

The background features a vibrant, abstract design with a color gradient from dark blue on the left to bright yellow and white on the right. The design consists of overlapping, wavy horizontal bands and a radial pattern of lines emanating from a bright white point on the right side, creating a sense of motion and energy.

CISCO *Live!*

Let's go



The bridge to possible

# Simplify Data Center Network Operations

With the new Cisco Nexus Dashboard

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Director, Product Management



PSODCN-1729

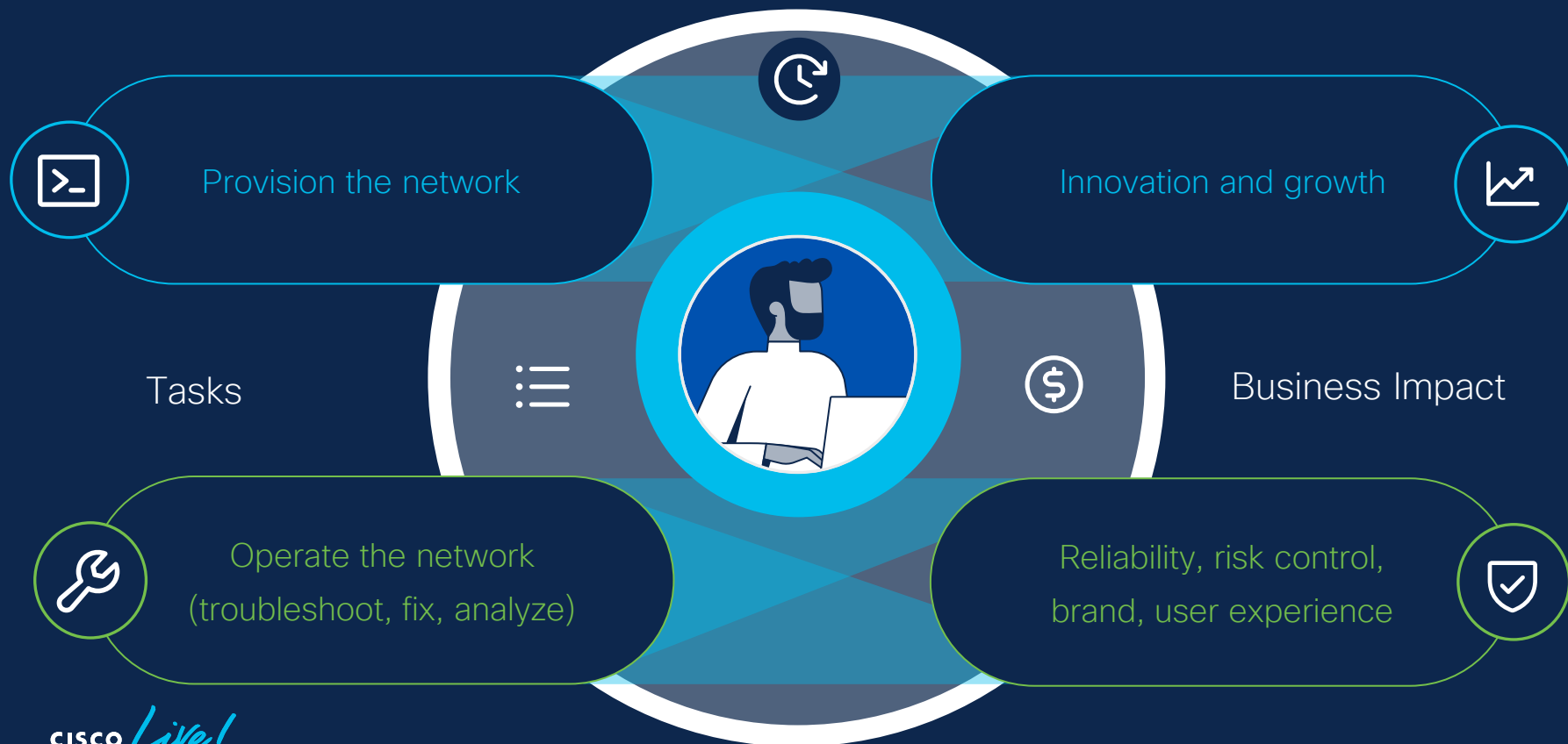
# Agenda

- The challenge
- The solution
- Licensing updates
- Use cases, new features and demos
- What's next
- Summary



# The challenge

# Life of a [data center] network-admin



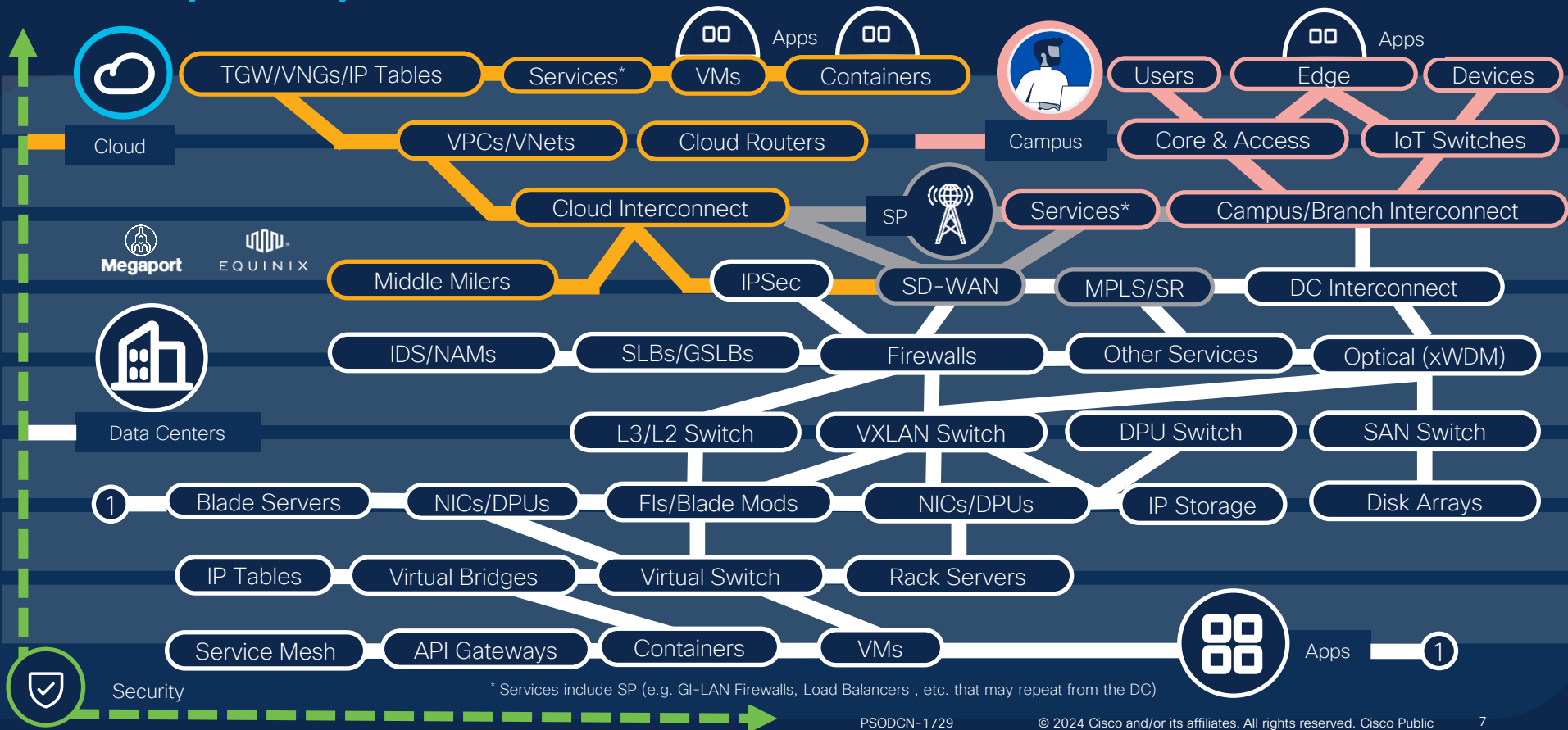
# Communication between users/devices & apps

