Seamlessly Manage IPv4 and IPv6 Addresses for Transparent Infrastructure Operation

PacketController Networks offers high performance Carrier-Grade NAT (CGNAT) solutions with protocol translation that enables service providers and enterprise to transparently support and interoperate IPv4 and IPv6 devices and content.

It provides carrier-grade scalability by offering a very high number of IP address translations, very fast NAT translation setup rates, high throughput, and high-speed logging.

Conserve Publicly Routable IPv4 Address Space

Large-scale NAT (LSN), NAT444 or NAT44 let service providers exponentially scale available source addresses, up to a 35-to-1 return on a large-scale NAT (LSN) pool resource.

NAT for IPv4 and IPv6 Connectivity

A wide range of functionality includes NAT 44, NAT 64, Deterministic NAT, Fixed NAT and DNS 64.

IPv4 to IPv6 Transition

Transition technologies help bridge the gap between IPv4 and IPv6 networks:

- DS-Lite and Lw4o6: Let IPv4 devices connect to the internet by tunneling their traffic through an IPv6 network.
- 6rd: Does the opposite, enabling IPv6 connectivity over an IPv4 network.
- MAP-T: Translates packets between IPv4 and IPv6 directly using a stateless NAT method, eliminating the need for tunnels.

High-speed Logging

- Up to 32 logging servers
- Minimize storage needs with customizable session logging

Carrier-Grade Performance

- 1GE, 10GE, 25GE, 40GE, 100GE and 400GE ports
- Up to 520Gbps on one single hardware appliance
- Up to 750M concurrent sessions on one single hardware appliance
- N+M Clustering to support 4TB throughput

CGNAT Support

- Carrier-grade NAT (CGN/CGNAT), Large-scale NAT (LSN), NAT444, NAT44
- NAT64/DNS64, 464XLAT, DS-Lite, Lw4o6, 6rd, NAT46, NPTv6, MAP-E, MAP-T
- ALG for FTP, TFTP, RTSP, PPTP, SIP, ESP, H.323, MGCP, ICMP, DNS
- Hairpinning

Networking

- Layer 2/Layer 3 support
- BGP+
- BGP Multi-path (ECMP)
- IS-IS v4/v6, OSPF v2/v3
- RIP v2/ng
- VLAN (802.1Q, QinQ)
- BFD
- Static routes & path monitoring
- Policy based routing (PBR)
- Link aggregation (802.1AX), LACP
- VXLAN
- NVGRE
- IPv4 NAT/NAPT
- IPv6 NPAT
- ACL
- Port mirroring

Flexible Licensing

- "Pay-as-you-grow" license on hardware
- From 5Gbps to 520Gbps

Extensibility

- N+M Clustering (Active-Standby, Active-Active)
- Multitenancy (Partition) Support
- Integrated DDoS Protection

