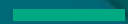


**Hewlett Packard  
Enterprise**

Supercharge your IT organization now:

# **Next-generation HPE Aruba Networking Central**



Tomas Muliuolis

17 09 2024

# Future of network operations

Empowering IT teams for an accelerated, AI-driven future

## Accelerating GenAI for Networking



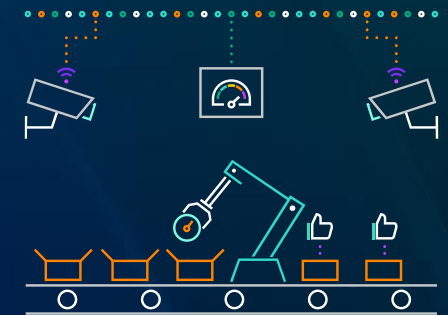
By 2026, 60% of network operations personnel will rely on **Generative AI** for Day 2 management, up from less than 5% in early 2024<sup>1</sup>

## Network as a Zero Trust security solution



46% ITDMs say **cybersecurity concerns** impact their organizations' willingness to invest in innovative technologies<sup>2</sup>

## Growing significance of DEM



**Digital Experience Monitoring** becomes a strategic investment area, with deployments expected to rise from 60% to **90%** in 2027<sup>3</sup>

<sup>1</sup>Gartner: Prepare for Generative AI in Network Operations , Mar 2024

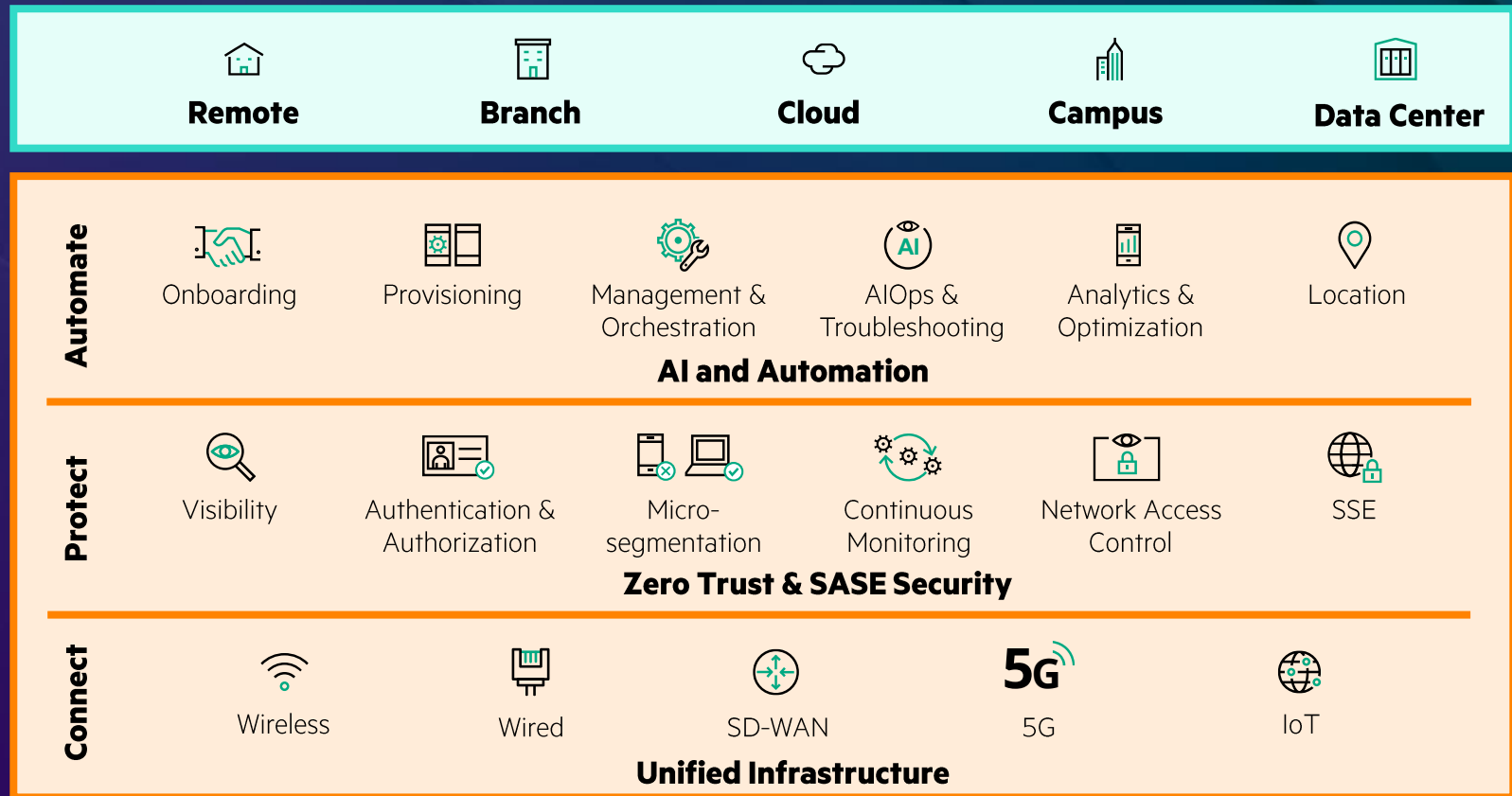
<sup>2</sup>The innovation vs. risk conundrum. Hewlett Packard Enterprise. 2023

