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The bridge to possible

Automate your Network with Cisco Nexus Dashboard Fabric Controller

Akshaya Premkumar
Product Manager, NDFC
PSODCN-2356

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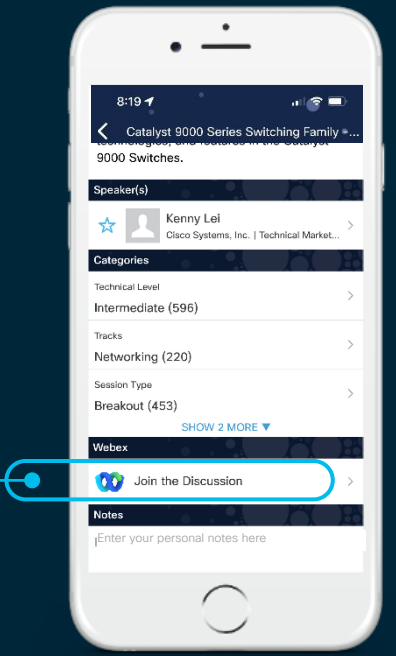

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Agenda

- Introduction
- NDFC Overview
- Automation with NDFC
- Streamlined Management
- Visibility and Monitoring
- Q&A with Matthew Taylor from NterOne

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The new normal is a hyper-distributed, extremely diverse IT landscape

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Cisco Nexus Dashboard Fabric Controller

Cisco Data Center Network Manager

Has become Cisco Nexus Dashboard Fabric Controller (NDFC)

Cisco Data Center Network Manager

Cisco Nexus Dashboard Fabric Controller

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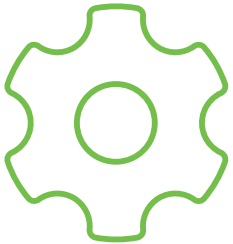
Cisco NDFC

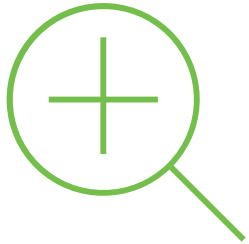


Automation

Accelerate provisioning
and simplify deployments

Management

In depth management
and control for all
network deployments



Visibility

Get centralized visibility
and monitoring views

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Cisco NDFC modes

Fabric discovery for LAN deployments

Fabric controller for LAN and IPFM deployments

SAN controller for MDS Fibre Channel deployments

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Cisco Nexus Dashboard

Simple to automate, simple to consume

Consume all services in one place

Private cloud | Third-party apps | Public cloud

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Automation

Accelerate provisioning from days to minutes

Easy to understand approach to auto-bootstrapping of entire fabric

Rapid deployment with Fabric Builder best practice templates for VXLAN-EVPN

DevOps friendly

Enhanced programmability

Scale within and across data centers with Nexus Dashboard Orchestrator

Benefits

Simplify fabric deployments	Developer agility	Multi-site

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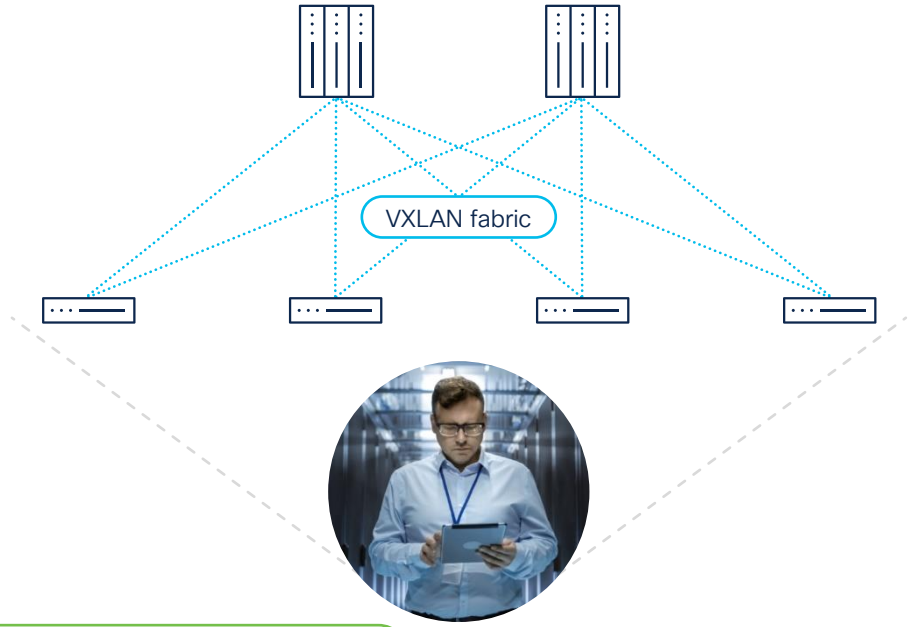
Automate your deployments

