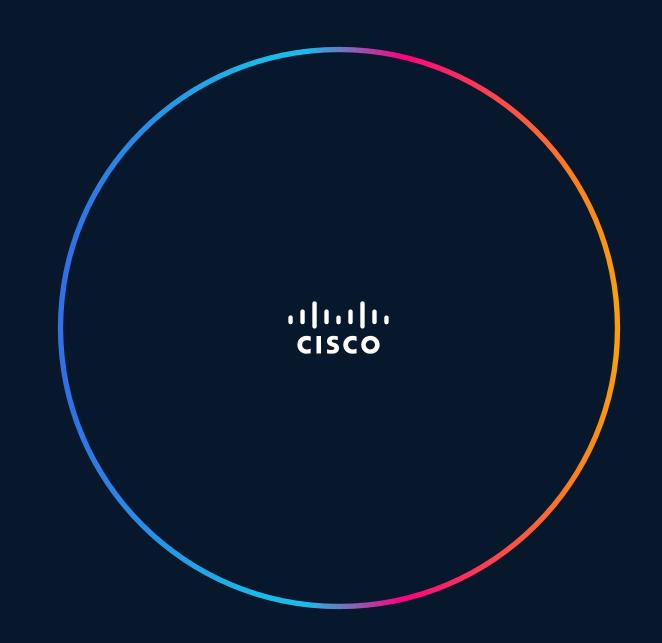
**CISCO** Connect

## Unified Campus Experiences

Lila Rousseaux Principal Solutions Designer

Jay Bradford Solutions Designer



#### Agenda

- 1. Cisco's Campus Networking Strategy
- 2. Platform Modernization
- 3. Assurance
- 4. Automation
- 5. Q&A

## Another massive technology disruption

Mobility

Internet



#### Al Is Bringing Changes and Challenges

1,000s

Al Agents per enterprise expected

#1 risk

Al-enhanced malicious attacks

64%

of orgs face IT skills shortage by 2026

# Is Your Campus Network Al ready?

For explosive traffic, for increased security risks, for more complexity



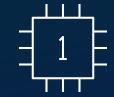
## **Operational Simplicity Powered by Al**



Architecture for the AI-Ready Secure Campus

**Scalable Devices** 

Ready for Al



**Security** 

Fused Into the Network



## Operational Simplicity AI-POWERED PLATFORM

Catalyst

**Catalyst Center** 

**Catalyst License** 

**Catalyst Hardware** 

MANAGEMENT

LICENSE

CISCO HARDWARE

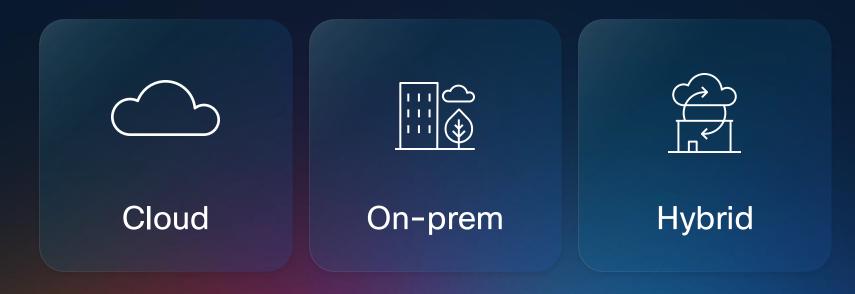
Meraki

Meraki Dashboard

Meraki License

Meraki Hardware

## A platform strategy that meets customers where they are



ONE HARDWARE | ONE LICENSE | ONE SUPPORT

### **Our Unified Platform**

API / Integrations Management Assurance **PLATFORM** Intelligence △△ 000 HARDWARE Secure Industrial Smart Wireless **Switches** Routers IoT

