



Cisco TechClub webinář



Cisco Nexus Dashboard

Pepa Venzhöfer

Technical Solutions Specialist – CCIE DC#59794

1.3.2022

Agenda

Nexus Dashboard

- Proč ho máme?
- Platforma
- Orchestrator
- Insights
- Demo
- Licencování

Operational challenges in the hybrid cloud



Customer expectations

Discover and plan



Analyze and predict



Change and remediate

Cloud operational platform

Fragmented insights

Multiple telemetry sources

High MTTR

Siloed data stacks

Distributed data sources



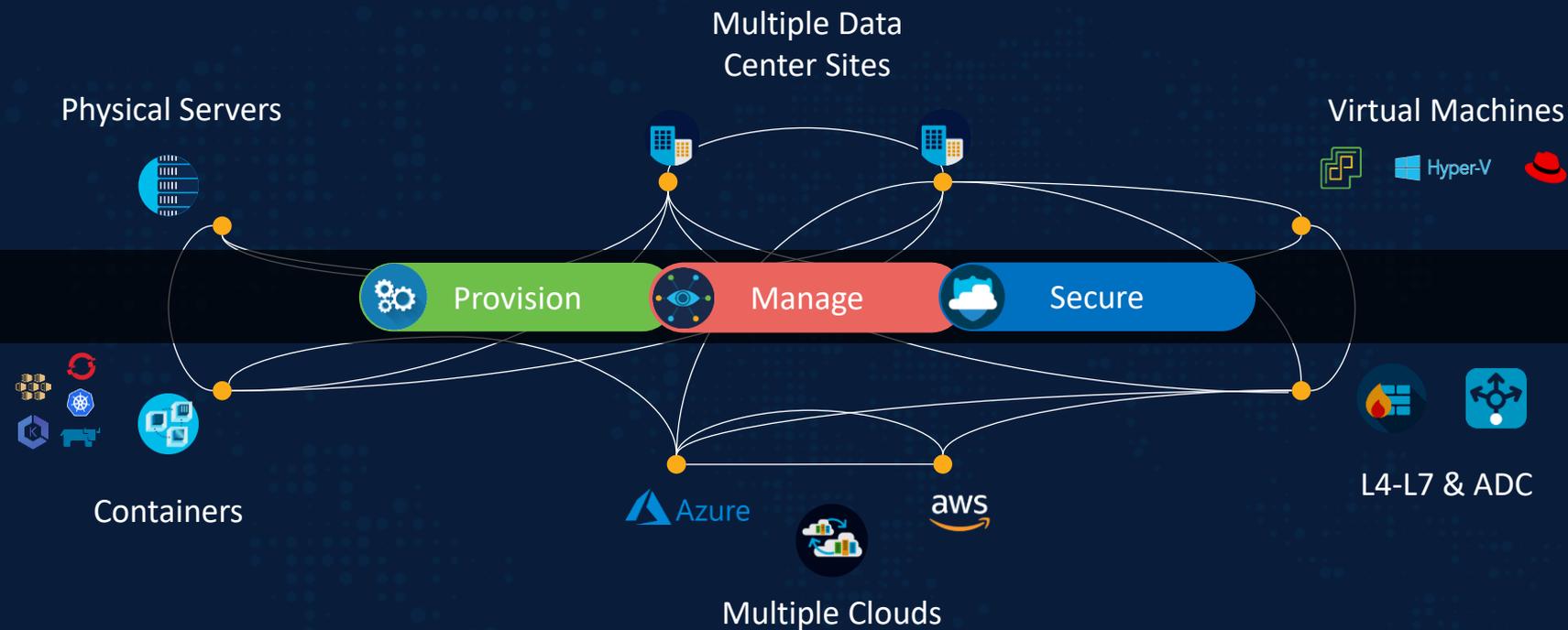
Challenges

No single pane of glass

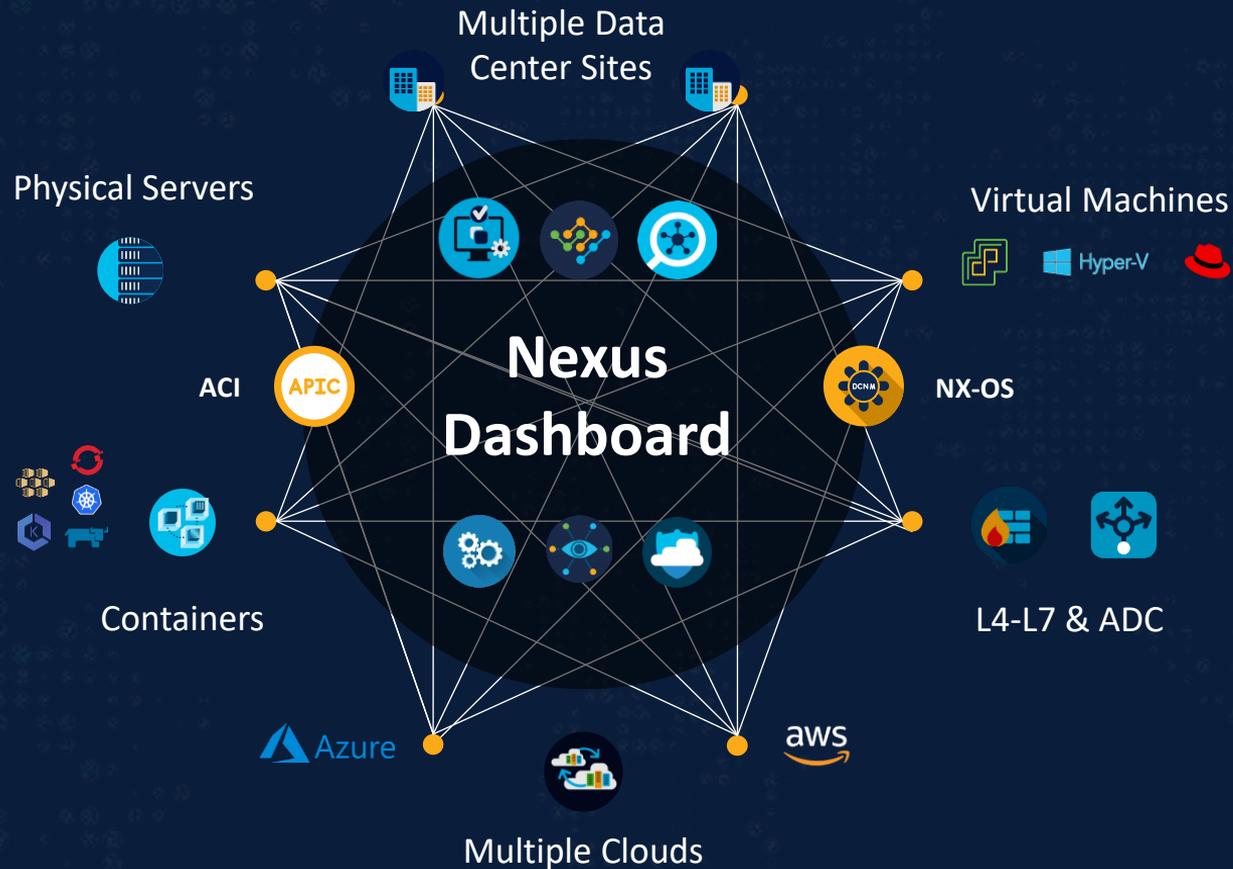
No correlation

Disjointed ops infra

High TCO



The network plays a **critical** role to connect **the business** anywhere

