

The New Nexus Dashboard: Unified. Streamlined. Modernized.

Shaw Phillips, Technical Marketing Engineer



Unified Cisco Data Center Networking

Unified Architecture

Nexus One

Powering AI/ML Fabrics

Unified Operations

Nexus Dashboard

Unified Intelligence

Nexus Dashboard

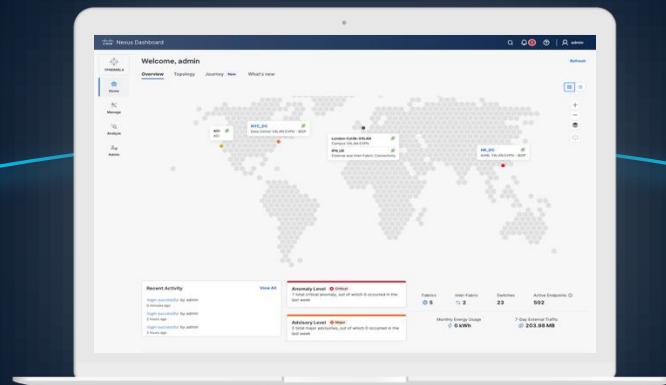
Data Broker, Splunk,
Thousand Eyes



Cisco Nexus Data Center Switching

Cisco Data Center Networking

Simple, secure, and sustainable



All Managed by Cisco Nexus Dashboard

Highly Secure Encryption
With end-to-end Segmentation

Flexible Fabric Deployments
Cisco ACI, NX-OS, SAN & Data Broker

Unparalleled Network Visibility
Within Nexus Dashboard

Enabling AI/ML workloads
With reduction in power utilization



Simple

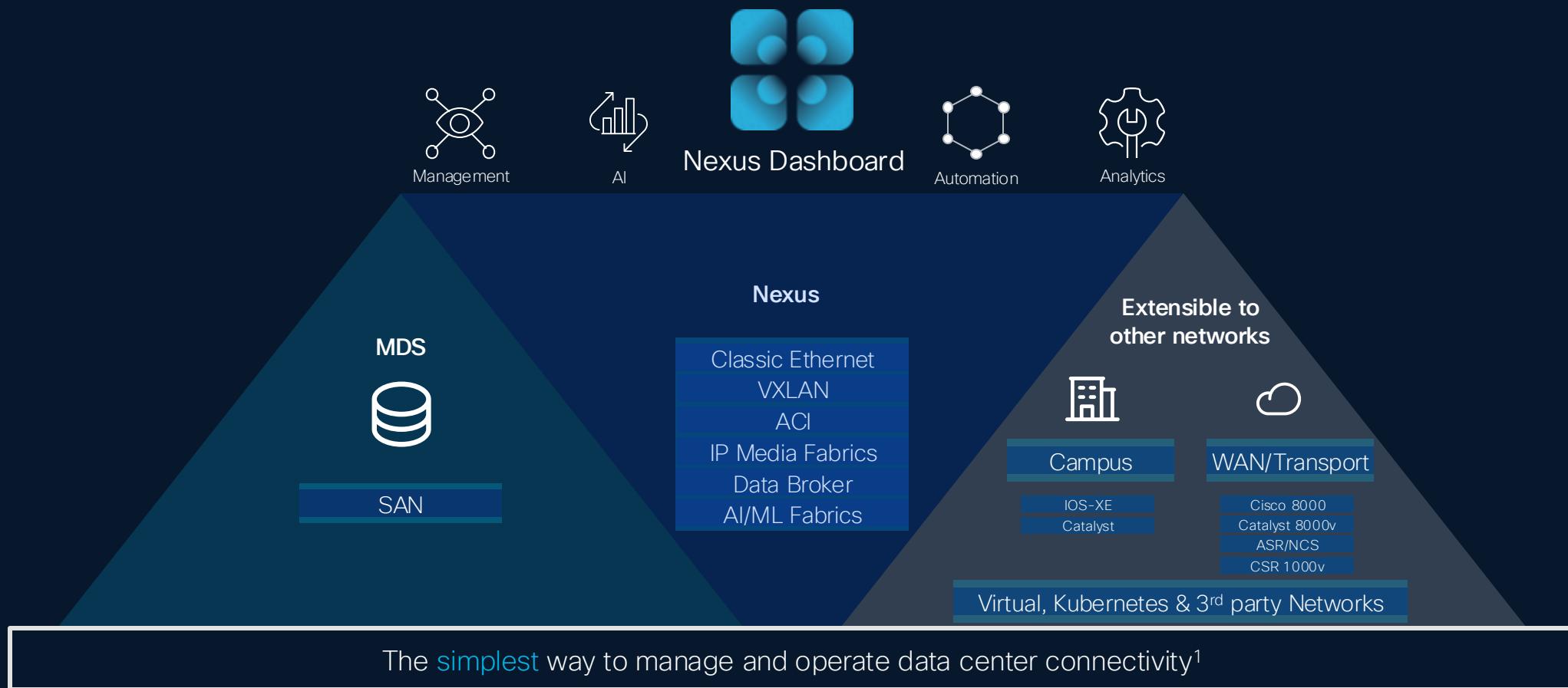


Secure



Sustainable

Cisco Nexus Dashboard



Introducing Nexus One

SOLUTION OUTCOMES

Zero-trust networking and micro-segmentation based on security groups

Advanced service chaining and service redirection

Standards based inter-operability with third-party networks

DevOps-ready APIs, Integration with CI/CD pipelines

Administrative multi-tenancy

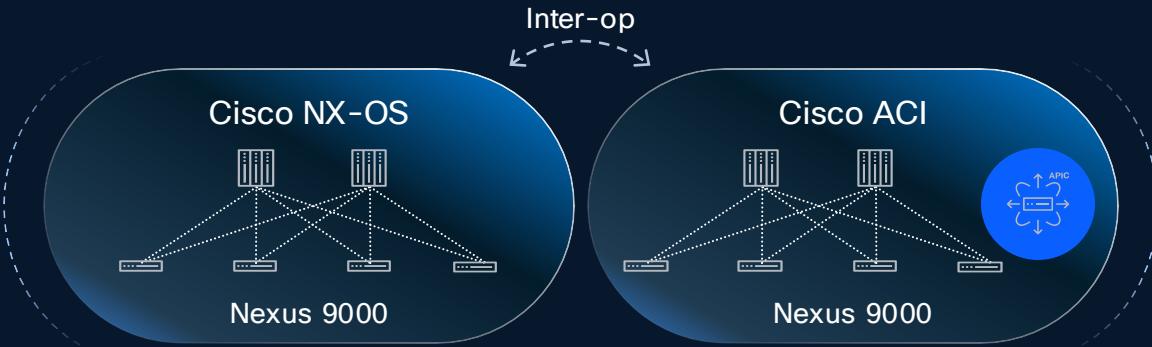
VM & container integrations

Unified management plane (including analytics)

