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.

The PacketController C400 is a 2RU dual-power appliance for 400G networks with available license at 400Gbps and 520Gbps and provides a cost-effective yet powerful solution for large size ISPs.

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

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

C400 Hardware Platform Specification

Available License	
Throughput	400/520 Gbps
Performance	
Throughput	520Gbps
Full TCP CPS	7.5M
Concurrent Sessions	750M
Partitions	512
Hardware Specification	
Processor	2 x Intel 36-core CPU
Memory	512GB
Storage	SSD (2 backup SSDs)
Hardware Acceleration	ASIC
Management Ports	Ethernet Management Port, RJ-45 Console Port
Default Network Interfaces	2 x 1GbE Copper Management
Pluggable Modules	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 600 mm(D) x 88mm(H)
Weight	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.