



NVIDIA DSX Air

April 2026

Berkin Kartal

Sr. Technical Marketing Engineer

Air Mission

The Mission:

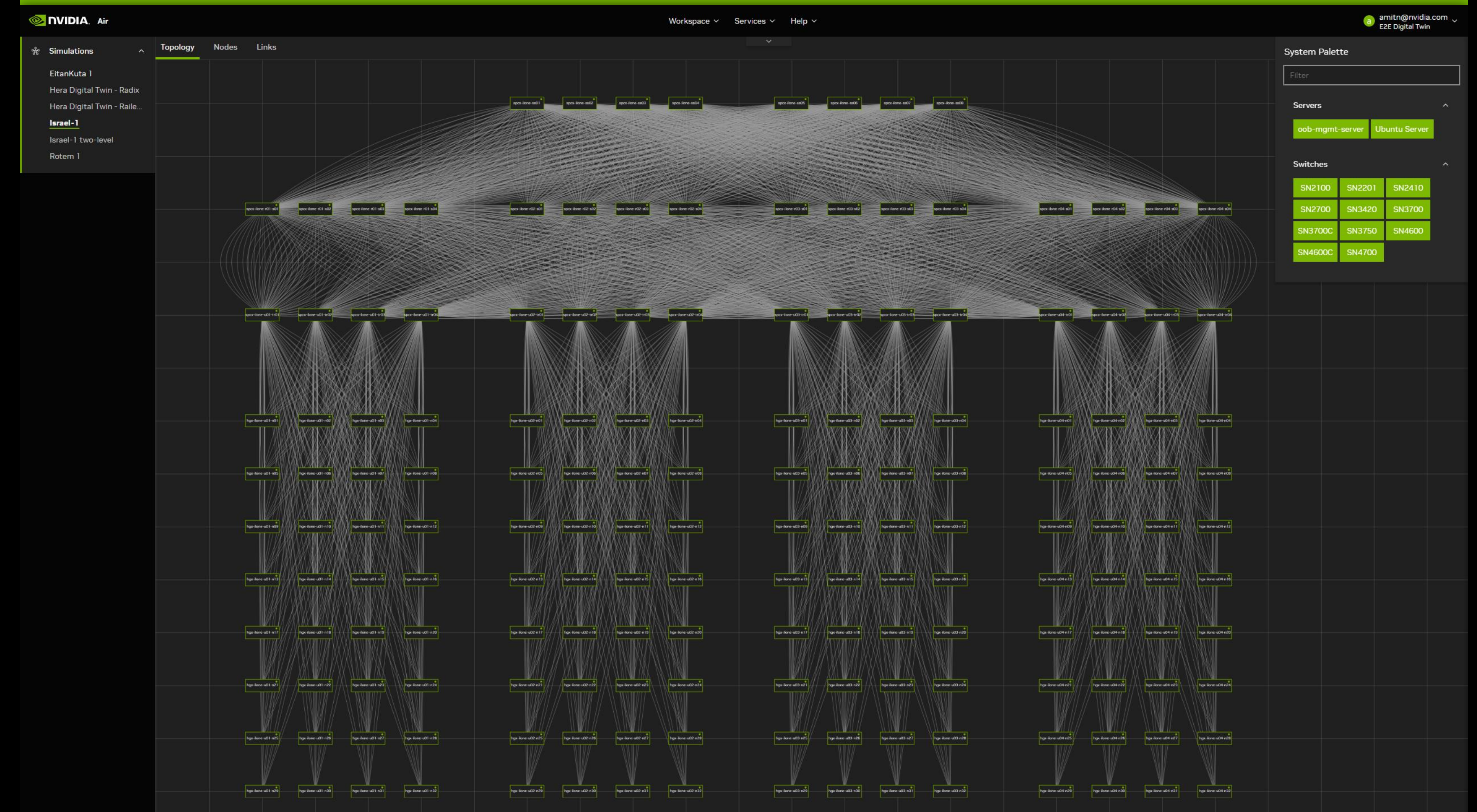
Accelerating AI adoption by simplifying the consumption of NVIDIA AI Factories

Nvidia Presents:

“AI Data Center Digital Twin platform for an entire NVIDIA AI ecosystem”