Provision various fabric types with Fabric Builder in minutes

Cisco best practice templates for VXLAN EVPN

Support for both brownfield and greenfield deployments



Benefit

Simplify deployment time, reduce chances of errors

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Increase developer agility with NDFC DevOps

DevOps

RED HAT ANSIBLE

HashiCorp Terraform

REST : API

Utilize GUI or automation through APIs

Integrations with Ansible and Terraform

Benefits

Accelerate deployments | Increase consistency | Minimize risk

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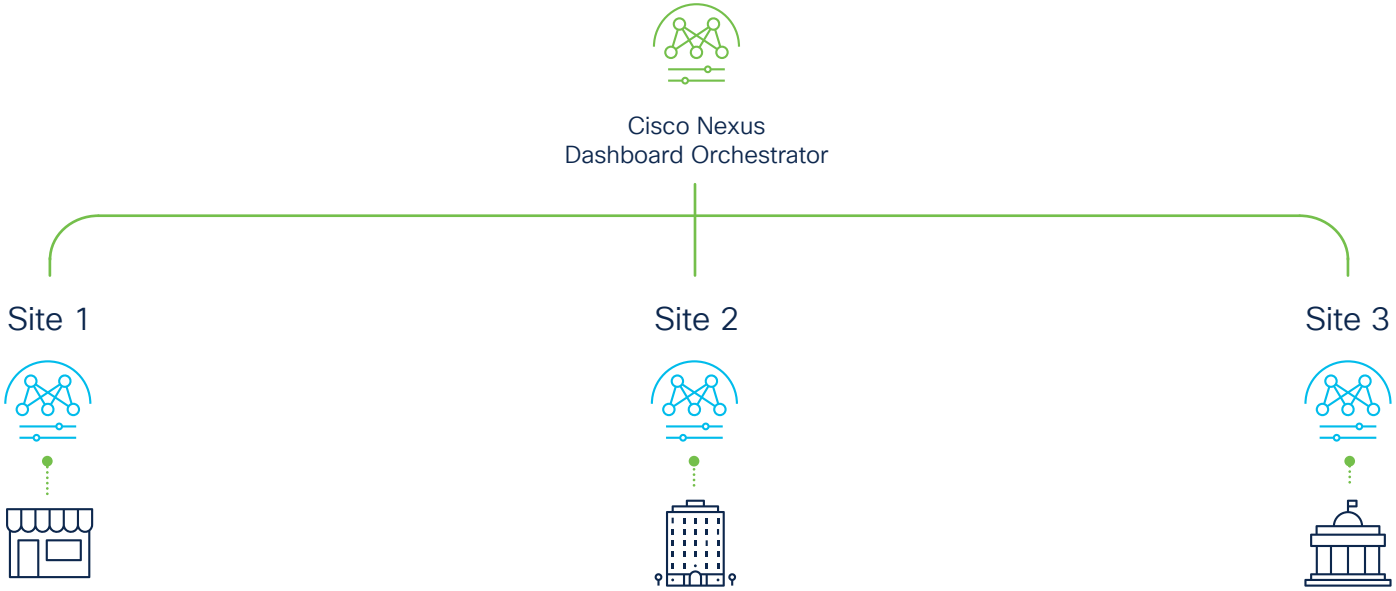
NDFC to NDFC Multi-site using ND Orchestrator



Benefits

Scale out
NDFC deployments

SSO and DUO MFA for
NDFC, ND Orchestrator, ND

DCI control between DC
and NDFC (multi-site)