## Perception



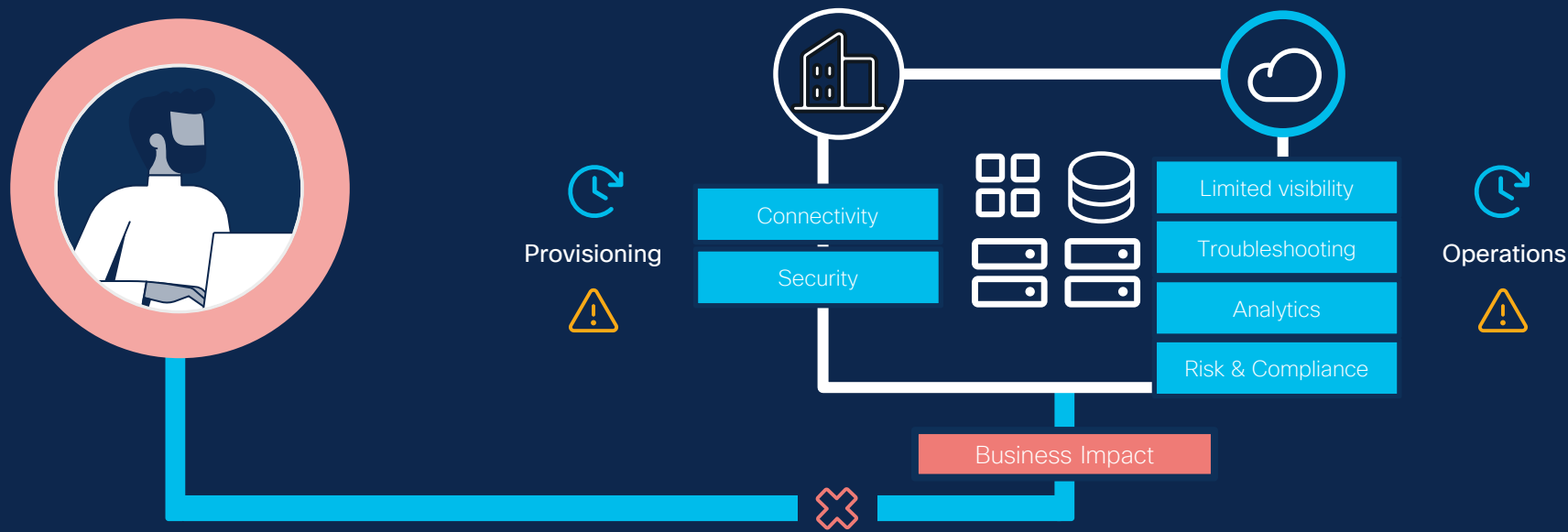
# Communication between users/devices & apps

Today's reality



# Communication between users/devices & apps

## Networking challenges





# The solution

# Unify your network

Unified and resilient data-center and cloud-network operations



\* Applies to Nexus Dashboard virtual appliance. Nexus Dashboard physical appliance or cloud instance cost is not included.

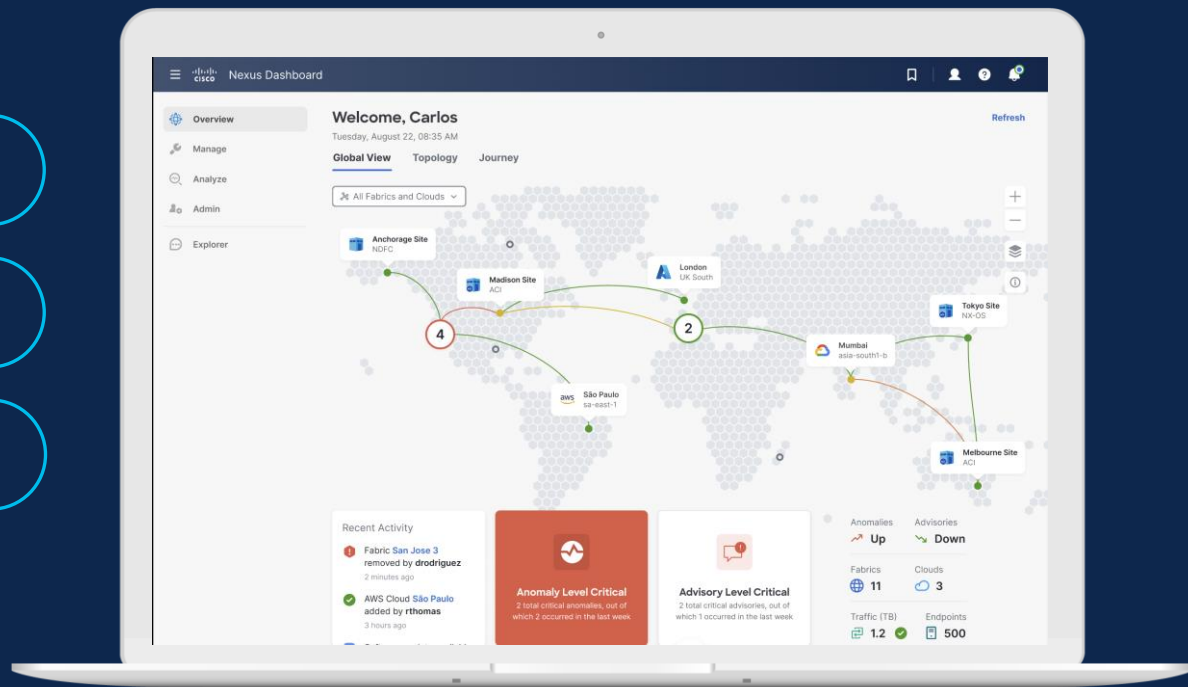
# Cisco Nexus Dashboard – Vision

One place to deliver connectivity and extended visibility for apps and DC services **anywhere**

Accelerate innovation → Automation

Minimize risk & downtime → Analytics

Accelerate time to resolution → Tools





## Cisco Nexus® Dashboard

### Services

#### Provisioning

Controller

Orchestrator



Initial setup



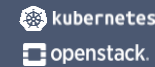
Automation



Custom configuration

Integrations

servicenow  
splunk>



#### Operations

Insights

Visibility

Analytics

Troubleshooting

Compliance

Access to Nexus Dashboard services/features is based on the Cisco Nexus 9000 [switch license tier](#).

# Licensing

# Nexus Dashboard **Insights**

Now available for **every** license level

Effective now!

# Tuning the Licensing Tiers

Select Nexus Dashboard **Insights** features now in Essentials and **Advantage** tiers



Nexus Dashboard  
Services

Essentials

Advantage

Premier



Insights



New



New



All Features



Orchestrator



Controller



**No** Nexus **without** Nexus Dashboard

[See more details](#)