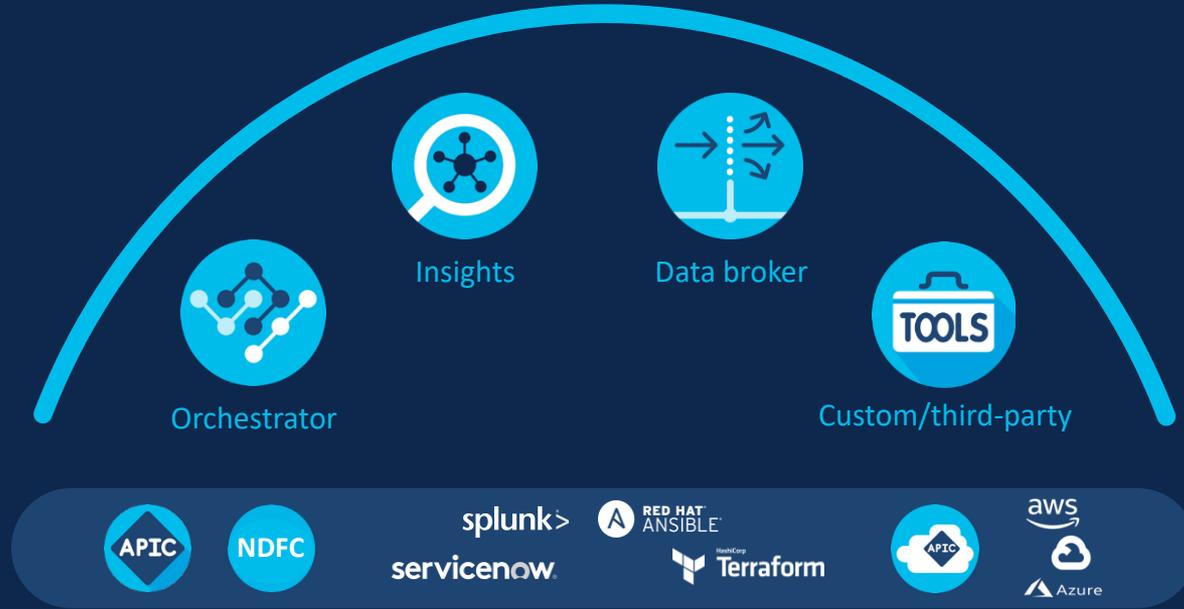


Configure the network **once**, deploy, monitor and secure **anywhere**

Platforma

Nexus Dashboard

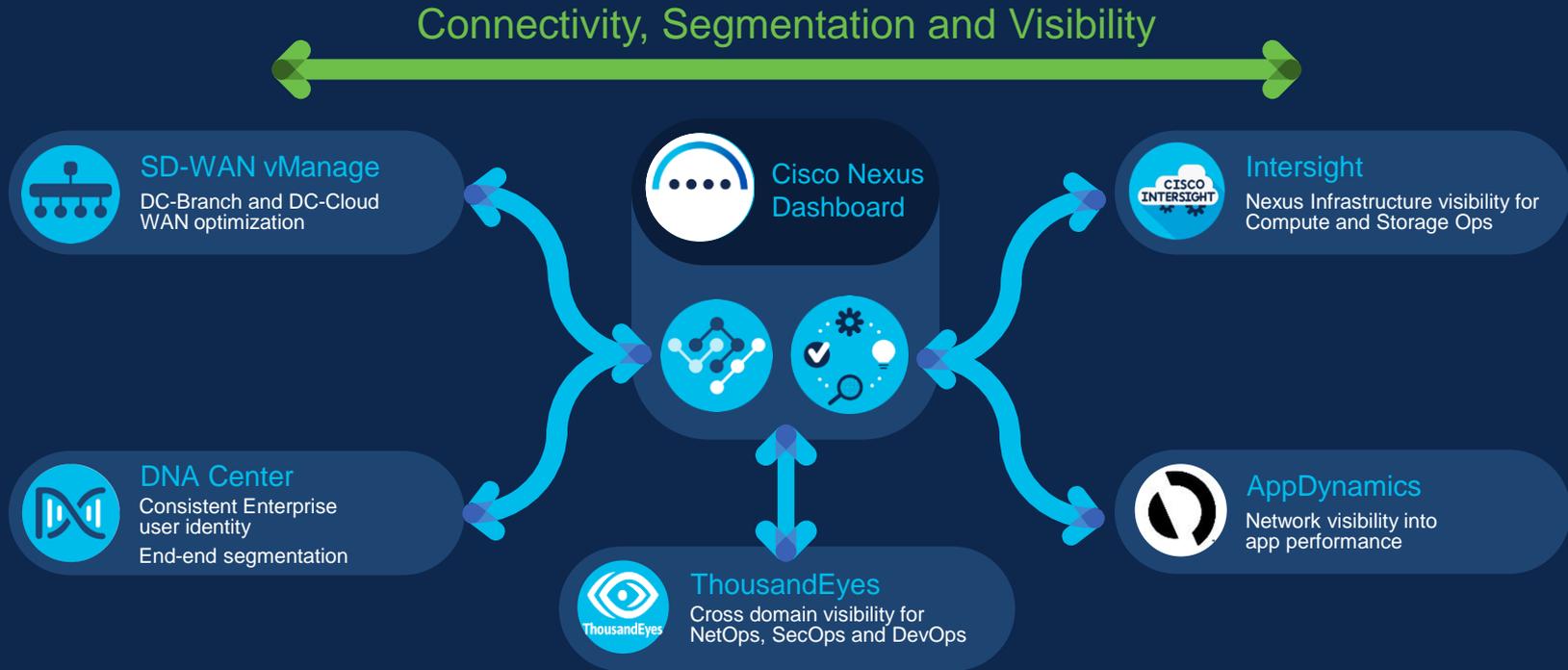
Simple to automate, simple to consume



Consume all services in one place

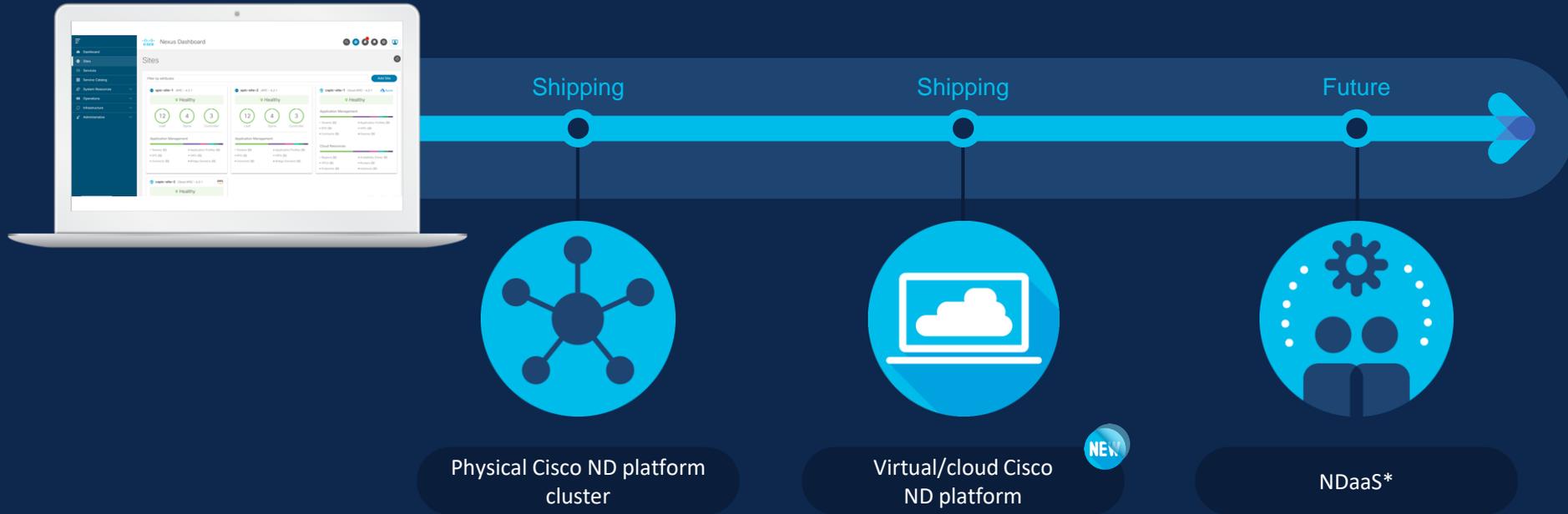
Nexus Dashboard

Service integrations



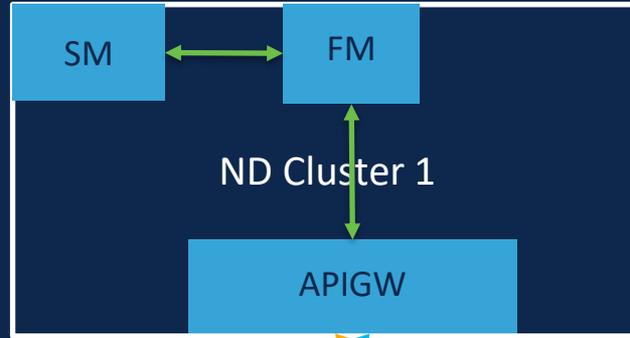