#### **Expanded Cloud Management for Catalyst Portfolio**



Wireless

Full wireless support
Scale large campus wireless
with Campus Gateway

GA | MAY



Switching

Expanded management for access and core switching, including C9200 and C9300

GA | JULY



Routing

Next-gen routing support coming

ALPHA | JUNE

Cloud management powered by cloud-native IOS XE



#### Large Campus Cloud Capabilities

### Retain Advanced Control with Cloud CLI



Simplify onboarding and flexibility with operating mode options and Cloud CLI

GA | JULY

### Powerful Switching Capabilities



Support campus deployments with BGP, VRF, ISSU, and StackWise Virtual

Roadmap

### Fabric for Secure Networking



Simplify NetOps with a secure fabric and micro/macro-segmentation

Roadmap

## Platform Modernization Wireless

## Cisco Wireless Wi-Fi 7 Meet the family





Global Use Access Points for efficient, smart, scalable operations



Complete connectivity: Bluetooth, IoT and location



Sustainably built and power-savvy

#### **Unified Procurement**

One

SKU structure
for hardware

One

Unified licensing model



#### Wi-Fi 7 for Every Operational Scale



6 Spatial Streams Dorm Rooms, Hospitality



CW9174E

8/10 Spatial Streams

External antennas

**NEW!** 



CW9176D1

12 Spatial Streams

Integrated Directional

**UWB** 



CW9179F

16 Spatial Streams

LPV/Stadium



CW91711

4 Spatial Streams

Omnidirectional

**NEW!** 



CW9172I

6 Spatial Streams

**Omnidirectional** 



CW91741

8/10 Spatial Streams

Omnidirectional

**NEW!** 



CW9176I

12 Spatial Streams

**Omnidirectional** 

**UWB** 



CW9178I

16 Spatial Streams

**Omnidirectional** 

**UWB** 



#### **Unified Wi-Fi and URWB Infrastructure**









Scales up to 5,000 APs and 50,000 clients

Easy migration for existing LAN controller architectures

No need to re-cable, change VLANs, or disrupt operations

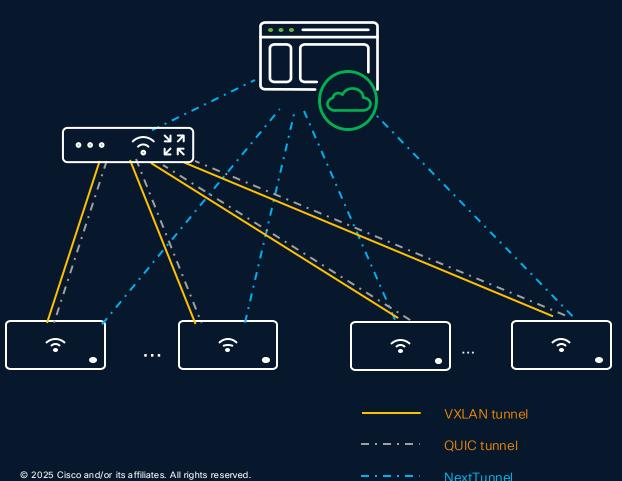
## Introducing The New Campus Gateway



**AVAILABLE TODAY** 

**Cisco Campus Gateway** 

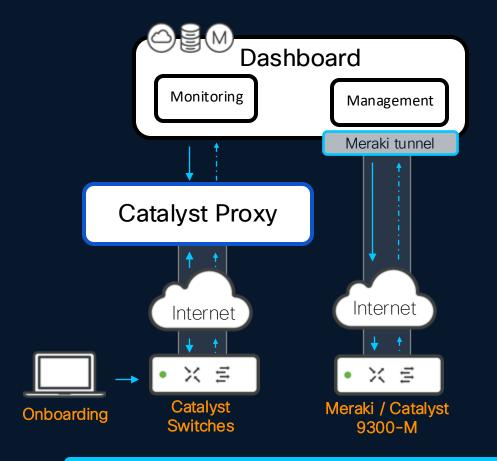
#### **Campus Gateway**



- Over the top wireless network
- No need for campus wide **VLANs**
- Seamless roaming across large wireless domains
- No need to configure trunk ports & native VLANs
- Centralized Wireless Services across 100s or 1000s of AP

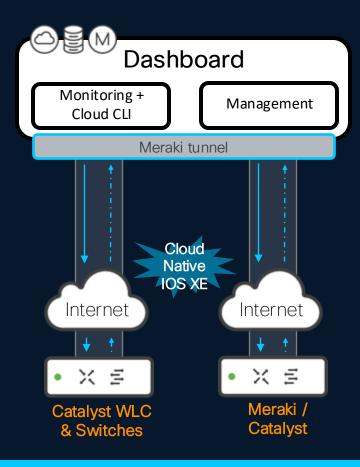
## Platform Modernization Switching

#### The Catalyst Cloud Journey



**Cloud Evolution** 

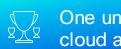
Cloud Monitoring for Catalyst Switching



Cloud Connected Catalyst

#### **IOS-XE Cloud Management Support**





One unified OS for cloud and on-prem



Options for migration or Day 0 cloud management



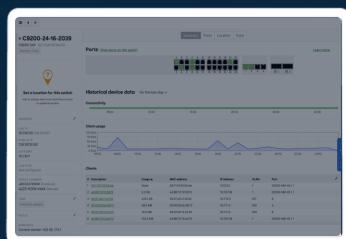
Cloud simplicity with advanced IOS XE features

#### Industry Leading Enterprise Switching Portfolio



#### **Unified Cloud Platform**





Cisco Meraki Dashboard

#### Cloud-Managed Enterprise Switching



Configuration Source: Cloud

#### **Advanced Routing**

Routed Ports

Loop-free Routed Access

**VRF** Lite

Scalable Macro Segmentation

**BGP** 

Flexible, Open Dynamic Routing

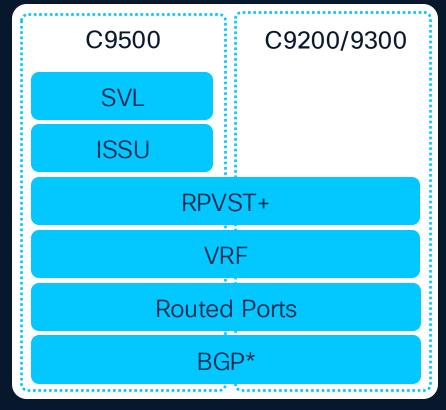
#### High-Availability

Rapid PVST+

Enhanced L2 Loop Prevention

StackWise Virtual (SVL) ISSU

Sub-second downtime firmware upgrades



<sup>\*</sup>BGP supports on C9200CX, MS390, C9300 and C9500

#### Maintain Operational Flexibility with Cloud Management

Configuration Source: Cloud



UNLOCK FULL CLOUD SIMPLICITY

Configurations are performed in the cloud and managed using the dashboard UI

Configuration Source: Device



RETAIN ADVANCED CONTROL

Configurations are managed via traditional methods and performed local to the device