# Platform

# Cisco Nexus Dashboard—platform

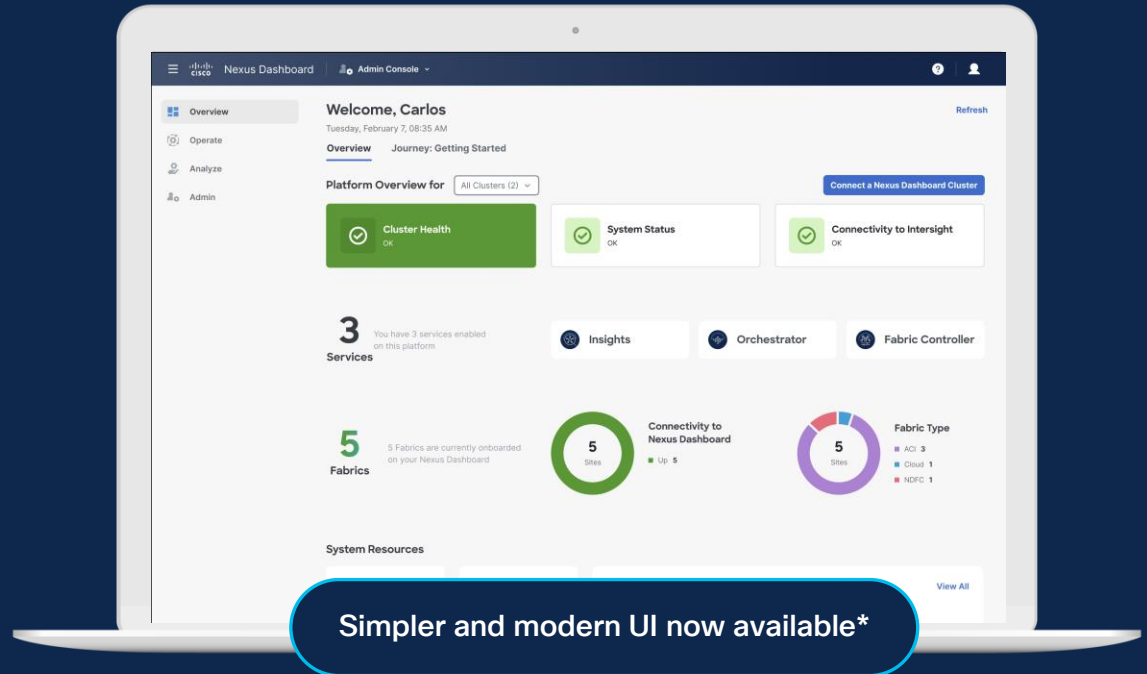
Overall strategic priorities and vision

Reduce footprint, increase scale

Enhance licensing model and UI

Support SMB and stand-alone NX-OS

Unify upgrade, product and services



\* Admin console UI displayed above available in Nexus Dashboard 3.1



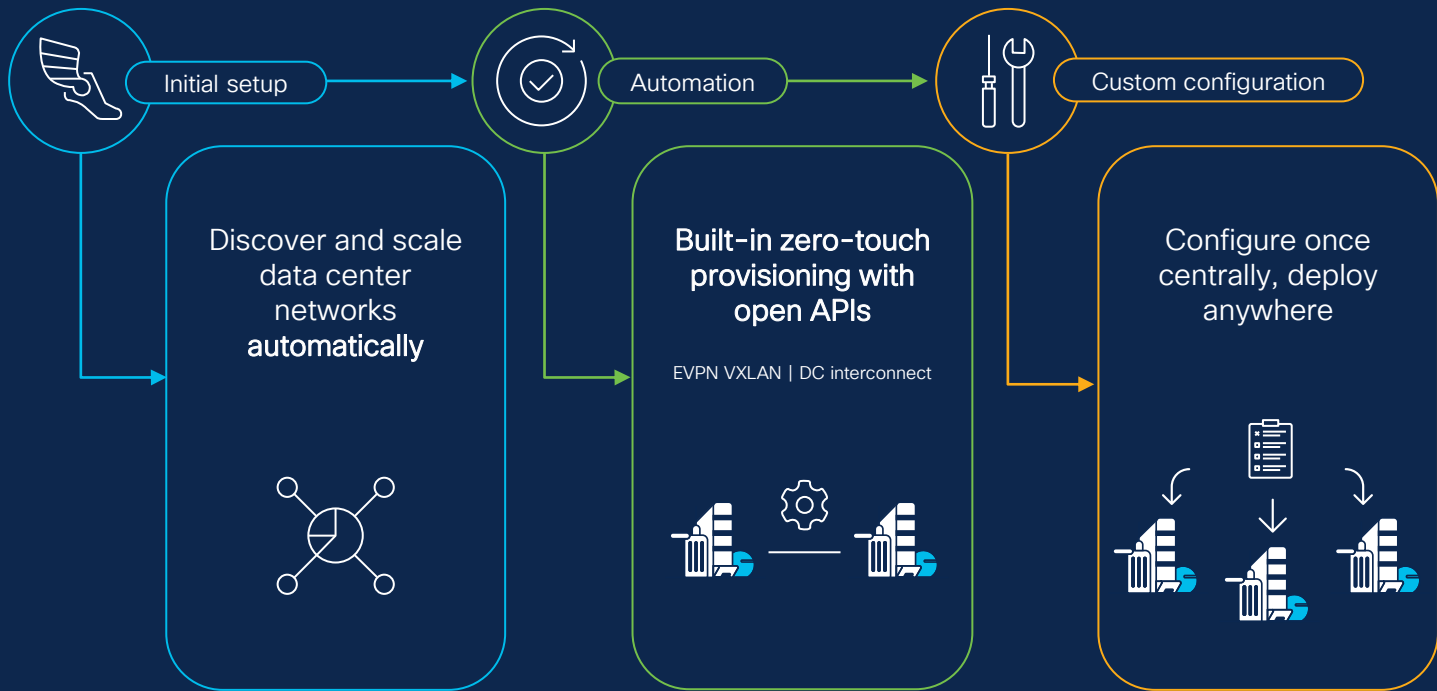
# Provisioning

Nexus Dashboard

Controller and Orchestrator

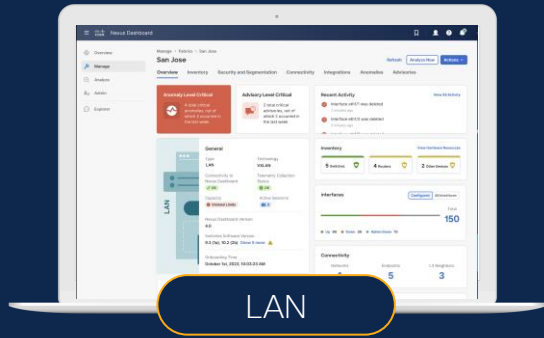
# Nexus Dashboard – Orchestrator

Accelerate provisioning with the power of automation



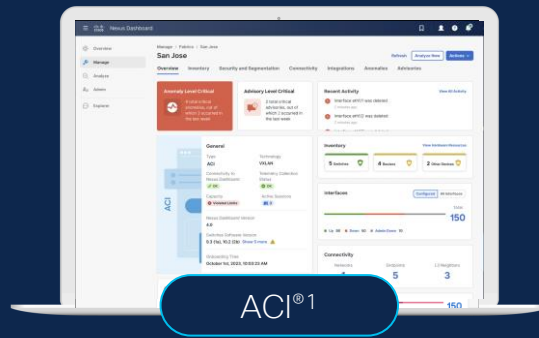
# Cisco Nexus Dashboard – Controller Services

## Fabric Types\*



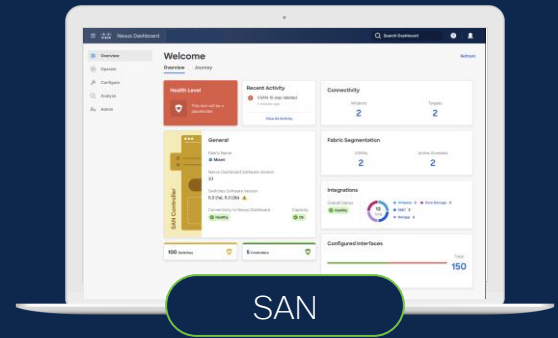
NDFC Zero Touch classic, IPFM and VXLAN Networks

Nexus® 9000 NX-OS, Cisco Catalyst® 9000, IOS-XR, IOS-XE and others<sup>2</sup>



Zero Touch VXLAN network with policy-oriented model

Nexus 9000, onboarded through APIC



NDFC Zero Touch customizable templates and Smart Zoning

Cisco MDS 9000

Simple and modern UX (coming soon)