DCI connectivity health,
tunnel path and statistics

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Management

Single point for management for data center operations

Optimized for both large deployments and traditional deployment models

Ensure consistency and reliability of data center fabrics

License management

Role based access control (RBAC) to reduce administrative workflows

Management for non-Nexus platforms

Benefits

Reliability	Compliance	Secure

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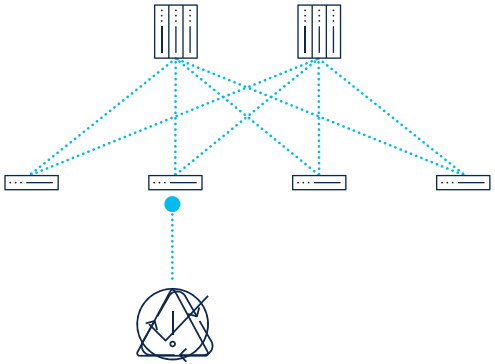
Configuration compliance

Ensure fabric consistency

Continuously monitors if configuration is compliant with user intent

Error detection, flag drifts for remediation



Benefits

Fabric reliability and visibility

Operations confidence

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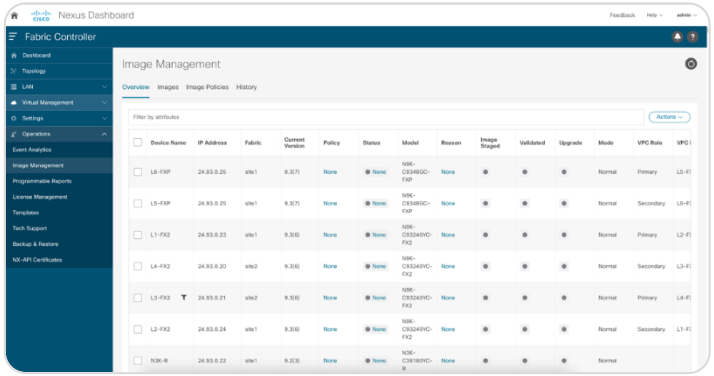
Streamlined image and patch management

Maintenance mode

- Guided workflows
- Image upgrades, EPLD upgrades and downgrades, SMU



Benefits

Simplified	Intuitive	Customizable

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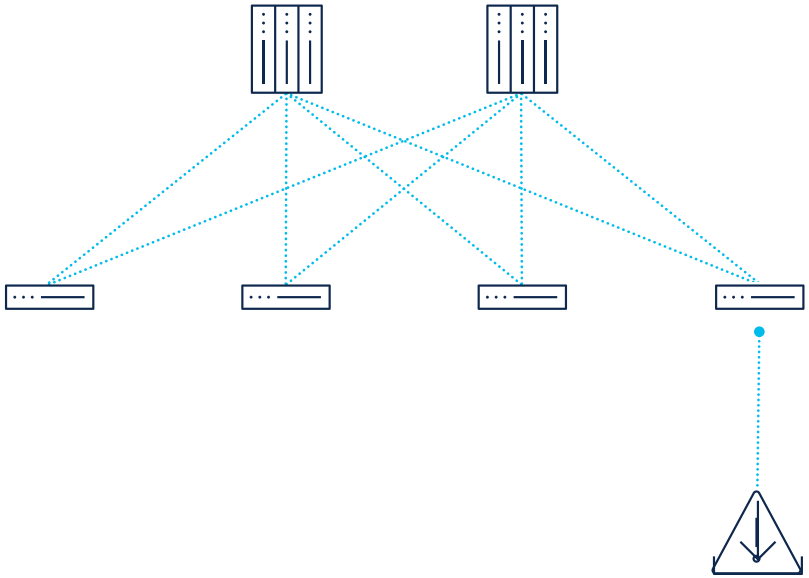
RMA replacement