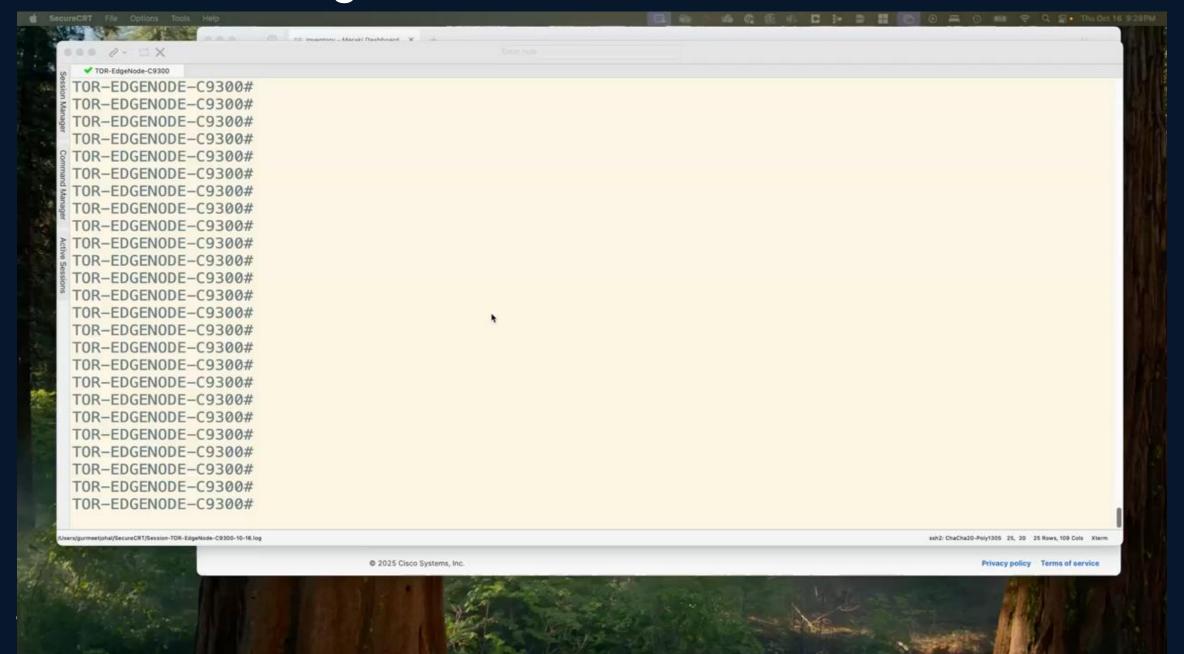
FLEXIBLE OPTIONS FOR MANAGING YOUR DEVICES FROM THE CLOUD

Configuration Source: Cloud

### Demo



#### Demo Onboarding 9300 into Dashboard - Cloud Mode

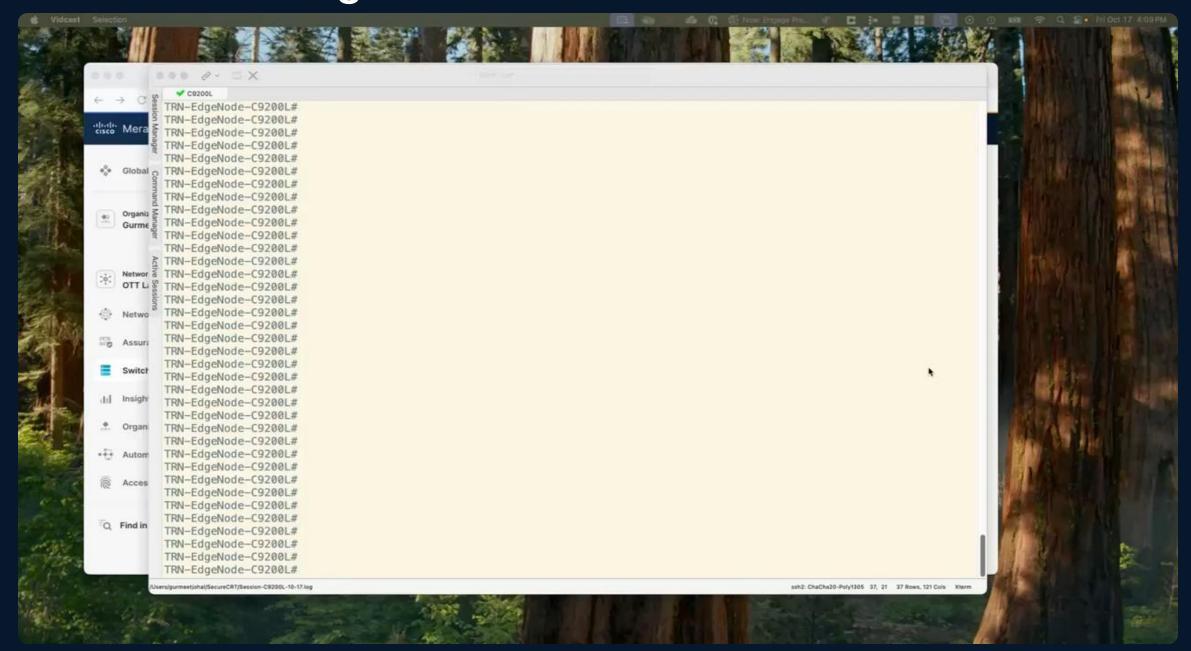


Configuration Source: Device

### Demo

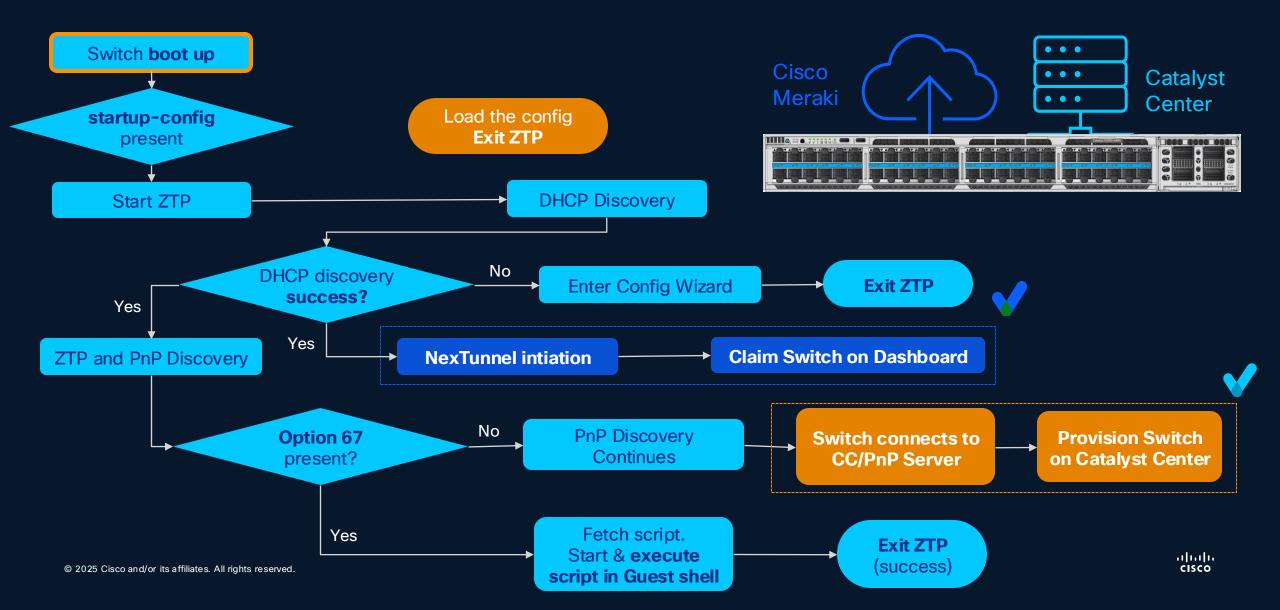


#### Demo Onboarding 9200L into Dashboard - Device Mode



#### **Unified Onboarding Experience**

Effortless Onboarding of the Cisco C9350 Smart Switch



