

## BNG CUPS Solutions Powered by Lanner HTCA-E400

PARTNER BRIEF

JUNIPER  
NETWORKS

HTCA-E400



### Default

2 x HLM-E110 switch blade, each with 1 x 100G QSFP28

### Small

- Baseline: 3 x HMB-E100, each with 8 x Cores, 64GB DRAM, 256GB SSD
- Scale Out: Additional 2 x HMB-E100, each with 8 x Cores, 64GB DRAM, 256GB SSD

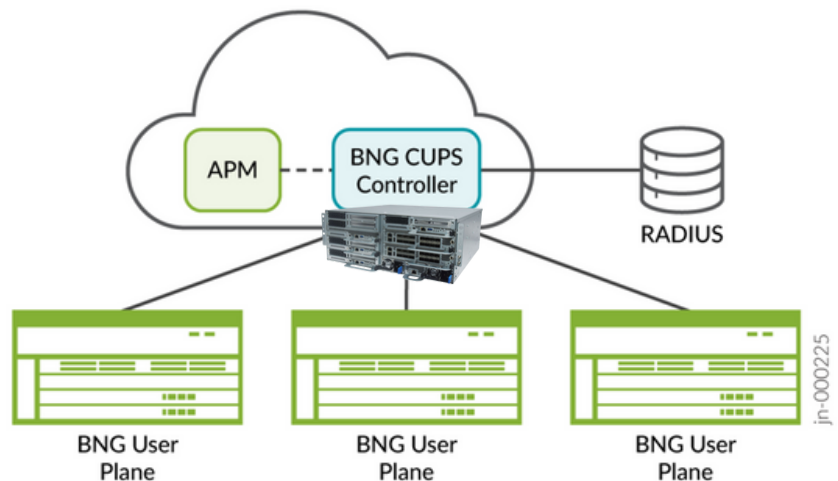
### Large

- Baseline: 3 x HMB-E100, each with 16 x Cores, 64GB DRAM, 256GB SSD
- Scale Out: Additional 2 x HMB-E100, each with 16 x Cores, 64GB DRAM, 256GB SSD

Control and User Plane Separation (CUPS) decouples control and user functions, enhancing scalability, flexibility, and efficiency. Lanner, in partnership with Juniper, offers a BNG CUPS solution using Lanner's HTCA-E400 Edge Server and Juniper's **BNG CUPS Controller**. This cloud-native solution enables service providers to scale, optimize, and efficiently manage their broadband networks. Based on the Broadband Forum (BBF) TR-459 standard, BNG CUPS allows independent engineering and scaling of user and control planes. Customers adopting this approach can achieve around 64% in total cost of ownership (TCO) savings.

### Key Benefits

- **Drive down operational complexity and costs:** Scale and manage each element independently.
- **Reduce CapEx:** Lower overall COGS with generic hardware.
- **Reduce time to market:** Quickly implement new software features



- **Centralized Address Allocation:** Simplifies IP address management across distributed BNG User Planes.
- **User Plane Load Balancing:** Enhances service reliability and performance by intelligently distributing traffic loads across multiple user planes.
- **Centralized Management and Control:** Allows for easier, more efficient management and updates to network infrastructure from a single control point.
- **Increased Scalability:** The cloud-native architecture allows providers to scale up to accommodate a growing number of subscribers without overprovisioning hardware.

- **Locational Independence:** The control and user planes can be deployed in different locations, improving flexibility and enabling independent lifecycle management.
- **Throughput and Latency Optimization:** By positioning user planes closer to subscribers, the solution minimizes latency and maximizes throughput.
- **Resiliency:** The solution is designed to be resilient against network failures, automatically redirecting traffic in the event of a failure in the user plane or a transport connection.
- **Live Subscriber Placement:** Automatically manages subscriber sessions in response to network congestion or performance degradation.