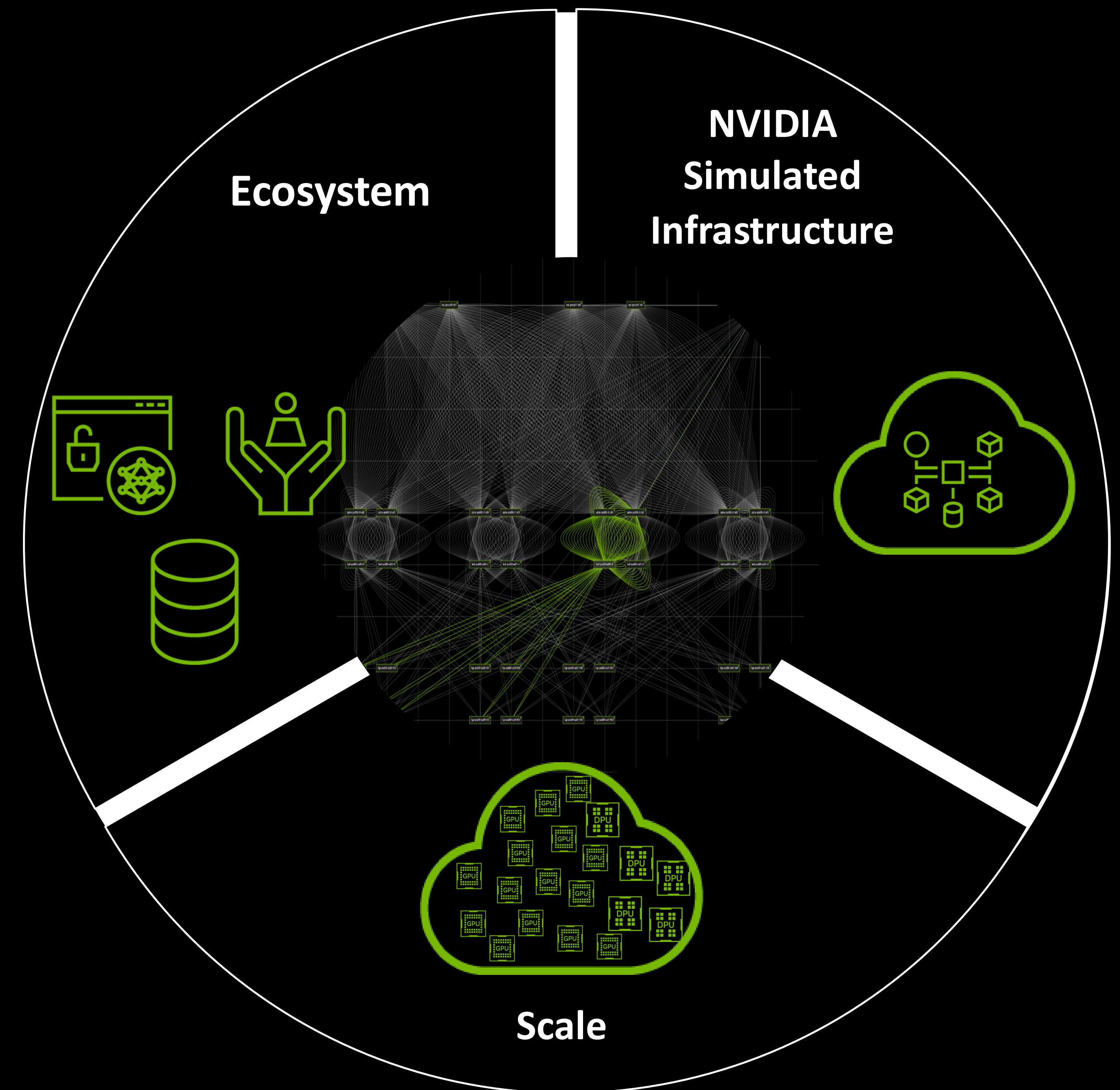
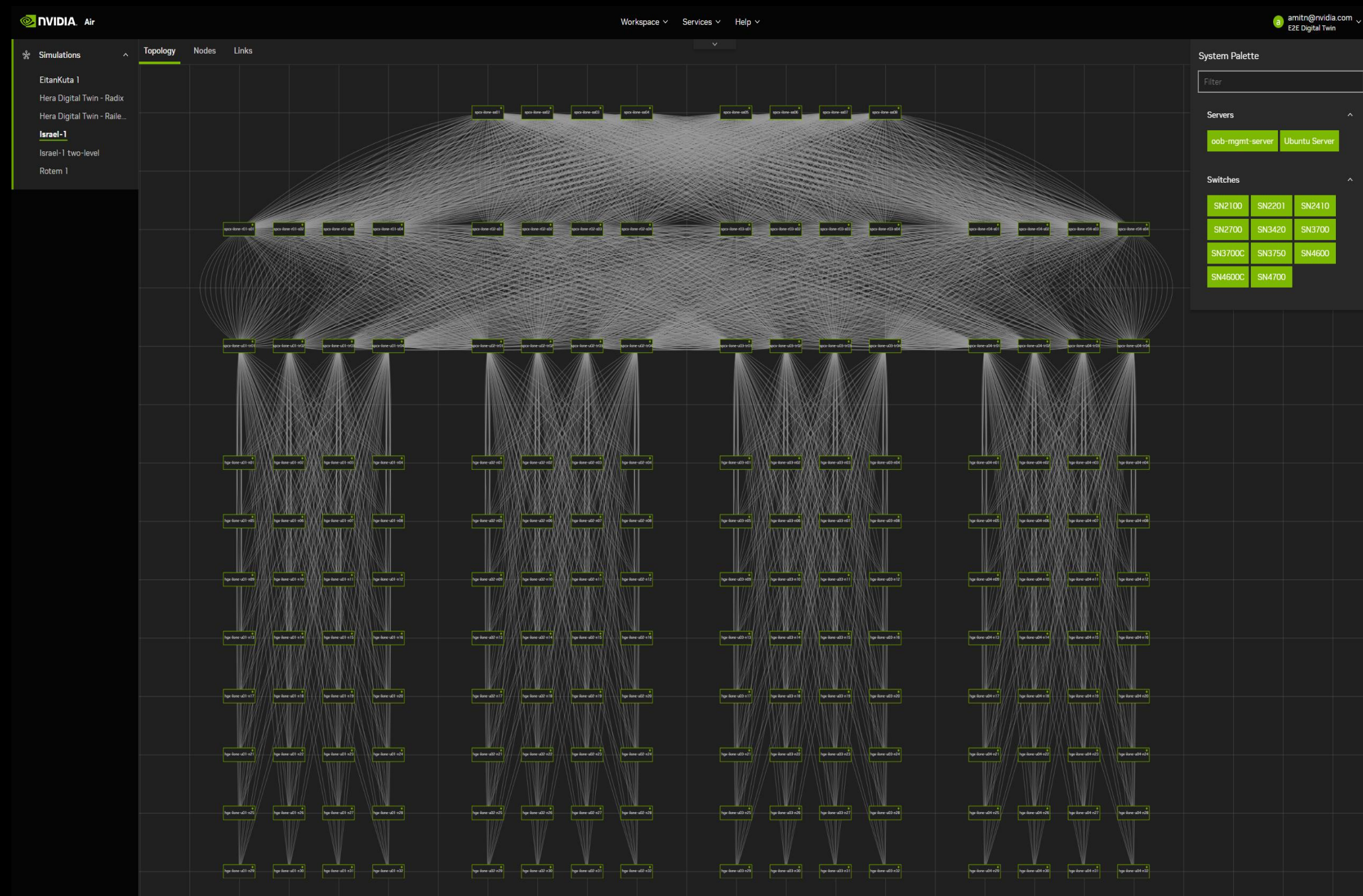
Data Center Digital Twin



