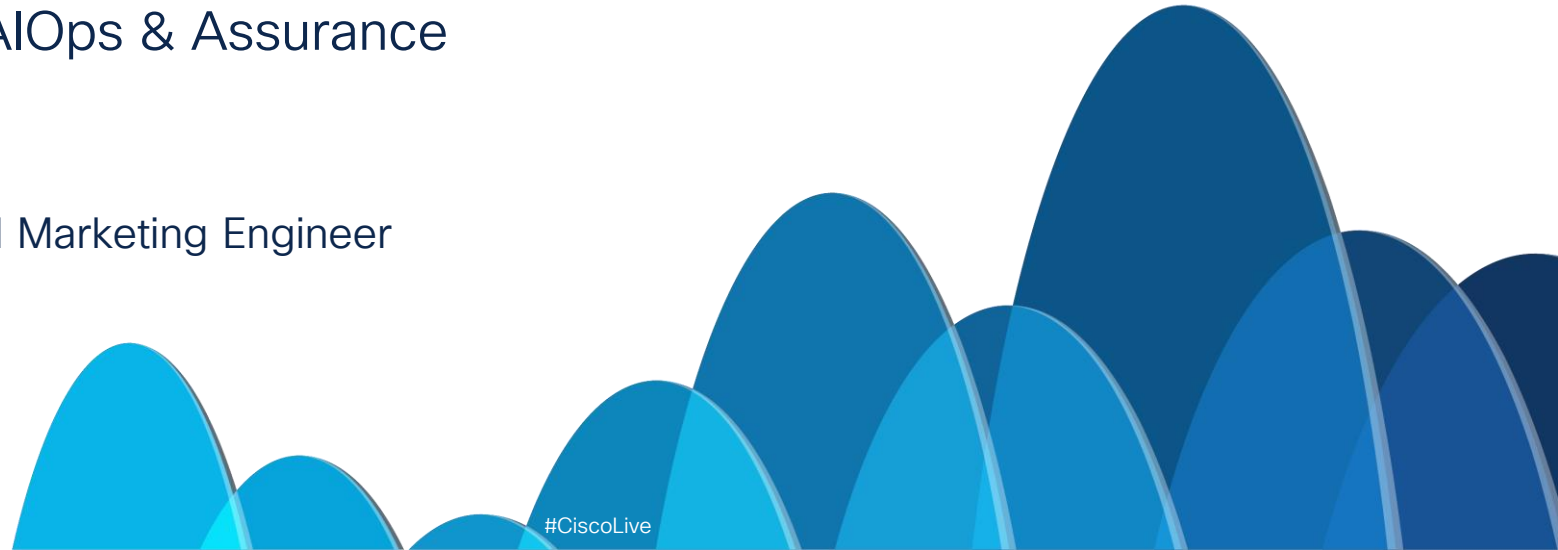
The bridge to possible

7 Ways to Optimize User Experience using Catalyst Center

Wireless AIOps & Assurance

Karthik Iyer
Sr. Technical Marketing Engineer

BRKEWN-2029



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Cisco Webex App

https://ciscolive.ciscoevents.com/ciscolivebot/#BRKEWN-2029

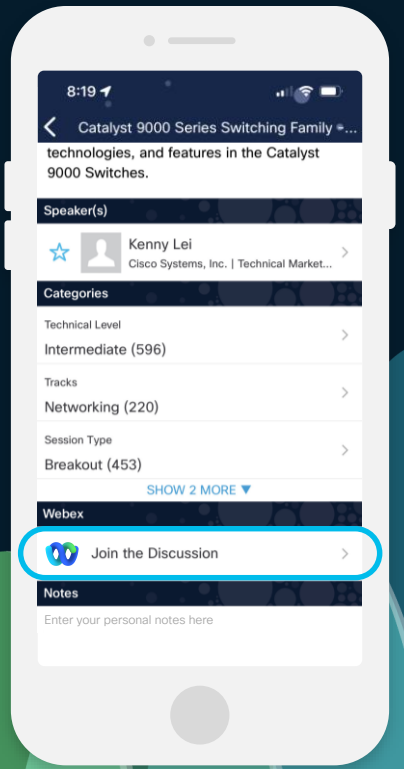
Questions?