## Platform Modernization Catalyst Center 3.1.5

#### Site Based RBAC

#### Challenge/Pain point

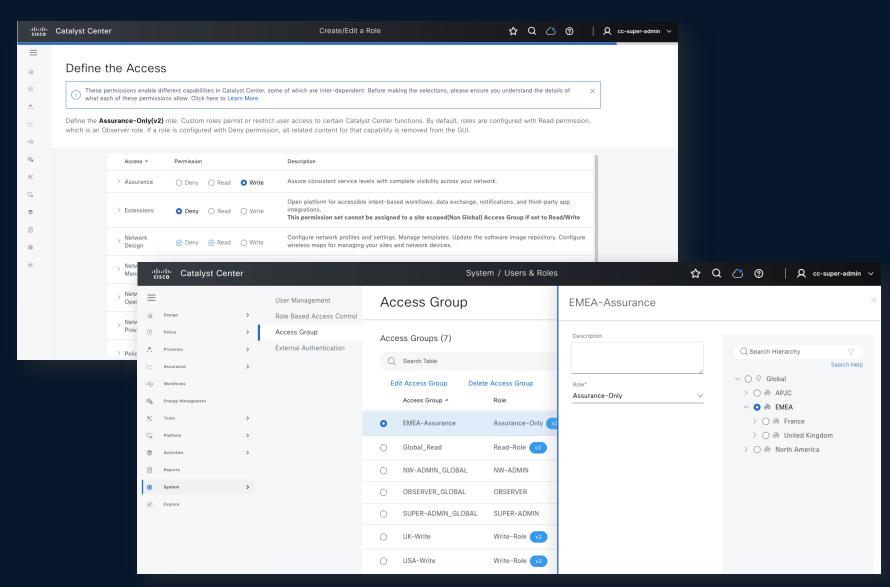
- Lack of granular access to design/provision the network
- Lack of ability to limit & delimit access to specific product features

#### Feature Capabilities

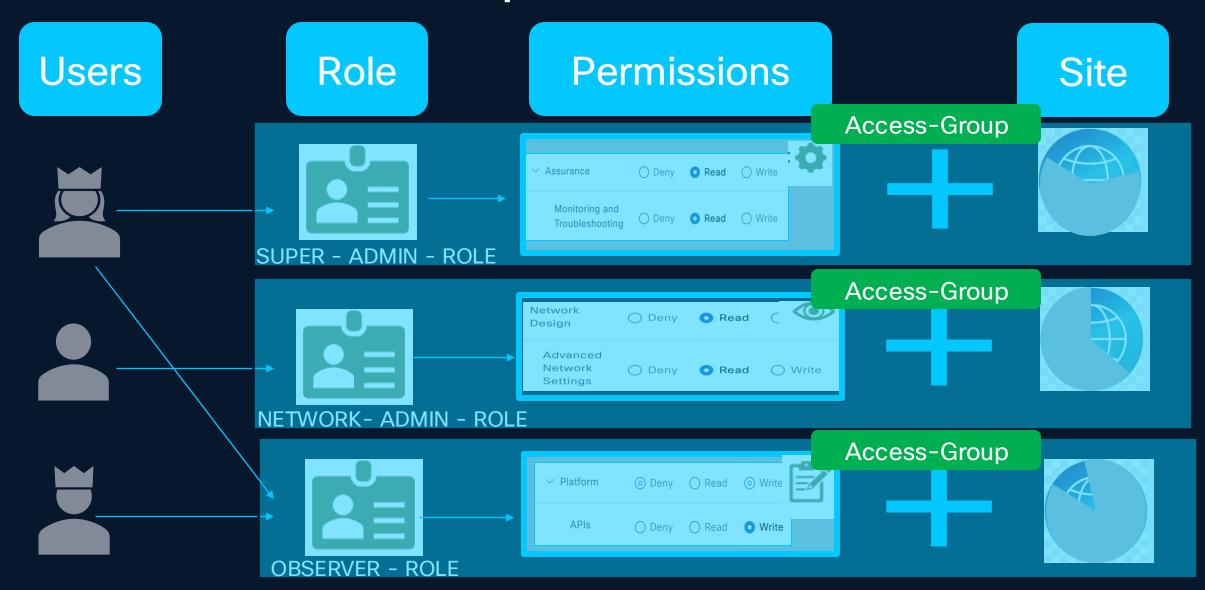
- Custom Roles provide access to Catalyst Center features
- Access Groups apply Custom Roles to Sites
- Provides granular access control down to Area, Building, or Floor

