



# Arista Extends Cloud-Grade Routing to the Network Edge

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Novel next generation routing endorsed by service provider customers

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Arista Networks (NYSE:ANET), a leader in cognitive cloud networking, announced today the expansion of its **cloud-grade routing** solutions for next generation network edge roles in the multi cloud era. Arista's **EOS® (Extensible Operating System)** enhancements for cloud and service provider customers transform edge and backbone routing, migrating from legacy routers to software-driven, highly available and scale-out architectures for faster time to revenue and lower Opex.

The new capabilities for virtual private networking and traffic engineering enable three additional edge use cases for multi cloud, metro and 5G RAN based on Arista's cloud-grade routing principles.

"Arista has a great record of disruptive innovation. I'm excited to see how they will disrupt the service provider network ecosystem," said Rob Rockell, Vice President, Network Engineering, Comcast.

## Cloud-Grade Routing is the Future Evolution

With a cloud-first approach to modern software principles, Arista extends beyond the data center to replace routers with routing. This routing journey began in 2016 with the introduction of the Arista R-Series platforms addressing use cases in internet peering, internet exchange networks and Telco NFV data centers. In 2018, Arista's routing solutions expanded to cover content distribution networks, provider edge and core routing.

These cloud-grade routing principles drive successful routing transformations based on leading merchant silicon platforms with high performance 10G/25G/100G/200G/400G connectivity, open standards with EVPN, and Segment Routing. Arista's flagship EOS software simplifies routing and drives Opex reduction through a single software train. As a modern networking operating system without legacy protocol stack baggage, EOS provides a consistent network-wide automation framework for scalable, secure, and efficient operations.



Arista's success in these existing routing use cases includes service provider and cloud provider customers.

"Arista's solution allowed us to take a fresh approach to routing for next generation edge and backbone, reducing the complexity of protocols, delivering L2/L3 services with EVPN over a Segment Routing based backbone, along with modernizing the operations to deliver superior services and experience for our customers," explains Mr. Salvatore Sciacco, CTO, CDLAN. "Arista not only had a technical solution that exceeded our needs but also a vision and strategy that complemented the future direction of CDLAN."

"Arista R-series with EOS has been instrumental in transforming the MPLS VPN edge, providing 100G density, internet route scale, stability and manageability," said Rick Cheung, Senior Network Engineer, CEN (Connecticut Education Network). "Our relationship with Arista's responsive advanced services and development teams feels like an extension of our own and has affirmed our decision to grow with Arista as the right one."

"We are delighted to partner with Arista Networks, sharing our focus on efficiency and experience to build our next generation cloud edge and routed backbone to accommodate our global networking infrastructure growth. Arista EOS' rich routing stack allows us to deliver programmatic traffic engineering in the core with Segment Routing without sacrificing quality, performance or reliability," said Mr. Joe Zhu, Founder and CEO of Zenlayer.

## Next Generation Network Edge

With this announcement, Arista enters its third phase of routing solutions with the simplification of multi cloud edge, metro edge and 5G edge designs for our cloud and service provider customers. These key attributes, driving the next phase of cloud-grade routing, for new edge profiles include:

- Multi Cloud Edge: Demand for public cloud services is creating the new cloud edge, created by the cloud footprint at the network edge to deliver services closer to the end customer. Cloud edges are being built globally, with 100G/400G directly connecting to the cloud, based on a repeatable Layer 3 architecture, common software-driven provisioning and programmatic traffic steering, to deliver uninterrupted service that scales globally.
- Metro Edge: Legacy router designs are degrading quality and end-user experiences for service providers. To meet the new bandwidth demand and faster connectivity for E-LINE and E-LAN services, service providers are upgrading their metro ethernet edge with Capex efficient, high density merchant silicon-based 100G/400G routing platforms. Additionally, to achieve Opex efficiency, service providers are simplifying protocol complexity by adopting a single protocol for multiple edge VPN services and driving consistent automation for the metro fabric - the combination for faster and scalable service delivery.
- 5G RAN Edge: 5G architecture is disaggregating traditional mobile backhaul, bringing the public cloud

footprint in the RAN (Radio Access Network) for real time localized service updates. To address bandwidth demand from distributed nodes and a radically scaled user/device and traffic profiles, 5G edge requires scale-out repeatable routing design with high speed, high performance connectivity, a single OS for open standards based protocols and consistent automation framework across the mobile backhaul and Multi-access Edge Compute (MEC) deployments, enabling Opex efficiency and faster time to market for new services.

## Availability

The features for the new routing use cases are available now in the latest EOS release, a single software train across all of Arista's products. The Arista R-series provides industry-leading performance, scale and port density. The latest platform breadth and flexibility of the R3-Series include:

- 7800R3 and 7500R3 modular systems scaling to 460Tbps of capacity
  - New 7500R3 and 7800R3 line cards with native 25G SFP ports for flexible scaleout of edge routing applications
  - Expanded 7800R3 range with 16-slots for up to 576 400G or 768 100G ports
- 7280R3 Series of 1U and 2U systems scales up to 9.6Tbps with 24 ports of 400G in 1U and with newly released options expanding the solutions for network edge
  - 7280CR3MK-32P4S and 7280CR3MK-32D4S with 32 100G ports and four 400G ports providing both routing scale and integrated MACsec encryption at 100G
  - 7280CR3-36S and 7280CR3K-36S, offering 36 100G ports and flexible port modes for all network edge roles from 10G to 400G
  - 7280SR3M-48YC8, offering 48 25G ports plus 8 100G ports with MACsec encryption
  - 7280SR3-40YC6, offering 40 25G ports plus 6 100G ports for aggregation and access deployments

To learn more about Arista's cloud-grade routing, join us for a webinar on September 2nd, 2021 at 10:00 AM PDT – register [here](#). Read more about this announcement on Jayshree Ullal's blog [here](#).

## About Arista Networks

Arista Networks is an industry leader in cognitive cloud networking solutions for large data center and campus environments. Arista's award-winning platforms deliver availability, agility, automation analytics, and security through CloudVision® and Arista EOS®, an advanced network operating system. For more information, visit [www.arista.com](http://www.arista.com).

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