CARRIER-GRADE NAT

CoreGate CGNAT

Share your IPv4 addresses across thousands of subscribers. Every NAT session can be traced back to the subscriber through port-block compliance records.



Throughput	Concurrent sessions	Packet rate (64B)	Subscriber scale
10–800 Gbps	**10M–800M**	**1,190** Mpps max	**16K–1.28M**

01 How it works · One public IPv4, dozens of subscribers

Subscribers get addresses from the 100.64.0.0/10 shared address space. CGNAT assigns each one a fixed port block on a public IP, so logs are written per block rather than per session.

SUBSCRIBER · CPE
100.64.12.37
RFC 6598 shared address space

→

COREGATE CGNAT · PBA
ports 20160–21167
Example: 1,008-port block, 64 subscribers per IP

→

INTERNET
203.0.113.24
Public IPv4 pool

02 Features

NAT444 and deterministic NAT
Fixed IP and port range per subscriber; traceability without per-session logs.

Port Block Allocation
Configurable block size and blocks per subscriber.

EIM / EIF and hairpinning
NAT behaviour that keeps gaming, VoIP and P2P working.

ALG support
Application layer gateways for protocols such as FTP, SIP and PPTP.

Per-subscriber limits
Session and port limits to prevent abuse.

Compliance logging
Block assignment records, signing and retention management.

Cluster and failover
Clusters of up to 16 nodes; sessions move automatically if a node fails.

Central management and OTA
One console, 24/7 monitoring and zero-downtime updates.

coregate.com.tr · sales@coregate.com.tr · +90 850 650 0 500

03 Seven tiers by traffic volume

Tier	Throughput	Concurrent sessions	Packet rate (64B)	Subscribers	Interface profile
CGN-10	10 Gbps	10M	14.8 Mpps	16K	4 × 10G
CGN-20	20 Gbps	20M	29.7 Mpps	32K	4 × 25G
CGN-40	40 Gbps	40M	59.5 Mpps	64K	4 × 40G
CGN-100	100 Gbps	100M	148 Mpps	160K	2 × 100G
CGN-200	200 Gbps	200M	297 Mpps	320K	4 × 100G
CGN-400	400 Gbps	400M	595 Mpps	640K	8 × 100G + 2 × 400G
CGN-800	800 Gbps	800M	1,190 Mpps	1.28M	8 × 100G + 4 × 400G

Packet rate is line rate at 64-byte packets. Session and subscriber scale assume 10M sessions and 16K subscribers per 10 Gbps.

04 Deployment scenarios

INLINE

Between BNG and upstream

The most common design for single-POP networks: CGNAT takes all subscriber traffic after the BNG.

CENTRALISED

Centralised for multiple POPs

Regional POP traffic is aggregated at the core, with one IP pool and one log store.

COMBINED

BNG + CGNAT on one platform

One box for small and mid-size ISPs: subscriber termination and NAT together.

05 Capacity grows, service keeps running

Cluster architecture
Scale horizontally and vertically. Add up to 16 nodes to grow capacity as you need it.

Automatic failover
If a node goes down, sessions and traffic move to the other nodes automatically.

OTA updates
Updates roll out node by node, with no maintenance window and no subscriber impact.

Security and vulnerability detection
The platform is scanned continuously, and detected vulnerabilities and threats are remediated automatically.

24/7 monitoring and support
Our NOC watches your platform around the clock, steps in before issues grow, and support is always open.

Centralised management
Every node, site and licence from one console, with configuration, monitoring and reporting together.

Get a quote for CGNAT

Your subscriber count and peak traffic are all we need to send a licence and hardware recommendation.

sales@coregate.com.tr
+90 850 650 0 500
coregate.com.tr