RMA for defective switch is required

Easily perform RMAs from NDFC UI

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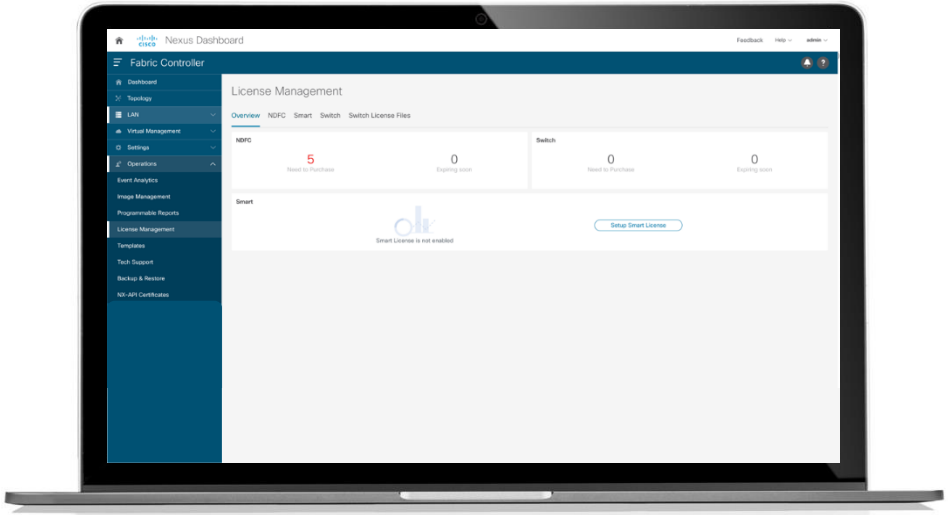
License management

NDFC offers unified license management for NX-OS and MDS deployments



Easily activate and configure Smart Licensing from NDFC UI

Benefits

Easily license your devices | Monitor license usage | Ensure compliance

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Management for non-Nexus platforms

Configuration management for Cisco IOS-XR devices

VXLAN EVPN management for Cisco IOS-XE Catalyst devices

Discovery and basic monitoring for third-party devices

ARISTA

Visibility and monitoring

Get comprehensive monitoring

Enhanced topology views

Compute and endpoint visibility

OAM support with NDFC

Obtain detailed inventory, health, resource consumption information on devices

End-to-end visibility, monitoring and troubleshooting

Integrate with Day 2 operations

Benefits

Intuitive	Deep visibility	Enhanced monitoring

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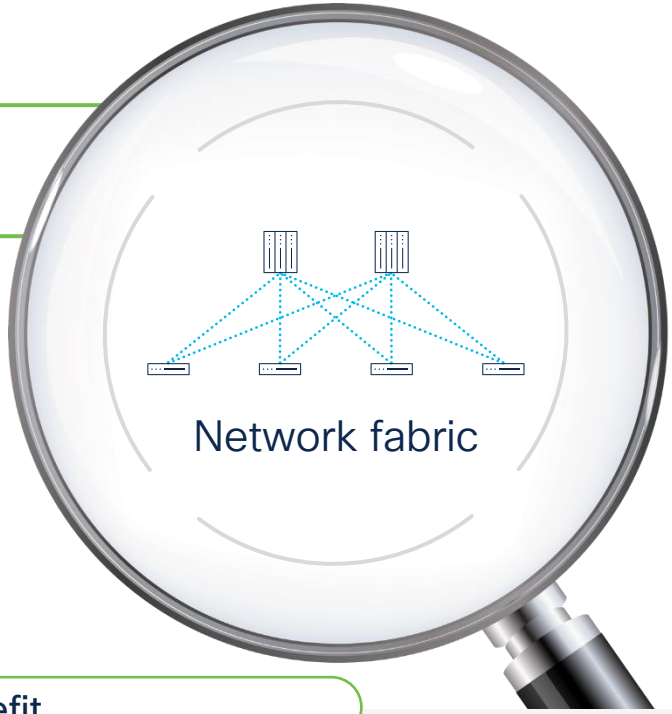
Compute visibility