<sup>3</sup>Gartner Market Guide for Digital Experience Monitoring, Nov 2023

# Security-first, AI-powered networking

Delivering distinctive experiences and innovative business results

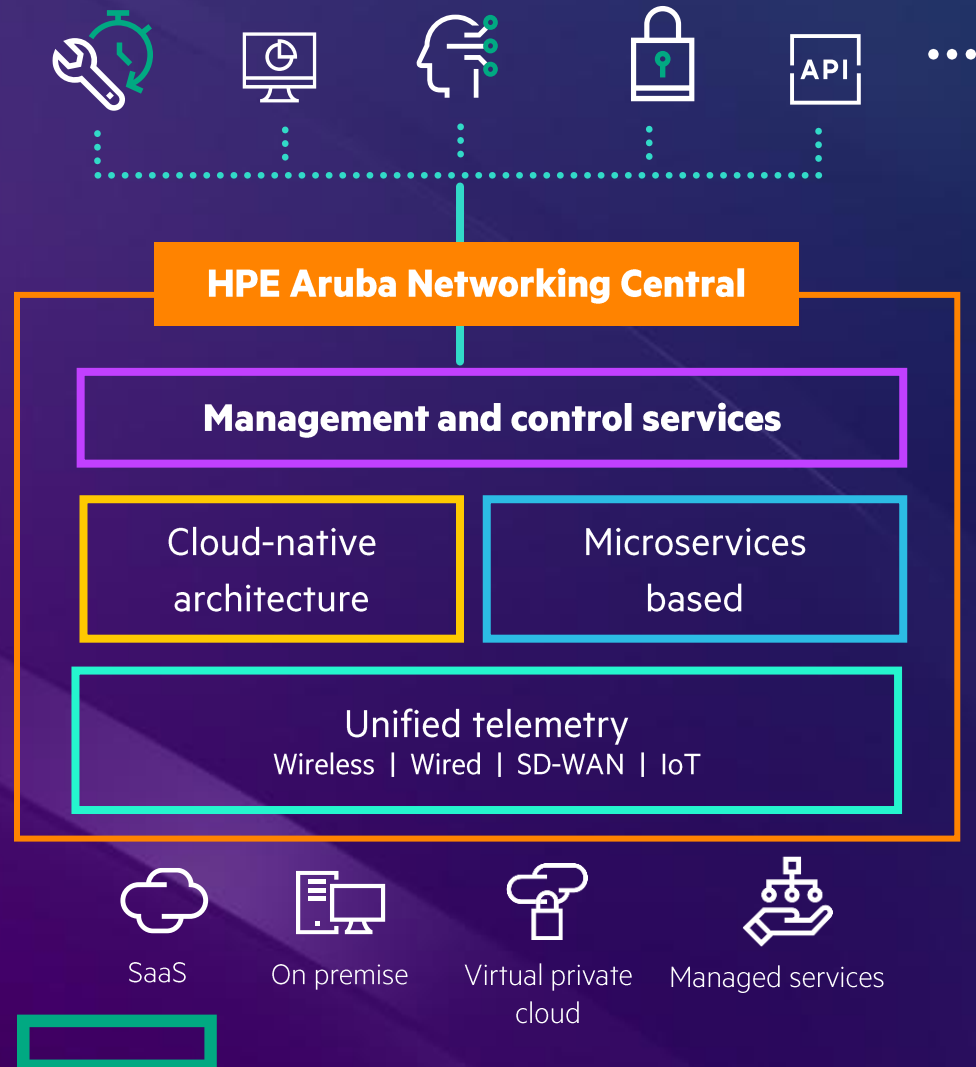
Powered by  
**HPE Aruba  
Networking  
Central**



HPE GreenLake for Networking

# HPE Aruba Networking Central

Cloud-native, AI-powered network management and orchestration



## AI and Automation

- AI insights for faster troubleshooting and optimization
- Gen AI-powered search
- Proactive user experience monitoring with UXI
- Live upgrades and robust reporting
- Intent-based workflows, and automation

## Built-in support for Zero Trust and SASE security

- AI-powered IoT profiling to close visibility gaps
- Consistent policies and access control
- Simplify security at scale

## Unified management and orchestration

- Single point of control and visibility
- Unified across WLAN, LAN, and SD-WAN
- High availability with live upgrades
- Zero touch provisioning

# Next-generation HPE Aruba Networking Central

## Unleash IT productivity across Day 0 to Day N network operations

**Aruba Central**

**SWITCH**  
**Switch-Infra**  
Information about the device.

**'Toggle' access from Central**  New Central

**Health**  
▲ Online with sub-optimal port negotiation issues, unsynchronized configuration.  
Uptime: 5d 1h 2m  
Last Restart Reason: Software upgrade  
Configuration Status: Unsynchronized  
Last Configuration Change: July 2, 2021, 9:34

**Properties**  
Model: CX 6200F 24G PoE  
Manufacturer: Aruba  
MAC Address: dc:a6:32:a2:aa:7c  
Serial Number: SG9AKN302Q  
IP Address: fe80::1c6b:33f9:a22f:557d  
169.254.63.219  
Topology: Standalone  
Software Version: 10.0.0.73075

**Performance**  
● Good performance.  
Usage: 645 MB  
Connected Clients: 2

**Connectivity**  
3 clients — Switch-Infra (Port 25) — GW-Oakmead-Backup (Port 7) — Internet (Port 11)

**Hardware**  
CPU: ● Good  
Memory: ● Good  
Temperature: ● Good  
Fans: ● 5 up (of 5)  
Power Supplies: ● 1 up, 1 in standby

**Recent Events**  
Time | Event  
Today, 13:44 | Client PoE re-negotiation  
Yesterday, 22:51 | Client 802.1x RADIUS timeout  
Yesterday, 21:36 | Device restarted

**Site:** Acme Store 019334  
**Network:** ▲ Fair  
**Clients:** 2  
**Security:** Risk (Low to High)  
**Alerts:** 13



# Next-generation Central

## Transforming the network operator experience

### GenAI powered

Self-contained, purpose-built LLM  
User intent accuracy and sub-second response times

How do I add a new SSID profile in Aruba Central?

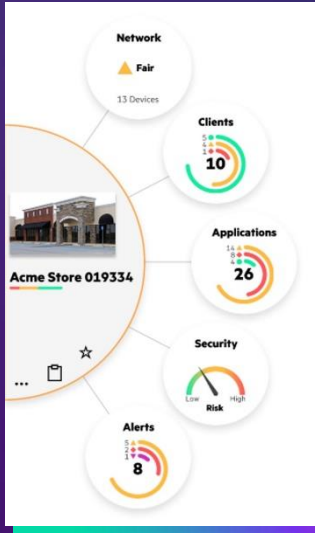
**Summary:**

To add a new SSID profile in Aruba Central, follow these steps:

- Set Filter:** Set the filter to a group with at least one AP. The dashboard
- Navigate:** Go to **Manage > Devices > Access Points**.