From switch simulation to AI Factory platform

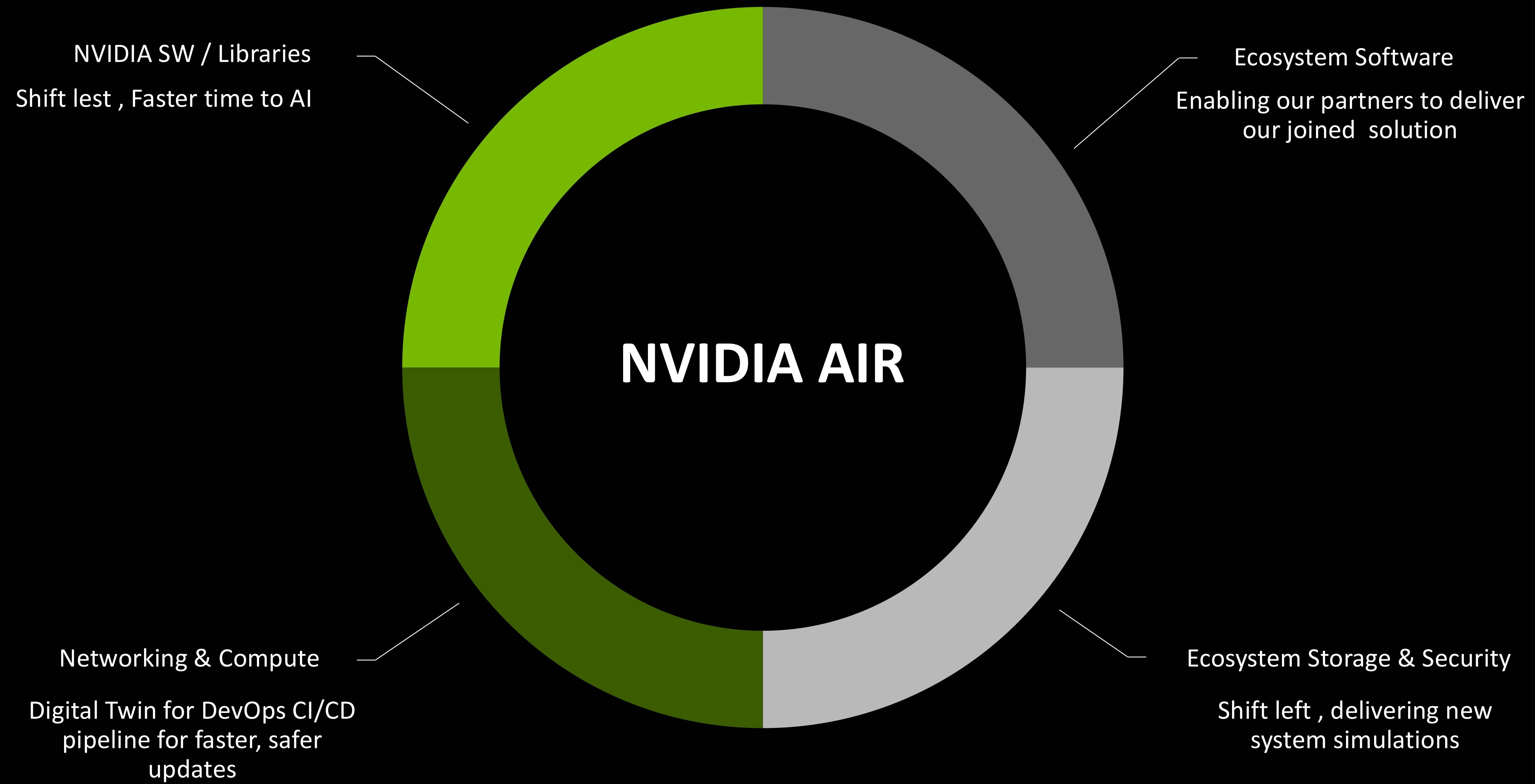
AIR platform delivers the entire NVIDIA HW simulation and SW stack with the NVIDIA ecosystem sustainable and at scale

Switch Simulation



Air Value – NVIDIA Datacenter Ecosystem

Digital twins for managing complete lifecycle of AI Factories



Why DSX Air?

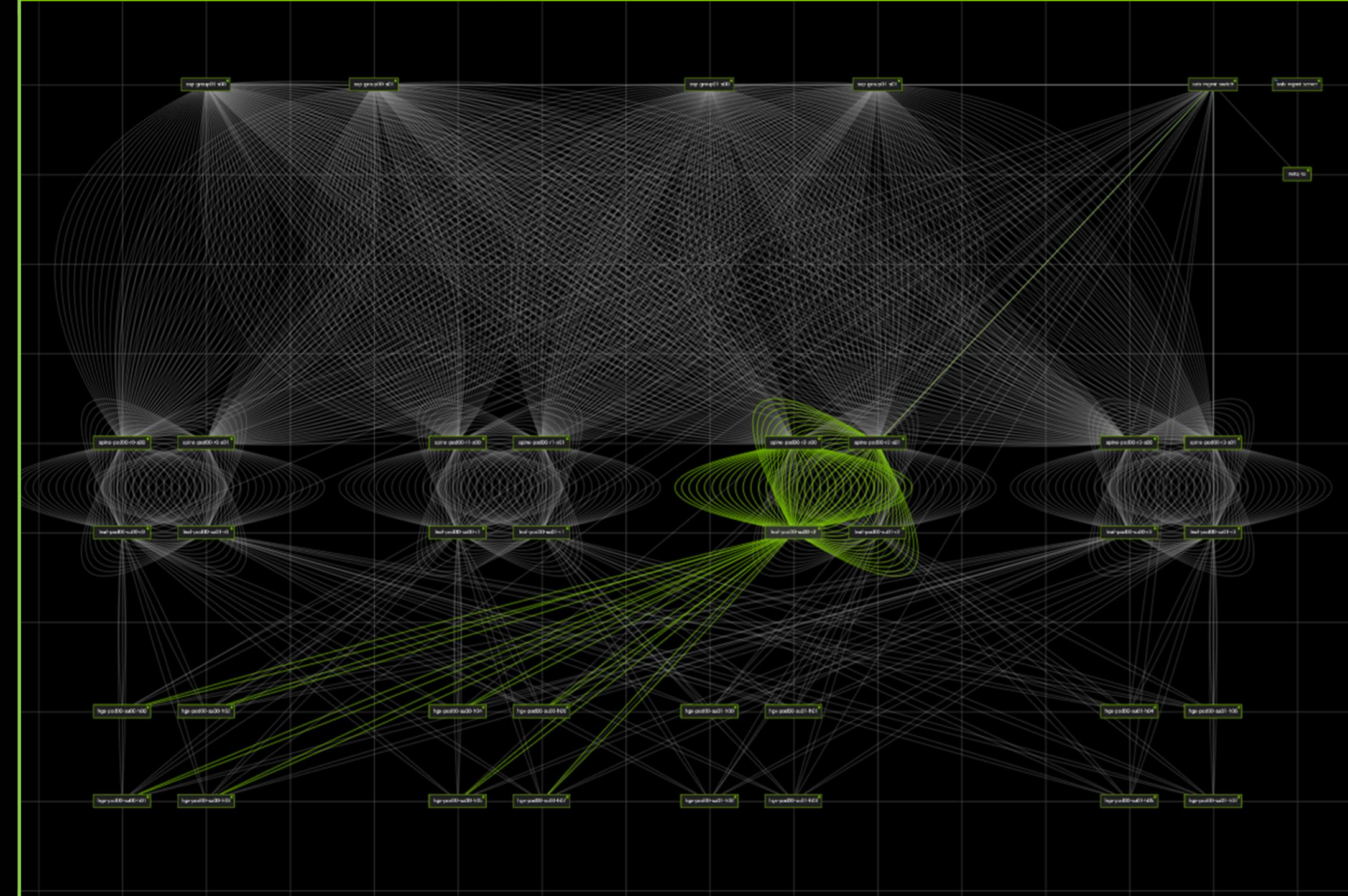
Every AI Factory needs digital twins for operational simplicity

