![PROCERA]

Packetlogic™ 9420 Platforms

High performance subscriber experience intelligence and policy enforcement for broadband networks

Ideally suited for service provider network deployments supporting high-density subscriber scenarios in a cost-effective, low-energy consumption appliance footprint.

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 120 Gbps of Subscriber Experience Intelligence for all network access

The PacketLogic 9420 platform identifies and gathers subscriber experience intelligence that enables network operators to gain insight into how their networks are performing and take action to improve the subscriber experience.

The PL9420 platform is a 2RU appliances offering up to 120 Gbps of network traffic throughput, accessible through 8 modular I/O slots configurable from 16 x 10GE or 32 x 1GE channels. The PacketLogic 9420 platform can be configured to support a range of analytics and policy enforcement functions.

It is ideally suited for service provider network deployments supporting high-density subscriber scenarios in a cost effective, low energy consumption, appliance footprint. The platform supports multiple high-availability options, including configuration synchronization and clustering for carrier-class availability.

Designed for the most demanding network deployments, the PacketLogic 9420 platform offers the performance and capacity to handle up 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

- Application-layer shaping

- Statistics collection

- Volume-based shaping

- Application delivery networking via advanced traffic steering

- HTTP header enrichment

PACKETLOGIC™ 9420 PLATFORM

POWERFUL ENFORCEMENT CAPABILITIES

The PacketLogic 9420 platform is a turnkey hardware solution 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.
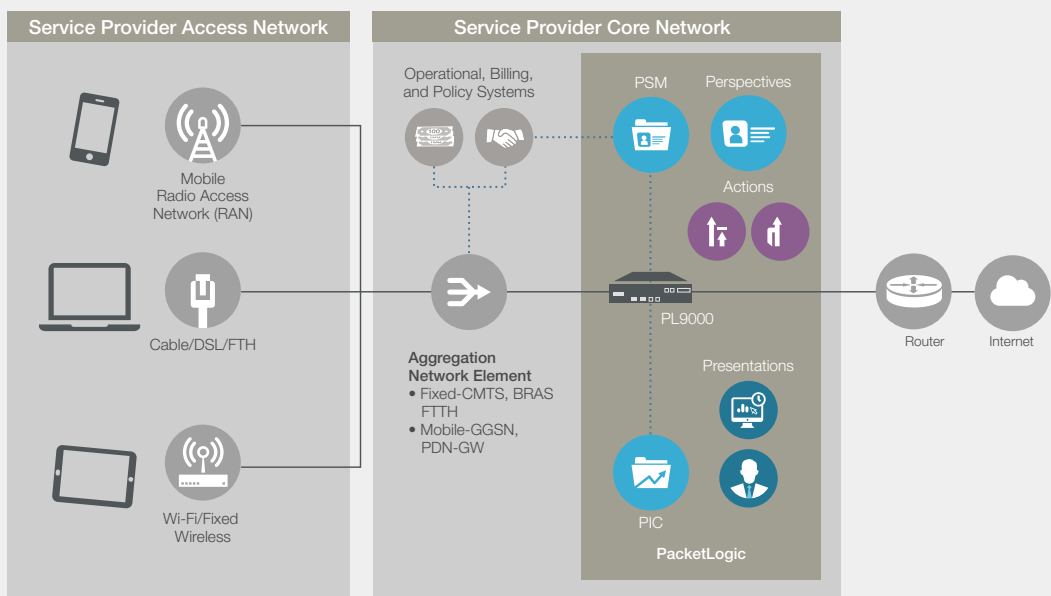
NETWORK INTEGRATION

The PL9420 tightly integrates with other PacketLogic software within the operator's core network to deliver analytics and enforcement solutions.

- **ACTIONS** are run directly on the PL9420 to perform intelligent policy enforcement. Congestion Management, Filtering, and Traffic Steering. In a mobile policy environment, the PL9420 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 PL9420 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 PL9420s enables operators to make informed business decisions on network conditions, congestion management, and innovative new services.

Figure 1

TYPICAL PACKETLOGIC DEPLOYMENT

Service Provider Access Network

- Mobile Radio Access Network (RAN)
- Cable/DSL/FTH
- Wi-Fi/Fixed Wireless

Service Provider Core Network

- Operational, Billing, and Policy Systems
- **Aggregation Network Element**
  - Fixed-CMTS, BRAS FTTH
  - Mobile-GGSN, PDN-GW

PSM
Perspectives
Actions
PL9000
Presentations
PIC
PacketLogic

Router
Internet

PL9420
SPECIFICATIONS

Connections	30,000,000[1]
Connections/sec	500,000[1]
Throughput	120 Gbps[1]
Subscribers	3,000,000[1]
Management Interfaces	2 x 1000Base-T
Max # of Channels	32 x GE or 16 x 10 GE
Physical Interfaces	1000Base-T, 1000Base-SX, 1000Base-LX, 10Gbase-SR, 10Gbase-LR, 10Gbase-ER RJ-45
Console Port	RJ-45 Console
Redundancy	Bypass, FlowSync
Bandwidth Licensing	10 and 100Mbps increments
Network Intelligence	Intelligence Center
Subscriber Management	Subscriber Manager
Hardware	2 rack unit (RU), 19" rack-mounted with AC/DC power supply
Components	Appliance, fixed form factor
Size	3.5" (h) x 16.9" (w) x 22" (d) 8.8 cm (h) x 42.9 cm (w) x 55.8 cm (d)
Weight	40lbs/18 kg
Power	Wattage: 820W; Voltage: 100-240 VAC Current: 8.0- 3.3A or -36 to -72VDC, Current: 16A@-48VDC; Frequency: 50-60 Hz
Environmentals	Operating temp: 0ºC to 40ºC; Storage temp: -20ºC to 75ºC; 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.

PROCERA

CORPORATE OFFICES
Procera Networks, Inc.
47448 Fremont Blvd Fremont,
CA 94538
P. +1 510.230.2777
F. +1 510.656.1355

CORPORATE OFFICES
Procera Networks
Birger Svenssons
Väg 28D 432 40 Varberg, Sweden
P. +46 (0)340.48 38 00
F. +46 (0)340.48 38 28

ASIA/PACIFIC HEADQUARTERS
Unit B-02-11, Gateway Corporate Suite,
Gateway Kiaramas
No. 1, Jalan Desa Kiara,
Mont Kiara 50480 Kuala Lumpur,
Malaysia

PROCERANETWORKS.COM