Use Cisco Webex App to chat with the speaker after the session

How

1. Find this session in the Cisco Live Mobile App
2. Click “Join the Discussion”
3. Install the Webex App or go directly to the Webex space
4. Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 7, 2024.



Karthik Iyer

Technical Marketing Engineer- AI-Driven Wireless Solutions

Fields of Expertise

Wireless Assurance and Automation, Wi-Fi 6/6E APs

Personal Life

Indian, Silicon Valley Resident, San Jose State University Alumni

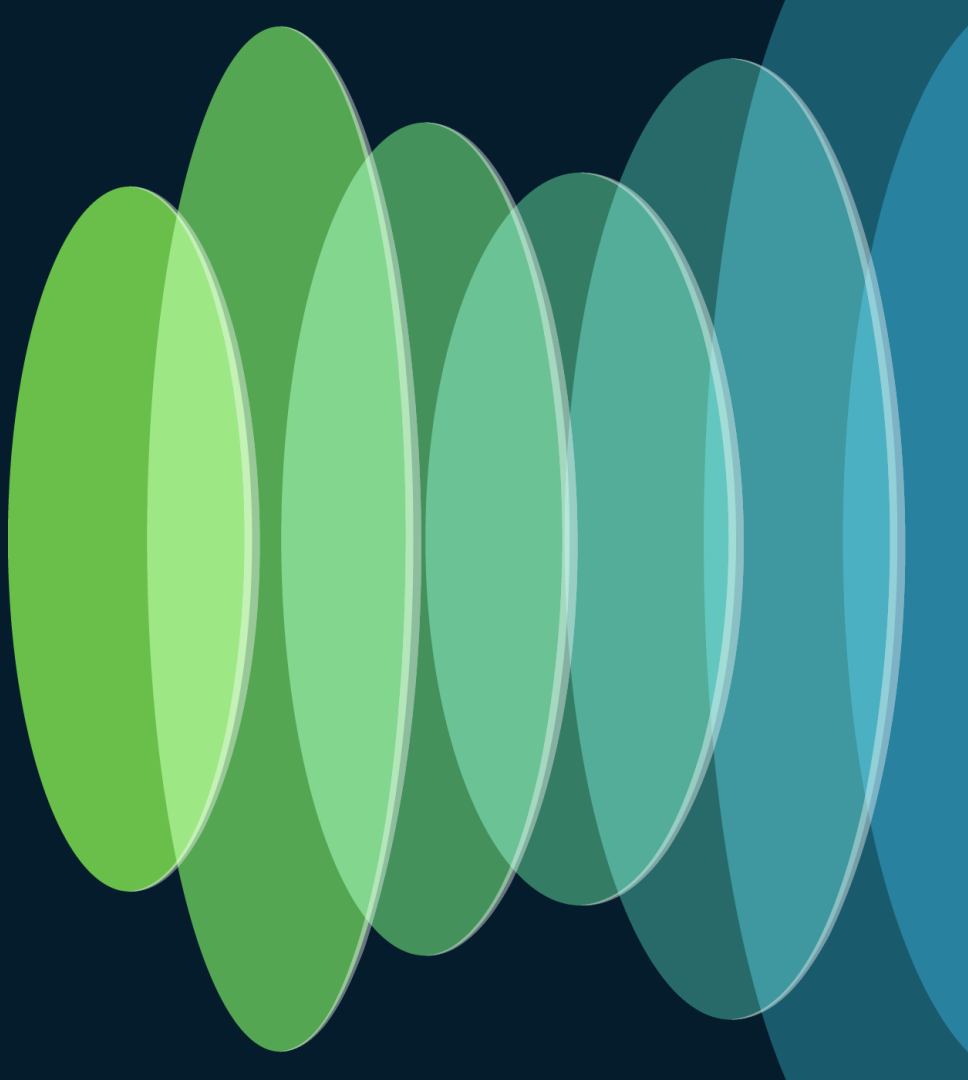
Hobbies

Motorcyclist, Formula 1 Enthusiast

Agenda

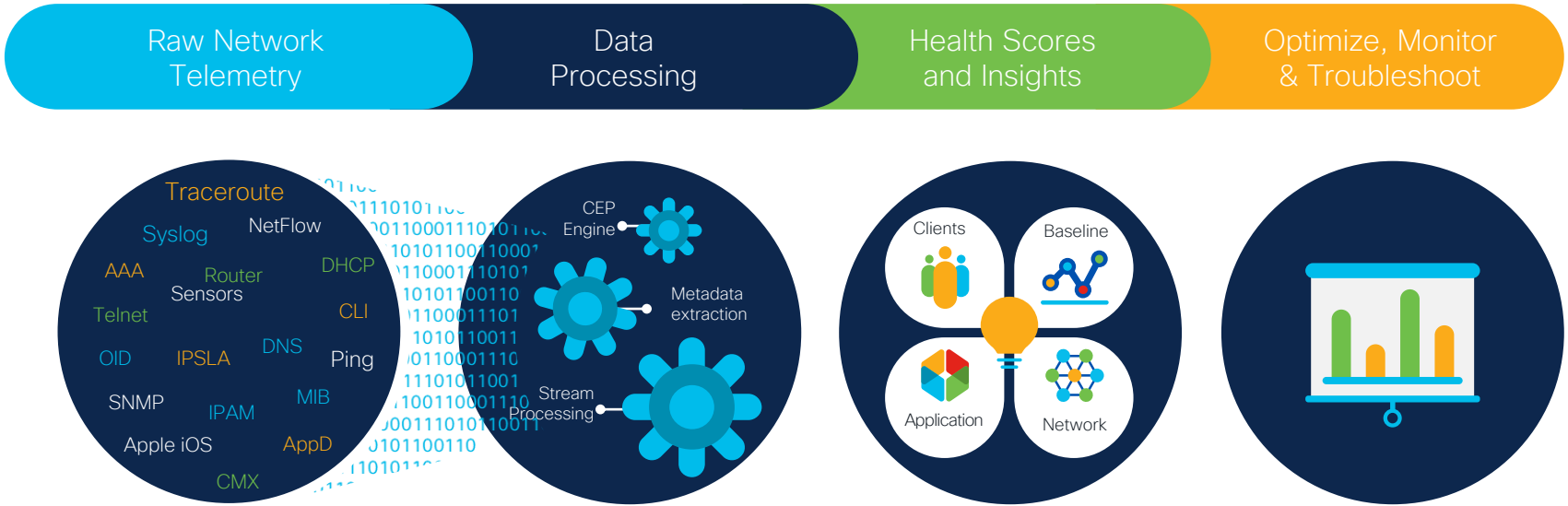
- The Power of AIOps with Wireless Assurance
  - What is AIOps?
  - 3D Maps
  - AnyLocate
  - AI-Enhanced RRM
- Wireless Troubleshooting with AIOps
  - AI Network Analytics
  - Site Analytics
  - ISE 360
  - Assurance dashboard
- Simpler Wireless Management
- Conclusion

What is AIOps?