Nexus Dashboard

Deployment options

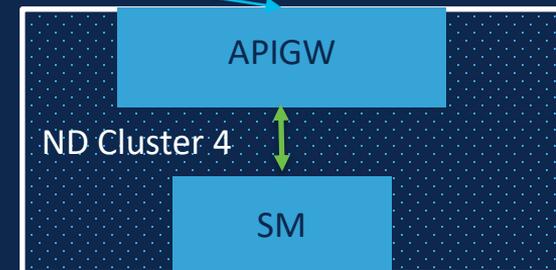
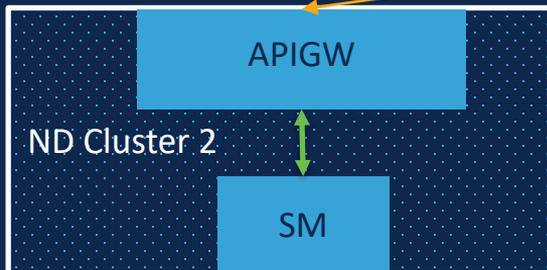


Federation Architecture

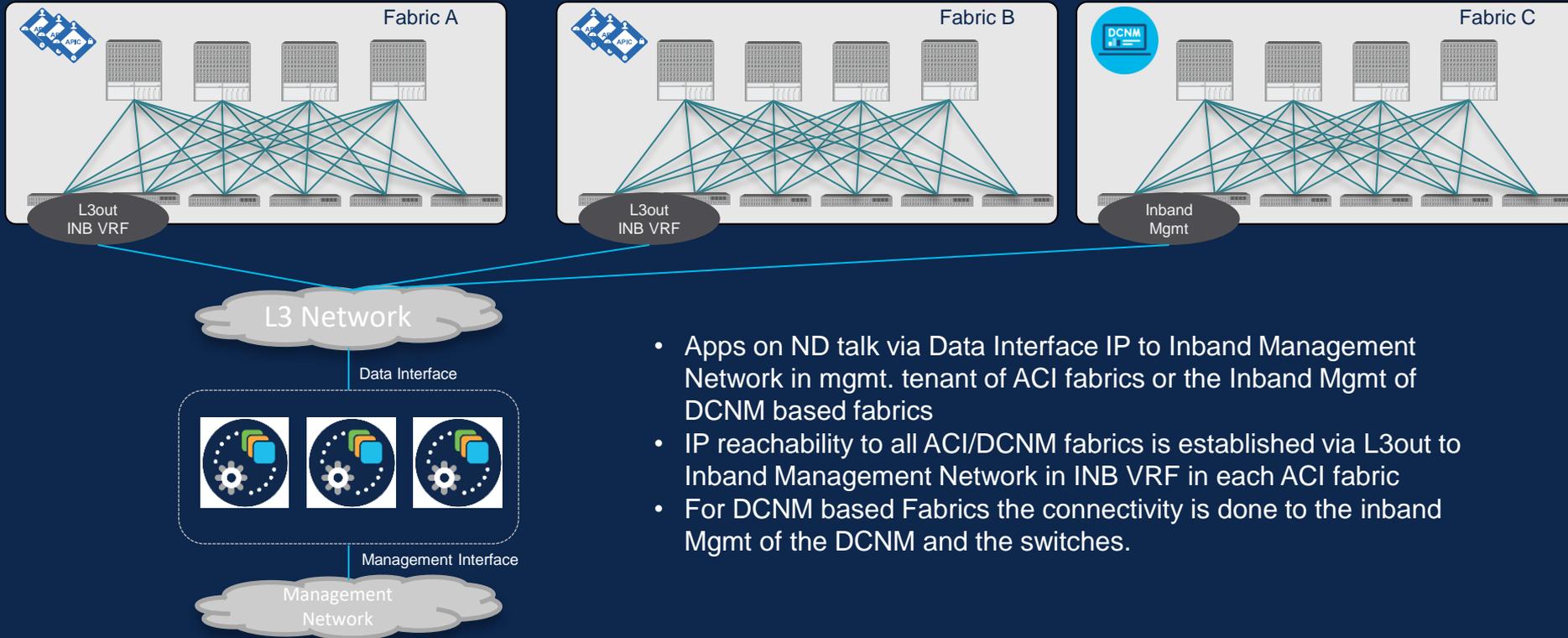
- User configures an ND cluster as Federation manager (FM) and connects it to other ND clusters
- FM manages the federation keeping track of member cluster reachability, node status, sites. etc.