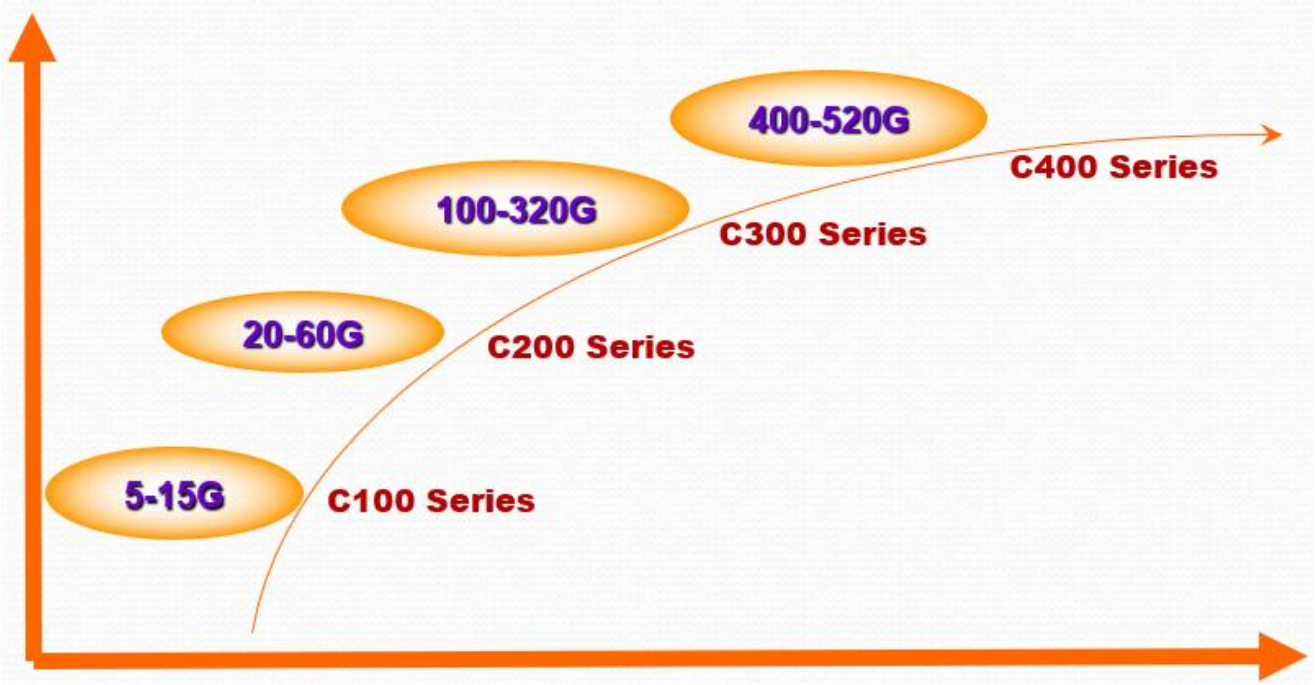
Management/Monitoring

- Dedicated management port (CLI, Telnet, SSH, WUI)
- Dedicated management routing table
- Dedicated control CPU
- SNMP v1/2/3
- RBAC with AAA (LDAP, Radius, TACACS+ support)
- 802.1ab LLDP
- sFlow/IPFIX/Netflow v9
- Syslog

PacketController Hardware Model

PacketController Networks provides high performance hardware models to meet your requirements.

All PacketController hardware platforms (Up to 520Gbps throughput) are designed with high performance in mind.



Hardware Platform Specification

	C100	C200	C300	C400
Available License				
Throughput	5/10/15 Gbps	20/40/60 Gbps	100/200/240/320 Gbps	400/520 Gbps
Performance				
Throughput	15Gbps	60Gbps	320Gbps	520Gbps
Full TCP CPS	450K	1.5M	2.2M	7.5M
Concurrent Sessions	64M	128M	256M	750M
Partitions	32	64	128	512
Hardware Specification				
Processor	1 x Intel 8-core CPU	2 x Intel 18 Core CPU	1 x Intel 36-core CPU	2 x Intel 36-core CPU
Memory	16GB (Up to 64GB)	64GB (Up to 256GB)	192GB (Up to 384 GB)	512GB
Storage	SSD (2 backup SSDs)			
Hardware Acceleration	Software	Software	ASIC	ASIC
Management Ports	Ethernet Management Port, RJ-45 Console Port			
Default Network Interfaces	2 x 1GbE Copper Management			
Pluggable Modules	Quad-Port 1GbE Copper 8 Port 1GbE Copper Quad-Port 1GbE Fiber 8 Port 1GbE Fiber Dual-Port 10GbE Fiber (SFP+) Quad-Port 10GbE Fiber (SFP+)	Quad-Port 1GbE Copper 8 Port 1GbE Copper Quad-Port 1GE Fiber 8 Port 1GbE Fiber Dual-Port 10GbE Fiber (SFP+) Quad-Port 10GbE Fiber (SFP+) Dual-Port 25GbE Fiber (SFP28) Dual-Port 40GbE Fiber (QSFP+) Dual-Port 100GbE Fiber (QSFP+)	Dual-Port 10GbE Fiber (SFP+) Quad-Port 10GbE Fiber (SFP+) Dual-Port 25GbE Fiber (SFP28) Dual-Port 40GbE Fiber (QSFP+) Dual-Port 100GbE Fiber (QSFP+)	Dual-Port 10GbE Fiber (SFP+) Quad-Port 10GbE Fiber (SFP+) Dual-Port 25GbE Fiber (SFP28) Dual-Port 40GbE Fiber (QSFP+) Dual-Port 100GbE Fiber (QSFP+) Dual-Port 400GbE (QSFP-DD)
Dimensions	500mm (W) x 440mm (D) x 50mm (H)	500mm(W) x 600 mm(D) x 88mm(H)	500mm(W) x 600 mm(D) x 88mm(H)	500mm(W) x 600 mm(D) x 88mm(H)
Weight	10 kgs	20 kgs	25 kgs	28 kgs
Power Supply	Hot swap Dual Power Supply			
Cooling Fan	Hot swap Fans			
Rails	Sliding Rails			
Operating Environment	Temperature: 0-40 °C (32-104 °F) Humidity: 5% to 95%			

All PacketController Hardware Appliances support N+M active-standby/active-active clustering deployment.
The specifications, performance numbers are subject to change without notice, and may vary depending on configuration and environmental conditions.