ECOSYSTEM VALIDATION



Playground to integrate with
NVIDIA in scale and partners

SIMULATION AT SCALE

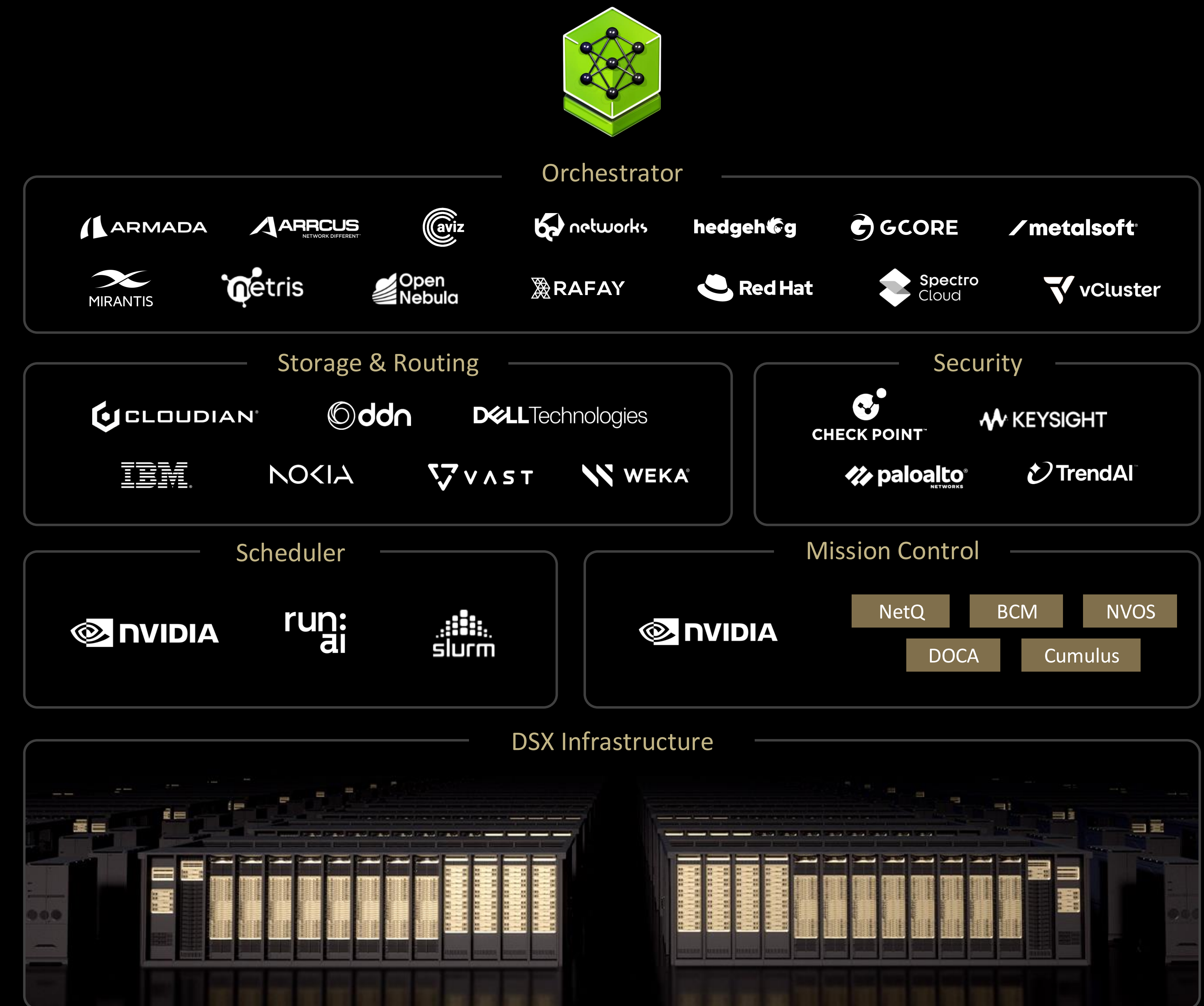
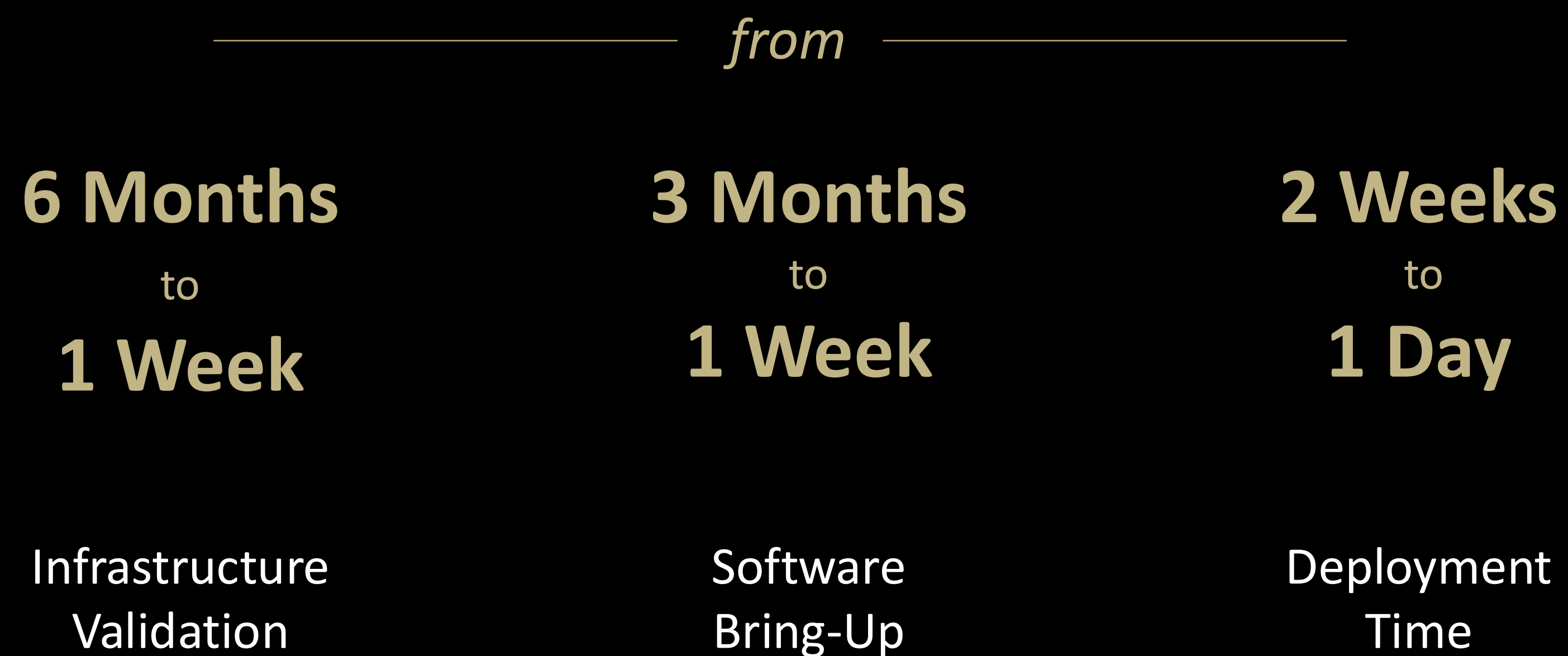