- FM uses Site Managers (SM) on all ND clusters to replicate this information for local queries/display
- APIGW is used to sync keys (for accessing data) between federation members



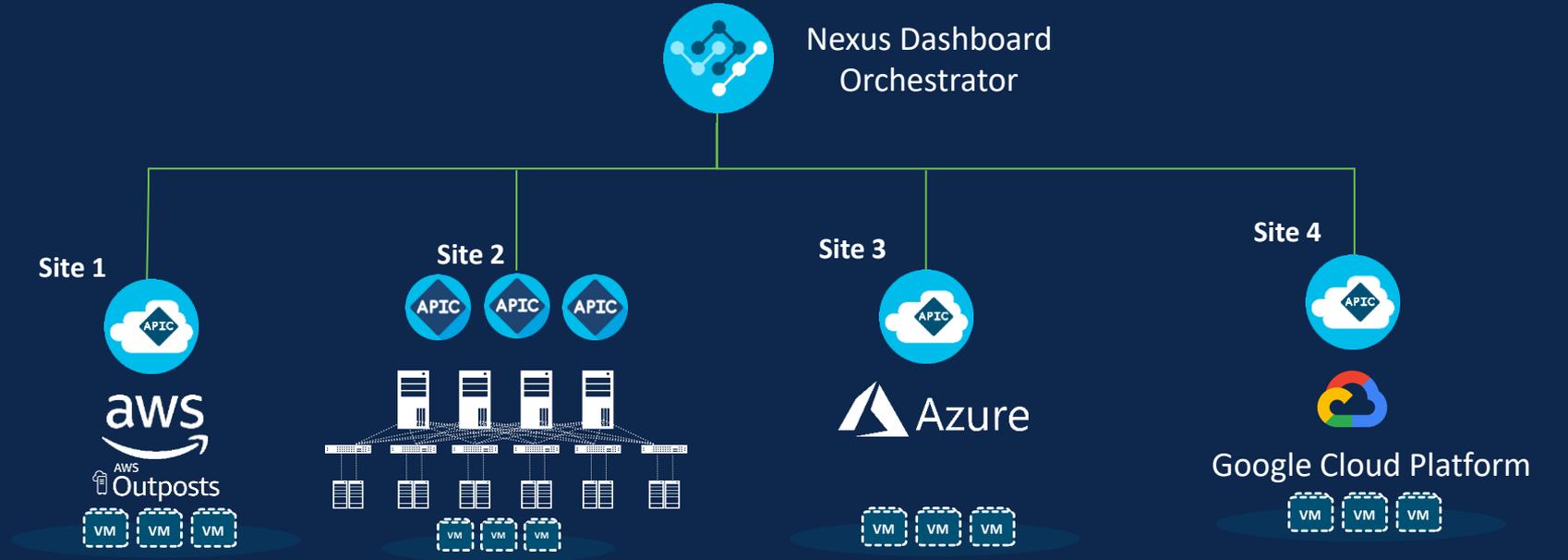
ND Cluster attached to any Networking Infra



- Apps on ND talk via Data Interface IP to Inband Management Network in mgmt. tenant of ACI fabrics or the Inband Mgmt of DCNM based fabrics
- IP reachability to all ACI/DCNM fabrics is established via L3out to Inband Management Network in INB VRF in each ACI fabric
- For DCNM based Fabrics the connectivity is done to the inband Mgmt of the DCNM and the switches.

Nexus Dashboard Orchestrator

ACI Anywhere



✓ Consistent Network and Policy

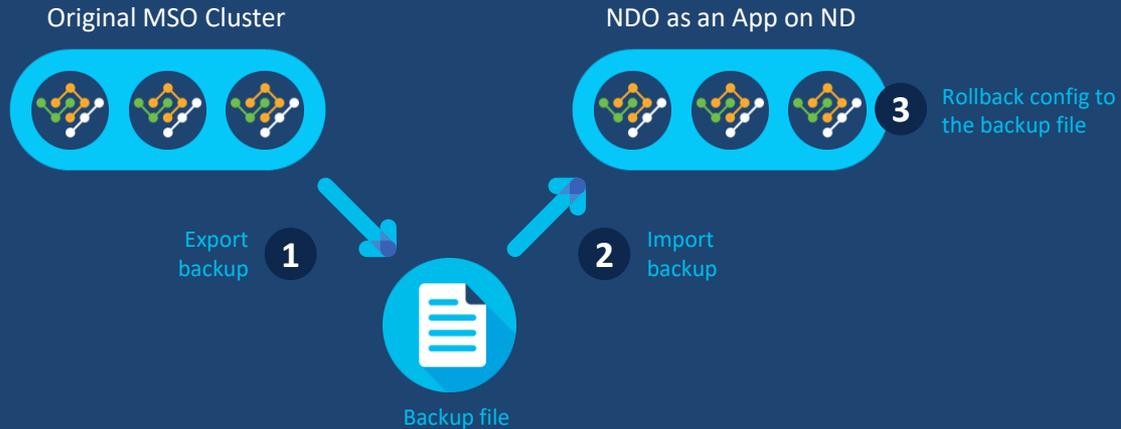
✓ Secure Automated Connectivity

✓ Single Point of Orchestration

✓ Secure Automated Connectivity

✓ Cloud only (Multi-Cloud)

Migration



Note: this procedure is only supported for SW upgrades but not for SW downgrades



Migration to ND for NDO is free
(ND and NDO are free)



Multi-cloud ready



Hypervisor variety

Nexus Dashboard Insights

Nexus Dashboard Insights

Overview

Assurance

Am I doing correct configuration?
Are interdependencies known?
Does the change impact something
am not aware of?