Unified policy plane

Unified control plane

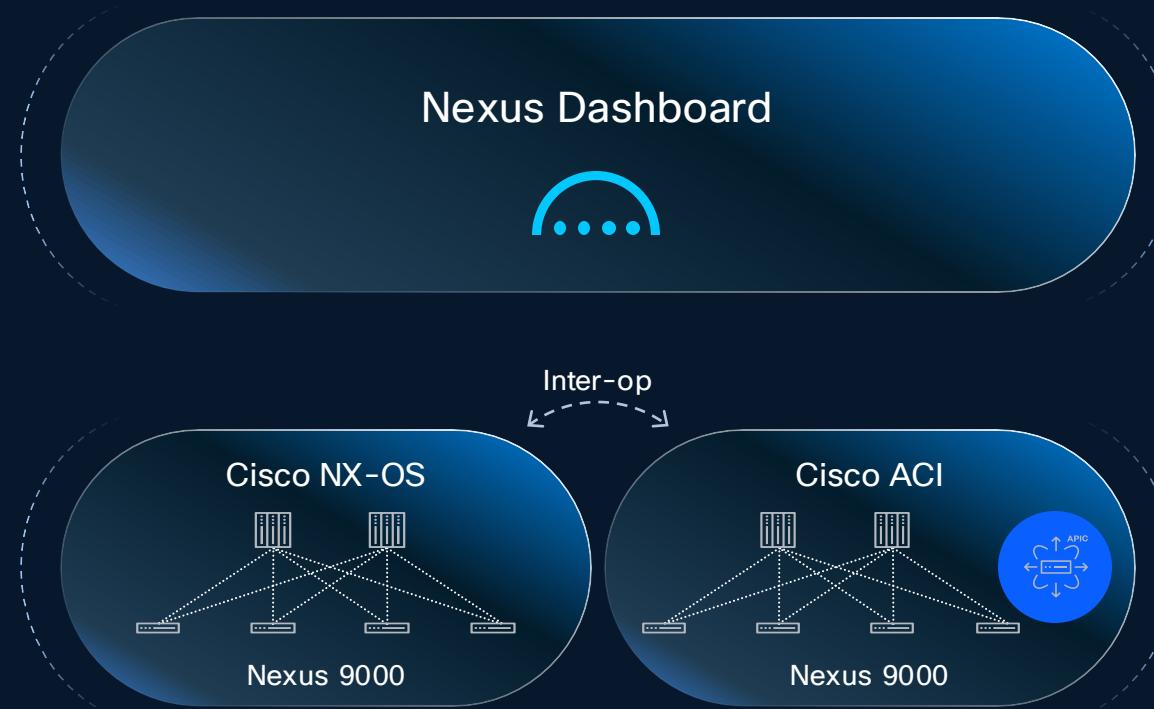
Unified data plane



Flexibility of deploying either NX-OS or ACI and drive consistent fabric outcomes

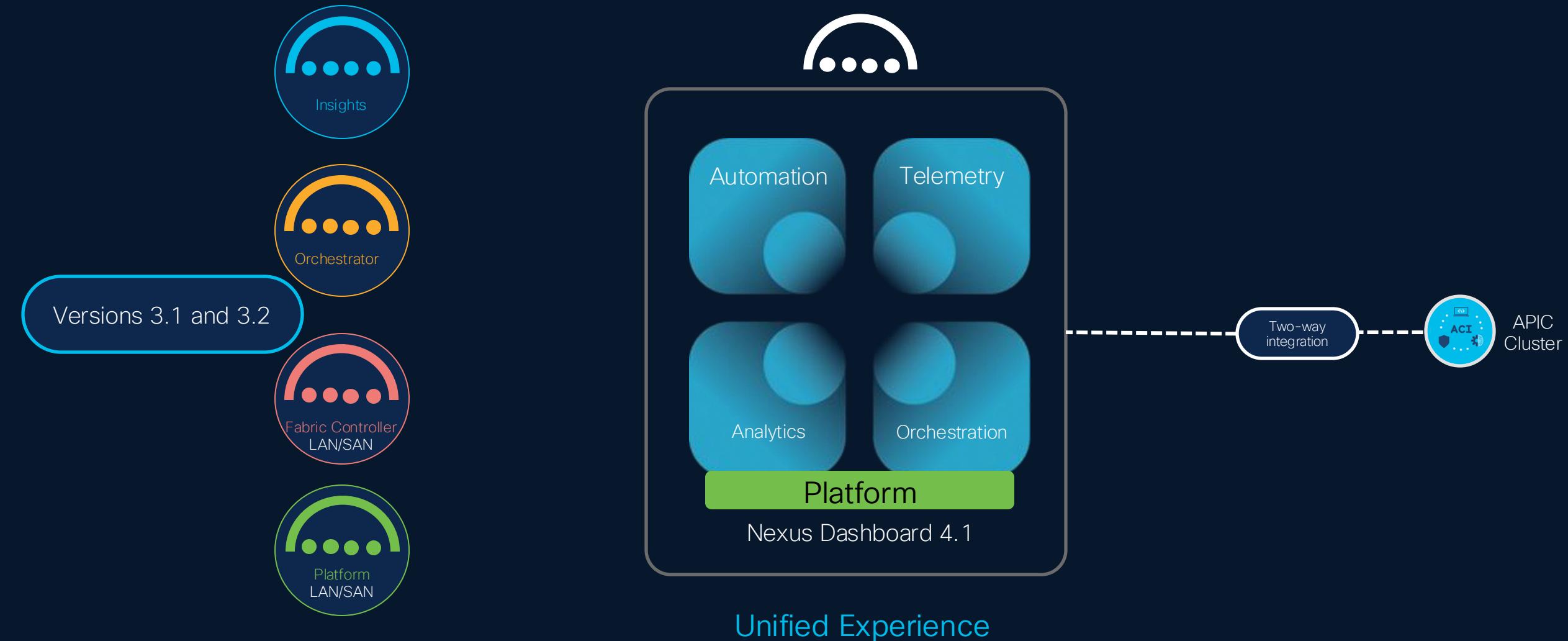
Cisco Nexus Dashboard

Unified Management Plane for Nexus One



Reimagined
Redefined
Rebuilt
with Nexus Dashboard 4

Unify your operational experience



Cisco Nexus Dashboard 4.1 - Scale

1 Node (Non-prod)



50 Switches
1,000 Flows/s
10,000 Conversations/min



25 Switches
500 Flows/s
3000 Conversations/min



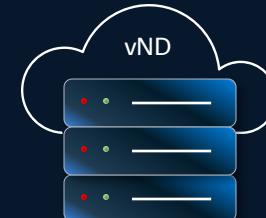
ESXi



3 Node



500 Switches
10,000 Flows/s
100,000 Conversations/min



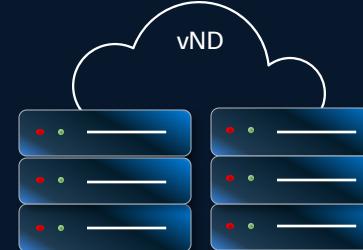
100 Switches
2,500 Flows/s
5,000 Conversations/min