Faster Time to AI

NVIDIA DSX Air

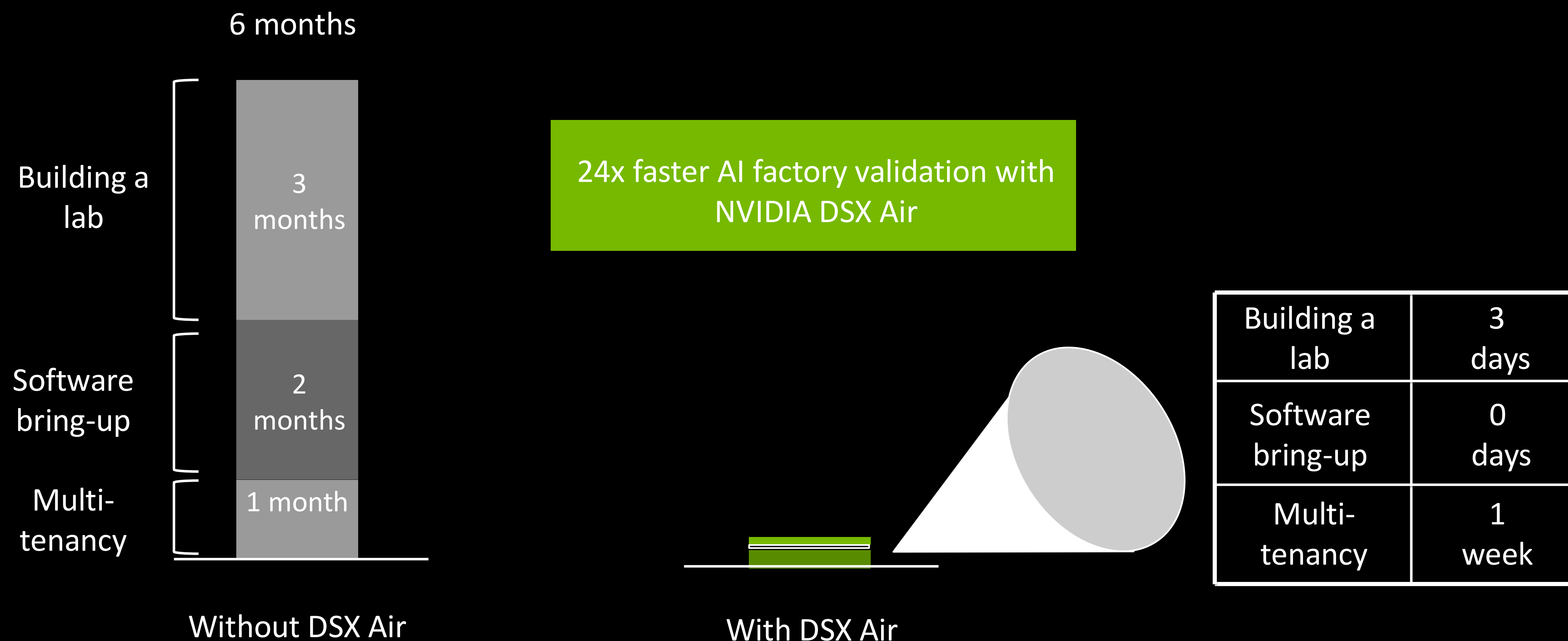
AI Factory Design and Validation Platform

Deploying AI Factories in Days Instead of Weeks



Building a Secured Multi-Tenant AI Factory

GPU servers, storage, switches, SuperNICs, DPUs, scheduler, network orchestration, GPU orchestration, security

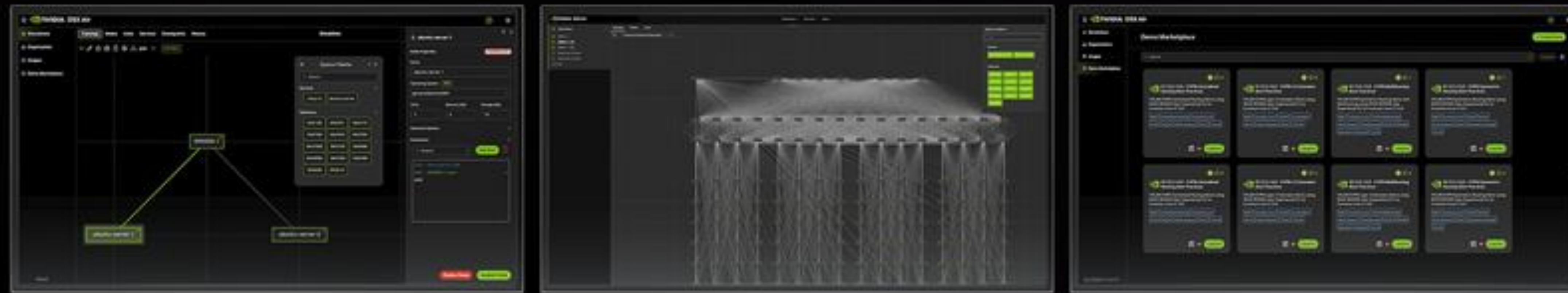


DSX Air AI factory simulation enables additional flexibility for:

- ✓ Testing at thousand-switch scale
- ✓ Validating alternative solutions
- ✓ Use of different GPUs