Troubleshooting

Where is the problem and what's the
blast radius?
How do I reduce MTTR?
How do I prove network is healthy?

Operations

Proactive advisories

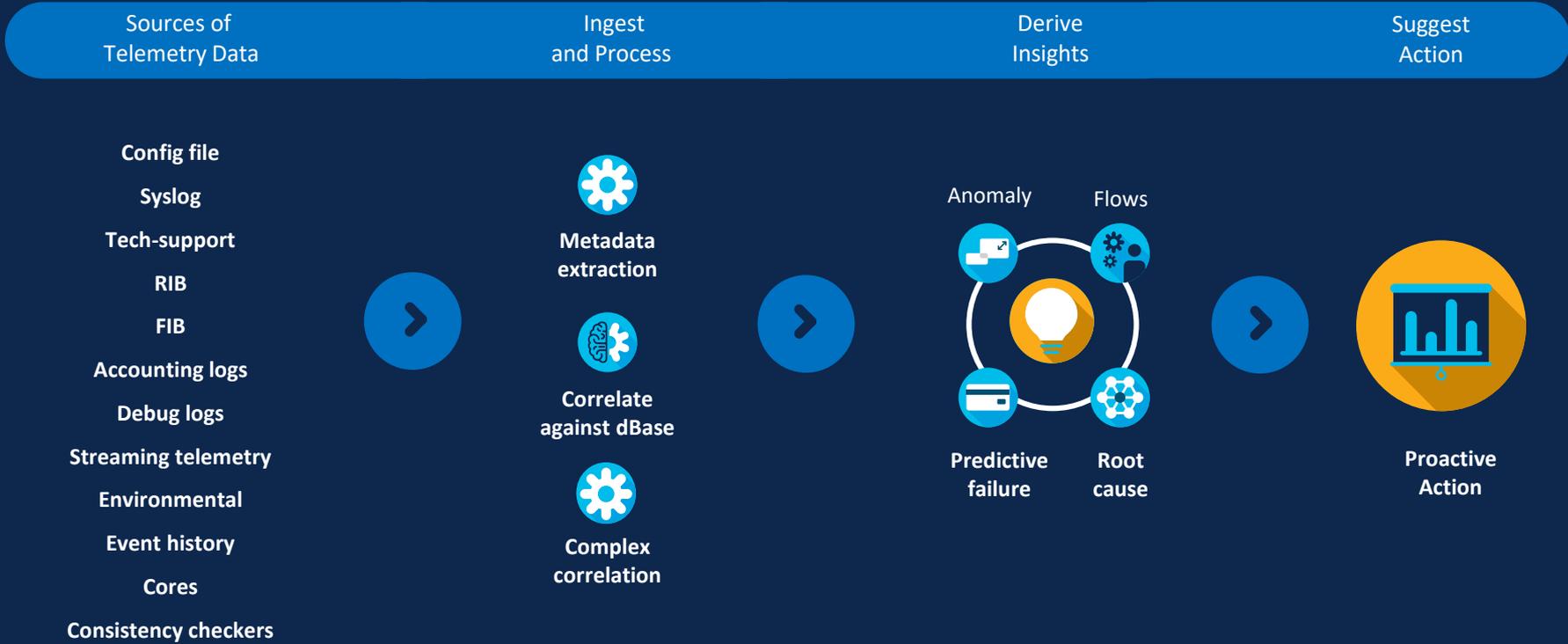
Was the issue preventable?
Is the network exposed to known
vulnerabilities?
Can I get proactive advice?



Single-pane-of-glass

Can I get visibility across
datacenters?
Single point for monitor and
control?

Nexus Dashboard Insights



Proactive Operations : Increase Availability, Performance and Simplify Operations