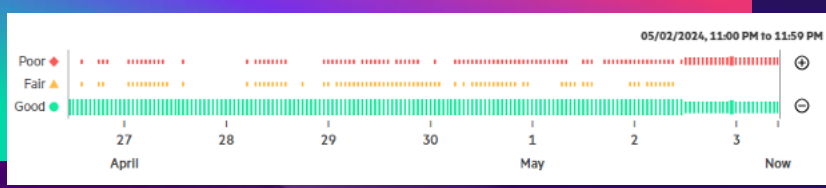
### Entity-centric navigation

Reduced number of clicks  
Minimized manual correlation



### Network 'time travel'

Holistic 'point-in-time' view  
Up to 7 days history  
Reduced MTTR



Proactive insights for network optimization  
Actionable recommendations for improved IT efficiency

**Access Point Firmware Recommendation Available**

**Enable WPA3 for Better Security**

WiFi security will improve for clients by enabling WPA3 on your WLANs, including...

### Device-agnostic configuration

Unified across APs, switches, gateways  
100% API support

**Create a Policy**

Name: Finance

Description: Finance Department

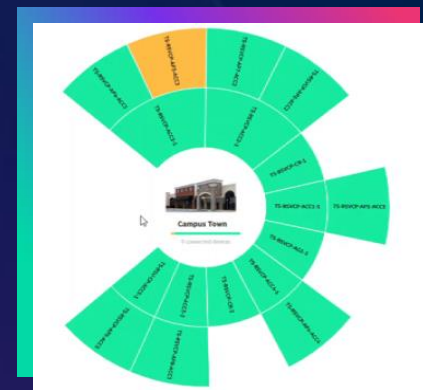
Enabled

Applies to Device Functions\*

2 device functions selected

- All Device Functions
- Branch Gateway
- Mobility AP
- Microbranch AP
- Mobility Gateway
- Switch

### 'Sunburst' topology

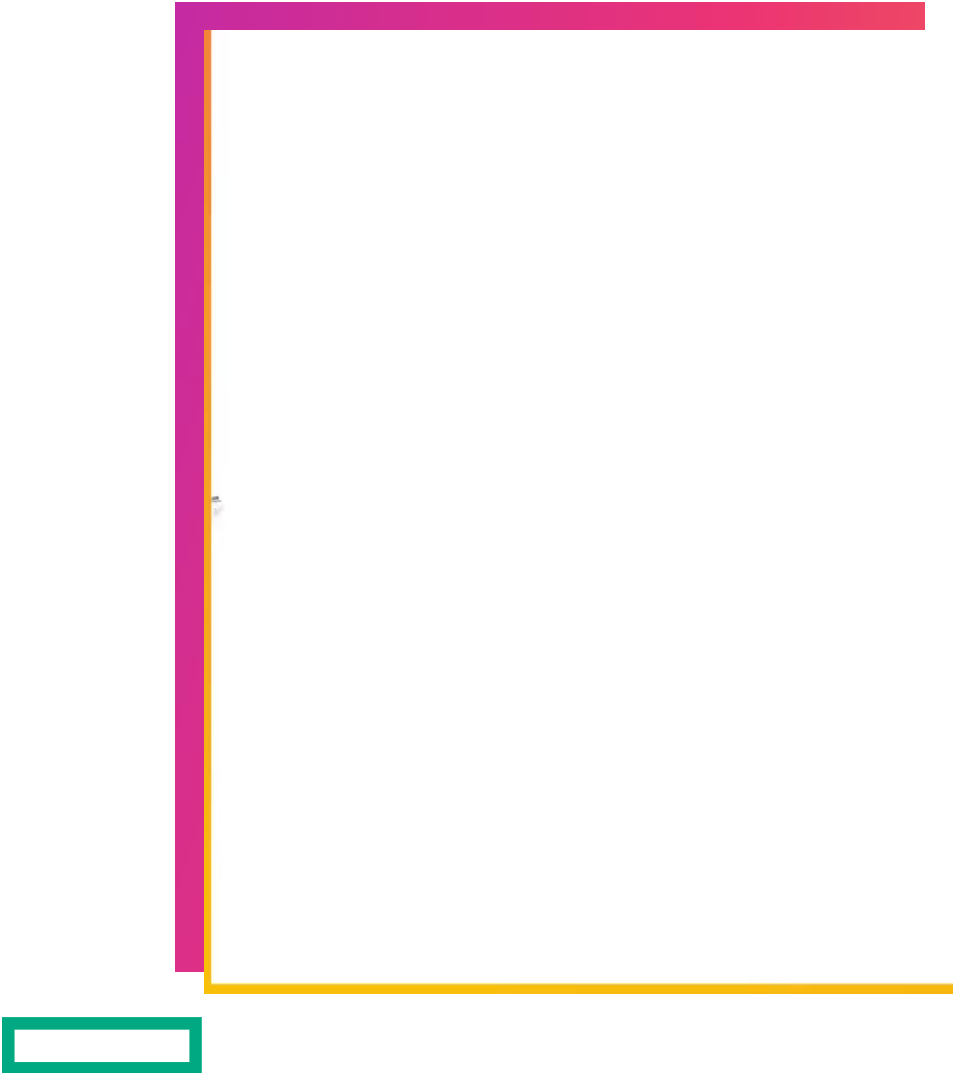


Intuitive physical and logical views  
Scalable to any size network, with rich filters to aid troubleshooting