ESXi

* These figures are for the M8 Platform, for full scale reference visit
<https://www.cisco.com/c/dam/en/us/td/docs/dcn/tools/nd-sizing/index.html>

6 Node



200 Switches
5,000 Flows/s
10,000 Conversations/min

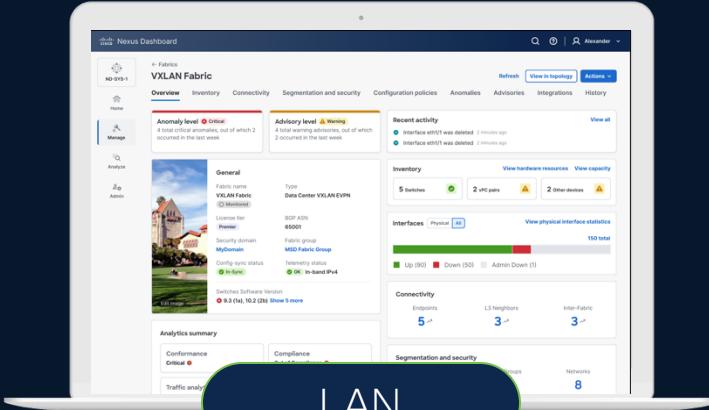


ESXi

Provision and Manage

Cisco Nexus Dashboard

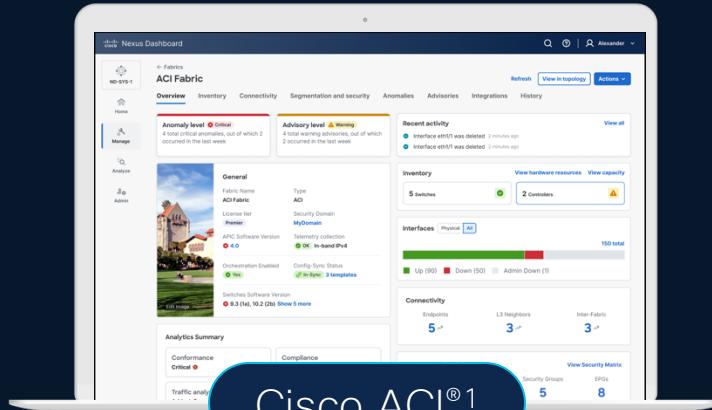
Main Fabric Categories



LAN

Zero-Touch classic, VXLAN, IPFM, Data Broker, AI/ML Networks & more

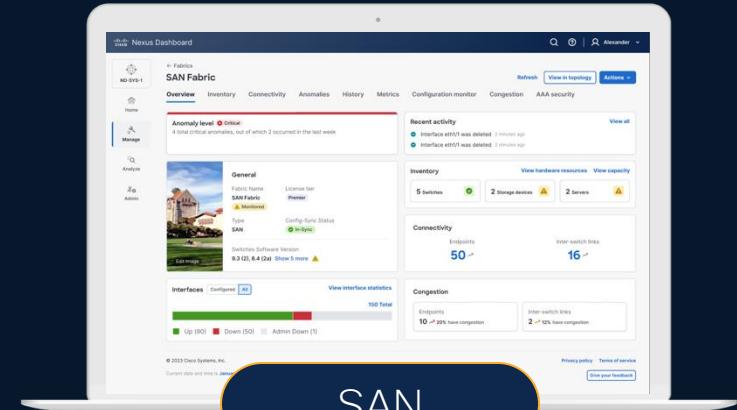
Nexus® 9000, Cisco Catalyst® 9000, IOS-XR and third party



Cisco ACI®¹

Zero-Touch VXLAN network with policy-oriented model

Nexus 9000



SAN

Zero-Touch customizable templates and Smart Zoning

Cisco MDS 9000

Consistent operational experience

Open APIs
with Ansible, Terraform

Operate multiple switches
as one logical unit

Cisco Nexus Dashboard

LAN Fabrics

Classic

2- or 3-tier NX-OS architectures

VXLAN

BGP EVPN fabrics for Nexus & Catalyst (IOS XE)

AI

Fine-tuned network provisioning to transport AI/ML apps with the best performance

External and Inter-Fabric Networks

NX-OS, IOS XE, XR, third-party networks mainly used to interconnect ACI, NX-OS, and Campus

IP Fabric for Media

Fine-tuned network provisioning and monitoring for broadcasting and media

Routed

BGP-based CLOS NX-OS fabrics

← Fabrics

Create/Onboard Fabric

What is a fabric?

1 Select a category Create new LAN fabric

2 Select a type VXLAN

3 Settings Default

4 Summary

5 Fabric creation

Select a type

Switches in this fabric will be configured automatically based on the option you choose.

VXLAN
Automate a VXLAN BGP EVPN fabric for Cisco Nexus (NX-OS) and/or Catalyst (IOS-XE) switches.

Classic LAN
Automate the provisioning of a 2 or 3-tier Traditional Classical Ethernet Network.

AI
Automate a Nexus (NX-OS) fabric for top performance AI networks using RoCEv2.

External and inter-fabric connectivity
Monitor or manage any architecture that includes Cisco NX-OS, IOS-XE, IOS-XR and/or 3rd party devices. This includes use cases for External connectivity, Inter-fabric Connectivity Networks (such as ISNs for ACI), and Inter-Pod Networks (IPNs).

Routed
Automate a BGP-based CLOS fabric on Cisco Nexus (NX-OS) switches.

IP Fabric for Media
Automate the creation of IP-based broadcast production networks on Cisco Nexus (NX-OS) switches.

