

PacketLogic™ 1000 Series Platforms

Subscriber Experience Intelligence platforms based on reliable, industry-standard server and storage hardware architecture

Sandvine's PacketLogic software enables support for a full suite of network intelligence and policy enforcement use cases.

KEY SYSTEM BENEFITS

- Carrier-class availability & storage
- Highly scalable options supporting up to hundreds of millions of users
- Unsurpassed granularity for collection of subscriber statistics (when used as Intelligence Center)
- 3GPP policy management (when used as Subscriber Manager)
- Customized reporting on demand

The PacketLogic 16xx platforms serve as the PacketLogic platform for Perspectives and Presentations, with the versatility to choose the platform that meets your needs.

The PL16xx are high-end platforms offering carrier-grade reliability and availability. They consist of two components, the Control Node (CN) and the Storage Node (SN), which can be configured to address your network requirements. Multiple SNs can be connected to each CN, enabling carrier-class scalability for collection of hundreds of millions of statistics items. A single CN supports up to four SNs to maximize capacity for long-term storage of statistics for business intelligence.

For smaller environments, the PL1620 is entry-level platform based on an industry standard, highly reliable server and storage hardware architecture, with the PL1640 and PL1650 serving as higher end platforms. PL1600 (CN) platforms interoperate with all Real-time Enforcer platforms, with the ability to connect to multiple Real-time Enforcers from a single PL1600 platform.

PL1600 running Subscriber Perspective function as the single point of contact for external policy management systems (PCRF and BSS/OSS) as well as to Real-time Enforcers. With support for millions of subscribers per platform, the Subscriber Perspective solution enables large-scale subscriber deployments. Multiple Subscriber Perspective instances can be deployed, scaling to hundreds of millions of users to support the largest networks in the world.

HIGH-VALUE USE CASES

Sandvine'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™ 1000 PLATFORM



POWERFUL POLICY ENFORCEMENT CAPABILITIES

The PL16xx platforms are turnkey hardware solutions optimized to support Sandvine's PacketLogic software to deliver Subscriber Experience Intelligence that combines intelligent policy enforcement for industry-leading network awareness.

Intelligence Center Key Features

- Carrier-class storage for hundreds of millions of statistics items
- High-performance statistics collection for 100Gbps deployments
- Unsurpassed granularity for collection of subscriber statistics for Intelligence Center reporting
- Real-time and historical statistics available through PacketLogic Client and Insights
- Customized reports delivered on-demand with Report Studio based on collected network intelligence
- Application delivery networking via advanced traffic steering
- HTTP Header Enrichment

Subscriber Manager Key Features

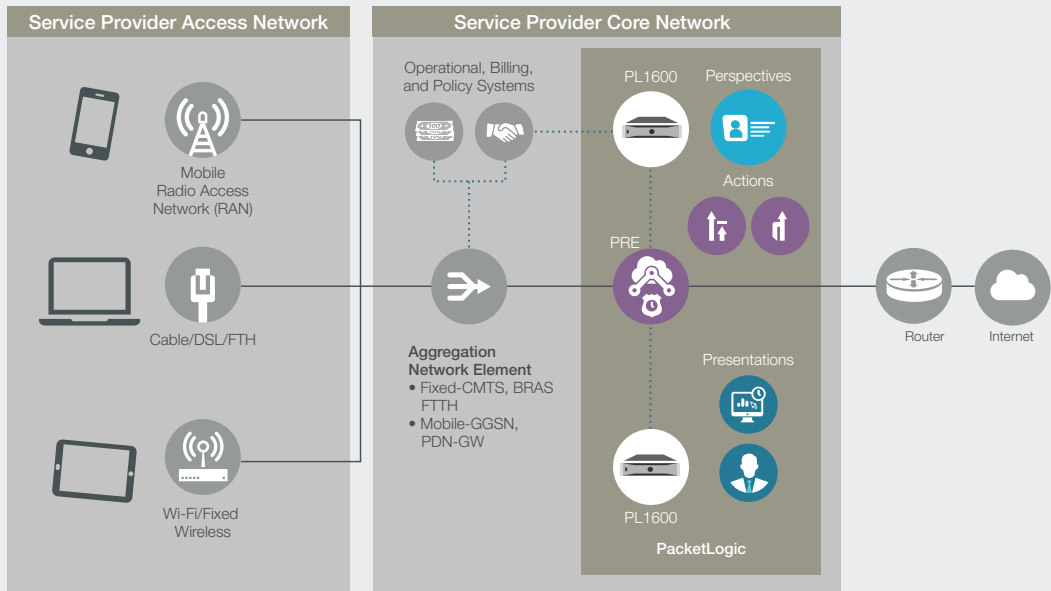
- 3GPP policy management interfaces for 3GPP Policy Control & Charging (PCC) ecosystem
- Single point of integration for Business Support Systems (BSS) and Operational Support Systems (OSS)
- Standards-based charging interfaces to enable fast innovative service plans
- Simple integration with AAA systems for subscriber awareness through DHCP, Radius, and Diameter
- Unparalleled subscriber, service plan, location, and device awareness visibility through the PacketLogic Intelligence Center and Insights

NETWORK INTEGRATION

Serving as Subscriber Managers or the Intelligence Center, the PL16xx platforms tightly integrate with other PacketLogic elements, including the Real-time Enforcer, within the operator's core network to enable a variety of policy-based provisioning, monitoring, and management functions.

