

# Secure AI Factory

Integrating Compute, Network, Security, and  
Observability for AI-Ready Environments

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# The Journey So Far



Three acts. Three pillars. Now, the integration story.

# The Three Pillars

FOUNDATION

## COMPUTE

UCS Servers with NVIDIA GPUs

Intersight Management  
AI PODs

CONNECTIVITY

## NETWORK

Silicon One ASICs

Nexus Platforms  
Hyperfabric AI

PROTECTION

## SECURITY

Hypershield

Isovalent  
Splunk Observability

But how do they work **together?**

# The Integration Problem



The result? 3 weeks to deploy. Endless ping-pong. "It works on my side."

# Cisco Secure AI Factory with NVIDIA



# Traditional vs. Integrated Deployment

## Traditional Approach

Day 1-5: Server team provisions UCS

Day 6-7: Email to network team

Day 8-14: Network configures switches

Day 15-18: Troubleshooting connectivity

Day 19-21: Security review & approval

TOTAL TIME  
**3 WEEKS**

VS

## Integrated Approach

Hour 1: Open Nexus Dashboard, select AI Fabric template

Hour 1-2: Automated provisioning (Nexus ↔ Intersight)

Hour 2-3: Validation & telemetry to Splunk

Hour 3-4: Security policies auto-applied

TOTAL TIME  
**2-4 HOURS**

**60-80% faster deployment.** Not marketing. Reality.

# Security-first architecture enables safe Enterprise AI



Security at all  
layers of the  
stack

## Securing the Applications

**Cisco AI Defense:** Testing and runtime security of LLMs and GenAI applications, integrated with NVIDIA AI.

## Securing the Workloads and Infrastructure

**Cisco Hybrid Mesh Firewall:** Unified management, consistent, pervasive policies.



**Cisco Isovalent:** Enhanced visibility into cloud native interactions, consistent policy definition and enforcement.



**Cisco Hypershield:** Protection against lateral movement, proactive vulnerability mitigation.



**Cisco Secure Firewall:** Threat protection at scale without compromising performance.

## Security Operations

**Splunk Enterprise Security:** Real-time threat detection, investigation, and response through analytics, automation, insights.

# End-to-End Observability



Single pane of glass. Instant answers.

# Cisco Secure AI Factory with NVIDIA



## Secure

Security, Observability  
and resilience



## Scalable

High performance at any scale  
enables faster delivery of  
AI tokens and applications



## Simple

Deployment simplicity and  
flexibility helps improve AI  
and IT team productivity

Secure. Scalable. Simple.

# Customer Success Story

Deployment Time

~~12 weeks~~



**3 weeks**

GPU Utilization

~~45%~~



**82%**

*"The integration isn't just about technology. It changed how our teams work together."*

Real results. Real transformation.

# Your Next Steps

1

## ASSESS

Take an honest look at your current state

- How many management tools?
- How many handoffs to deploy?
- Can you trace issues end-to-end?
- Do teams share platforms?

2

## DEFINE

Set measurable integration goals

- Faster time to production?
- Better security posture?
- Reduced operational costs?
- Improved developer experience?

Pick 2-3 specific, measurable goals

3

## PILOT

Start small, measure, expand

- Choose one AI use case
- Deploy on Cisco infrastructure
- Measure vs. current process
- Document lessons learned
- Scale what works

Start with one team. One workload. Prove the value. Then expand.

Thank you

### Resources & Support

DOCS

Cisco Validated Designs  
AI-ready infrastructure guides

LEARN

Nexus Dashboard Docs  
API reference

TRAINING

Isovalent Labs  
eBPF & Cilium hands-on

SUPPORT

Splunk AI  
Observability & analytics

Questions? We're here to help.

Mastin Bailey & Andrew MacDonell  
Your Cisco account team • Solution architects



[cisco.com/go/ai](https://cisco.com/go/ai)

All resources & documentation