Dynamic fabric topology views

Visibility from network fabric and infrastructure

Kubernetes and VM level visibility



Benefit

Single point of management providing in depth visibility and information

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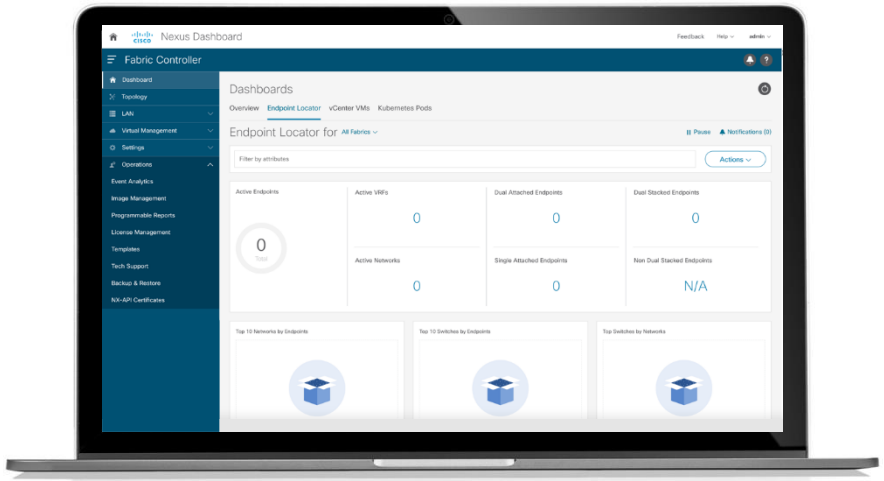
Endpoint visibility



Almost real-time data on active endpoints

Consolidated in single view with endpoint locator dashboard

Obtain information on:

- Endpoint life and history
- Active VRFs
- Active networks

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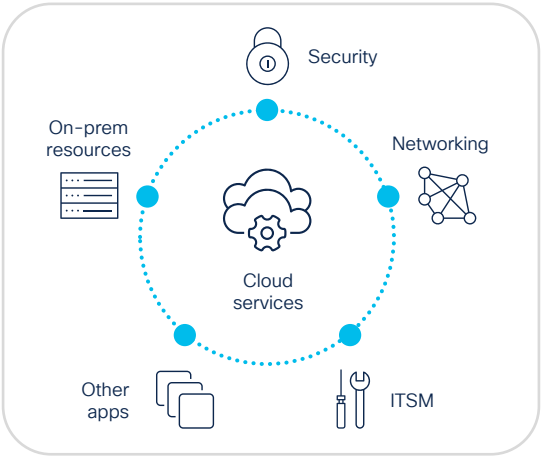
Cisco Nexus Dashboard Insights

360-degree visibility



Network, applications, integrations

Analytics

Digitization, telemetry, correlation

Integrate with NDFC

Unprecedented visibility into data center environments

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Cisco Nexus Dashboard Fabric Discovery

Run fabric discovery for LAN deployments: Enable inventory, discovery, monitoring only

Enable Cisco Nexus Dashboard's Day 2 operations capabilities without deploying fabric controller