### AI-powered optimization

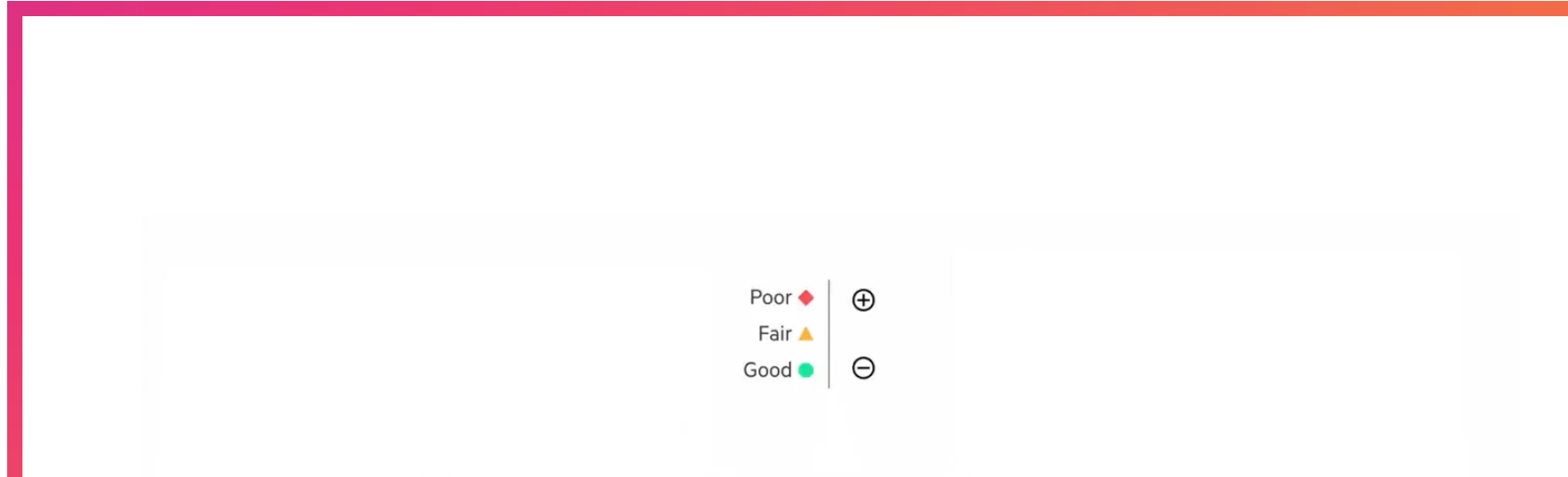
# Entity-centric 'solar system' view

Reduce navigation clicks and minimize manual correlation

- 
- Promotes **quicker discovery** without navigating across several screens and tables
  - **Proactive summarization** with 'blended' indicators
  - Seamless switching between site, network devices, clients, applications etc.
  - Access to unified network device and client lists

# Industry-first network 'time travel'

Helping IT teams answer 'What changed? When? Why?'



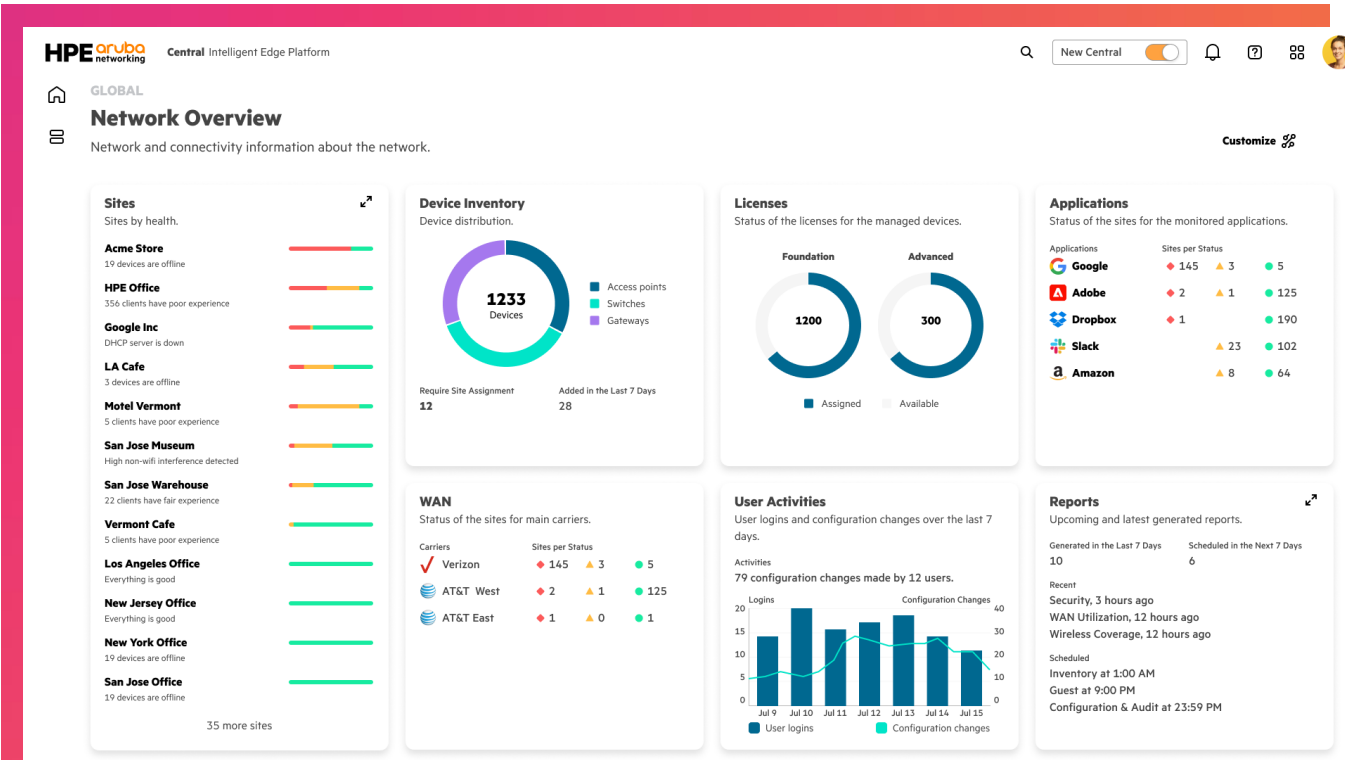
- Holistic '**point in time**' network snapshot to troubleshoot difficult issues
- Deep correlation that goes beyond manual analysis of event logs and packet captures
- Move back in time for up to **7 days** , with granularity of **1 min**
- On selecting a timestamp, all dashboard views reflect what the network looked like at that point





