BROADBAND NETWORK GATEWAY

CoreGate BNG

Terminate fibre and wireless subscribers on one platform, with RADIUS authentication, instant plan changes via CoA and per-subscriber QoS.



PPPoE subscribers	Throughput	Access model	AAA
8K–128K	10–100 Gbps	PPPoE · IPoE	RADIUS · CoA

01 How it works · Subscribers connect, plans apply instantly

The subscriber's CPE opens a session over PPPoE or DHCP. The BNG checks the identity with RADIUS and applies address, speed and QoS from the returned profile. Plan changes arrive via CoA without dropping the session.

SUBSCRIBER · ONT / CPE
PPPoE · VLAN 100
Fibre or wireless access

→

COREGATE BNG
100/20 Mbps profile
Session, address and QoS

→

RADIUS · BILLING
Access-Accept · CoA
Your existing AAA and billing

02 Features

PPPoE and IPoE
Both access models on one platform, with VLAN and QinQ.

RADIUS AAA
Works with your existing RADIUS and billing systems.

Change of Authorization
Plan and speed changes applied without dropping the session.

Per-subscriber QoS
Rate profiles, shaping and priority classes.

IPv4 and IPv6
Dual-stack subscriber addressing, alongside CGNAT on the same platform.

Session visibility
Active subscribers, traffic and session history in one console.

Compliance records
Session start, stop and address assignments are recorded.

Cluster, failover and OTA
Up to 16-node clusters, automatic failover and zero-downtime updates, all from the central management system.

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03 Five tiers by PPPoE subscribers

Tier	PPPoE subscribers	Recommended throughput	Interface profile
BNG-8K	8,000	10 Gbps	4 × 10G
BNG-16K	16,000	10 Gbps	4 × 10G
BNG-32K	32,000	20 Gbps	4 × 25G
BNG-64K	64,000	40 Gbps	4 × 40G
BNG-128K	128,000	100 Gbps	2 × 100G

Recommended throughput assumes 16K subscribers per 10 Gbps, rounded up.

04 Deployment scenarios

FTTH

Fibre ISP

VLANs from your OLTs terminate on the BNG, with subscriber profiles from RADIUS.

WISP

Wireless ISP

PPPoE sessions from base stations are terminated in one place.

COMBINED

BNG + CGNAT

Subscriber termination and NAT on one platform; one box for small and mid-size ISPs.

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.

06 Frequently asked questions

Will it work with my RADIUS server?
Yes. It connects to your existing AAA and billing using standard RADIUS attributes.

Can PPPoE and IPoE run together?
Yes. Both access models can run on the same platform on different VLANs.

What if I outgrow my subscriber licence?
You move up a tier with a licence upgrade; if the hardware runs out of headroom you add a node.

Does a speed change disconnect the subscriber?
No. CoA applies the new profile while the session stays up.

Get a quote for BNG

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

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