Nexus Dashboard Insights

Feature set

Assurance and compliance



Configuration assurance



Pre-change analysis



Delta analysis



Explorer



Change management



Communication compliance

Visibility and troubleshooting



One View



AppDynamics integration



Endpoint analytics



Connectivity analysis



Flow analytics



Capacity planning



Topology view



Microbursts detection

Advisory and maintenance



Upgrade assist



PSIRT notification



TAC assist



Advisories

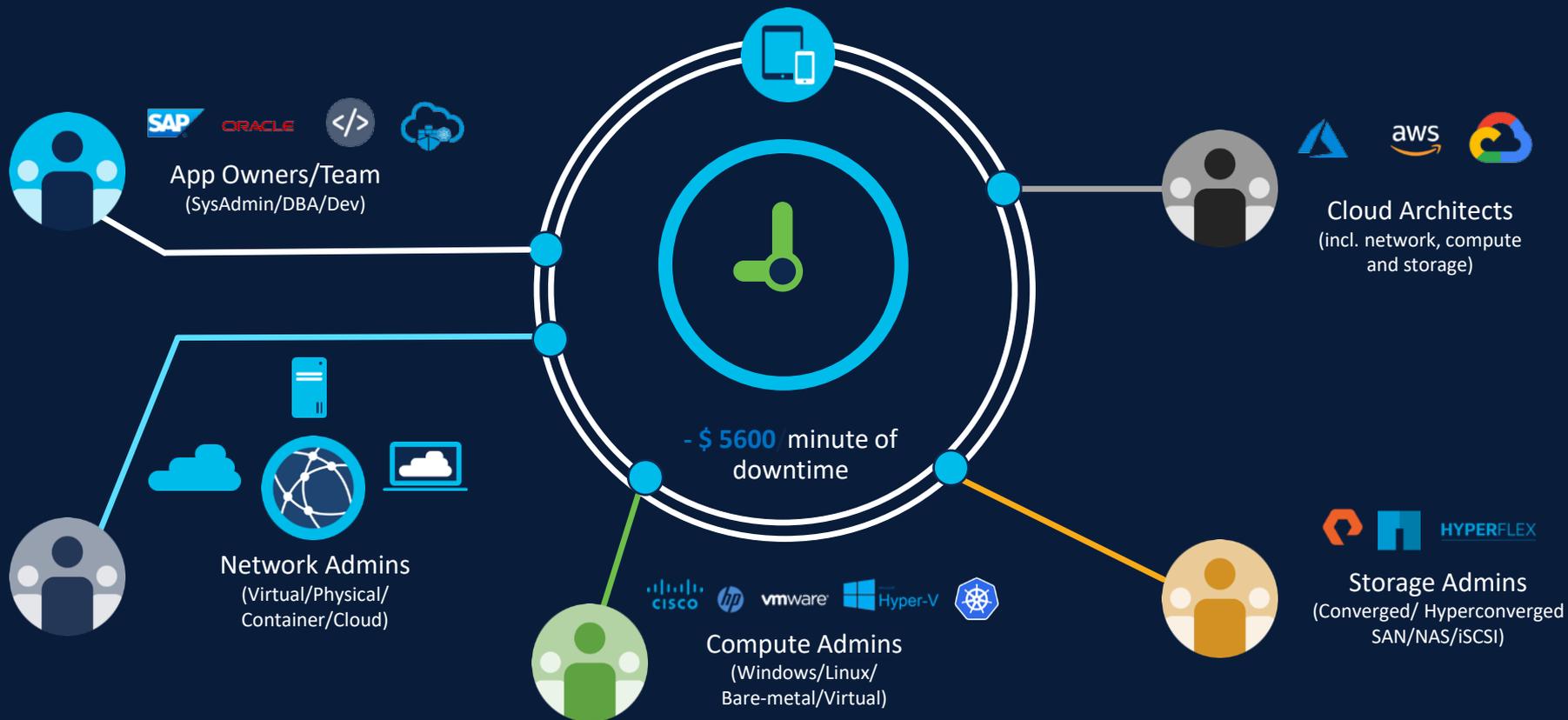


Field notices

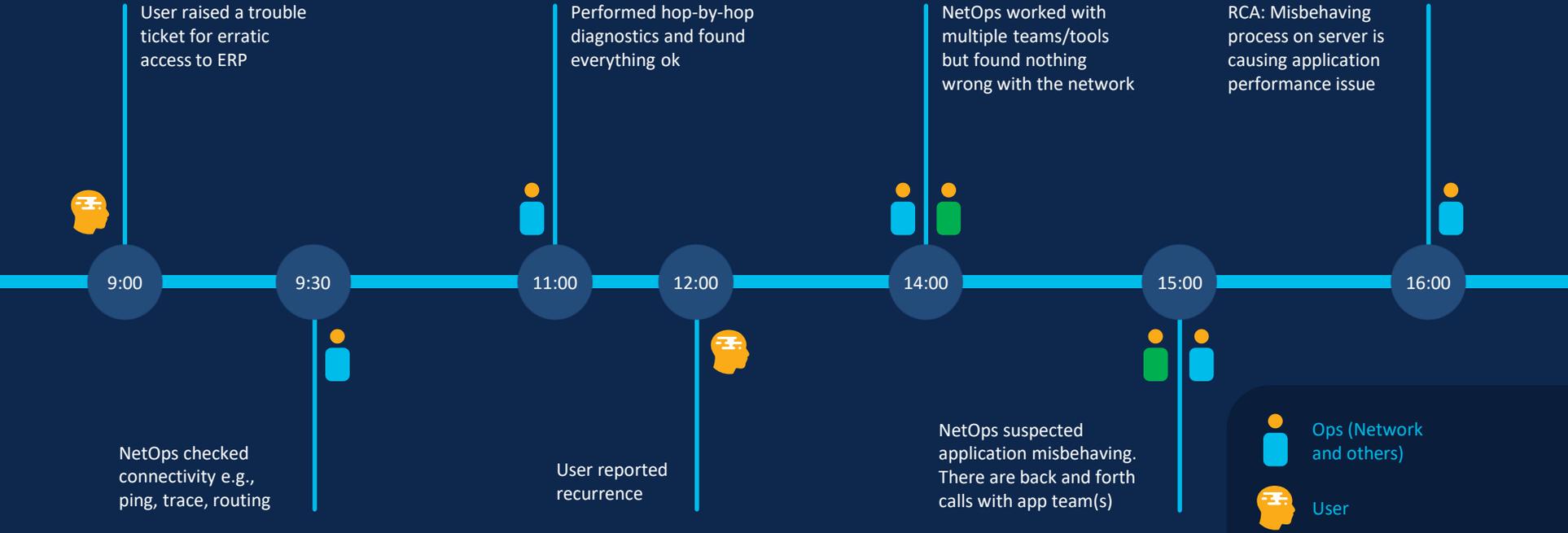


Email notifications

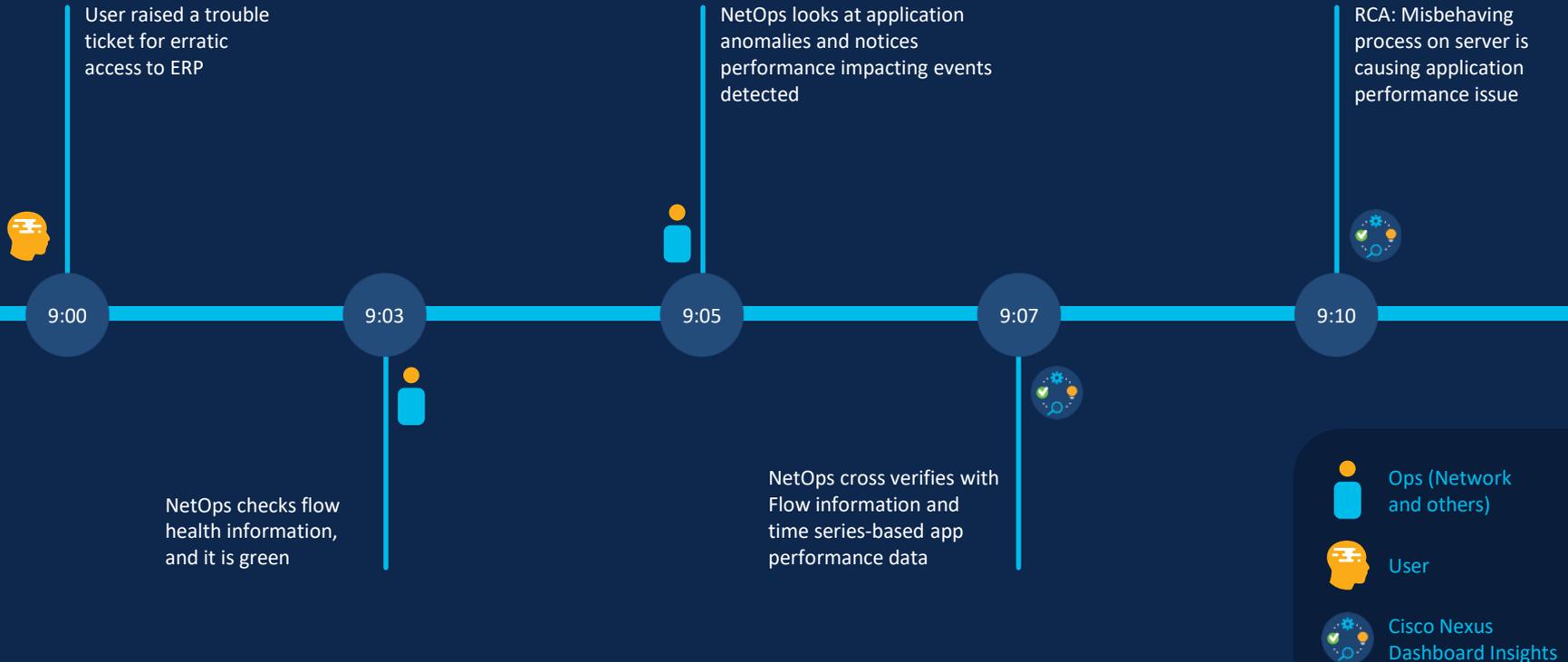
The problem: Finding where the problem is



Traditional troubleshooting workflow