Fabric type Data Center VXLAN EVPN - iBGP

Data Center VXLAN EVPN
Fabric for a VXLAN EVPN (iBGP or eBGP) deployment with Nexus 9000 and/or 3000 switches.

Campus VXLAN EVPN
Fabric for a VXLAN EVPN Campus deployment with Catalyst 9000 and/or Nexus 9000 switches as Border Gateways.

Cancel

Back Next

LAN

Analyze

Cisco Nexus Dashboard - Analyze

Topology - Maintain visibility across fabrics



Updated topology

View fabrics, switches, interfaces, and endpoints with their corresponding anomaly scores



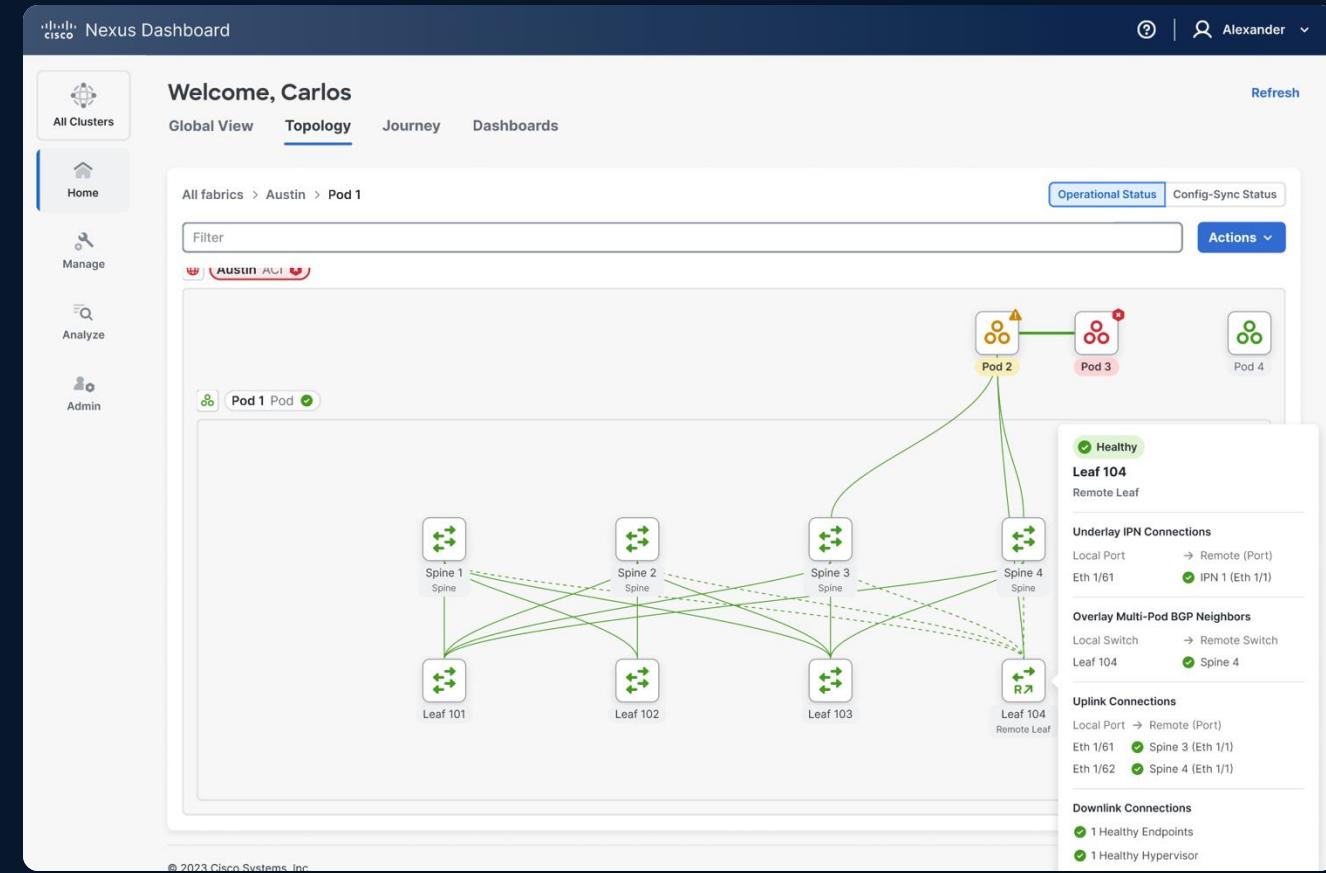
Visualize and configure

Verify health and configuration-sync status, configure VPC pairs, assign roles, and more



Single and multi-fabric

Drill down into a fabric or visualize connections across fabrics, including external and inter-fabric networks such as IPN and ISN



Benefits

Visualize all your fabrics

Cisco Nexus Dashboard - Analyze

Custom Dashboards – Monitor key metrics



Custom widgets

Choose your most relevant data sources—anomalies, traffic analytics, energy usage, utilization and more