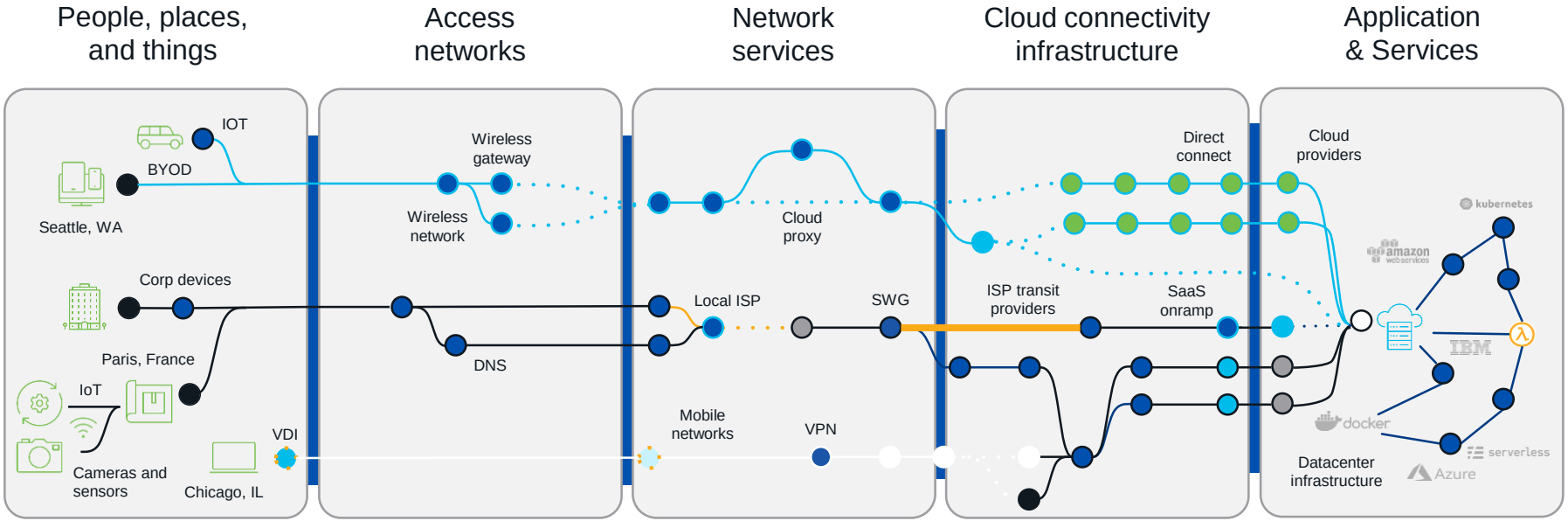


AIOps – Artificial Intelligence for IT Operations

Transforms raw data into actionable insights



Networks are More Complex Than You Think



Cisco AIOps & Assurance Focus Areas and Vision

Network Devices
Network devices across wireless and wired domains are up and operational.

Infra Connectivity
Connections between network devices to the RF, LAN, WAN, and Services are available and optimal.

Client
Wireless & wired clients can leverage the network to access data reliably.