#### Platform Dependency

Catalyst Center 3.1.x

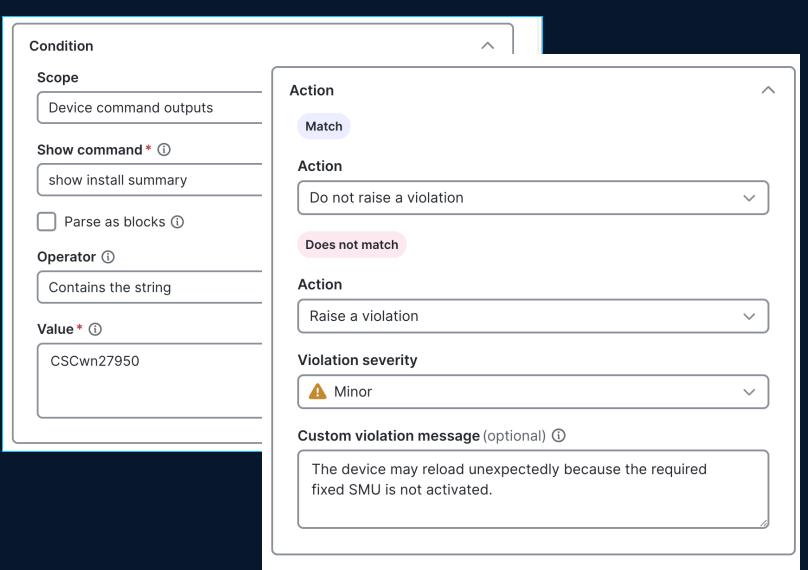


#### Site Based RBAC - Example



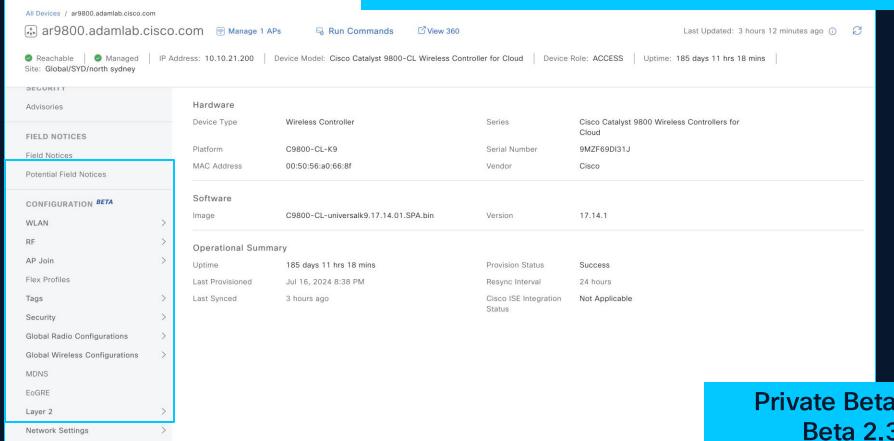
#### Rule Based Compliance

- Custom rules and policies to detect any violations
- Can use string comparisons, regular expressions, and expression evaluations
- Applied to configs, show commands, and device properties
- Each rule can have variables, multiple conditions, and configurable violation messages and severity level



#### 9800 WLC - Per Device Configuration

Per-Device Configuration: create, edit, clone, and delete the device-level configurations for a WLC

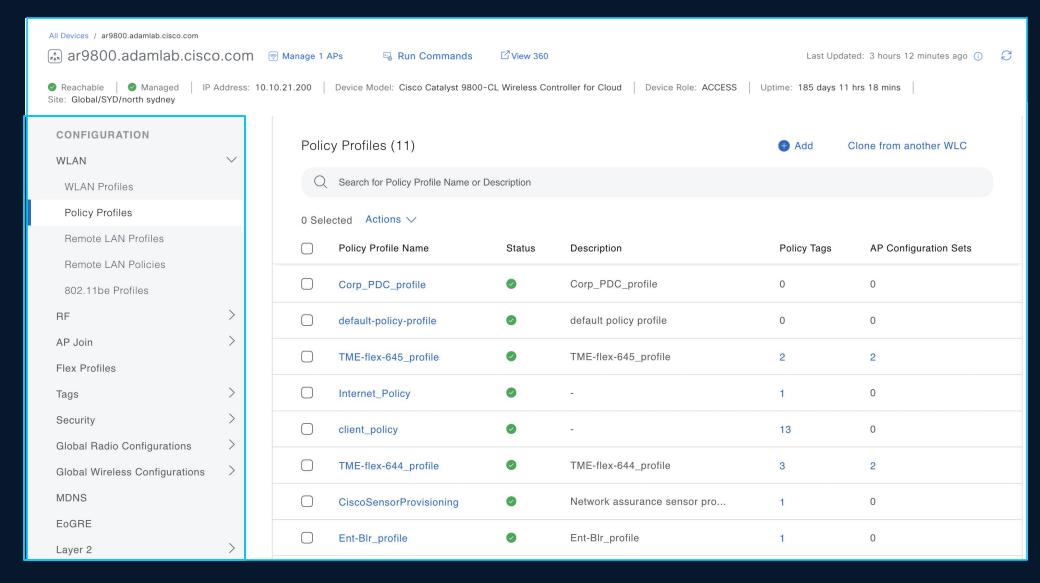


Private Beta: 2.3.7.6

Beta 2.3.7.9

3.1.x

### 9800 WLC - Per Device Configuration



#### **New Features and Key Enhancements – 3.1.x**



#### **Platform**

- Catalyst Center on Azure
- Site Based RBAC
- Contextual RCA for Support bundle
- CCGM Updates



#### **NetOps**

- Brownfield device onboarding workflow
- New SWIM Dashboard
- Rule-Based Compliance
- Campus Network
  Automation
- AP priming for C9K WLC
- Campus Automation Industrial Configuration
- App Hosting for IE
- REP topology view for fabric and non-fabric
- Per Device Config AP configuration
- Cloning profiles across multiple WLC



#### **AlOps**

- Energy management dashboard
- Install TE agent workflow
- Enhanced visibility into Cisco
   ISE authentication failures
- Event Analytics Al Outlier
- Service Now Bidirectional Integration



#### **SecOps**

- Security Service Insertion
- Pub-Sub for brownfield deployments and migration-Beta
- Allowed VLAN, add a native VLAN on a TRUNK link
- Voice VLAN template for user ports
- SDA Fabric can experience outages caused by SSDP
- Overlapping IP Pools