Benefit

Deep visibility into deployments

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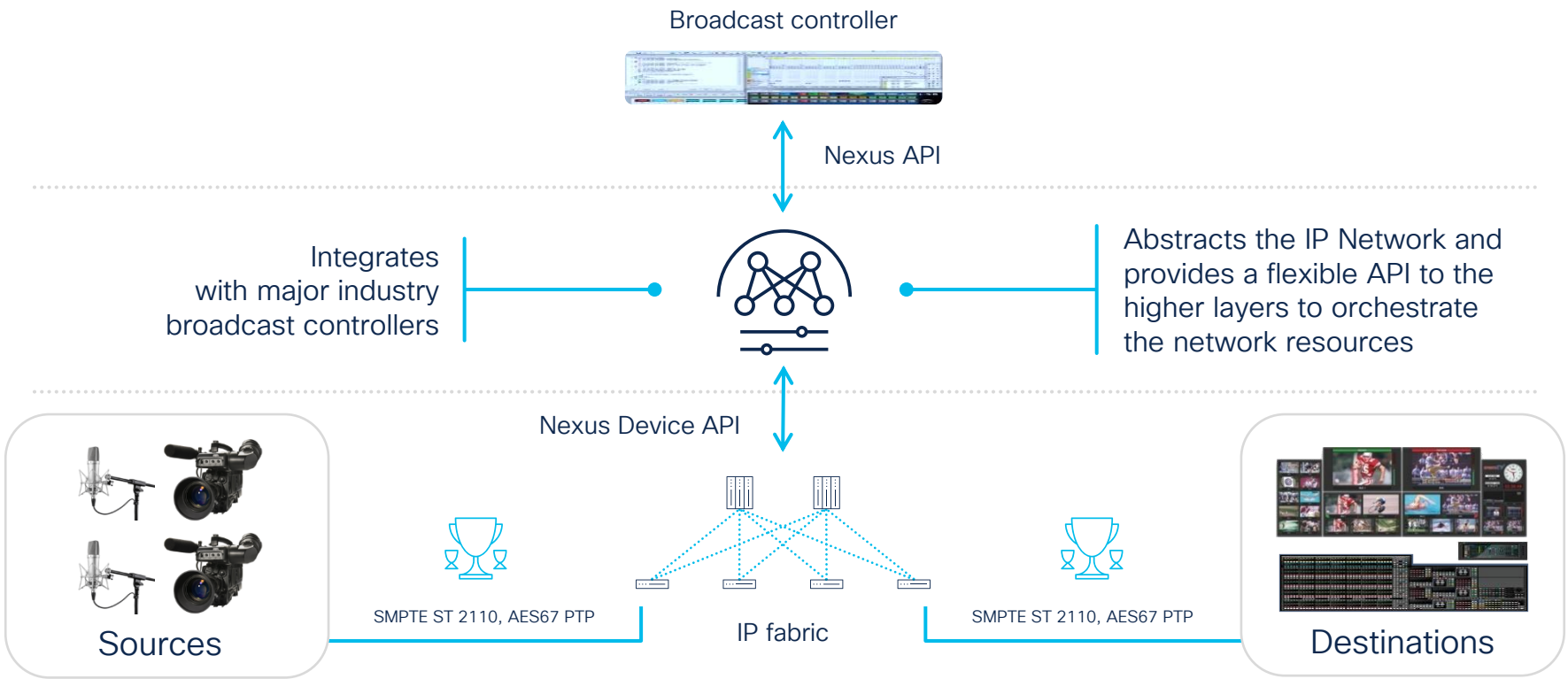
IP Fabric for Media

NDFC provisions and monitors IP Fabric for Media



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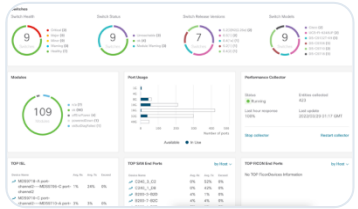
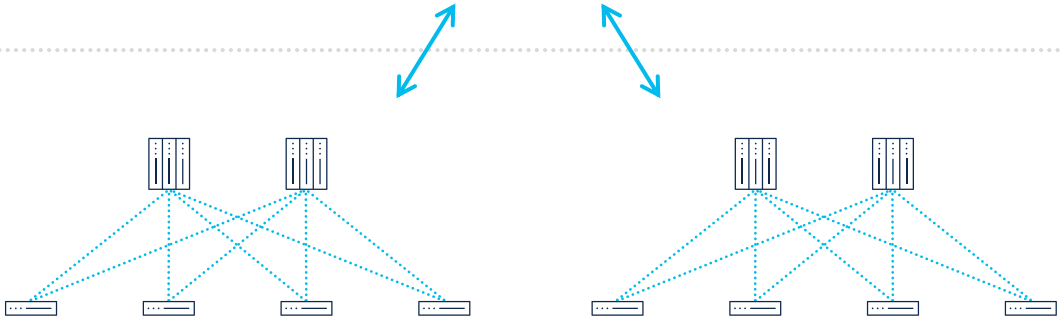
Cisco Nexus Dashboard SAN Controller

NDFC provisions and monitors Storage Area Networks

Manages and monitors Cisco MDS and Nexus switching and integrates with Cisco UCS



Single Pane of glass for day-to-day SAN management and SAN Analytics



Fabric A

Fabric B

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NDFC summary and benefits

NDFC solution benefits

Streamlined lifecycle management

Automate and configure your networks with ease

Maintain compliance and detect errors

Extensive visibility, monitoring and modernized topology views

Expand your network with integrations with NDO and NDI

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Q&A with Matthew Taylor from NterOne

Thank you

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