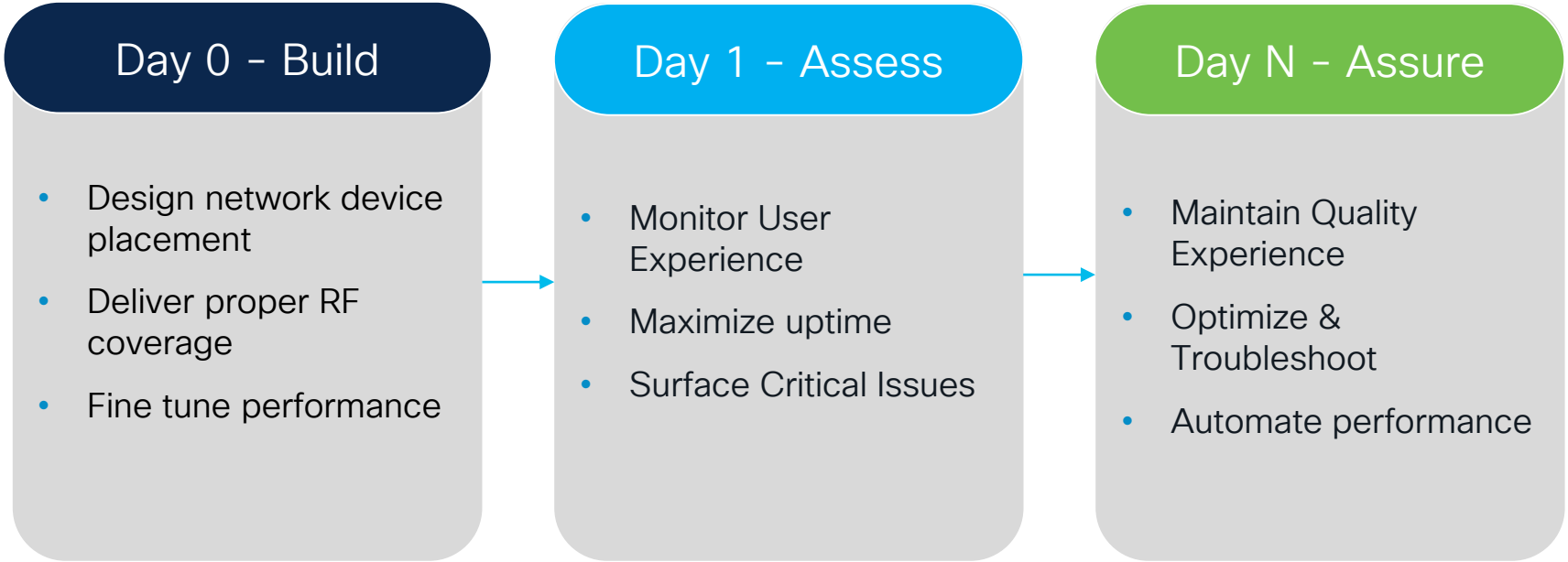
Applications
Users can utilize applications with sufficient performance when needed.

Great User Experience

- AI-Driven Automation
- Full-Stack Optimization
- Proactive Issue Detection
- Auto Issue Remediation

Cisco AIOps & Assurance enables great user experiences!

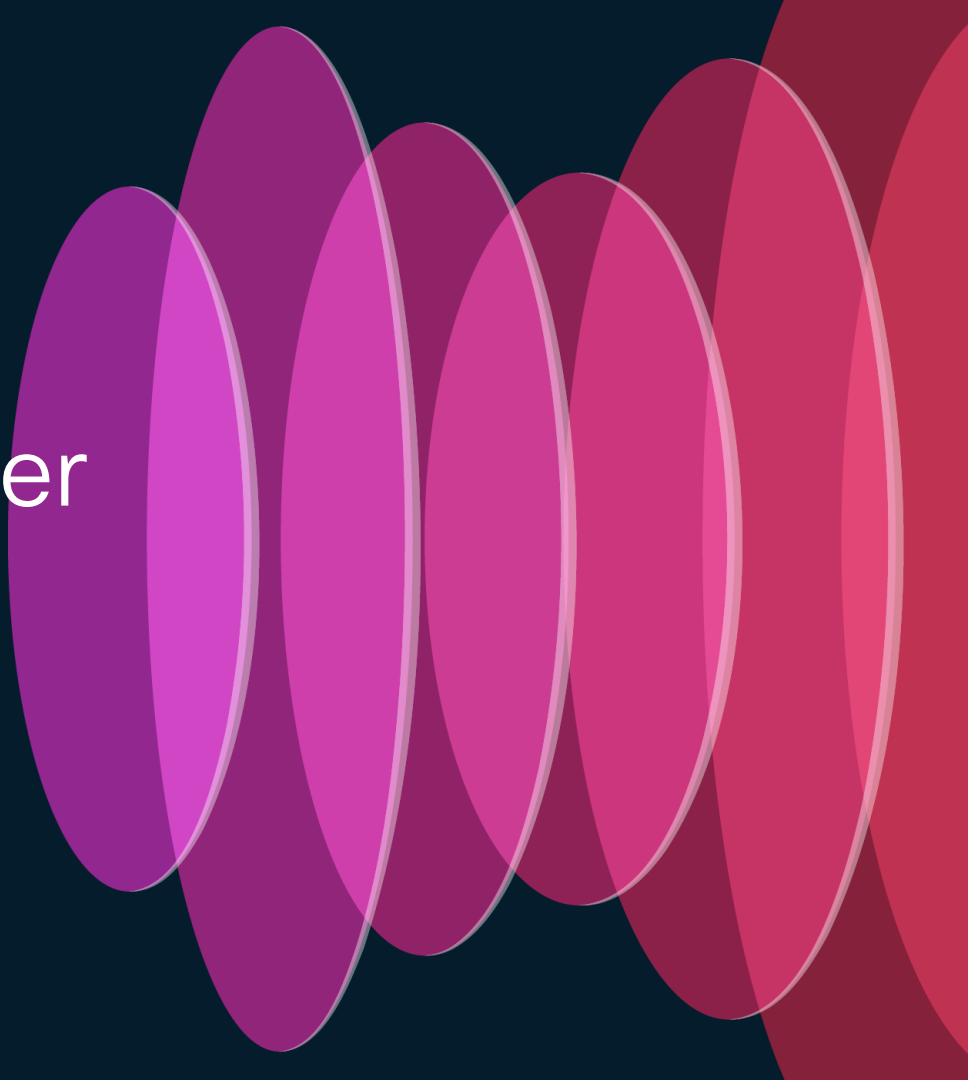
Simplify Network Management with AIOps & Assurance