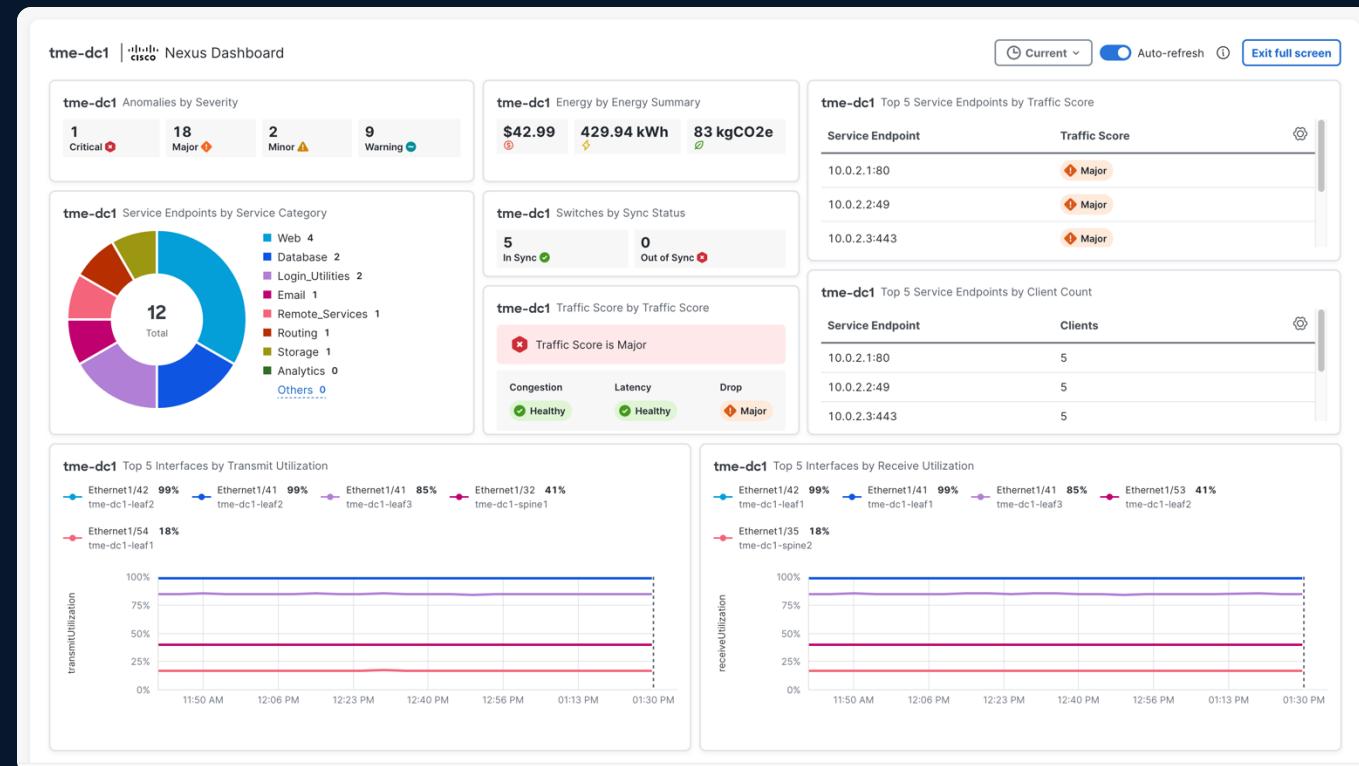
Single pane view

Monitor relevant statistics across multiple fabrics, switches, interfaces, and endpoints from a single page



Real-time and historical data

Get live updates to your fabrics or track changes over time



Benefits

One-stop wholistic monitoring

Cisco Nexus Dashboard - Analyze

Energy Management - Achieve net-zero goals faster



Cost

Learn about associated energy costs each month and compare them against previous ones; customize your own negotiated rates



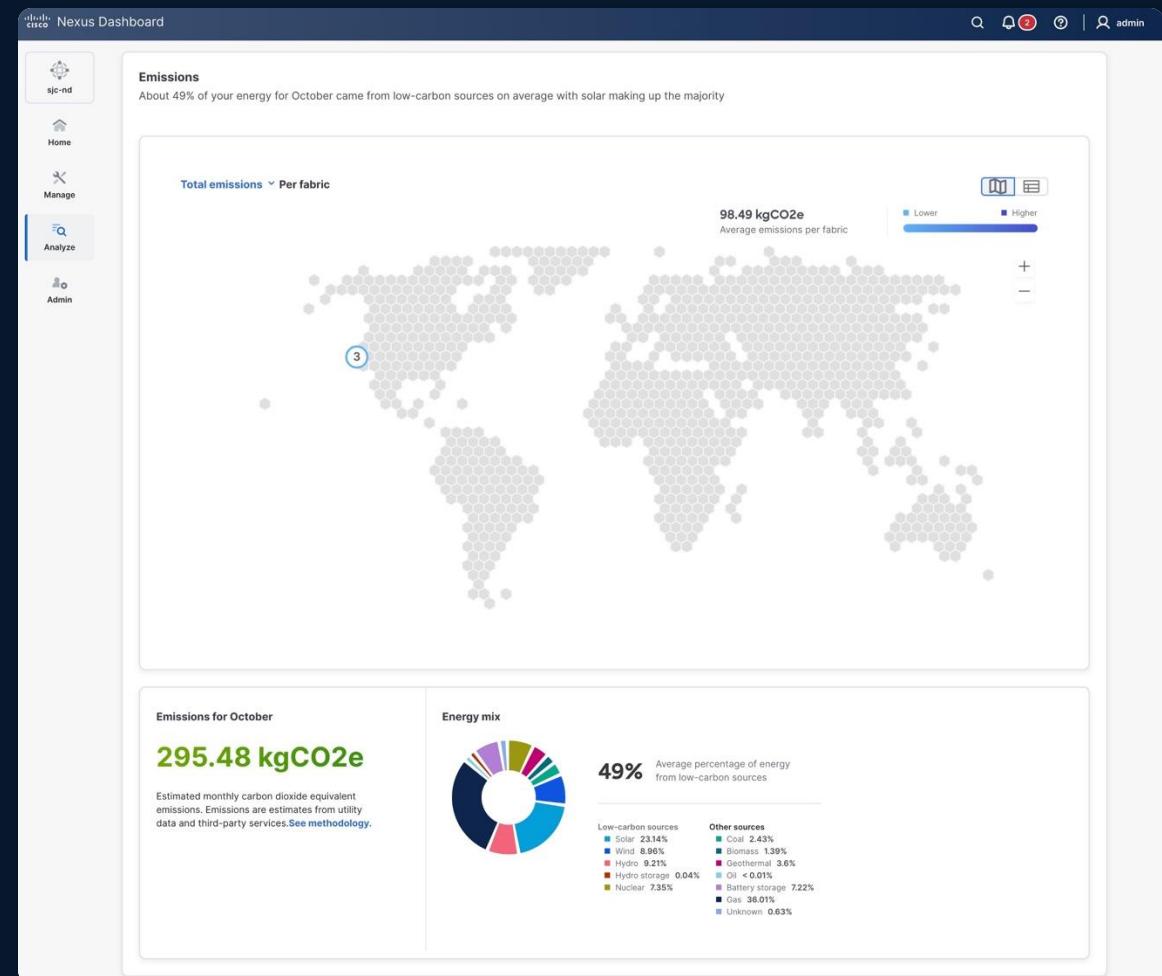
Energy consumption

Switch and PDU (Panduit) power consumption gives you insight into peaks and how efficiently your switches are using electricity



CO2 emissions¹

Understand the energy sources your data center networks use, visualize the top contributing devices, and compare against previous months



¹ Requires connectivity to Intersight

Benefits

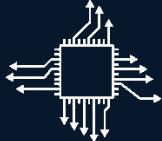
Cisco Nexus Dashboard - Analyze

Traffic Analytics - Identify latency, congestion, and drops in your network



Automatically identify services in your network

Through well-known L4 ports (e.g., Web - TCP port 80) pre-loaded service categories are learned and monitored; category customization is also allowed based on your own preferences



