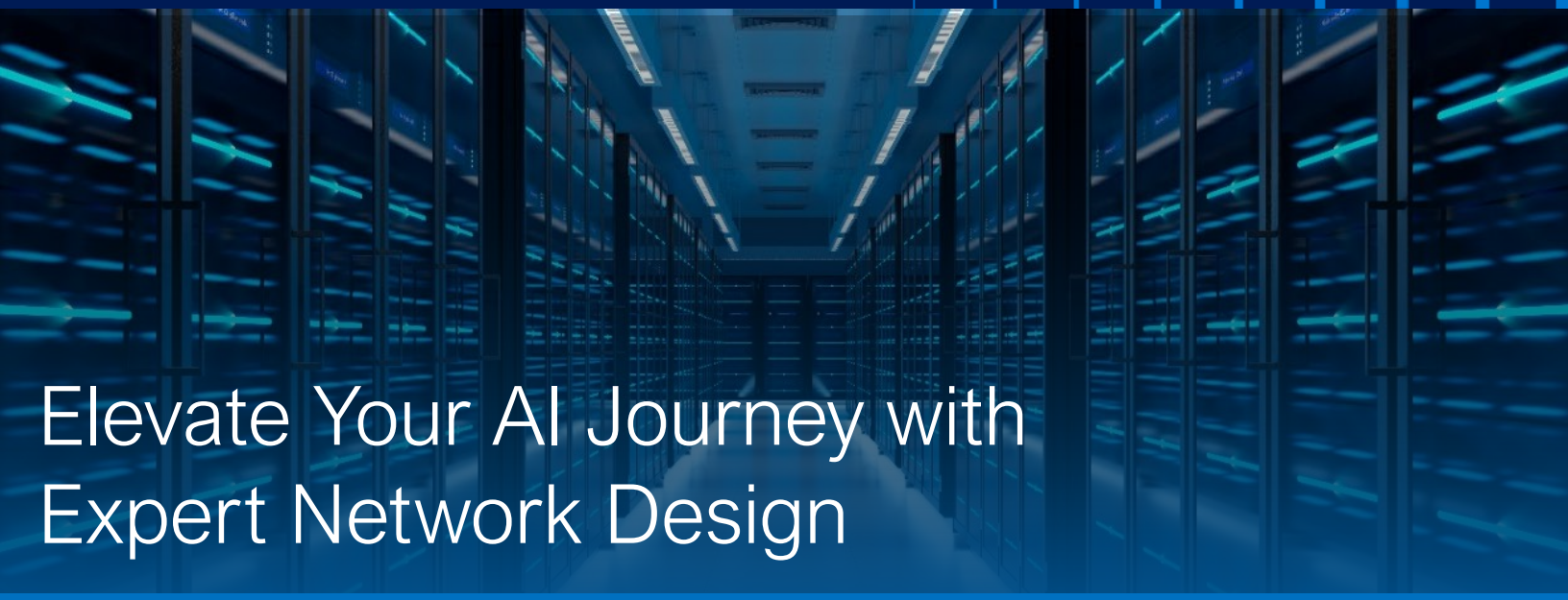
DELL Technologies



Elevate Your AI Journey with Expert Network Design

Design Services for AI Networking

In today's data-driven world, leveraging artificial intelligence (AI) is crucial for staying competitive. However, maximizing AI investments requires a well-optimized network that ensures minimal latency and maximum performance. Dell Technologies' Design Services for AI Networking offers a comprehensive solution to help businesses enhance their AI GPU clusters, providing a tailored network design to meet unique AI needs.

Service Overview

Our Design Services for AI Networking is a two-week intensive program led by Dell's Subject Matter Experts (SMEs). Here's what you can expect:

- **Workshops and In-Person Meetings:** We begin with understanding your infrastructure and AI use cases through interactive workshops.
- **Custom Network Topology:** Based on our assessment and customer input, we design a unique network topology tailored to your specific AI requirements.
- **Best Practices Documentation:** We provide detailed documentation outlining best practices and solutions for your new AI network design.
- **Network Strategy and Operational Guidelines:** Access comprehensive guides to help you operate your AI cluster at optimal capacity.

Key Insights

- **33%** of elapsed time in AI/ML processes is spent waiting for the network[1]
- AI application traffic is growing by a factor of **10x** and cluster size by **4x** every two years[2]
- As AI workloads put pressure on data centers and network infrastructure, advancements in networking technology are needed to support the seamless operation of these large-scale tasks

Customer Benefits

We assess your network, develop a new AI network design and ensure future AI network scalability. With Dell's expert strategy session and detailed documentation, your team can effectively manage and sustain your AI network.

Maximize ROI: Investing in AI GPU clusters is significant, and a well-optimized network is essential to ensure these clusters perform optimally. By minimizing latency and enhancing performance, you can maximize your return on investment.

AI Networking Strategy: A successful AI network requires a comprehensive roadmap, including future scalability opportunities and eliminating potential bottlenecks. Our service provides this strategic advantage.

Knowledge Transfer: Many organizations lack the technical expertise to manage AI networks effectively. Our service offers the necessary know-how, enabling you to run, monitor, maintain, and expand your GPU networks proficiently.

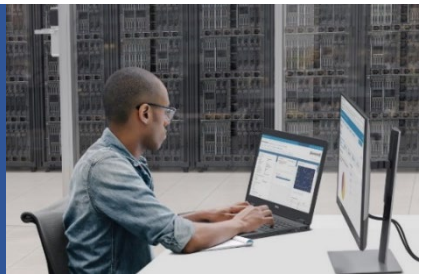
Reduce Performance Bottlenecks: Underperforming GPUs can significantly bottleneck AI performance. Our SMEs create an optimal, customized AI network design that incorporates scalability considerations.

Prevent Trial and Error in Network Planning: Avoid expensive trial and error in network planning and management. Our SMEs provide best practices and knowledge transfer, bridging the gap between your existing network and new components.

Dell's Multivendor Environment Management: Managing multivendor environments can be complex. Dell's in-house and established delivery network ensures a seamless 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.

[1] Source: Meta report on AI data and networking, 2023, Link
[2] Source: Dell'Oro Group Networking report, May 2024, Link