# Network operations dashboard

Powerful 'command center' view to direct operator attention

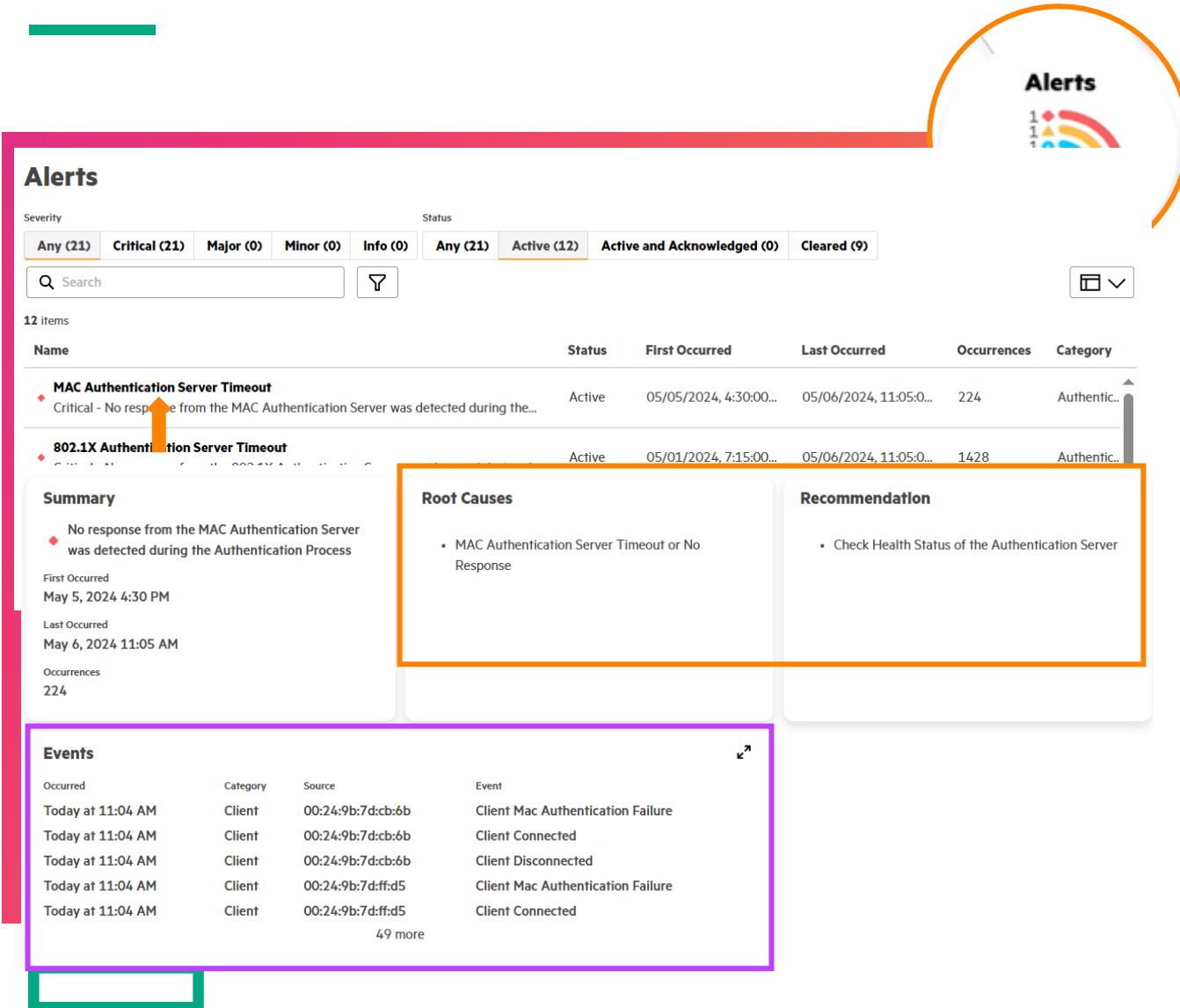


- Unified view of the network for quick assessment of site health, application experience, device inventory, and more
- Optimizing the **'to-do' list** of a network operator
- Blended indicators highlight issues requiring **immediate attention**



# AI-driven assurance and alerts

## Accelerate troubleshooting across skill levels



The screenshot shows an 'Alerts' dashboard. At the top right, a circular callout highlights the 'Alerts' header with a colorful icon. Below the dashboard, a purple-bordered box highlights the 'Root Causes' and 'Recommendation' sections. At the bottom, another purple-bordered box highlights the 'Events' table. A green-bordered box is at the bottom left.

**Alerts**

Severity: Any (21) Critical (21) Major (0) Minor (0) Info (0) Status: Any (21) Active (12) Active and Acknowledged (0) Cleared (9)

Search: [Search] Filter: [Filter]

12 items

Name	Status	First Occurred	Last Occurred	Occurrences	Category
MAC Authentication Server Timeout Critical - No response from the MAC Authentication Server was detected during the...	Active	05/05/2024, 4:30:00...	05/06/2024, 11:05:00...	224	Authentic...
802.1X Authentication Server Timeout Critical - No response from the 802.1X Authentication Server was detected during the...	Active	05/01/2024, 7:15:00...	05/06/2024, 11:05:00...	1428	Authentic...

