

Optimizing Networks for Modern AI Workloads

Design Services for AI Networking

Unlocking the full potential of AI initiatives hinges on a robust network capable of handling the unique demands of AI workloads. Dell Technologies' Design Services for AI Networking empowers organizations by providing a customized network design that minimizes latency and maximizes performance, ensuring the AI network is properly structured to meet current and evolving demands. Elevate your AI capabilities, support innovative growth, and adapt to the evolving landscape of technology, ultimately propelling your business forward.

Service Overview

Design Services for AI Networking is a two-week program led by Dell's experienced network professionals. Here's what to expect:

- **Workshops:** Evaluation of the impact of AI use cases on overall network needs, aligning AI initiatives with your goals
- **Custom Network Design:** Benefit from a unique network design tailored to your specific AI requirements, directly addressing the current and future demands of your business.
- **Best Practices Documentation:** This resource equips your team with the knowledge and tools needed to maintain and enhance network performance, ensuring long-term success and stability.
- **Network Strategy and Operational Guidelines:** Leverage comprehensive guides to help you operate and maintain your AI cluster at peak efficiency.

Key Insights

- **33%** of elapsed time in AI/ML processes is spent waiting for the network¹
- AI application traffic is growing by a factor of **10x** and cluster size by **4x** every two years²
- As AI workloads increase pressure on data centers, the need for low-latency, high bandwidth networking technology becomes essential to support the execution of AI tasks



Achieving a Scalable Network Design

We assess your current network and develop a new AI network design that will scale with your evolving AI workload requirements. Our proven approach to aligning with your ongoing business needs delivers a design that your team can efficiently manage as your AI needs grow.

Maximize ROI: Investing in AI GPU clusters is a substantial commitment, and to ensure peak performance, a well-optimized network is crucial. Our service will help you minimize latency and boost performance, achieving maximum return on investment.

AI Networking Strategy: Ensure your AI network is future-ready with a comprehensive strategy that maximizes scalability and performance for current and future AI workloads, empowering your business to adapt and grow seamlessly.

Knowledge Transfer: Gain the technical expertise needed to efficiently manage your AI networks. Our service equips your team with the knowledge to run, monitor, maintain, and expand your GPU networks, ensuring long-term operational success and scalability.

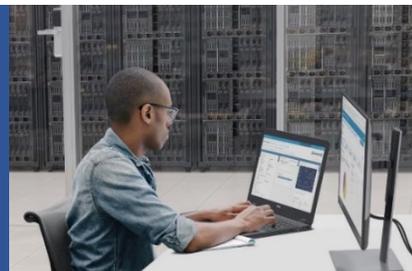
Reduce Performance Bottlenecks: Eliminate performance bottlenecks in your AI operations with a customized network design that optimizes GPU efficiency. Our experts ensure your network meets the low latency and high bandwidth requirements essential for AI workloads.

Prevent Trial and Error in Network Planning: Avoid the costs and delays of trial and error in network planning with expert guidance. We save you time and resources by delivering best practices that ensure a seamless integration between your existing network and new components.

Dell's Network Environment Management: Simplify the complexity of managing AI network environments with Dell and NVIDIA's collaborative approach, enabling a seamless, secure, end-to-end deployment experience.

Our Expertise and Commitment

We understand that each organization has unique AI networking needs. As a market leader in both data center infrastructure and AI solutions, our team of experts is well-positioned to deliver a cutting-edge, scalable network design that aligns with your current and future goals.



Contact Us

We are committed to empowering our clients through state-of-the-art technologies, exceptional support, and unmatched expertise. Contact us today to elevate your network environment's potential for innovation and growth and take the next step on your successful journey towards superior AI performance. Talk to your Dell representative for more information or visit [dell.com](https://www.dell.com).

¹ Source: Meta report on AI data and networking, 2023, [Link](#)

² Source: Dell'Oro Group Networking report, May 2024, [Link](#)