#### DevOps

- New APIs
- API enhancements
- New reports

### Assurance

## Delivering Multilayered Assurance



Experiences now span mobile, cloud, and edge-visibility must follow

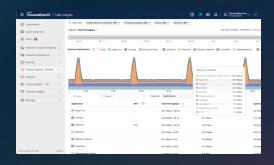
**Measure** where it matters

**See** every part of the path

Contextualize the source

## Deep Visibility from Campus to Mobile to Industrial

#### ThousandEyes Traffic Insights



Smarter visibility and planning for enterprise networks

GA | JUNE

## ThousandEyes Mobile endpoints



Extends Assurance to mobile endpoints

BETA | NOW

## ThousandEyes Industrial Devices

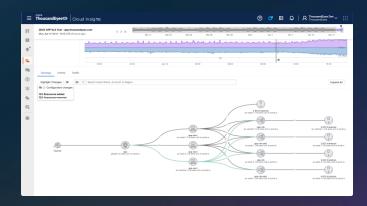


Assurance for the industry's largest Industrial IoT portfolio

GA | JULY

## **New ThousandEyes Innovations**

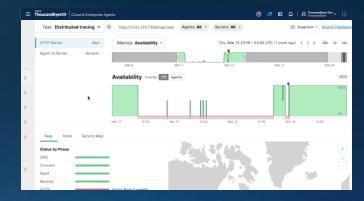
#### ThousandEyes Cloud Insights



Deeper visibility into Microsoft Azure (new) and AWS environments

GA | JUNE

#### ThousandEyes + Splunk



End-to-end app to network assurance

GA | JUNE

#### AVAILABLE | NOW

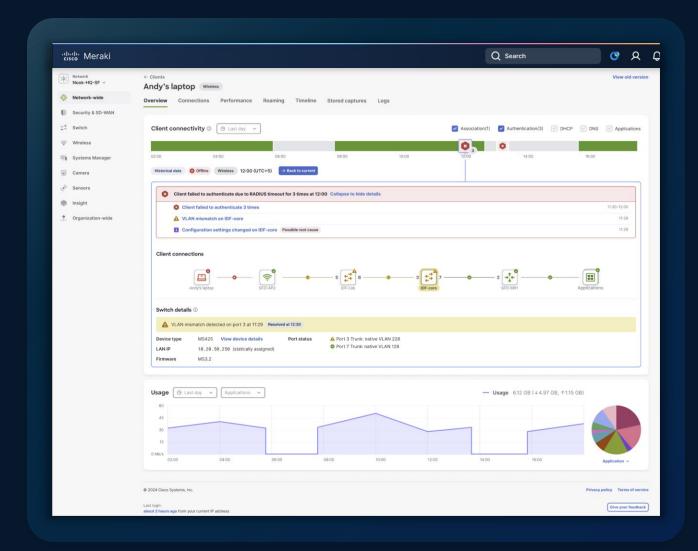
# Assurance Across Every Digital Experience

Deep visibility across both owned and unowned networks

Al-powered insights surface experience-impacting issues instantly

Closed-loop workflows trigger automated remediation

Al Assistant accelerates root cause analysis end-to-end

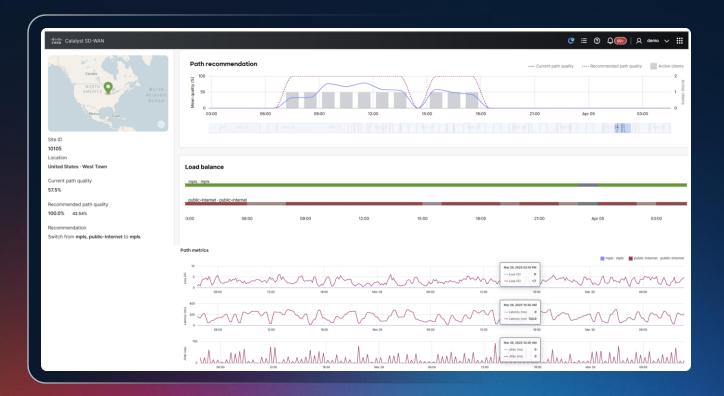


Proactive guidance for maintaining network stability

Optimize WAN performance

Generate long-term recommendations for network optimization

## Predictive Path Recommendations

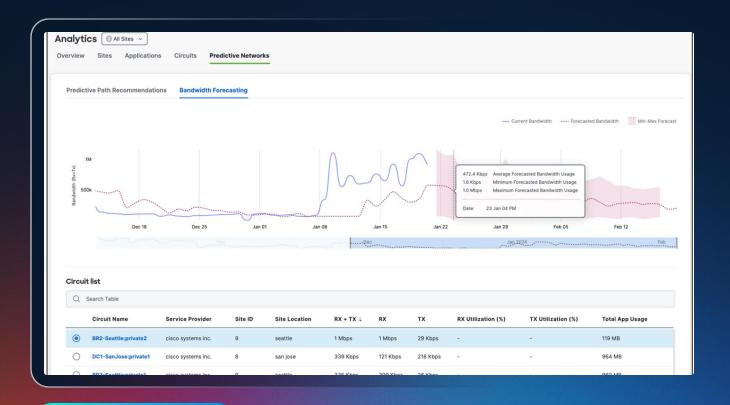


**AVAILABLE NOW** 

Monitor usage trends for capacity planning

Get a better understanding of growth trends, seasonality, surge, min/max band, and performance