Open APIs  
with Ansible, Terraform

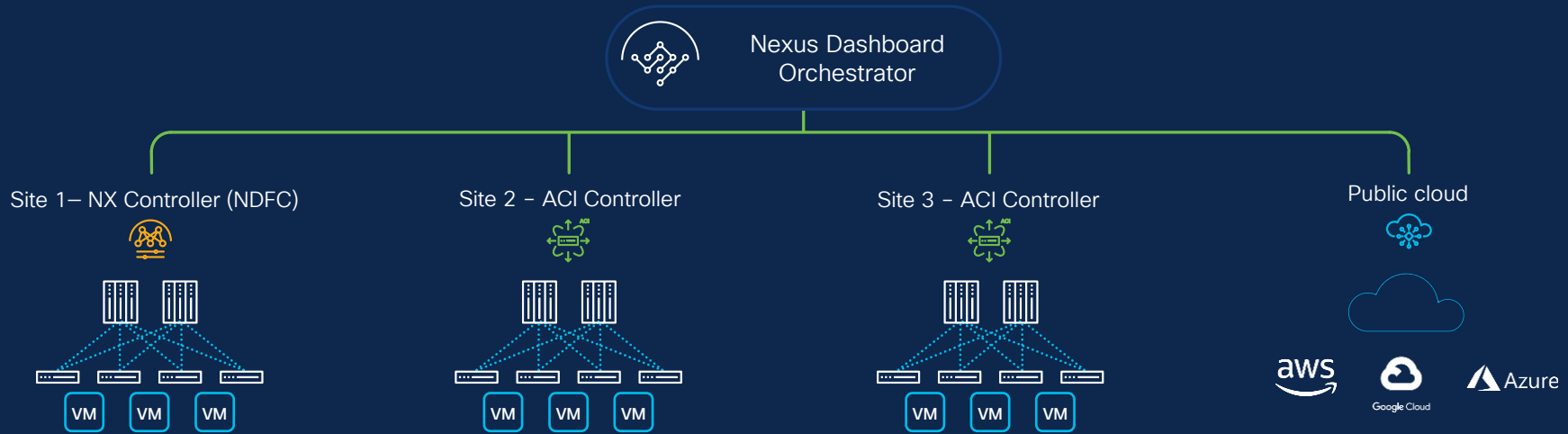
Operate multiple switches  
as one logical unit

\* ACI and SAN fabric configuration tasks require dedicated cluster

<sup>1</sup> Future option to integrate ACI Controller (APIC) cluster in Nexus Dashboard Multi-Cluster mode