Pervasive across switches and fabrics

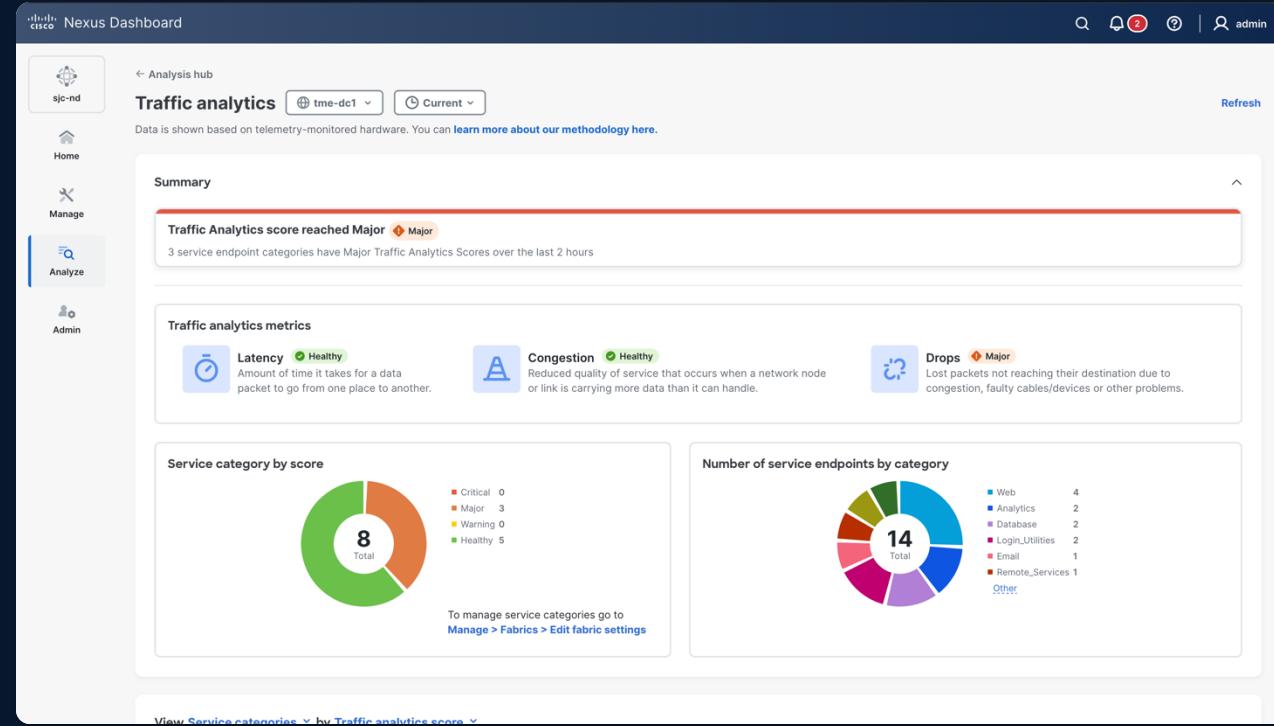
Learn about clients and services connecting across multiple fabrics without rules or any additional rule configuration



Granular visibility for every connection

From overall fabric score to category, service, and connection, Traffic Analytics can monitor individual client-to-service sessions and allows you to “tap-in” by capturing flow records on demand

Requires: ACI - 6.1.1 and NX-OS 10.4(2F) + PTP



Benefits

Detect performance issues | Customize monitored services

Traffic Analytics

New features in 4.1

Support for N/S Traffic

Service Identification for UDP

Support for L4-L7 Service

The image displays the Cisco Nexus Dashboard interface, version 4.1, illustrating several new features for Traffic Analytics.

Service Endpoint Details for 192.168.103.10:22

Endpoint general details:

IP address 192.168.103.10	Port 22	Hostname —	Last updated Jul 06 2025, 02:17:10.025 PM	VLAN 103
VRF demo_vrf	Protocol TCP	Switches tme-dc3-leaf1	Interfaces eth1/3	Fabric tme-dc3

Top clients by Traffic analytics score

Traffic analytics

Flow Collection Modes

- Traffic analytics full
- Traffic analytics compatibility
- Disabled

Enable UDP categorization

Flows path summary

Source fabric tme-dc1

Path:

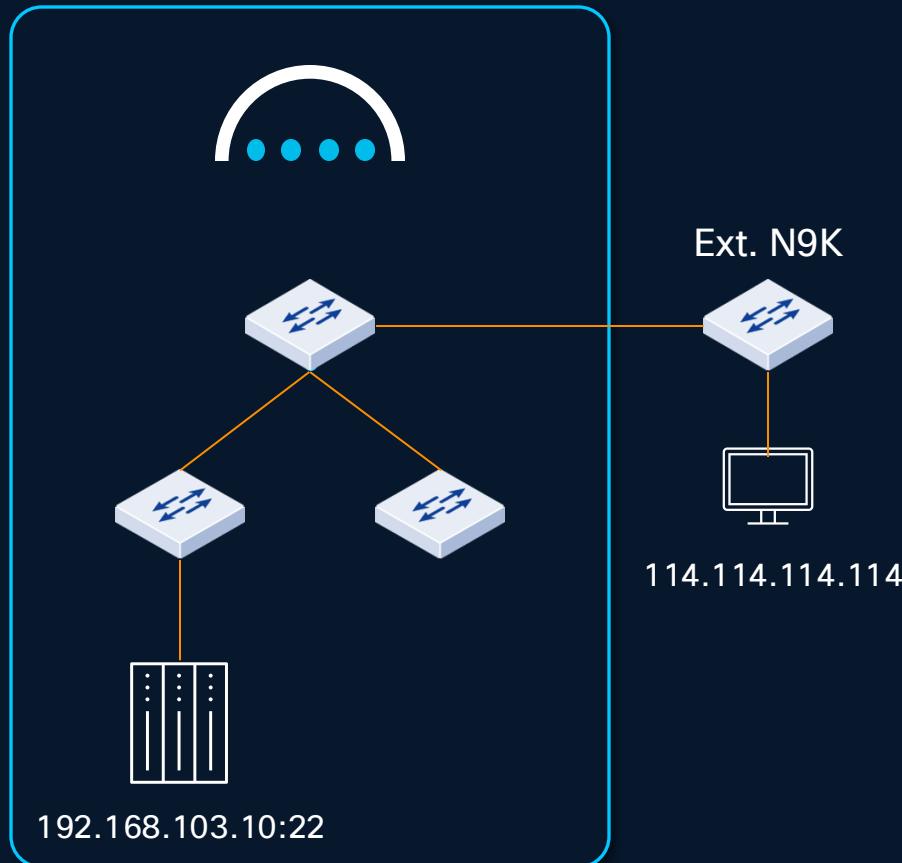
```
graph TD; Source[10.10.10.10] --> Leaf1[tme-dc1-leaf1]; Leaf1 --> Leaf2[tme-dc1-leaf2]; Leaf2 --> Leaf3[tme-dc1-leaf3]; Leaf3 --> Destination[10.10.20.10]; Leaf1 --> Spine1[tme-dc1-spine1]; Leaf2 --> Spine1; Leaf3 --> Spine1; Leaf1 --> Spine2[tme-dc1-spine1]; Leaf2 --> Spine2; Leaf3 --> Spine2; Leaf1 --> Spine3[tme-dc1-spine1]; Leaf2 --> Spine3; Leaf3 --> Spine3;
```