**Summary**

No response from the MAC Authentication Server was detected during the Authentication Process

First Occurred: May 5, 2024 4:30 PM  
Last Occurred: May 6, 2024 11:05 AM  
Occurrences: 224

**Root Causes**

- MAC Authentication Server Timeout or No Response

**Recommendation**

- Check Health Status of the Authentication Server

**Events**

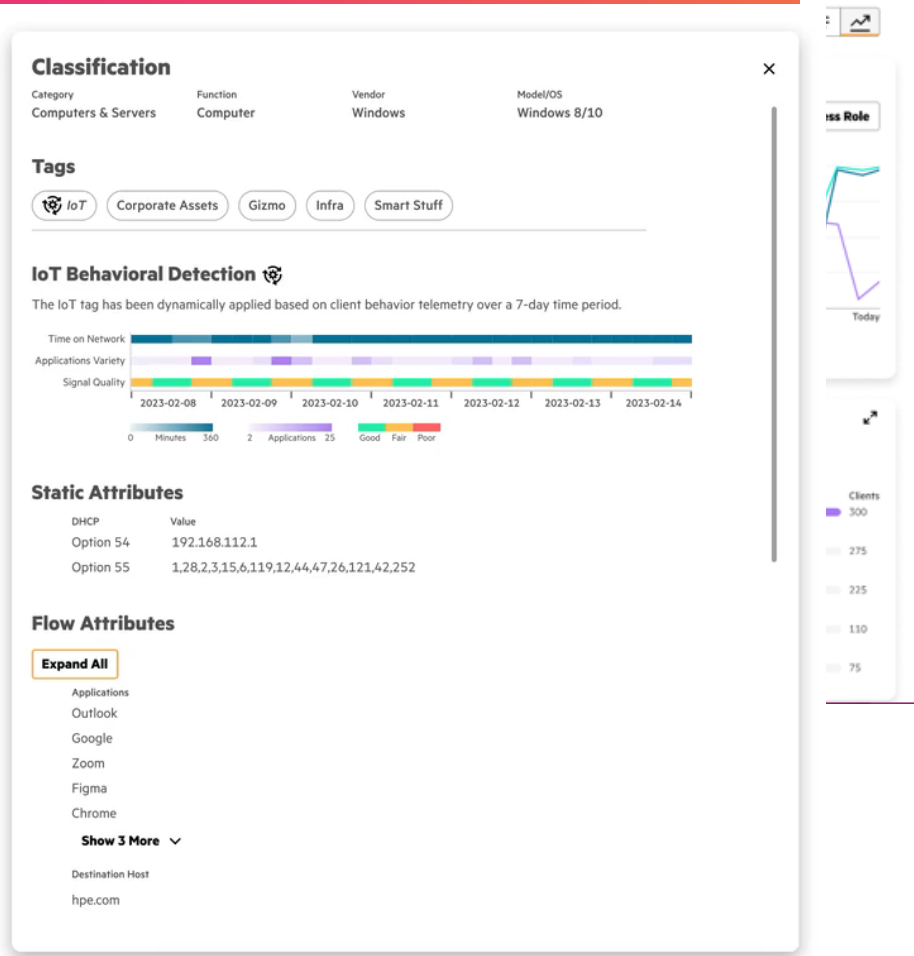
Occurred	Category	Source	Event
Today at 11:04 AM	Client	00:24:9b:7d:cb:6b	Client Mac Authentication Failure
Today at 11:04 AM	Client	00:24:9b:7d:cb:6b	Client Connected
Today at 11:04 AM	Client	00:24:9b:7d:cb:6b	Client Disconnected
Today at 11:04 AM	Client	00:24:9b:7d:ff:d5	Client Mac Authentication Failure
Today at 11:04 AM	Client	00:24:9b:7d:ff:d5	Client Connected

49 more

- **Event-to-insight in <5 minutes** with near real-time alerts, speeding up MTTR
- **Full-stack correlation** with precise root-cause, recommendation and **impact**
- Reduced alert fatigue with consolidated list of triggered events
- Assurance indicators for device health and client experience for quick diagnosis

# AI-powered client profiling

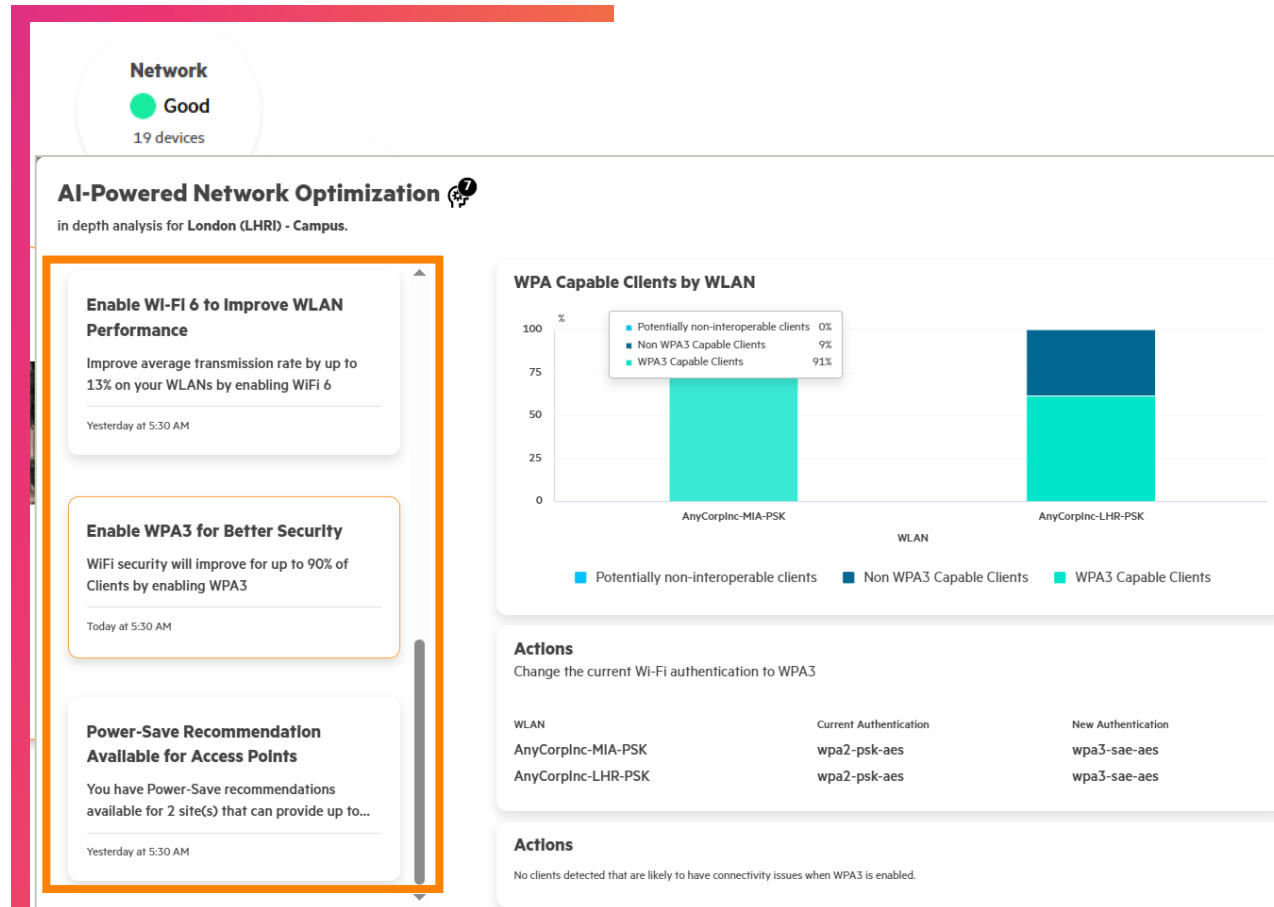
Enhance endpoint visibility for Zero Trust networking