Day 0

Wireless 3D Analyzer

Advanced Insights and Recommendations



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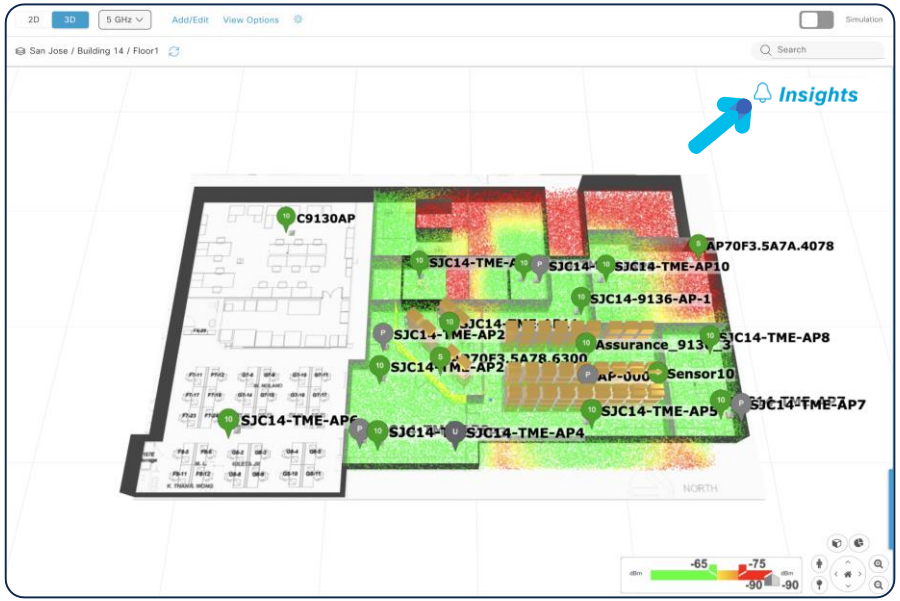
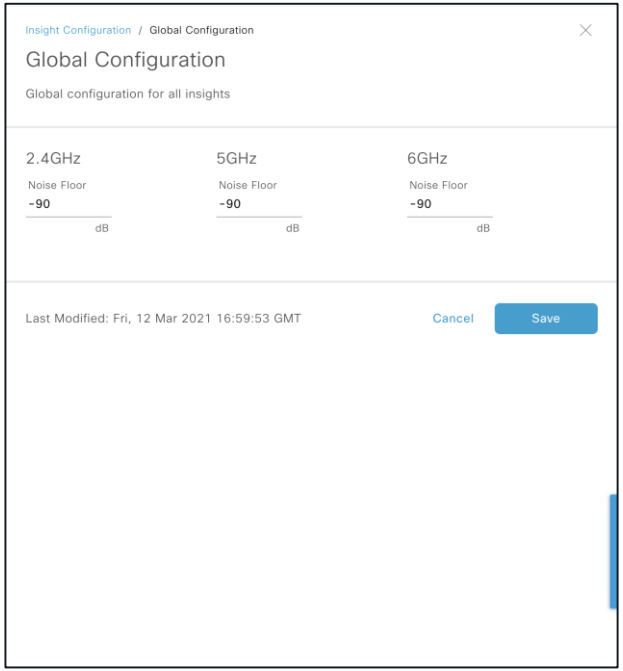
Monitoring SLAs With Visual Insights
Visibility Into Areas of Coverage That Need Attention