## **Bandwidth Forecasting**



**AVAILABLE NOW** 

## AgenticOps Lineup



GA/BETA



Al Assistant

Accelerate network operations

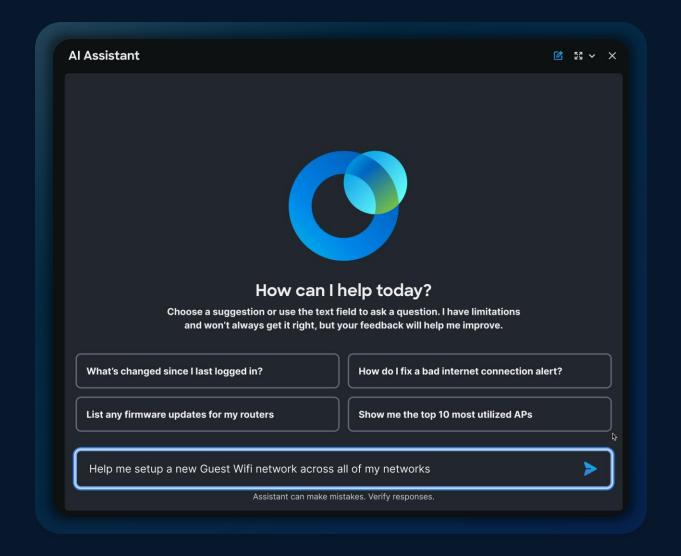
POWERED BY DEEP NETWORK MODEL

## Al Assistant Powered Automated Workflow for Wi-Fi Setup

Creates secure SSIDs with 802.11X and RADIUS

One prompt updates NAC across Meraki and ISE

Automates end-to-end access control

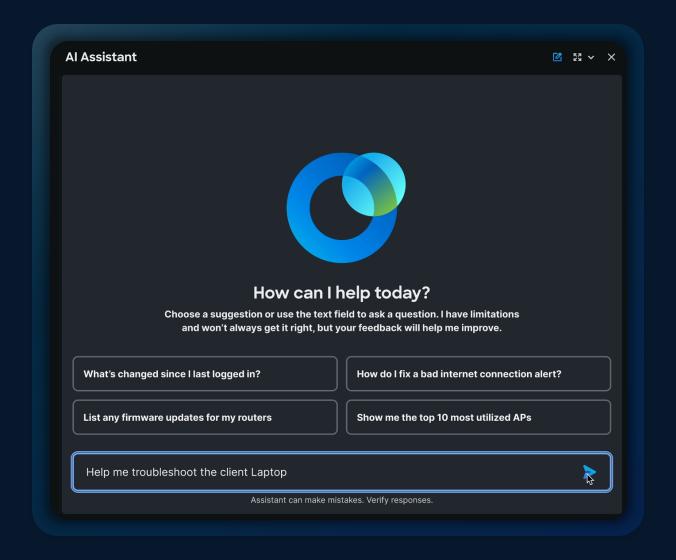


# Al Assistant Powered RCA and Resolution for Issues

Finds root cause—not just the alert

Provides full stack visibility

Pinpoints the issue and guides the fix



#### **ALPHA**

## Al Canvas

Troubleshooting and execution across multiple domains

Collaboration across multiple users (NetOps, SecOps and execs)

Built on the foundation of the Deep Network Model



## Automation

## **Introducing Cisco Workflows**



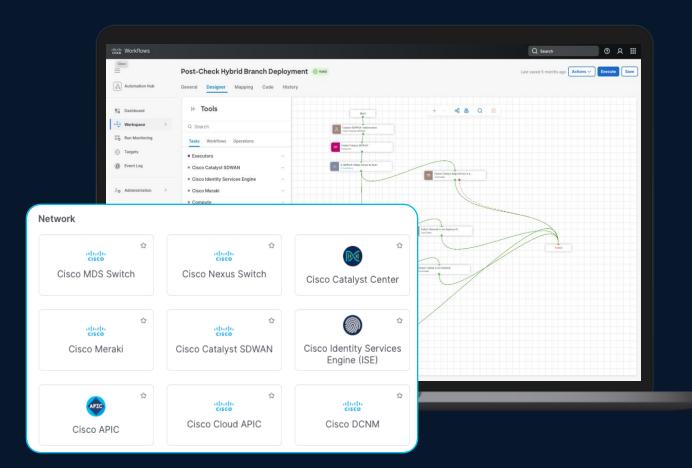


For Cisco + 3<sup>rd</sup> Party Domains

Mitigate risk, reduce manual tasks, and deploy sites faster

Accelerate automation with workflows based on Validated Designs

## Central Automation for Cisco and Third-Party Applications





Automate tasks across Catalyst Center and SD-WAN, Meraki, ISE, ACI, Nexus, and more.



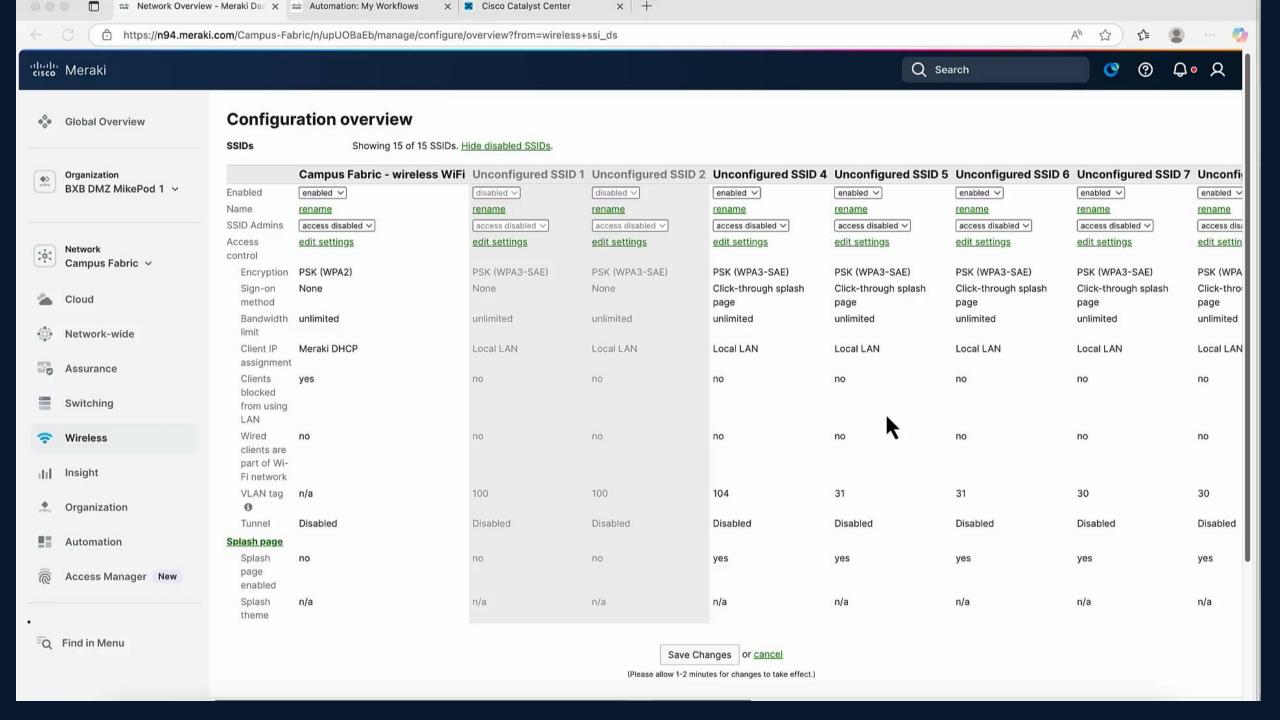
Integrate third-party applications such as ServiceNow into automation templates with Cisco domains.