<sup>2</sup> Support for other Cisco IOS XR and third-party platforms

# Cisco Nexus Dashboard – Orchestrator



 Data center

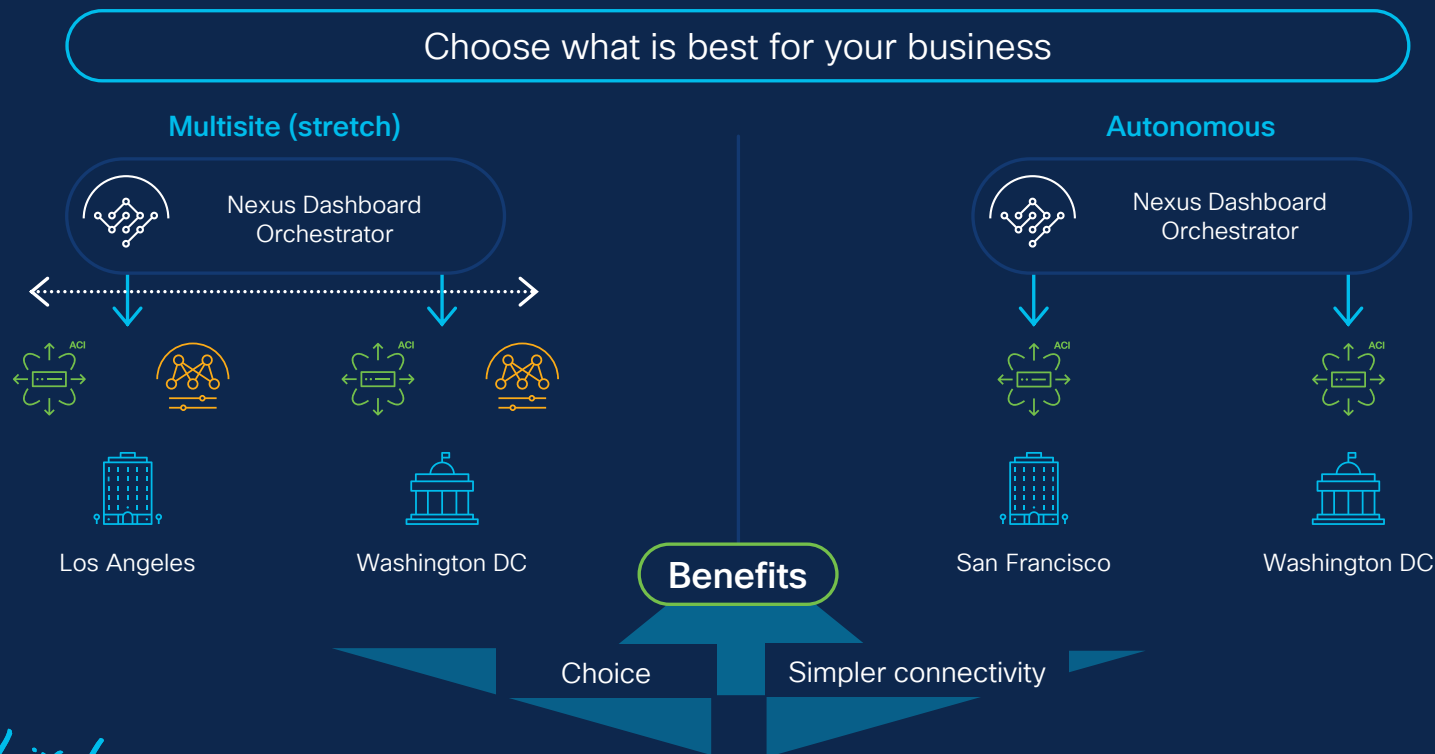
 5G telco data center

5G Multi-domain

 Cloud

# Cisco Nexus Dashboard – Orchestrator

## Multi-site or Autonomous Template types



# Cisco Nexus Dashboard – Orchestrator

Deploy network configuration and policy templates across up to 100 fabrics



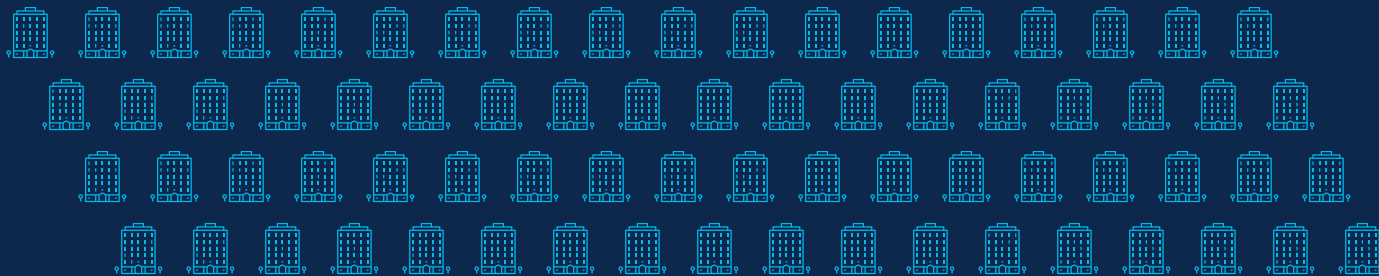
Nexus Dashboard  
Orchestrator

**1 Cisco Orchestrator instance supports:**

100 fabrics x 500 leaf switches/fabric  
equals 50,000 leaf switches



Configuration template



ACI 4.2(4) or above

## Benefits

Single point of configuration  
management up to 100 ACI fabrics

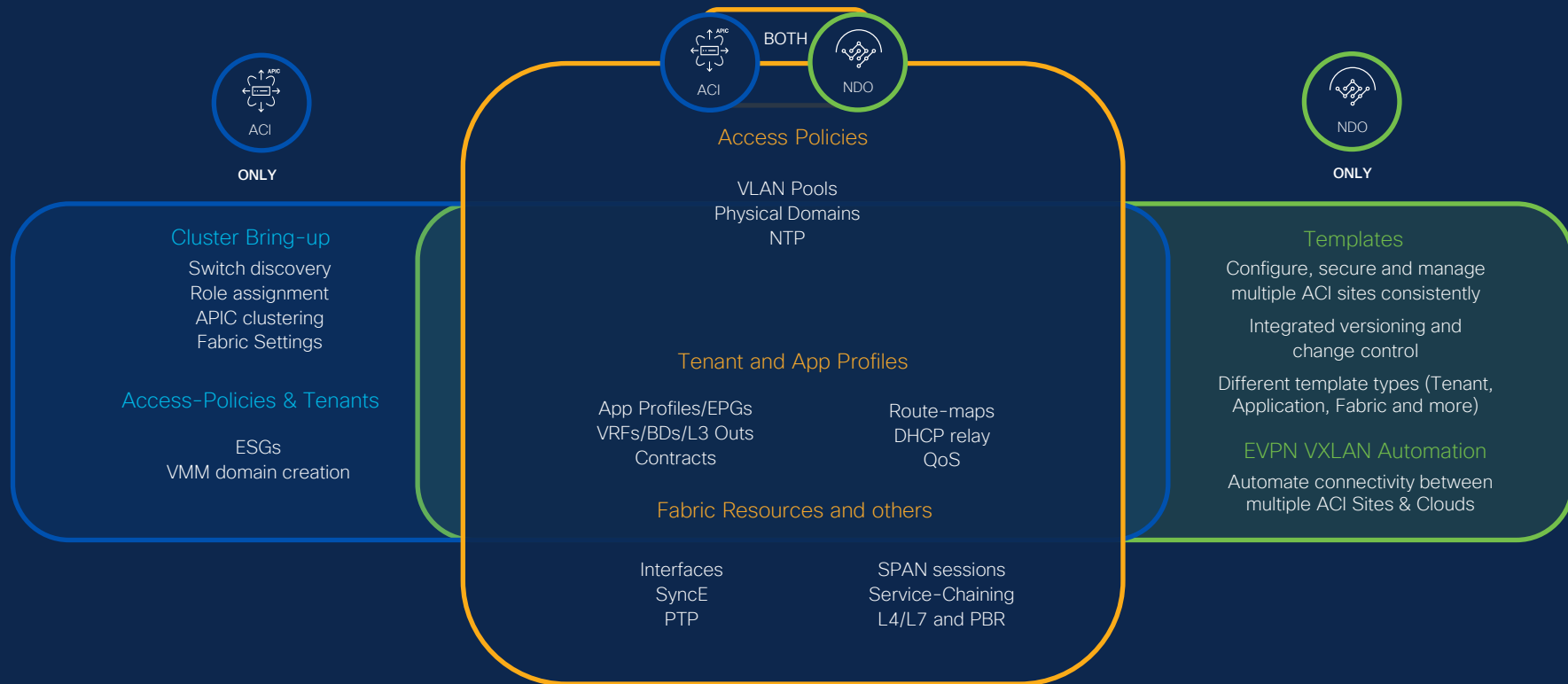
Configuration template versioning  
and rollback supported

Extend network segments  
across 14 fabrics (multi-site)