Figure 1

TYPICAL PACKETLOGIC DEPLOYMENT



PL16XX PLATFORM SPECIFICATIONS



Form Factor	2RU; 19" rack-mounted		
Environmental	Temperature: Operating:10° to 35°C (50° to 95°F) Storage: -40° to 65°C (-40° to 149°F); Relative Humidity: 10% to 80% (noncondensing) Storage: 5% to 95% (noncondensing)		
Physical Dimensions	3.44" (h) x 17.08" (w) x 29.75" (d) /8.7cm (h) x 44.4cm (w) x 75.6cm (d)		
Weight	29.2kg (64.3.lb) (maximum configuration)		
Network Interfaces	4 x 1000BASE-T		
System Disk	2x1TB 7.2K RPM NLSAS RAID1		
Memory (RAM)	PL1620	PL1640	PL1650
	32GB	128GB	384GB
Power	AC Wattage: 495W maximum; Voltage 100-240V AC, 50/60 Hz; Current consumption 3.96A @ 100V, 1.7 A @ 240		AC Wattage: 750W maximum Voltage 100-240V AC, 50/60 Hz; Current consumption 6A @100V, 2.5 @240
	DC Wattage: 1100W maximum ; Voltage: -48 to -60V DC, current consumption 12A@-48VDC		DC Wattage: 1100W maximum ; Voltage: -48 to -60V DC, current consumption 12A@-48VDC
Internal Add-On Options	2x1TB 7.2K RPM NLSAS RAID1 6x1TB 7.2K RPM NLSAS RAID6	2-Port 10GE SFP+ H830 External RAID Controller 6x1TB 7.2K RPM NLSAS RAID6 6x1.2TB 10K RPM NLSAS RAID10 2x200GB Solid State Drive SAS Write Intensive MLC RAID1	
External Storage Options	SN1201, SN1204, SN2412		

PACKETLOGIC™ 16XX PLATFORMS CAPACITY & PERFORMANCE

	Intelligence Center			Subscriber Manager		
	PL1620	PL1640	PL1650	PL1620	PL1640	PL1650
Subscribers	2M ¹	5M ¹	5M ¹	5M ¹	10M ¹	20M ¹
Concurrent Subscribers		N/A			7.5M ¹	7.5M ¹
Transactions per Second		N/A		Up to 50K ¹	Up to 100K ¹	Up to 150K ¹
Interfaces	Subscriber Manager: PacketLogic Python API; 3GPP-compliant Gx interface to Policy and Charging Rules Function (PCRF); 3GPP-compliant Gy interface to Online Charging Systems (OCS); 3GPP-compliant and Call Data Records (CDR) to Offl Charging Systems (OFCS); IPDR; vJSON-RPC; SOAP; Radius; DHCP					

¹ Depending on features used

SN12XX & 24XX STORAGE NODE SPECIFICATIONS

Form Factor	2RU; 19" rack-mounted		
Environmental	Temperature: Operating:10° to 35°C (50° to 95°F) Storage: -40° to 65°C (-40° to 149°F); Relative Humidity: 10% to 80% (noncondensing) Storage: 5% to 95% (noncondensing)		
Physical Dimensions	3.5" (h) x 17.08" (w) x 29.75" (d) /8.8cm (h) x 44.4cm (w) x 75.6cm (d)		
Weight	29.2kg (64.3.lb) (maximum configuration)		
Power	AC Wattage: 600W maximum continuous; Voltage 100-240V AC, 50/60 Hz; Current consumption 4.8A at 100V, 2.0A at 240		
	DC Wattage: 1100W maximum continuous; Voltage: -48 to -60V DC, Current consumption 12A(PL1620/40/50)		
Network Interfaces	4 x 1000Base-T Ethernet Networking ports		
Attached Storage	SN1201	SN1204	SN2421
	12x1TB	12x4TB	24x1.2TB

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ABOUT SANDVINE

Sandvine helps organizations run world-class networks with Active Network Intelligence, leveraging machine learning analytics and closed-loop automation to identify and adapt to network behavior in real-time. With Sandvine, organizations have the power of a highly automated platform from a single vendor that delivers a deep understanding of their network data to drive faster, better decisions. For more information, visit sandvine.com or follow Sandvine on Twitter at [@Sandvine](https://twitter.com/Sandvine).



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