

### Six Reasons to Modernize Your Data Center Network

With SHI and Cisco





### A Data Center Built for the Future

If you want to make your data center network more agile, scalable, and secure while optimizing performance and sustainability, SHI and Cisco provide the expertise and technology to help you achieve your goals. Together, we deliver intelligent, AI-ready infrastructure that eliminates complexity, accelerates innovation, and ensures your business is ready for the future.

## Simplifying Network Complexity

The network is the backbone of business agility, enabling seamless connectivity and the rapid deployment of data center networking services. However, as IT landscapes grow, businesses face challenges managing fragmented systems, excessive tools, and decentralized network operations.

Without a unified approach, organizations risk inefficiencies that slow innovation, increase operational costs, and hinder overall performance. To stay competitive, IT teams need a simplified, automated solution that provides visibility and control over their data center networks.

#### How SHI and Cisco Help:

- SHI helps you reduce operational sprawl with Cisco Nexus Dashboard, a single-pane-of-glass approach to data center management.
- Cisco Nexus Dashboard transforms data-center network operations with simplicity, automation, and analytics.
- SHI's expert deployment and support services ensure seamless adoption and operational efficiency.



In a recent IDC Business Value report, respondents reported a

26%

improvement in team productivity after adopting Cisco Nexus Dashboard.<sup>1</sup>

### Optimizing AI/ML Workloads

Artificial intelligence and machine learning are revolutionizing industries, but these advancements demand high-performance networks that deliver low latency, high throughput, and lossless performance.

As AI models become more complex and datasets grow, organizations must ensure their network infrastructure can scale efficiently without bottlenecks.

A robust data center network is essential for Al workloads, reducing job completion times and enabling enterprises to maximize the potential of their Al investments.

#### How SHI and Cisco Help:

- SHI helps you build a high-performance AI networking infrastructure with Cisco Nexus 9000 Series switches, providing the high bandwidth, low latency, and lossless Ethernet needed to support AI/ML workloads at scale.
- Cisco Nexus Dashboard delivers real-time telemetry and automation tools to monitor congestion, fine-tune network performance, and accelerate AI model training.
- Using Cisco's validated network designs, SHI's expert services enable organizations to seamlessly scale AI/ML environments from small clusters to thousands of GPUs.

According to the Cisco Global AI Readiness Index

97%

of businesses know

Al will increase
infrastructure workloads.

17%

of organizations have fully flexible networks to handle this complexity.<sup>2</sup>

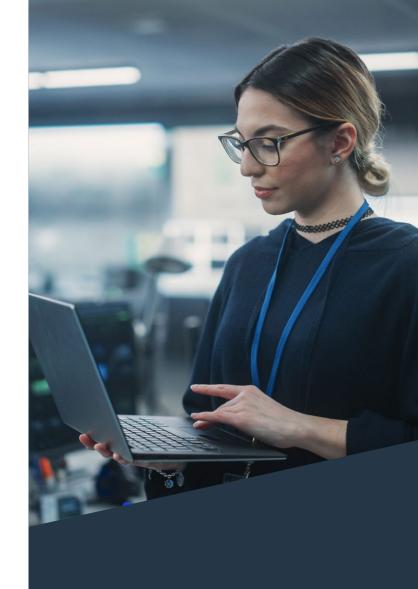
# Achieving Sustainability Goals

With rising energy costs and growing sustainability mandates, organizations must rethink how their data centers consume power. Traditional infrastructure often lacks the efficiency needed to align with modern environmental goals, leading to excessive energy use and higher operational expenses.

A greener, more intelligent data center network reduces costs and helps businesses achieve sustainability commitments and regulatory compliance.

#### How SHI and Cisco Help:

- Cisco Nexus 9800 Series Switches, deployed by SHI, offer energy-efficient architecture designed for sustainable IT environments.
- SHI's sustainability consulting helps businesses track their carbon footprint and optimize energy consumption.
- Visibility tools like Cisco Nexus
   Dashboard provide real-time
   insights into kilowatt usage,
   costs, and CO<sub>2</sub> emissions.



Cisco Nexus 9800 is

59%

more sustainable than previous versions.<sup>3</sup>

## Strengthening Data Center Security

Cybersecurity threats continue to evolve, making it critical for organizations to safeguard their data centers against unauthorized access, ransomware, and compliance risks.