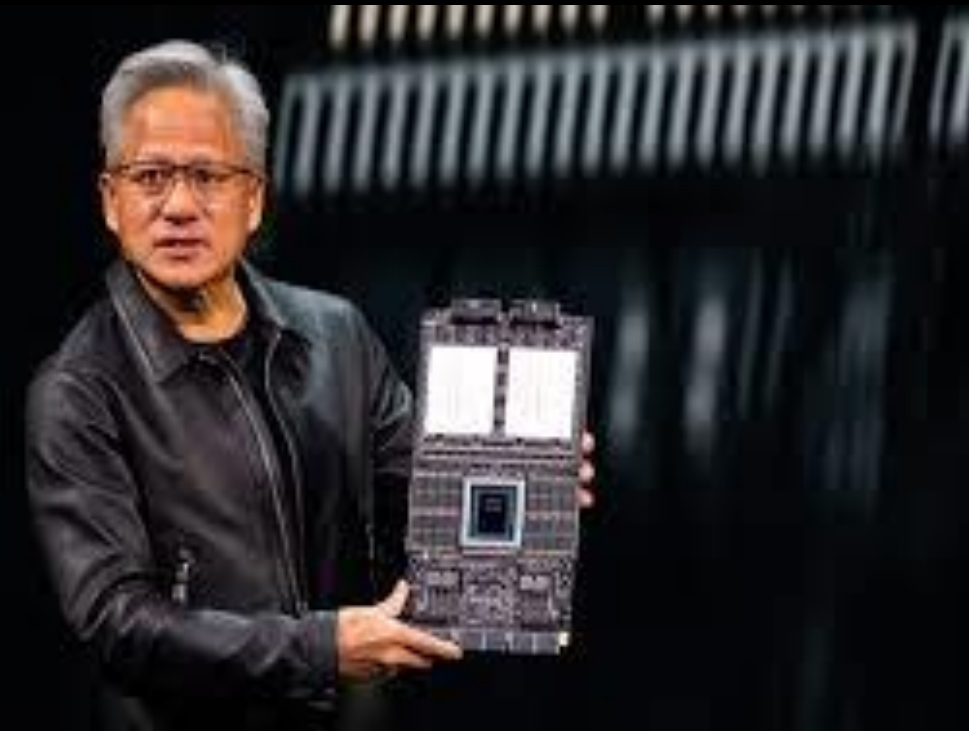
Shifting Left with Early Access to New Platforms

Get Access to Spectrum-6 and NVLink 6 Months Ahead of Schedule with DSX Air



(Some of the) Big Problems that DSX Air can help with

Shift Left



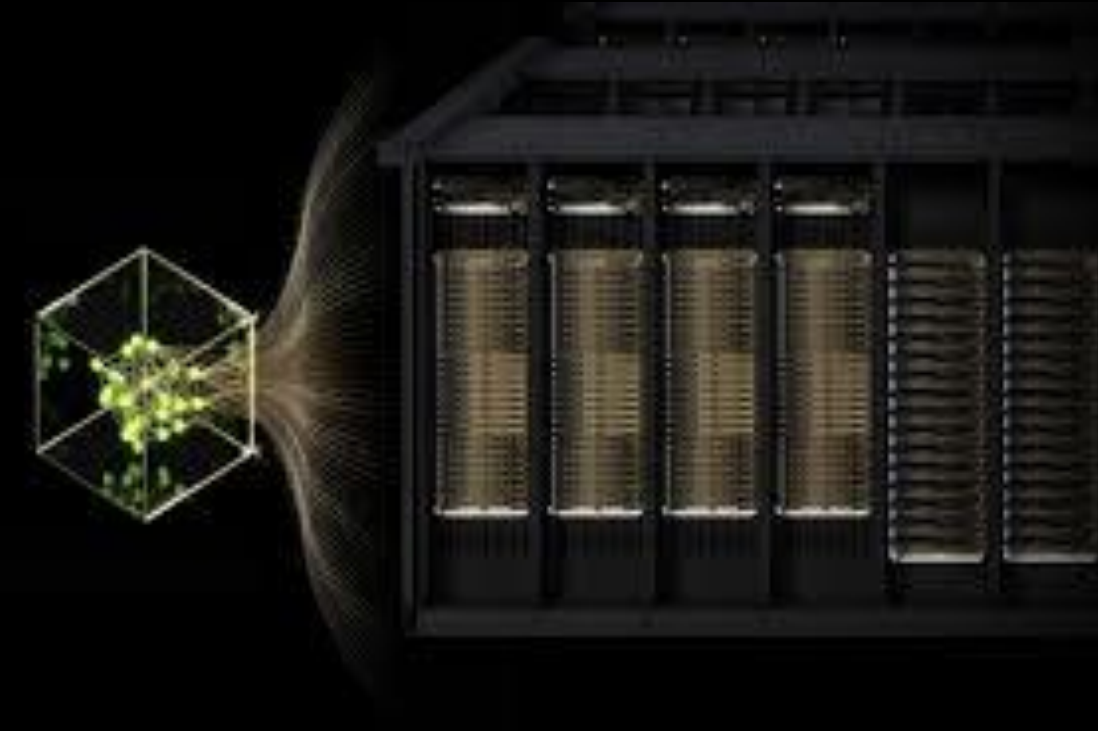
Building your DC before the system Arrival

Democratize AI without compromise



Many Software components
Agile designs

Sizing and Resource constrains



Define the Infrastructure software stack configuration, based on Workload and User requirements

Security








Security aspects both for Users and agents
Alignments between all the components

Memory (KV Cache)



KV Cache considerations

Build Your DT

-  Simulations
-  Organizations
-  Organizations
-  Demo Marketplace
-  Ecosystem Partners

Simulation

+ Create Data Center Setup					



- Simulations
- Organizations
- Organizations
- Demo Marketplace
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Simulation

Data Center Setup

Reference Architecture

NCP Enterprise SuperPOD

GPU Platform

GB300 B300 RTX Pro 6000

Scale

Small Medium Large

Cancel **Next**

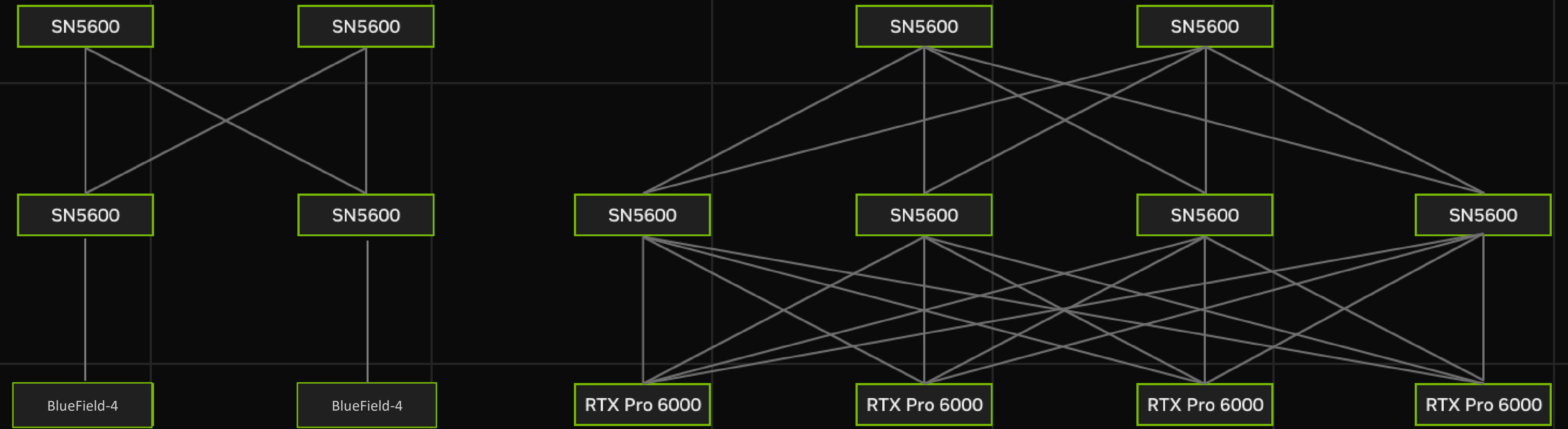


- Simulations
- Organizations
- Organizations
- Demo Marketplace
- Ecosystem Partners

