Stockholm, Sweden
March 1, 2022

Enea Unveils Industry's First "Smart IP" Functionality Simplifying 5G Load Balancing

Based on a unique stateless design, Enea's Virtual Load Balancer scales horizontally at 200 Gbps per instance, simplifies routing and guarantees end-to-end route and application stickiness.

Enea today announced the launch of the Virtual Load Balancer (vLB), a fully virtualized, software-based solution that includes the industry's first 'Smart IP' function for mobile operators to horizontally scale user plane applications to 200 Gbps per instance, while handling 5G's high throughput rates and traffic volumes.

The vLB is based on a unique stateless design and distributes IP traffic across multiple application servers based on configurable loads, availability and policy. It is cost-effective as the fully virtualized solution replaces traditional, appliance-based load balancing hardware while providing superior performance, scalability and a choice of flexible network insertion options to direct traffic quickly.

To route traffic efficiently, the pioneering concept of "Smart IP" exposes a single virtual IP address to forward traffic to and from user plane services and applications distributed across multiple servers or instances. In this way, network elements such as access routers that send traffic to the load-balanced applications can use a single route to forward and receive traffic, drastically simplifying operation and scaling.

"The centerpiece of our vLB is the innovative true stateless design that enables horizontal scalability without compromising transparency, stickiness and failover management" said Roland Steiner, Senior Vice President for Telecoms at Enea. "Most operators have a limited number of routers. And they face a significant operational cost to manage firewall, traffic management, monetization and regulatory applications that can sometimes be distributed across 60 - 80 servers with multiple IP addresses. Smart IP frees operators from this complexity and cuts the cost of load balancing with unprecedented scalability. We are making networks process data in a smarter way."

To enable smarter operations, the vLB is built on top of Enea's proprietary VPP-based (Vector Packet Processing) traffic engine to eliminate traditional software-based packet handling challenges. Packets are handled ultra-fast thanks to a single function that performs inspection, classification, and orchestration enforcement. Enea Openwave's traffic engine also enables vLB to deliver unprecedented performance in a software-based load balancer: 200 Gbps on a single virtual instance.

"Traditional mobile core application load balancers cannot match the performance from Enea's vLB", said Stéphane Téral, Chief Analyst at Light Counting. "Conventional hardware can create complexity and be costly as it does not scale horizontally and forces operators to manage complex routing tables across multiple components. Smart IP deftly eliminates this pain point and is a major breakthrough for the mobile industry."

References

- Enea's Virtual Load Balancer (vLB) https://owmobility.com/traffic-management/virtual-load-balancer/

- Enea's Virtual Load Balancer (vLB) Whitepaper https://info.enea.com/5G-capacity-virtual-load-balancing

Contact

Chevaan Seresinhe, Sonus PR for Enea
Email: chevaan.seresinhe@sonuspr.com
Telephone: +44 797 1967 644

Erik Larsson, Senior Vice President Marketing and Communication
E-mail: erik.larsson@enea.com

About Enea

Enea is one of the world's leading specialists in software for telecommunications and cybersecurity. The company's cloud-native products are used to enable and protect services for mobile subscribers, enterprise customers, and connected devices. More than 4.5 billion people rely on Enea technologies in their daily lives.

Enea is headquartered in Stockholm, Sweden, and is listed on Nasdaq Stockholm.

For more information: www.enea.com