To minimize vulnerabilities, a modernized data center security strategy must include network segmentation, zero-trust frameworks, and proactive threat detection.

Without these layers of protection, businesses risk data breaches that can lead to downtime, financial losses, and reputational damage.

#### How SHI and Cisco Help:

- Cisco's zero-trust security architecture safeguards data centers with network segmentation, encryption, and policy-driven access controls, preventing unauthorized movement of threats.
- SHI's security specialists help organizations enforce security policies, ensuring alignment with industry best practices and regulatory requirements.
- Cisco Application Centric Infrastructure (ACI)
  enhances proactive threat monitoring by integrating
  with SIEM solutions such as Splunk and ServiceNow
  to provide real-time alerts and forensic insights.

Cisco's zero-trust security
framework, delivered by
SHI, provides end-to-end
segmentation and encryption
to minimize attack surfaces,
enforce compliance, and
proactively defend against
evolving threats across
hybrid environments.



### Unifying Multi-Fabric Complexity

Today's data center networks are no longer single-fabric environments. As businesses expand and embrace hybrid and multi-cloud architectures, managing multiple fabrics across on-prem, cloud, and edge locations has become more challenging.

Without a unified strategy, businesses face siloed operations that introduce policy inconsistencies, security gaps, and management inefficiencies.

### How SHI and Cisco Help:

- Cisco Nexus Dashboard, delivered by SHI, simplifies multi-fabric management by providing a centralized view and policy control across ACI, NX-OS, and third-party fabrics, reducing operational silos.
- Cross-fabric policy enforcement automates segmentation, security compliance, and network consistency, eliminating manual processes that increase risk and complexity.
- SHI's expert services provide tailored implementation strategies, ensuring that hybrid environments seamlessly integrate with a scalable and futureready network architecture.

Cisco Nexus Dashboard,
delivered by SHI,
unifies multi-fabric
operations, simplifying
policy management and
ensuring a more agile,
scalable, and secure
network environment.<sup>3</sup>



### Scaling for Growth and Future Demand

Data centers must evolve to support the next wave of business growth, whether that includes AI/ML workloads, high-performance computing, or expanding cloud services.

Traditional network architectures often struggle to keep up with increasing data volumes, resulting in bottlenecks, downtime risks, and performance inefficiencies.

A modern, scalable network infrastructure is key to future-proofing business operations and maintaining competitive agility.

#### How SHI and Cisco Help:

- Boost network performance with Cisco 400G switching, enabling enterprises to handle growing data volumes, high-speed transactions, and Al-driven workloads with minimal latency and maximum throughput.
- Eliminate scaling limitations with a future-ready infrastructure that supports seamless expansion across data center, cloud, and edge environments without disruptions or costly redesigns.
- Leverage SHI's cloud and networking expertise to architect scalable, highcapacity solutions that align with evolving business needs, from AI adoption to multi-cloud strategies.



Cisco Nexus Dashboard, deployed by SHI, reduces unplanned downtime by

50%

providing the resilience and reliability needed for high-growth data center environments.

### Get Started With SHI and Cisco

Modernizing your data center is essential to staying ahead in today's fast-paced business environment. SHI and Cisco deliver a proven combination of technology, expertise, and services to help you confidently transform.

Contact SHI\_Cisco@shi.com to schedule a consultation and learn how to optimize your data center with Cisco solutions.

Schedule a consultation



At SHI, we're passionate about delivering exceptional value and service to our customers. Whether you're planning a straightforward technology refresh or looking to transform your IT environments, SHI's thousands of ridiculously helpful experts can work with you and your business to support a productive, resilient, and secure IT environment.

### cisco Partner

Cisco is the worldwide leader in technology that powers the Internet. Our products and services include networking, collaboration solutions, security solutions, wireless and mobility, data center, Internet of Things (IoT), video, analytics, and software solutions.

- <sup>1</sup> IDC, The Business Value of Cisco Nexus Dashboard, 2024
- <sup>2</sup> Cisco, Cisco Global Al Readiness Index, 2024
- <sup>3</sup> Cisco, Simplify Your Data Center Network Experience, accessed April 2025