Simulation

Enterprise Reference Architecture >> RTX Pro 6000 >> Small Scale [\[change\]](#)

+ Add Ecosystem Partners



- Simulations
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Simulation

Enterprise Reference Architecture >> RTX Pro 6000 >> Small scale [\[change\]](#)

Ecosystem Partners

Scheduler

NVIDIA Run:AI slurm

Orchestrator

RAFAY Cviz **Qetris** Kiwi AI

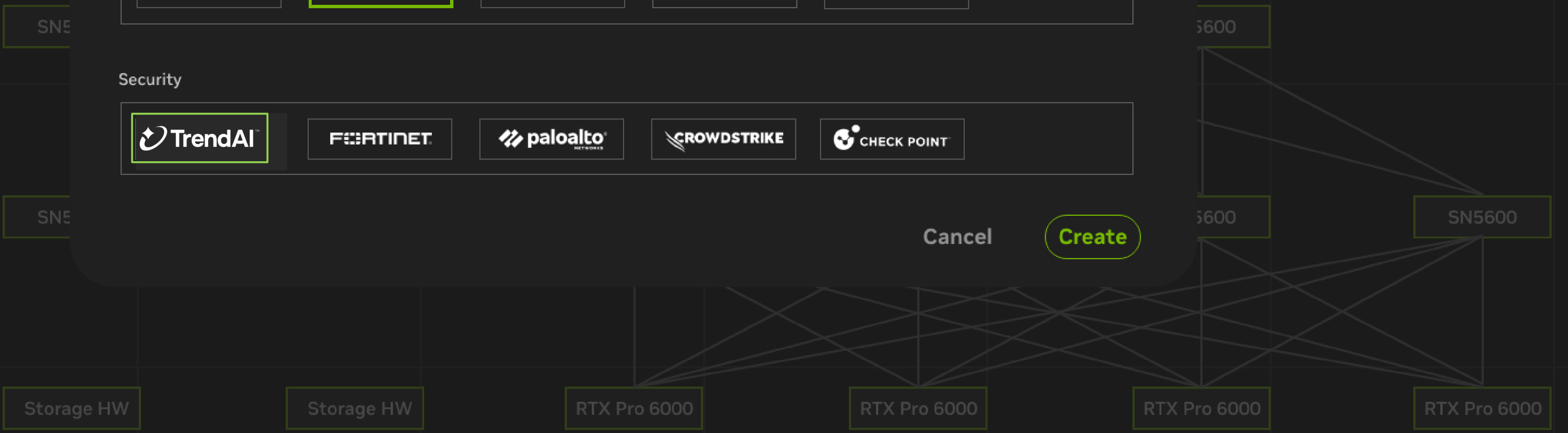
Storage

DELL Technologies **VAST** NetApp ddn WEKA

Security

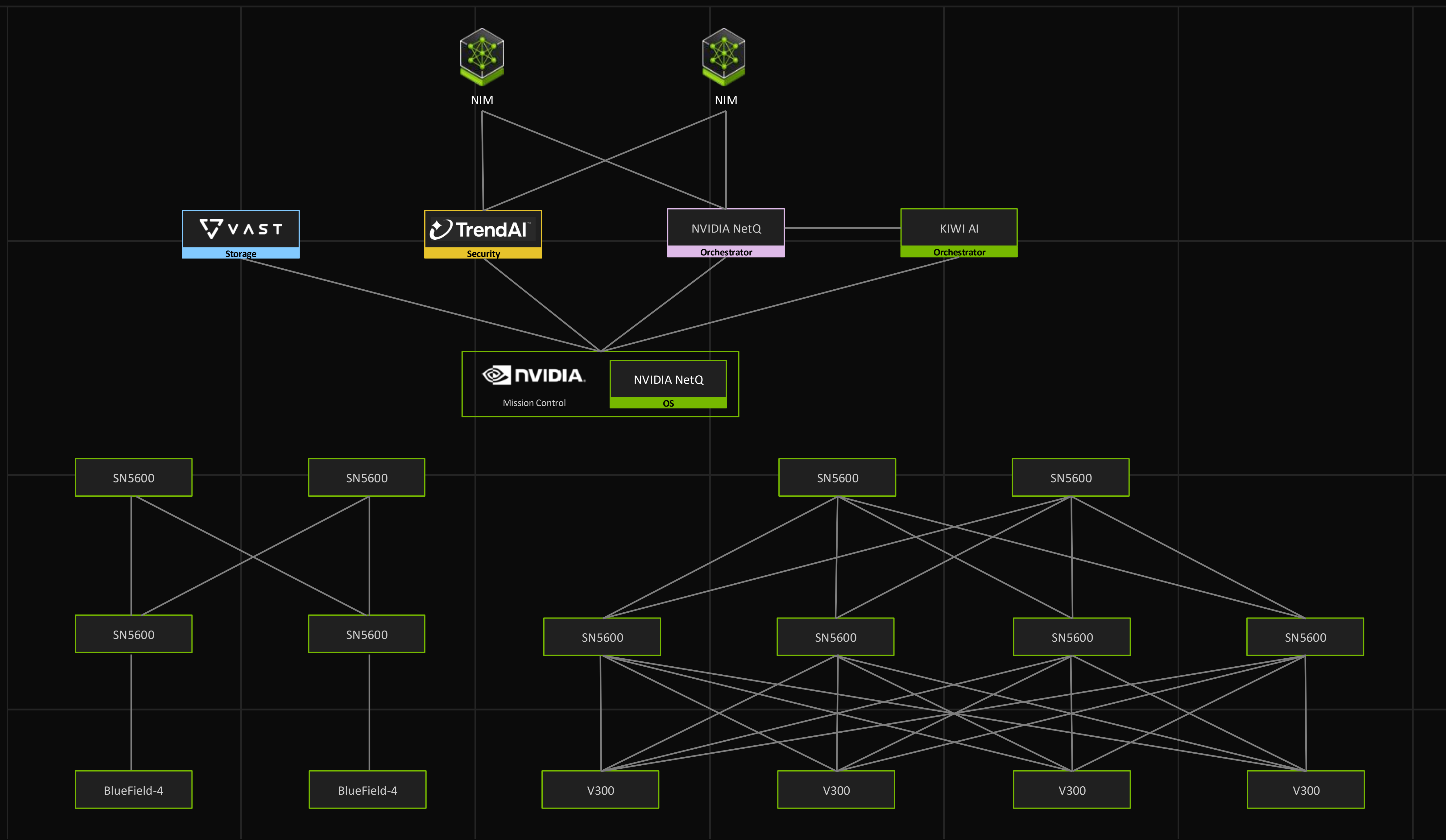
TrendAI FORTINET paloalto CROWDSTRIKE CHECK POINT

Cancel **Create**



- Simulations
- Organizations
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Simulation



Demo Marketplace


Demo Marketplace

spectrum Search ☰

VAST Data 🌐 0

Using RAG to process large amount of video data

BGP East-West EVPN RCP Spectrum-X



Launch

TrendAI 🌐 0

Detect and block a malware using TrendMicro running on a DPU

BGP ConnectX-7 E-W Network EVPN official RCP Spectrum-X



Launch

0 Spectrum™-X v2.0: Preconfigured GB300 2-Tier... 🌐 0

E-W network configuration for GB300 2-tier dual-plane (NCCL LB) topology using RCP.


