ARISTA

Arista Networks Unveils Next Generation Data and Al Centers

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New 800G R4 series portfolio accelerates routing and AI at scale

SANTA CLARA, Calif.--(BUSINESS WIRE)-- Arista Networks (NYSE: ANET), a leader of cloud and artificial intelligence (AI) networking, today announced the next generation family of R4 Series platforms for AI, data center (DC), and routed backbone deployment. The R4 family of routers helps customers reduce the total cost of ownership (TCO) while ensuring high performance, low AI job completion time, low power consumption, and integrated security.

Arista enables high capacity DC/Al clusters with a dense 800 Gbps R4 system, thereby setting a new benchmark with the introduction of 3.2 Tbps HyperPorts. This offers distributed Al workloads with ultra-capacity for distributed scale-across and multiplanar networking.

"The 800GbE market is growing explosively with port shipments more than tripling sequentially in Q2 '25, and Arista led in branded market share for both 800GbE as well as overall data center Ethernet switching," said Seamus Crehan, president of Crehan Research. "These new 800GbE products from Arista are well-timed to capitalize on this segment's projected 90% five-year average annual growth rate driven by AI, storage, and general compute workloads."

The new R4 series routers deliver a broad and deep portfolio of fixed and modular solutions for scalable and multiple use cases. The density and flexibility provided by Arista's new R4 family optimize customer network architectures with efficient two-tier leaf-and-spine designs. All R4 products deliver a rich suite of **Arista EOS®** (Extensible Operating System) L3 features required for modern architectures using EVPN, VXLAN, MPLS, and SR/SRv6. Each R4 system ensures predictable latency via hierarchical deep packet buffering, coupled with scalable protection against packet loss during transient congestion.

800G Leadership for AI Centers

Customer use cases for AI centers include high-scale backbones, DC Interconnect, lossless AI training and inference, and scale-across routing. AI Centers demand high speed transport in very high port densities. Arista meets this challenge by offering a wide range of density options for 800 Gbps across its broad portfolio. Petabit scale across cloud/AI titans, neoclouds, service provider, and enterprise customer segments is now possible.

"When Magnite needed to build our next-generation data center solution for AI and other advanced computing needs, Arista was the clear choice given their high quality offering. We've deployed a dense 800G spine using the modular Arista 7800R4 platform with both AI-optimized and high-scale multiservice routing linecards, providing an ideal foundation for the future," said Tim Smith, SVP Technical Infrastructure Engineering and Operations at Magnite.

Security is integral to the new 800GbE-based offerings in the **7800R4** and **7280R4** product families. Each platform supports wirespeed encryption on every port simultaneously with TunnelSec™, including MACsec, IPsec, and VXLANsec options. This diverse set of multi-layer encryption technologies protects customer data in transit from malicious interception.

The 7800R4 modular system sets the gold standard for flexible port density and radix across 4, 8, 12, and 16-slot chassis. Key capabilities of the 7800R4 family include:

- High density up to 576 ports of 800GbE in a single system.
- 36-port 800 GbE linecards supporting a full, flexible feature set and high logical routing scale.
- Introduction of HyperPort. For a single 3.2 Tbps high speed interface for scale-across interconnections between DC locations. This ultra capacity can enable 44% shorter job completion time for AI bandwidth flows compared to traditional load balancing over four separate 800 Gbps ports.

Complementary Spine with 7280R4

The 7280R4 complements the 7800R4 in a compact fixed form factor. The 7280R4 and 7800R4 are based on the flagship and highly deployed Arista EOS. The data plane forwarding features are also consistent across both product lines. Customers can right-size their solutions to match needed port speeds, densities, space, and network architectures. Key 7280R4 family enhancements include:

- 32-port 800 GbE system, ideal as an Al/DC spine or backbone router
- 64-port 100 GbE with 10-port 800 GbE system, ideal for an AI/DC leaf

Secure Data Center Leaf Upgrades

Arista also announced new 7020R4 Ethernet leaf switches for high-speed direct server connectivity as an AI or DC

leaf. The 7020R4 family is ideal for customers with complex workloads, heterogeneous environments, and high-end workstations that expect a rich feature set, high logical scale, and deep packet buffering for congestion control.

Key additions in the 7020R4 family include 10GbE Ethernet with copper or 25GbE SFP port options, and 100 GbE uplinks with wirespeed TunnelSec encryption per port for cybersecurity protection.

Availability

- 7800R4 modular systems are shipping now.
- Two new 7800R4 linecards are shipping now.
- Two new 7280R4 platforms are shipping now.
- New 7020R4 Chassis platforms Q1 '26.
- New 7800R4 with HyperPort Q1'26.

Read more about today's announcement in a **blog** authored by Martin Hull, VP and General Manager, Cloud and Al Platforms and Brendan Gibbs, Area VP, Product Line Management. Join us for a webinar on November 20, register here.

About Arista Networks

Arista Networks is an industry leader in data-driven, client-to-cloud networking for large AI, data center, campus, and routing environments. Its award-winning platforms deliver availability, agility, automation, analytics, and security through an advanced network operating stack. For more information, visit **www.arista.com**.

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