Now with Cisco Nexus Dashboard Insights



Demo

Licencování

How to buy Nexus Dashboard Insights

Software included with Switch subscription licenses

DCN Day2Ops

Cisco Nexus Dashboard Insights



Multi DC
(DCN Advantage)

or



Single DC
(DCN Essential)

DCN Advantage

Cisco Nexus Dashboard
Orchestrator

DCN Premier

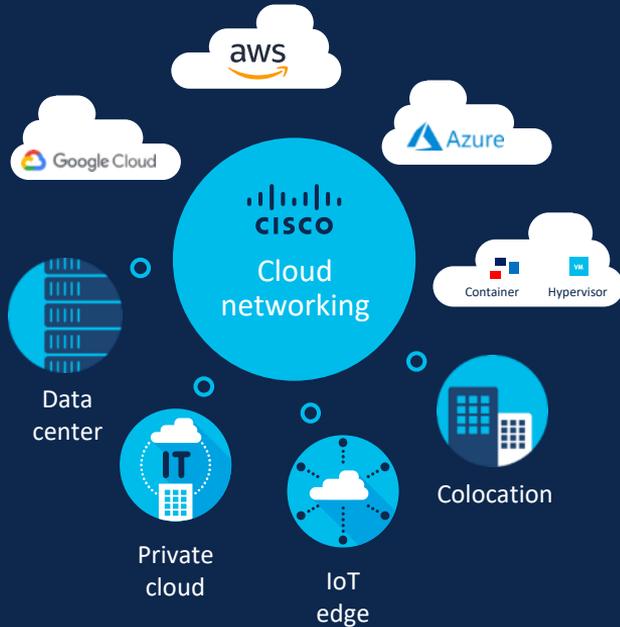
Cisco Nexus Dashboard Insights
and Nexus Dashboard Orchestrator

Install Base (ACI/NX-OS)

New Purchase (ACI/NX-OS)

Shrnutí

Solve Multicloud Networking Operations Challenges



Assurance



Troubleshooting



Proactive advisories



Need for **homogenous experience** across heterogenous cloud environments



The bridge to possible