Connect cloud and on-premise controllers to extend automation across the Cisco portfolio and beyond.

Cisco Workflows

## Demo



## Network Automation for Cisco and Third-Party Applications



Automate tasks across Catalyst Center and SD-WAN, Meraki, ISE, ACI, Nexus, and more.

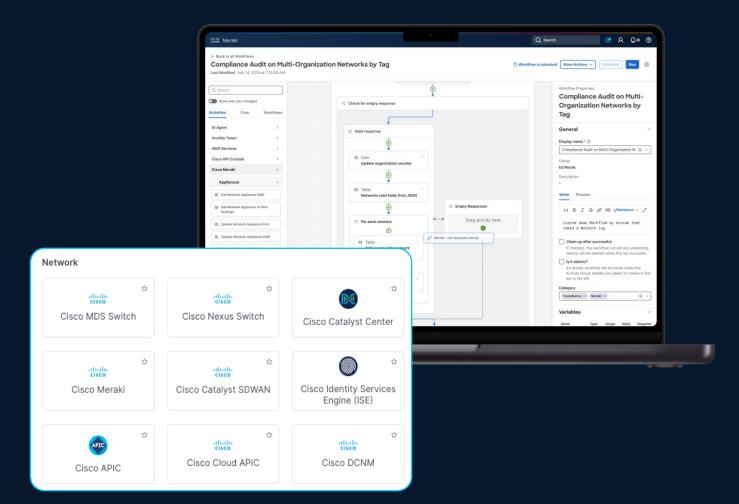


Integrate third-party applications such as ServiceNow and Jira with Cisco domains.



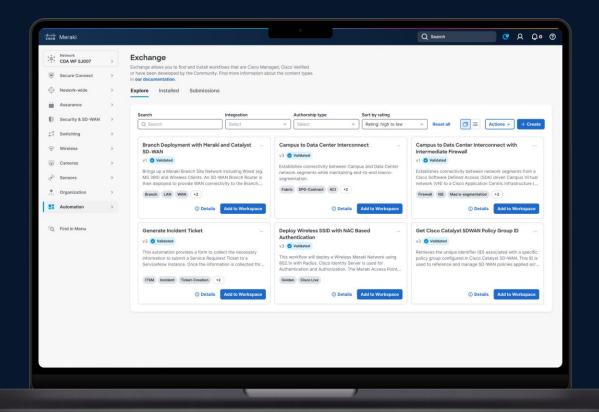
Connect cloud and onpremise controllers to extend automation across the Cisco portfolio and beyond.

## Drag and Drop Your Automation



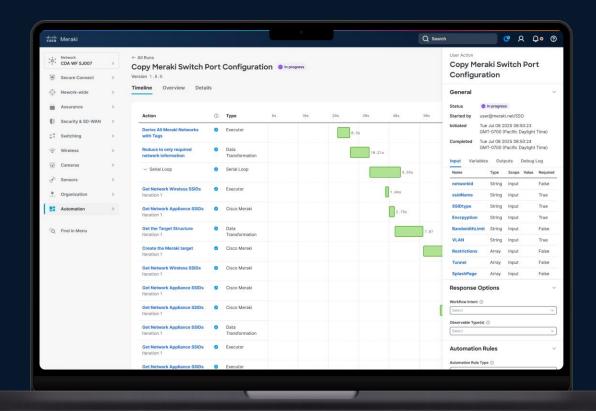
Bring your automation design to life with an intuitive drag-and-drop interface. Adapters provide automation capabilities across the Cisco portfolio. Each adapter contains a range of validated actions that can be automated across respective controllers.

## **Browse the Exchange**



Workflows features an exchange of pre-made automations that solve common use cases. These automations can be run as is or easily customized in the dragand-drop workflow editor. We frequently update our library with new, free automations.

## **Monitor Progress for Active Runs**



Get insight into active automations from Workflows in the Automation tab in the Cisco Meraki dashboard. Monitor runs, see statuses, identify targets, troubleshoot errors, and keep logs for compliance and visibility.

## **Challenges for Network and Security Teams**



**Error-prone processes** 



Time-consuming tasks



**Talent and labor shortages** 

Q&A

## Other Sessions You Might Like: (Space Permitting)

2:15pm

From Edge to Core

Securing Campus Networks with Intelligent Al-Ready Switches.

Nigel Gocan

3:30pm

The Power of End-to-End Assurance

Learn how ThousandEyes integrates seamlessly with key Cisco technologies

Bill Donoghue

2:15pm

Security for Al

Addressing threats with Al Defense

**Rob Barton** 

**CISCO** Connect

Thank you



## .1|1.1|1. CISCO