NEWS RELEASE

Lumen Unveils Bold Vision for the Internet Backbone to Support the AI Era

2025-10-22

Chief Technology & Product Officer calls for Cloud 2.0, an urgent reinvention of today's Cloud network core architecture to meet AI's explosive growth

DENVER--(BUSINESS WIRE)-- In an urgent call-to-action to hyperscalers, enterprises, and public sector organizations, Lumen Technologies (NYSE: **LUMN**) today unveiled a bold vision for reinventing the internet backbone to meet the unprecedented demands of AI. The vision, detailed by Lumen Chief Technology & Product Officer Dave Ward in a newly published white paper, predicts that today's internet and cloud architectures – designed for Cloud 1.0's static, centralized computing – cannot withstand the 100x increase in east-west traffic, the rise of real-time inference, and the need for sub-5 ms latency that AI workloads demand. According to Ward's report, entitled **Cloud 2.0: Because AI Won't Run on Yesterday's Internet**, a full-scale reset is required to fundamentally support the demands of AI at scale.

Lumen Chief Technology & Product Officer Dave Ward explains the urgent need for Cloud 2.0 architecture to meet the exponential demands of AI compute at the company's recent Analyst Forum.

"The public internet is not infinite, and it's not programmable to meet the service demands of AI," said Dave Ward. "Cloud 2.0 requires a complete reboot with programmable networks, massive bandwidth increases, and new distributed interconnect and on-ramp architectures. We're not talking about an incremental upgrade. We're talking about rebuilding the core of the internet for the AI era."

For more than a decade, "Cloud 1.0" was layered onto networks never designed for the scale and intensity of multi-cloud AI workloads. But U.S. data center capacity is set to grow tenfold to nearly a billion square feet by 2030.[1] AI is driving exabyte-scale data transfers that demand 400G+ speeds just to keep pace, and industrial-scale AI training requires ultra-low latency. Ward argues that patchwork solutions are no longer enough. The industry must embrace

Cloud 2.0, a fusion of cloud and enterprise network architectures purpose-built for the AI era.

Several defining features of Cloud 2.0 clarify how networks must evolve and perform to meet the exponential demands of AI:

- **AI Proliferation and Decentralization**. The rapid spread of AI workloads – expected to grow more than 50x by 2030 1 – and the shift toward decentralized architectures are driving demand for sub-5 ms latency and fully programmable, high-speed networks that can place compute wherever intelligence is needed.
- **Enterprise Densification and Diversification**. By 2028, enterprises will manage 10x more inter-app connections and multi-cloud environments spanning edge to core 1. To keep pace, enterprise networks are being densified and diversified, creating new connectivity patterns that go well beyond traditional Cloud 1.0 models.
- **Stratification of the Network.** The "flat" internet is fragmenting into three performance layers – IP aggregation edge, Ethernet and waves-based data center interconnect, and dark fiber-enabled core – each purpose-built for distinct levels of speed, security, and control.
- **Decline of Carrier-Neutral Facilities.** Traditional carrier-neutral facilities will lose dominance as 70% of interconnection traffic moves to DCI-centric fabrics by 2030 1, bringing the network closer to data, AI models, and applications.

Ward stresses that the shift will be swift and unforgiving, with most of the architectural transformation unfolding by 2028, creating both massive opportunities and existential risks for providers and enterprises alike.

If the U.S. fails to prepare, argues Ward, the network bottlenecks will hit fast. The potential results: constrained innovation, delayed AI deployment, rising costs for business, and new vulnerabilities that underpin national security and global economic competitiveness.

"The winners of the AI era will be those who act now," Ward added. "Enterprises and providers that invest in Cloud 2.0, with programmable networks, fabric-based connectivity, and DCI-centric design, will thrive. Those that delay risk being left behind in an economy where connectivity is the ultimate competitive advantage."

The Cloud 2.0 features outlined in the white paper inform **Lumen's strategy** and investments in its physical network, digital platforms, and connected ecosystem – establishing a forward-looking roadmap for the future of networking.

The full white paper is available for **download** now.

1Full source: **Cloud 2.0: Because AI Won't Run on Yesterday's Internet**.

About Lumen Technologies

Lumen is unleashing the world's digital potential. We ignite business growth by connecting people, data, and applications – quickly, securely, and effortlessly. As the trusted network for AI, Lumen uses the scale of our network to help companies realize AI's full potential. From metro connectivity to long-haul data transport to our edge cloud, security, managed service, and digital platform capabilities, we meet our customers' needs today and as they build for tomorrow.

For news and insights visit news.lumen.com, LinkedIn: /lumentechnologies, X: lumentechco, Facebook: /lumentechnologies, Instagram: @lumentechnologies and YouTube: /lumentechnologies. Lumen and Lumen Technologies are registered trademarks of Lumen Technologies LLC in the United States. Lumen Technologies LLC is a wholly owned affiliate of Lumen Technologies, Inc.

Forward-Looking Statement

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including statements regarding management's expectations with respect to our business, strategy and operations as well as statements identified by words such as "estimates," "expects," "anticipates," "believes," "plans," "intends," "will," and similar expressions. These forward-looking statements are not promises nor guarantees of future results, are based on our current expectations only and are subject to various risks and uncertainties, including those described in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, as updated in our other filings with the U.S. Securities and Exchange Commission from time to time. Actual results may differ materially from those anticipated by us in these statements due to several factors, including those referenced in our filings with the U.S. Securities and Exchange Commission.

Media Contacts:
Joe Goode
joseph.goode@lumen.com
+1 781-799-6048

Stephanie Meisse
stephanie.n.meisse@lumen.com

Source: Lumen Technologies