Greenfield and Brownfield  
environments supported

# Nexus Dashboard Orchestrator

## Feature support



# Operations

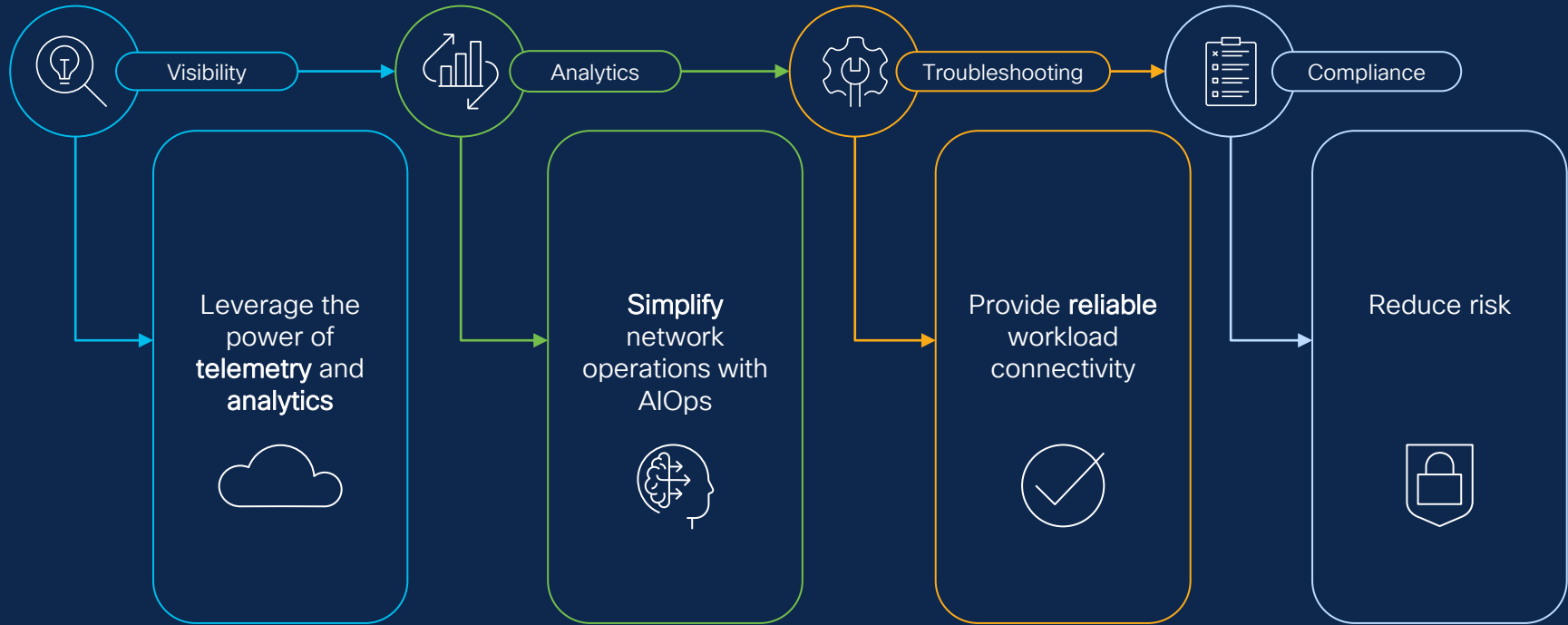
Nexus Dashboard

Insights



# Nexus Dashboard – Operate

Leverage the power of telemetry and analytics with Insights



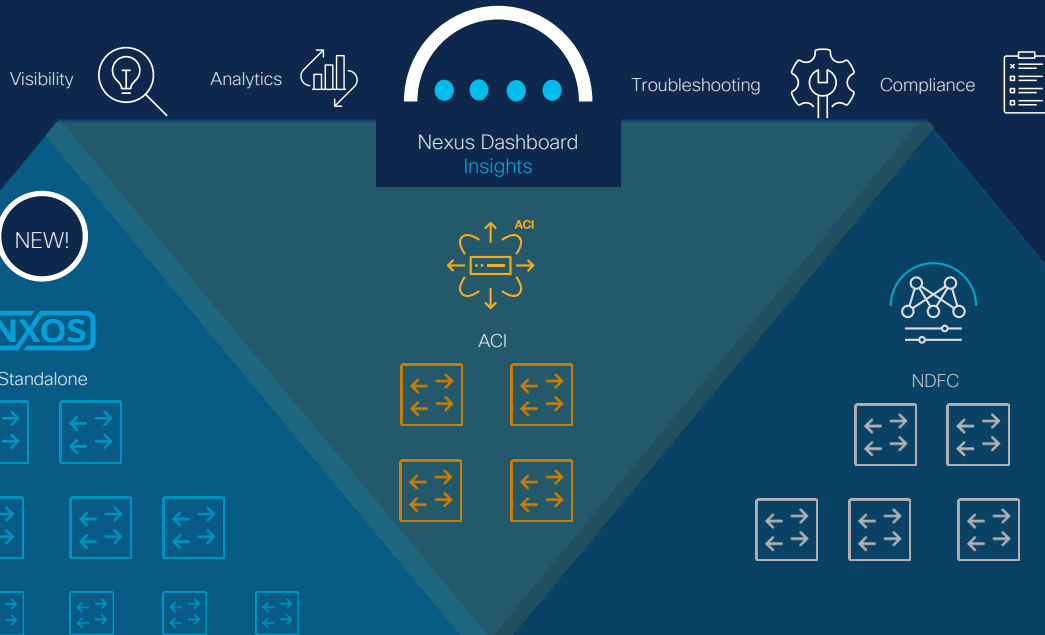
# Nexus Dashboard Insights

Quick **tour**



# Nexus Dashboard – Insights

Onboard sites with standalone NX-OS switches from the Admin Console

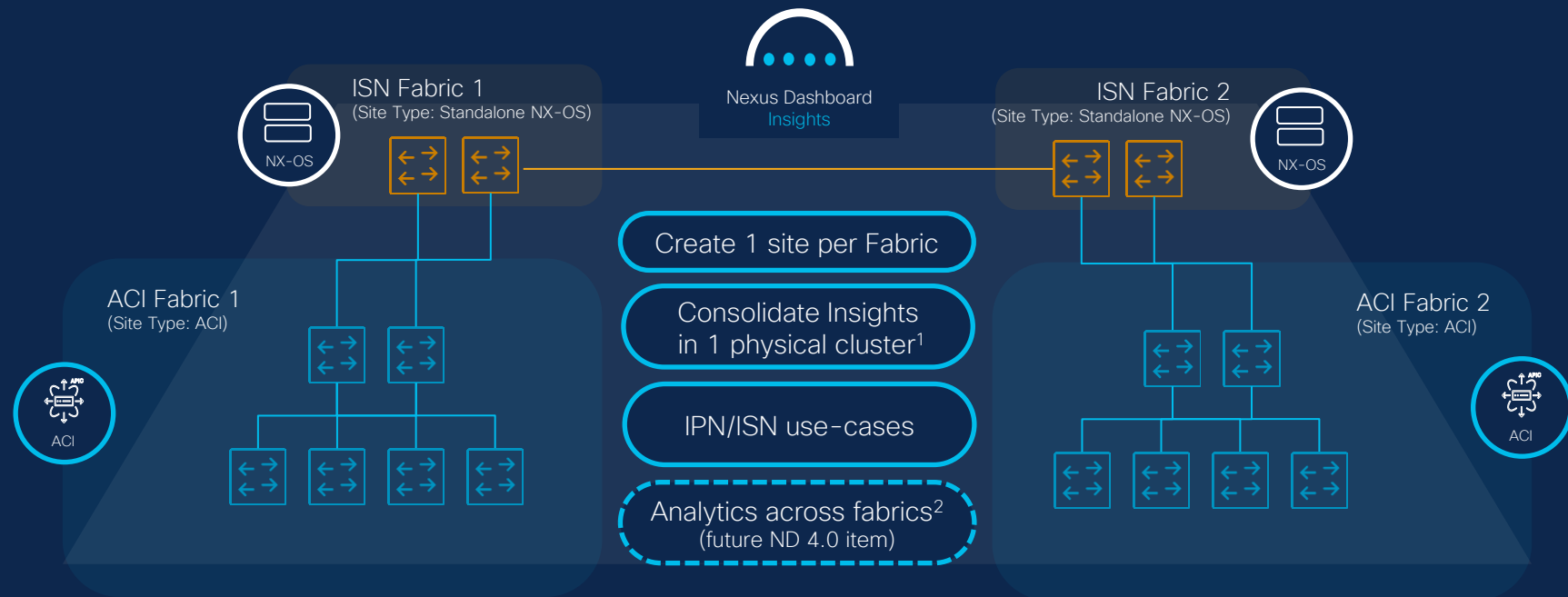


ND 3.2

With **out-of-band** support option for streaming software telemetry

# Nexus Dashboard – Insights

Use-Case: Mixing ACI and NX-OS standalone fabrics



<sup>1</sup> Total number of NX-OS standalone switches must not exceed 5% of the max scale value  
e.g. 3 node physical cluster would support up to 15 NX-OS standalone switches (based on 300 max scale)

Other scale limitations may exist when onboarding different site types or when co-hosting services on the same cluster

<sup>2</sup> Topology, integrated Site-IPN visibility, Explorer and Analysis Hub tools planned to be Multi-Site/Multi-Pod capable in 4.0

# Nexus Dashboard – Insights

Leverage the power of telemetry and analytics



Visibility

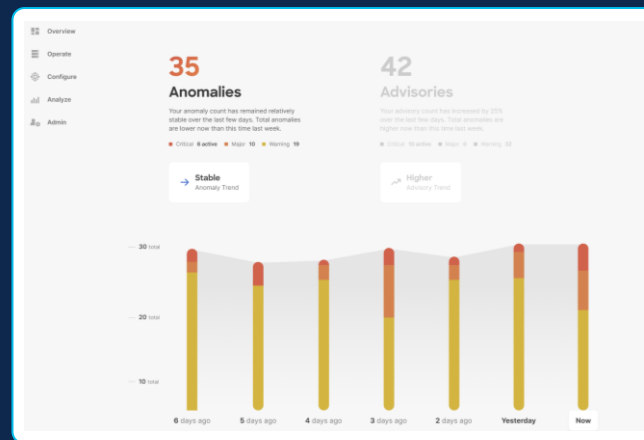
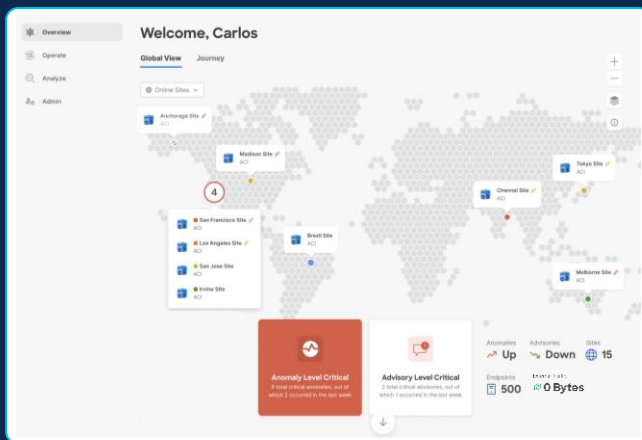
## Aggregate & Drill-down

View and access all your sites and fabrics from a [single](#) place

Learn about [anomalies](#) and [advisories](#) in your network

Observe trends, [traffic](#) stats, and inventory

[Zoom](#) in from global map to a site, switch, interface, and VM/endpoint



# Nexus Dashboard – Insights

Analysis Hub



Analytics

Analyze

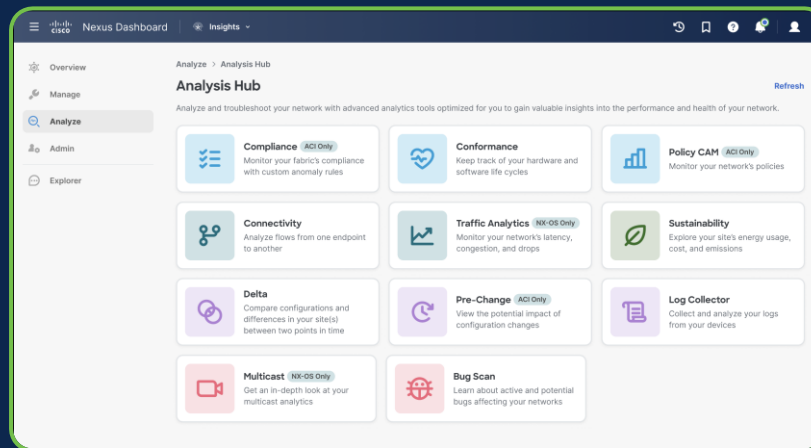
Analysis Hub: Analytics and tools to enhance network operations

Connectivity Analysis – Traceroute evolution

Bug Scan – Run a bug scrub on-demand in your network

Delta Analysis – Learn about changes in your network

And many more...!