Legend:

- Green line: Normal traffic
- Red line: Anomaly traffic
- Blue line: Critical traffic

Traffic Analytics

North/South Flows



Endpoint general details

IP address	Port	Hostname	Last updated
192.168.103.10	22	—	Jul 06 2025, 04:47
VRF	Protocol	Switches	Interfaces
demo_vrf	TCP	tme-dc3-leaf1	eth1/3

Top clients by Traffic analytics score

	Critical	Major	Warning	Healthy
Jul 05, 2025, 9:56 PM				Healthy
Jul 06, 2025, 3:56 AM				
Jul 06, 2025, 9:56 AM				

Traffic analytics score

Client Endpoint	Attributes	Fabric	Traffic analytics score	Switch	Interface	VLAN	VL
114.114.114.114	External	-	Healthy	-	-	-	-

Traffic Analytics

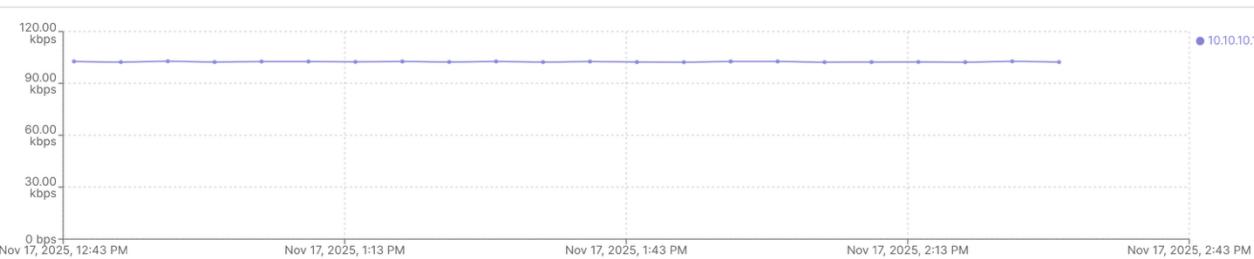
L4-L7 Flows

Nexus Dashboard

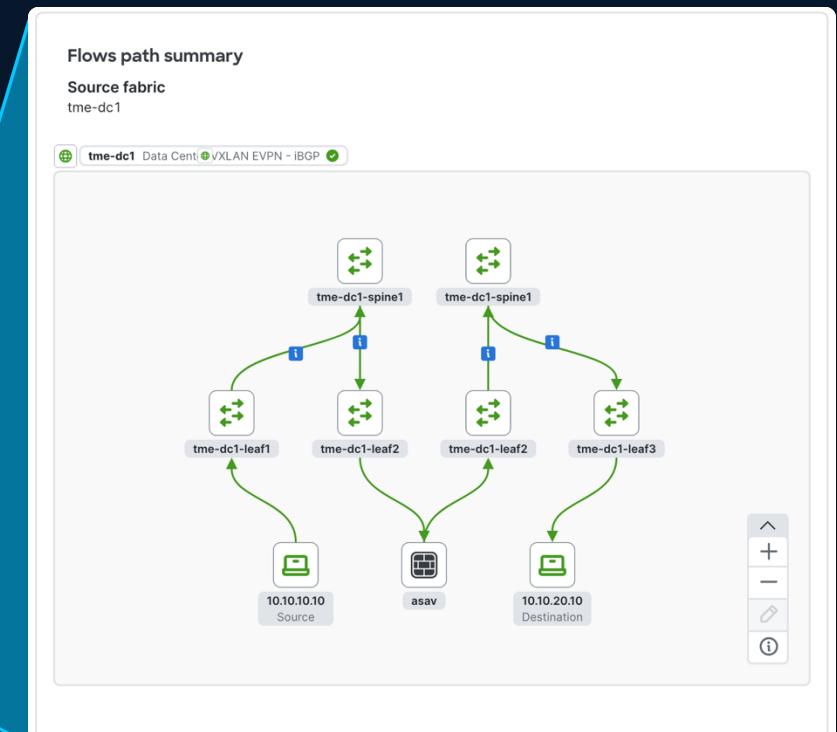
Endpoint general details

IP address	Port	Hostname	Last updated	VLAN
10.10.20.10	80	—	Nov 17 2025, 02:34:36.113 PM	1202
VRF	Protocol	Switches	Interfaces	Fabric
general	TCP	tme-dc1-leaf3	eth1/42	tme-dc1

Top clients by Tx rate

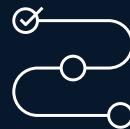


Client Endpoint	Attributes	Fabric	Traffic analytics score	Switch	Interface	VLAN	VNI	VRF	Protocol	Drops	Drop nodes	Tx rate	Rx rate
10.10.10.10	L4L7	tme-dc1	Healthy	tme-dc1-leaf1	eth1/42	1201	2000	general	TCP	-	-	102.44 kbps	8.51 kt



Cisco Nexus Dashboard - Analyze

Connectivity Analysis – View transit and analyze issues



Evolve from traceroute

Add a source and destination IP or MAC address and let Nexus Dashboard do the rest; optionally add L4 ports to be more specific



