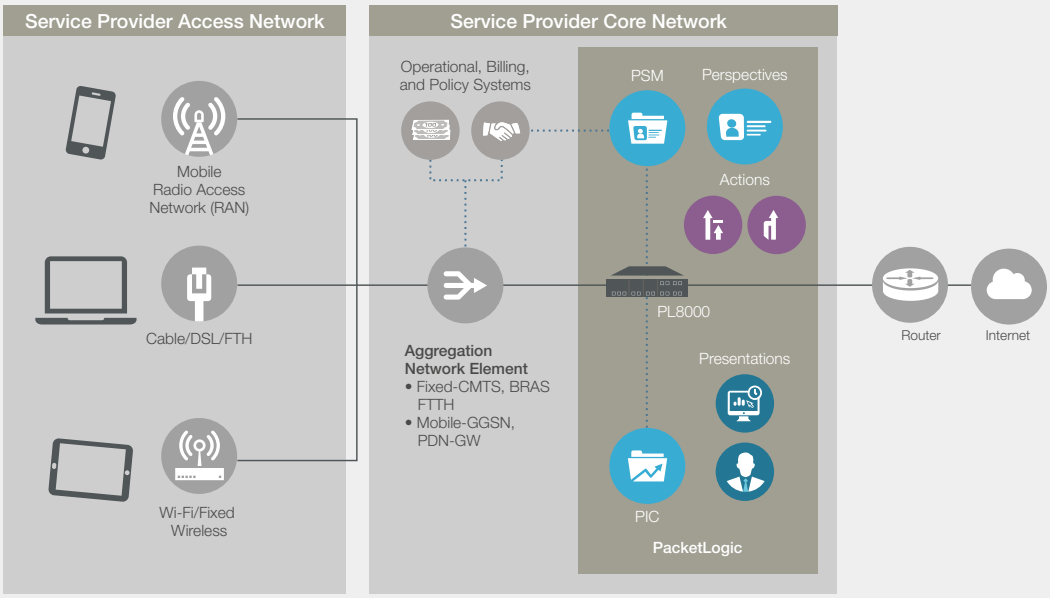
NETWORK INTEGRATION

The PL8000 tightly integrates with other PacketLogic software within the operator's core network to deliver analytics and enforcement solutions.

- **ACTIONS** are run directly on the PL8000 to perform intelligent policy enforcement. Congestion Management, Filtering, and Traffic Steering. In a mobile policy environment, the PL8000 acts as a 3GPP Policy and Charging Enforcement Function (PCEF)
- **PERSPECTIVES** integration to support powerful intelligent policy enforcement at the different subscriber, RAN, or other Perspective levels. The PL8000 gleans subscriber information during login to dynamically create policies, traffic control, or service packages for each user on the network. Other Perspectives enable fine-grained visibility and control for individual locations, content types, devices, etc.
- **PRESENTATION** to provide rich intelligence and analytics visualization for networks, subscribers, devices, and application performance. The network intelligence gathered by deployed PL8000s enables operators to make informed business decisions on network conditions, congestion management, and innovative new services.

Figure 1

TYPICAL PACKETLOGIC DEPLOYMENT



PL7000 SERIES SPECIFICATIONS

	PL8840	PL8920	PL8960
Connections	15,000,000[1]	15,000,000[1]	20,000,000[1]
Connections/sec	220,000[1]	300,000[1]	400,000[1]
Throughput	32 Gbps[1]	50 Gbps[1]	70 Gbps[1]
Subscribers	2,000,000[1]	3,000,000[1]	3,000,000[1]
Management Interfaces	2 x 1000Base-T	2 x 1000Base-T	2 x 1000Base-T
# of Channels	8 x 10 GE, 16 x GE	24 x GE or 12 x 10 GE	24 x GE or 12 x 10 GE
Physical Interfaces	1000Base-T, 1000Base-SX 1000Base-LX, 10Gbase-SR 10Gbase-LR	1000Base-T, 1000Base-SX 1000Base-LX, 10Gbase-SR 10Gbase-LR	1000Base-T, 1000Base-SX 1000Base-LX, 10Gbase-SR 10Gbase-LR
Console Port	RJ-45 Console	RJ-45 Console	RJ-45
Redundancy	Bypass, FlowSync	Bypass, FlowSync	Bypass, FlowSync
Bandwidth Licensing	1 Gbps and 10Gbps increments	1 Gbps and 10Gbps increments	1 Gbps and 10Gbps increments
Network Intelligence	Intelligence Center	Intelligence Center	Intelligence Center
Subscriber Management	Subscriber Manager	Subscriber Manager	Subscriber Manager
Hardware	2 rack unit (RU), 19" rack-mounted	2 rack unit (RU), 19" rack-mounted	2 rack unit (RU), 19" rack-mounted
Components	Appliance, fixed form factor with 4 I/O module slots	Appliance, fixed form factor with 6 I/O module slots	Appliance, fixed form factor with 6 I/O module slots
Size	3.5" (h) x 16.9" (w) x 22" (d) 8.9 cm (h) x 43 cm (w) x 55.9cm (d)	3.5" (h) x 16.9" (w) x 22" (d) 8.8 cm (h) x43 cm (w) x 55.9 cm (d)	3.5" (h) x 16.9" (w) x 22" (d) 8.8 cm (h) x43 cm (w) x 55.9 cm (d)
Weight	40lbs/18kg	40lbs/18kg	40lbs/18kg
Power	Wattage: 720W; Voltage: 100-240 VAC or 36-72 VDC, Frequency: 50-60Hz; Current: 6-2.5A	Wattage: 720W; Voltage: 100-240 VAC or 36-72 VDC, Frequency: 50-60Hz; Current: 7.2-3A	Wattage: 720W; Voltage: 100-240 VAC or 36-72 VDC, Frequency: 50-60Hz; Current: 7.2-3A
Environmentals	Temperature: Operating: 0°C to 40°C; Storage: -20°C to 80°C; Operating humidity: 5% to 85% (non-condensing)	Temperature: Operating: 0°C to 40°C; Storage: -20°C to 75°C; Operating humidity: 5% to 85% (non-condensing)	Temperature: Operating: 0°C to 40°C; Storage: -20°C to 80°C; Operating humidity: 5% to 85% (non-condensing)

[1] Depending on configuration/features used

ABOUT PROCERA NETWORKS

Procera Networks, the global Subscriber Experience company, is revolutionizing the way operators and vendors monitor, manage and monetize their network traffic. Elevate your business value and improve customer experience with Procera's sophisticated intelligence solutions.
For more information, visit proceranetworks.com or follow Procera on Twitter at @ProceraNetworks.

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