# Nexus Dashboard – Insights

Analysis Hub – Traffic Analytics

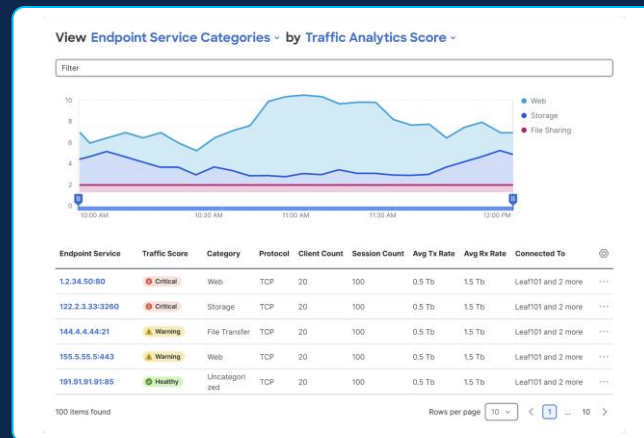
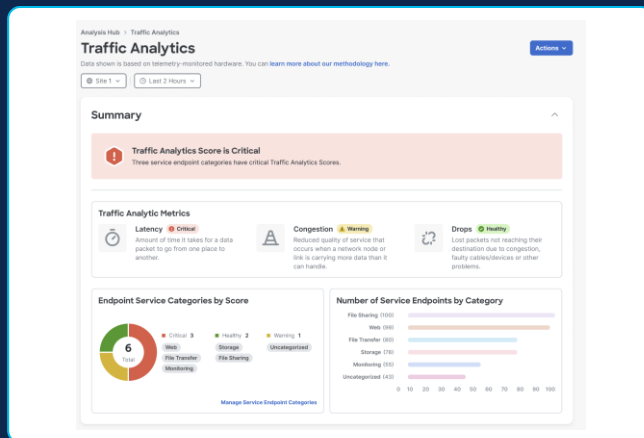


Analytics

Analyze  
Traffic  
Analytics

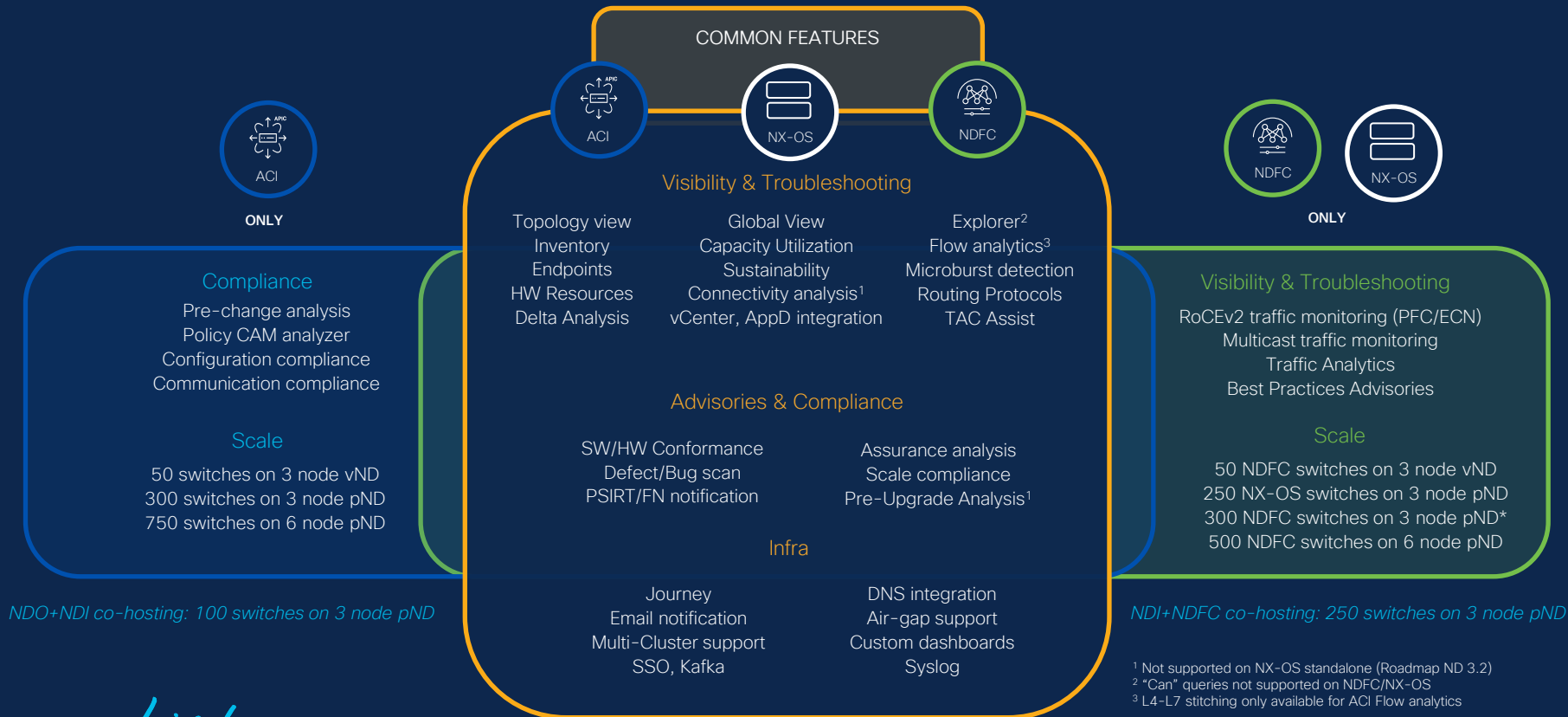
Automatically detect services in your network at scale.  
Use built-in service categories or create your own.  
Collect a service baseline using well-known layer4 ports.  
Latency, drops, and flow deviations reported for services/clients.