- Only solution with AI-powered IoT profiling and **behavior analysis** for segmentation accuracy
- **Traffic flow visibility** for high classification efficacy and enhanced protection
- Advanced filtering and custom group tagging aid in policy creation and enforcement

# AI-powered recommendations

Free up valuable IT cycles and reduce risk with proactive optimization insights



- **Custom, actionable recommendations** at a global/per-site basis
- AI/ML models trained and re-trained **weekly** on **data from anonymized peer groups** with similar environments
- **Examples –**
  - Firmware recommendations
  - 802.11ax recommendations for Wi-Fi performance
  - AP power save recommendations to support sustainability efforts
  - WPA3 insights for improved security posture and **more!**

# Gen AI powered search

Enhanced with enterprise-grade LLMs for improved operator experience

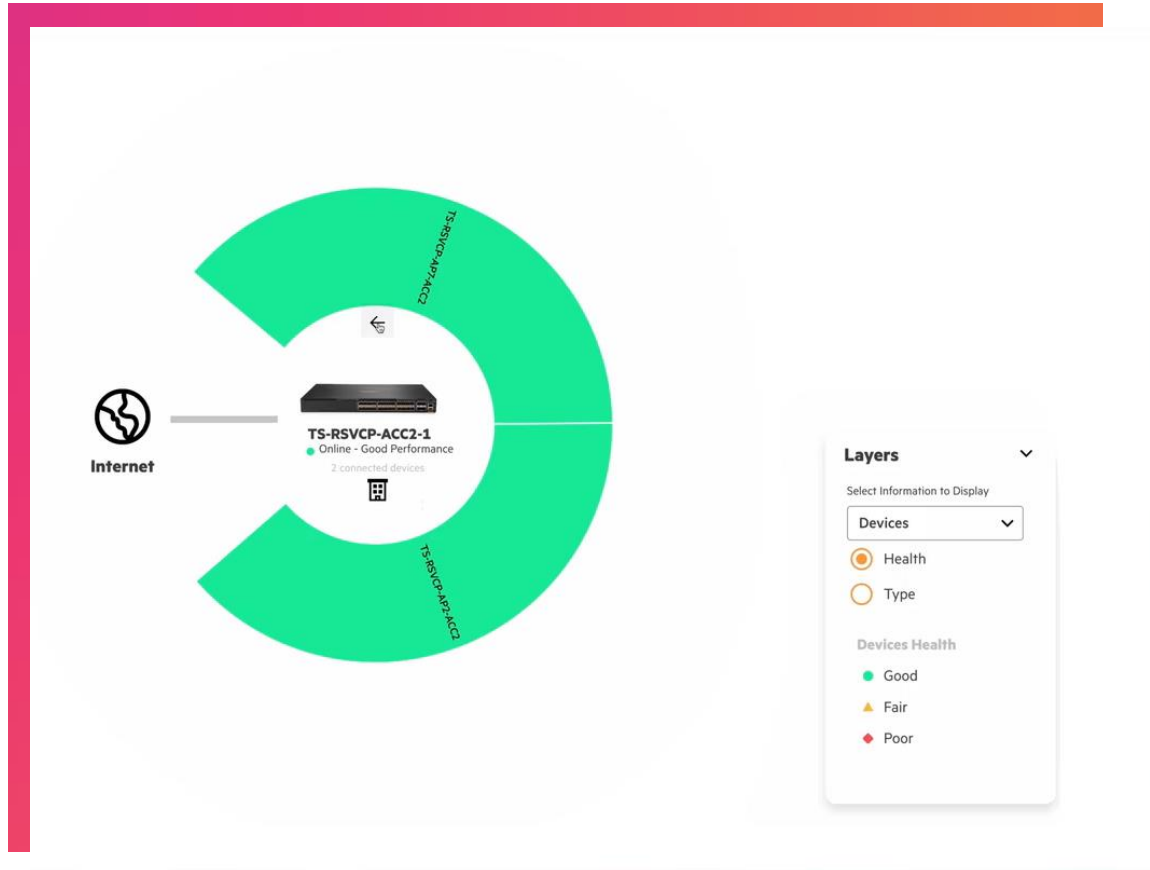
The screenshot shows a search interface in Aruba Central. At the top, a search bar contains the query "devices running 10.4". Below the search bar, the "Search Results" section is displayed, showing two items:

Name	Type	MAC address	IP Address	Model	Serial Number
GW-Catania-02-MB ONLINE	Gateway Cluster	20:4c:03:d3:11:f8	9.9.9.1	A9004	CNMHKL8032
AP-Catania-01-LR ONLINE - Last seen -	Access Point Standalone	90:4c:81:c0:53:14	10.1.50.3	AP-345	CNFYK510L2