BGP ConnectX-8 E-W Network EVPN official RCP Spectrum-X



Launch

Netris +vCluster 🌐 0

Create and enable multitenancy




Launch

Rafay 🌐 0

Complete Compute orchestration for ERA RA 512 GPUs RTXPRO

BGP BlueField-3 E-W Network EVPN official Spectrum-X




Launch

Keysight 🌐 6

Generate LLM network traffic to validate multitenancy.

BGP Bluefield3 East-West EVPN official RCP Spectrum-X Spectrum4 VXLAN




Launch

GTC 2026 Air Digital Twin Demo 🌐 0

Showcases Air Digital Twin capabilities and integrations with 6 partners covering multitenancy, security and storage.

KEYSIGHT CHECK POINT Netris RAFAY TrendAI VAST




Launch

OpenShift 🌐 1

Complete Compute orchestration for NCP RA 16K GPUs VR

BGP Cumulus Linux EVPN L2 Extension MLAG Multi-tenancy NVUE VXLAN




Launch

Checkpoint Software 🌐 1

Block specific network traffic using Checkpoint software running on DPU

BGP Cumulus Linux EVPN-Multihoming Multi-tenancy Multihoming NVUE PIM-SM Symmetric Routing VXLAN



Launch

Dell NCP RA B300 🌐 0

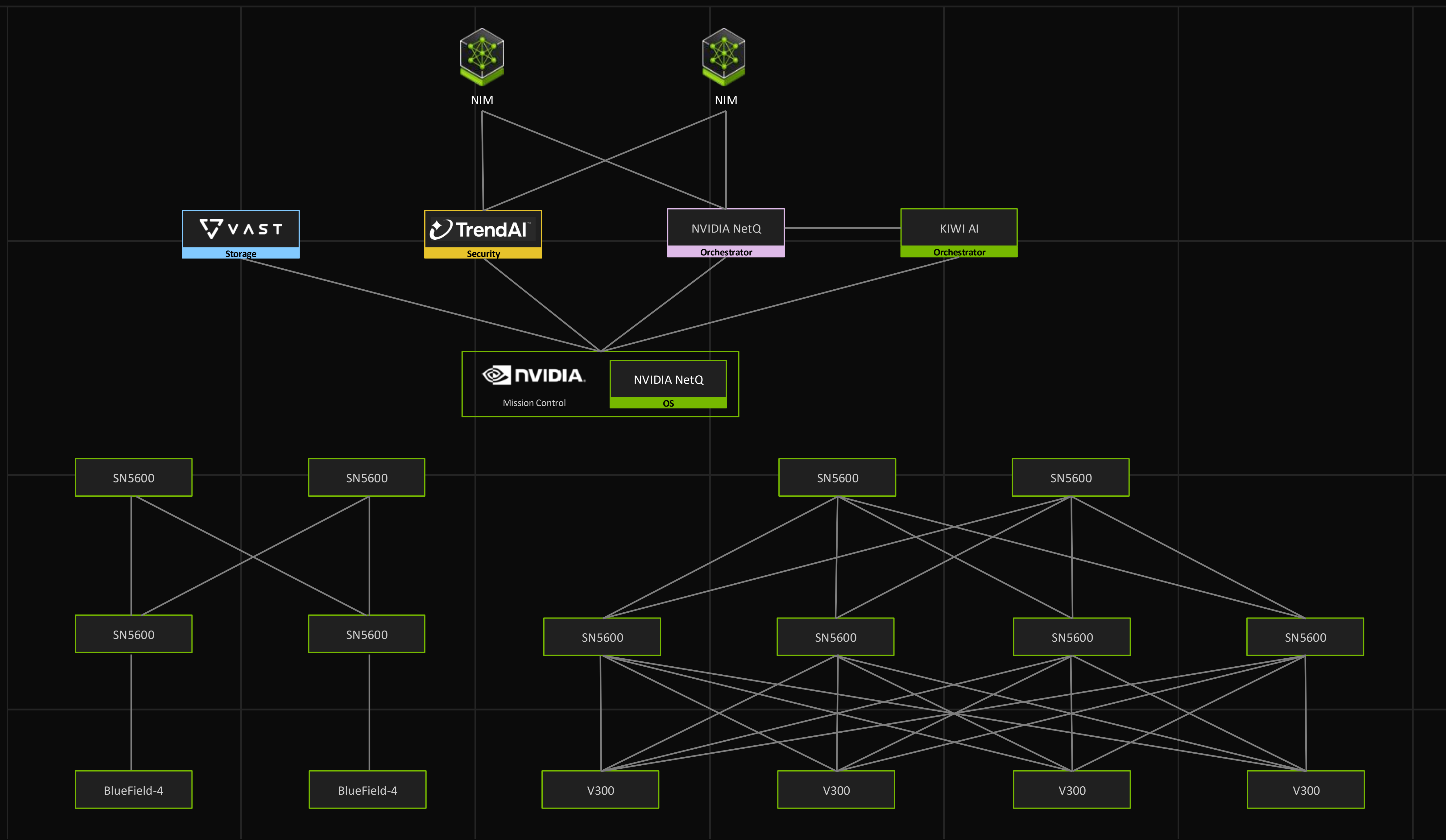
BGP Cumulus Linux EVPN MLAG Multi-tenancy NVUE Symmetric Routing VXLAN



Launch

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Simulation



DSX Air Ecosystem



DSX Air Overall Timeline

2026 – Jan

- Monetization for scale
- NVLink switch (NVOS) simulation
- Infra for Multi-ASIC switch
- Infra for NVL rack simulation

2026 – Jul

- NVL rack simulation (GA)
- GUI for emulated nodes
- Scenario injections
- Containers as nodes
- On the fly simulation changes

2026 – Apr

- Ecosystem (Images & Demos)
- NVL rack simulation (EA)
- Scale - connectivity improvements

Demo





Thank you