ND 3.1<sup>1</sup>



# Nexus Dashboard Insights

## Feature support





# Nexus Dashboard

What's **next?**



## Cisco Nexus® Dashboard

### Services

#### Provisioning

Controller

Orchestrator



Initial setup



Automation



Custom configuration

Integrations

servicenow  
splunk>



#### Operations

Insights

Visibility



Analytics



Troubleshooting



Compliance



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## Cisco Nexus® Dashboard

### Unified Product

Multi-Site Controller Services



Fabric Discovery  
& Initial Setup



Automation & Custom  
Configuration



Smart Software Updates

Unified Product

Insights



Visibility



Analytics



Troubleshooting

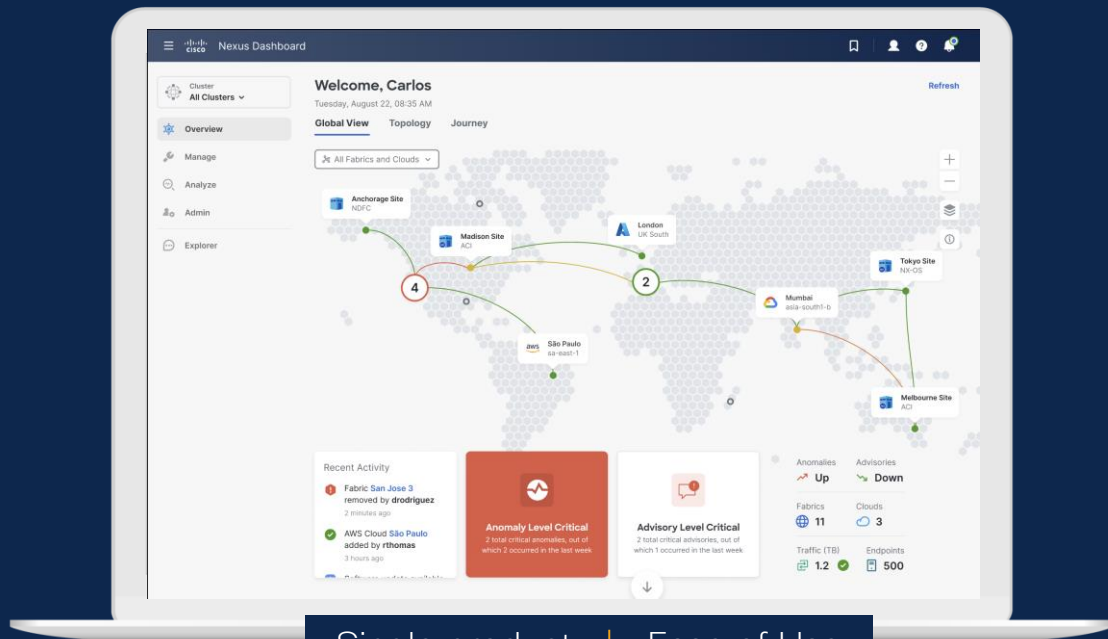


Compliance

# Nexus Dashboard

Unified experience Phase 3 – Single Product

Unified Product



Single product | Ease of Use

# Summary

# Maximize the power of connectivity



**Accelerate** innovation  
and sustainability



**Increase** business value



**Minimize** downtime

# Included with every Cisco Nexus 9000

## Tiered licensing purchase



### Consumption choice, single licensing

Cisco Nexus® Dashboard: Provisioning and/or day-2 operations



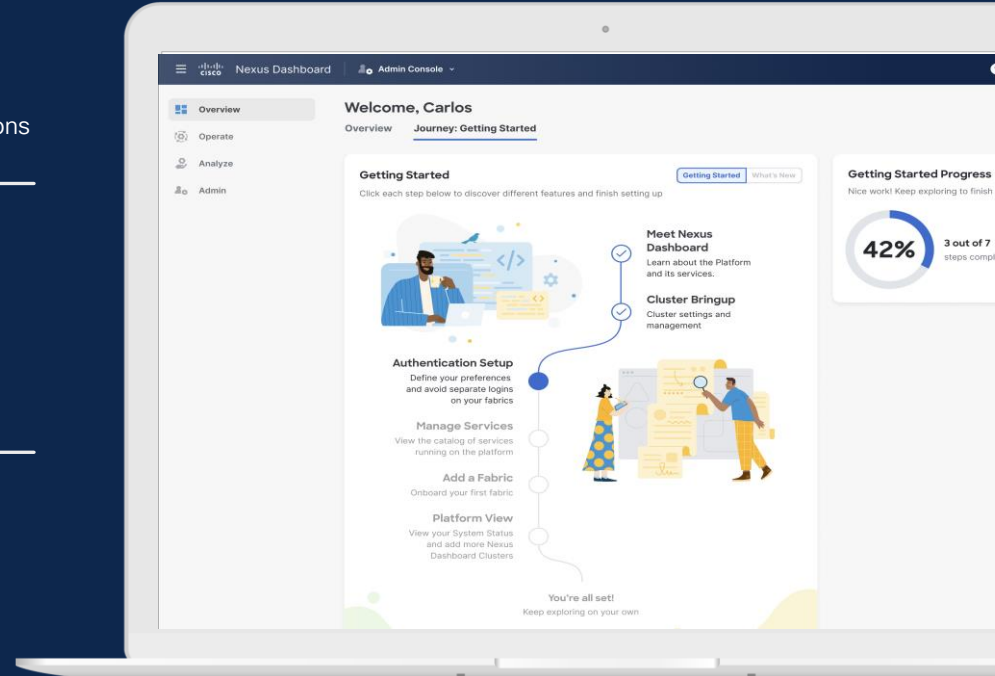
### Simple, modern, useful

Cisco Nexus Dashboard 3.0: now available  
Cisco Nexus Dashboard 3.1 **Coming soon! (March)**  
Appliance based (physical or virtual)



### Innovate and minimize risk and downtime

Leverage the power of automation and analytics  
Go beyond the switch port  
Always connected to Cisco® TAC<sup>1</sup>



<sup>1</sup>When connected to Cisco Intersight® and leveraging Cisco TAC Assist

# Additional resources



## [Nexus Dashboard Capacity Planning](#)

Resources needed by form factor and scale

## [CN Product Compatibility Matrix](#)

Product version compatibility

## [Nexus Dashboard Insights User Guides](#)

Feature functionality & limits

## [Cisco Data Center and Cloud Made Easy](#)

Videos and tutorials for ACI, Nexus Dashboard and more

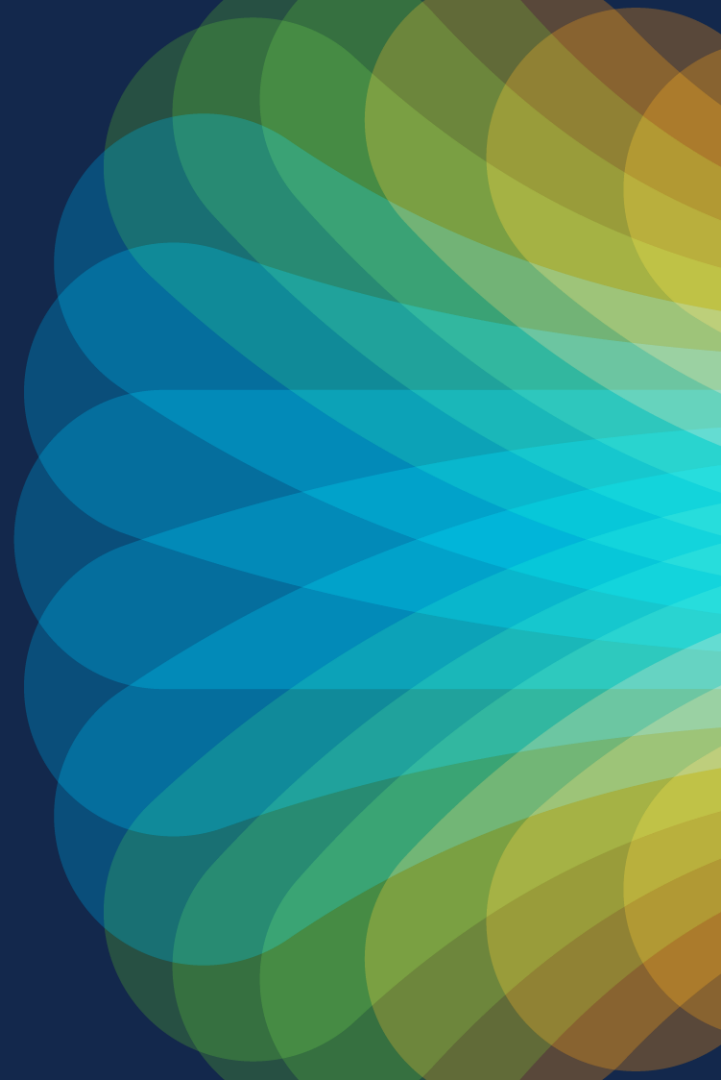




The bridge to possible

# Thank you

CISCO *Live!*



The background features a vibrant, multi-colored abstract design. On the left, there are horizontal, wavy bands of color in shades of red, orange, yellow, and green. On the right, a bright white light source emits a series of sharp, radiating lines in various colors, including blue, green, and yellow, creating a sunburst effect.

cisco *Live!*

Let's go