- Trained and tuned on **multiple proprietary LLMs**, purpose-built for networking
- Pre-conditioned with 3 million network questions for improved performance and accuracy
- **Sub-second summarization** of latest 30k pages of VRDs and tech pub documents
- **Uncompromised security** with no external API interfaces, and no PII/CII shared beyond customer instance

# 'Sunburst' topology

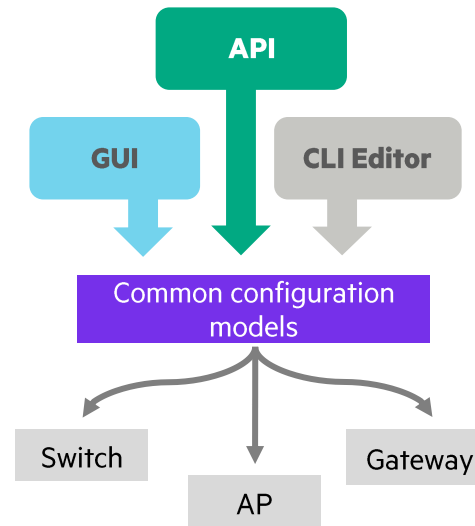
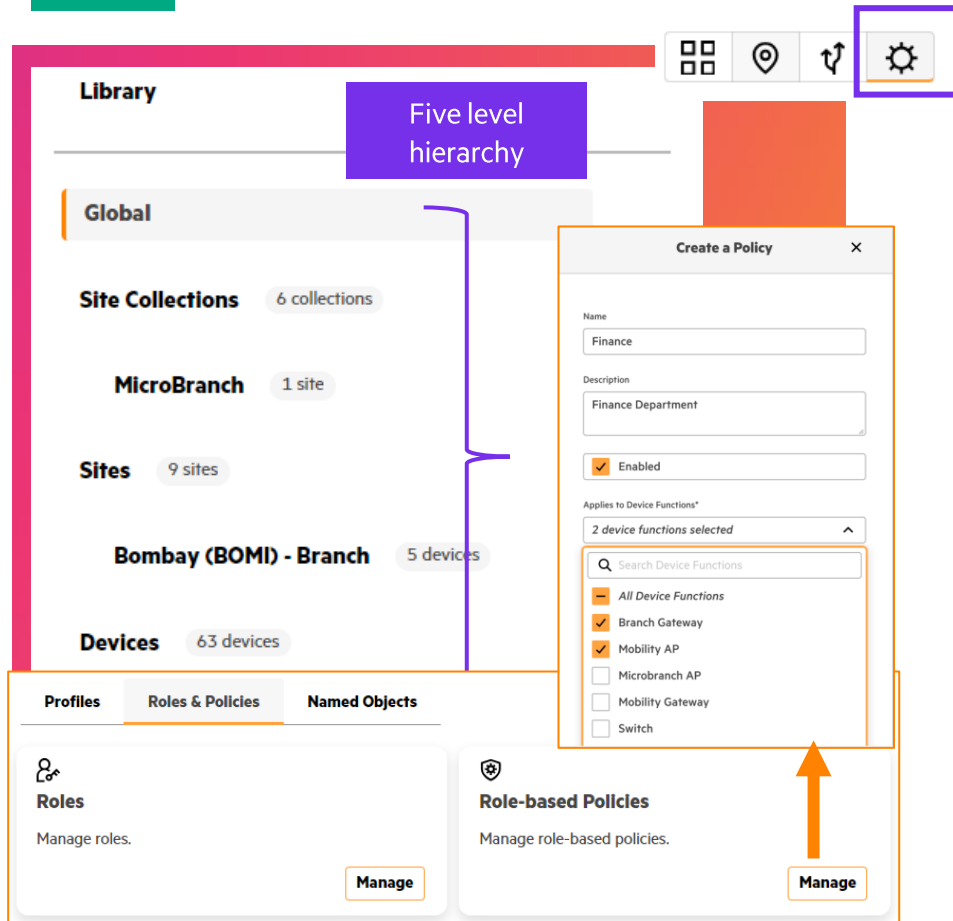
Speed up analysis and troubleshooting with a bird's eye view



- Intuitive visual representation of the physical and logical network connectivity
- Scales for **networks of any size** and complexity, unlike traditional network diagrams
- Allows administrators to get to the **right context - quickly**
- Rich filters with physical and logical elements (such as health, VLAN, Client density, and AP radio integrity)
- Change the center or reference point of the visualization for further drilldowns

# Flexible, enterprise-grade configuration

Automate and streamline network configuration at scale with unified workflows



- **Multi-level hierarchy** with global, site collection, sites, device groups and devices
- Granular control to **model complex configurations**
- Reusable profiles that are **configured once** and applied as required
- Standardized workflows to abstract config complexity and reflect business intent
- Advanced data modelling to **automatically generate** device specific configurations
- **100% API support** unified across device types



# Next-generation Central

## Transforming the network operator experience



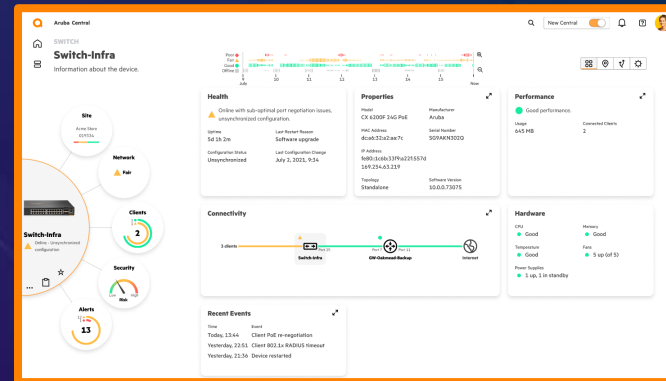
### Maximizing IT efficiency

Contextual data representation based on **user-intent** and minimized manual correlation



### Operational simplicity

Software-defined, intent-based and **device agnostic** configuration workflows



### Reduced MTTR

AI-powered workflows, powerful troubleshooting tools, and pragmatic assistance for **faster root cause analysis**



### Enhanced programmability

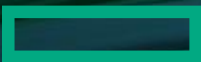
**100% API-first model** for high degree of interoperability





# Thank you

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