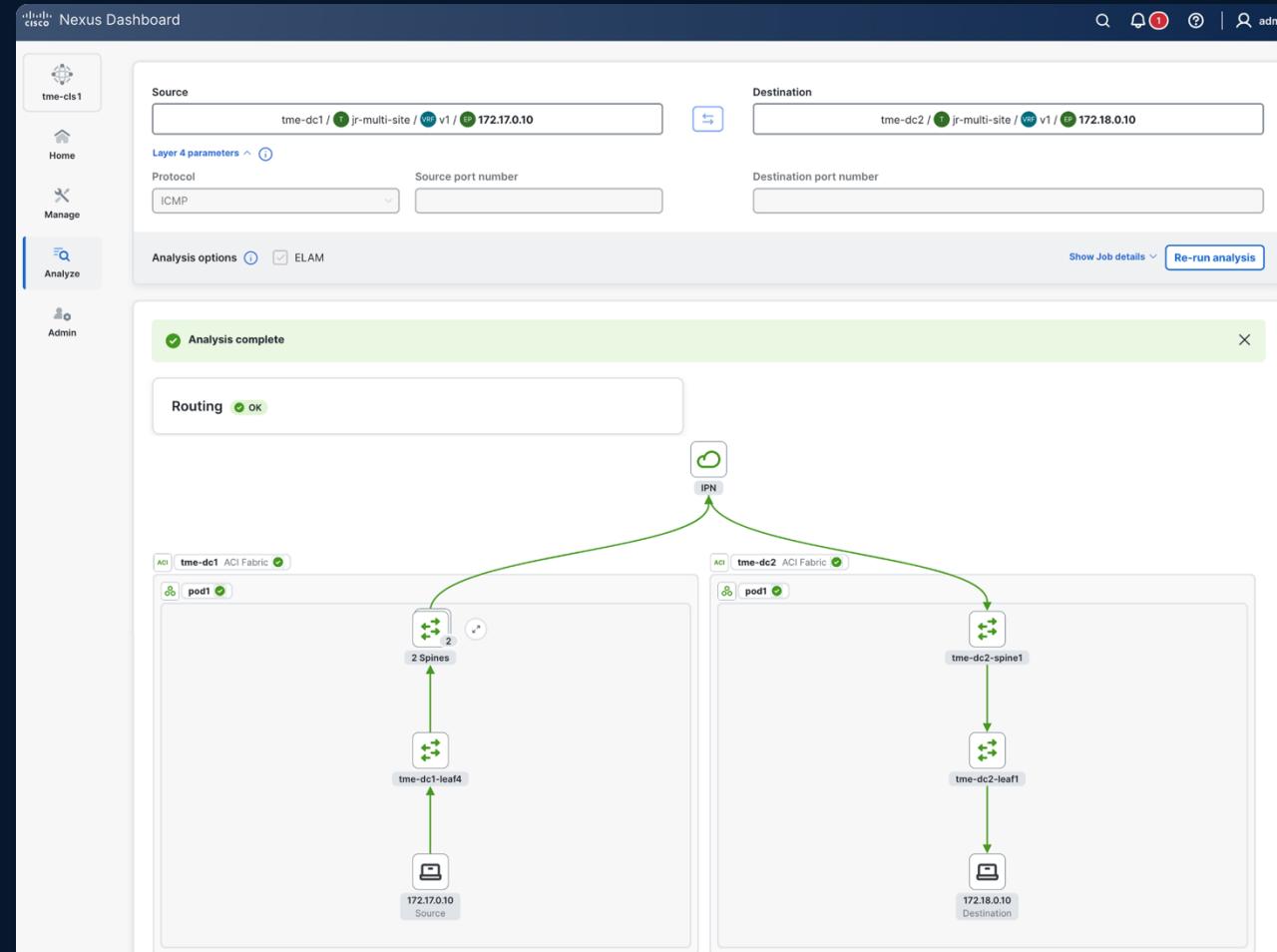
Increased visibility

Add forwarding (ELAM and OAM), consistency checks and routing verification



Single and multi-fabric

Visualize the whole path even when endpoints communicate through different Nexus Dashboard-managed fabrics

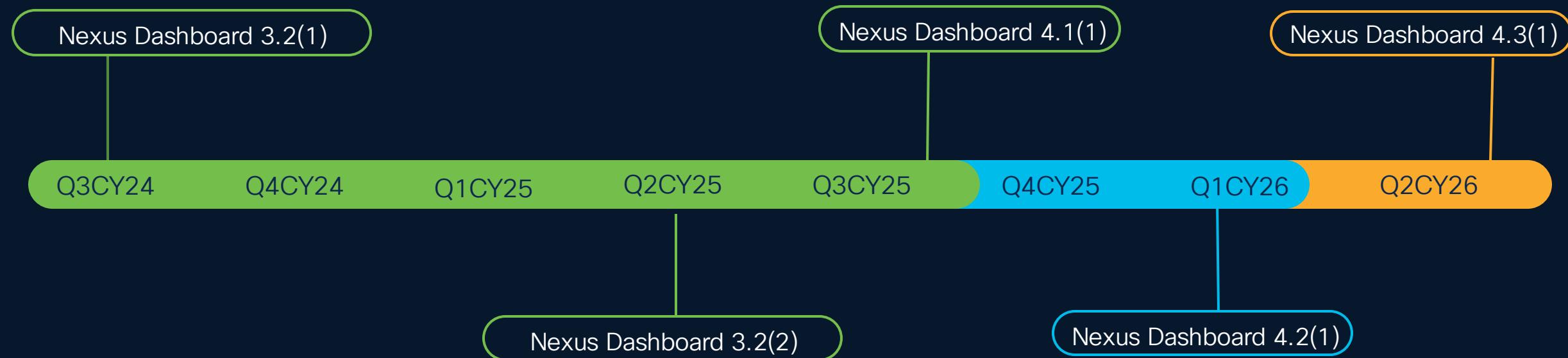


Benefits

Learn about in-transit issues | Avoid isolated troubleshooting

Demo!

Release Timeline



Roadmap

Nexus Dashboard 4.2

Q1CY26

Platform

- Certifications (Korean SVS)
- Fabric Designer
- Administrative Multi-Tenancy
- UCS M8 Appliance (Burly)
- vND on Nutanix
- SNMP Export of Anomalies

Analytics, Troubleshooting and Visibility

- Traffic Analytics Transit L3
- ESG/GPO Support for Explorer, TA & CA
- Catalyst Telemetry Support
- Connectivity Analysis for L4-L7
- uSeg with PBR Assurance
- Real-time telemetry (ACI)
- ND-Embedded Splunk Analytics
- AI/ML Enhancements:
 - identifying performance degradation (packet drops, CRC, optics)
 - Topology with GPU servers
 - Enhanced Anomaly Rules

Scale and performance

- 6 node M6 (all services) 500 Switches
- New 3-node M8 'Burly' Cluster, 1000 switches
- Federation scale 4000 Switches, 12 Clusters

Automation and Orchestration

- Inter-fabric connectivity between ACI and NX-OS fabrics
- Smart switch with Hypershield support for Top of Rack Use Case
- Brownfield ToR Support
- Catalyst 8K Image Management
- Fabric Software Image Management Improvements
- Inband Plug and Play for Cat9k