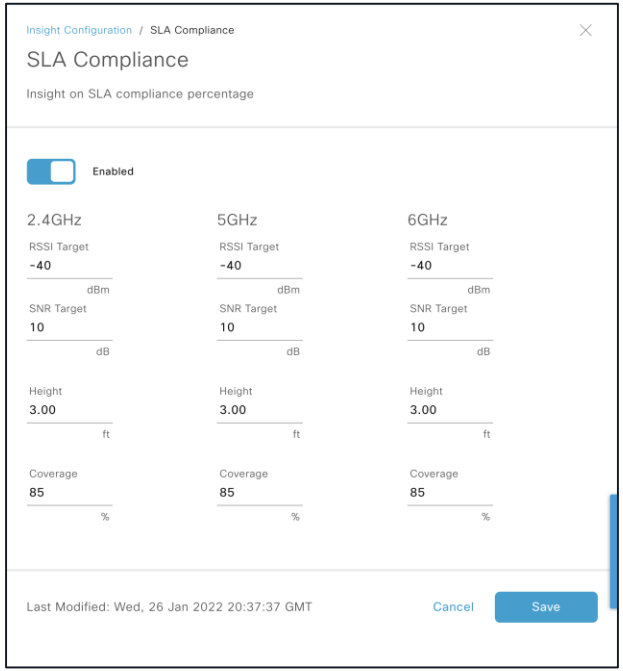
1 Click on the Insights icon to view SLAs that meet or miss the configured threshold.

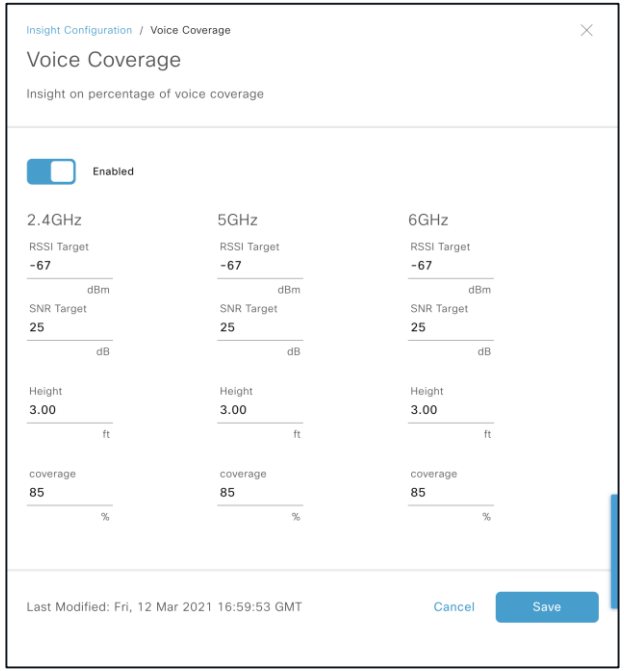


2 A banner appears with a list of insights. Clicking on Click adjusts the map for you to view insight details.

Customizing SLAs for Visual Insights
Tailor Visual Insights to Your Network Environment



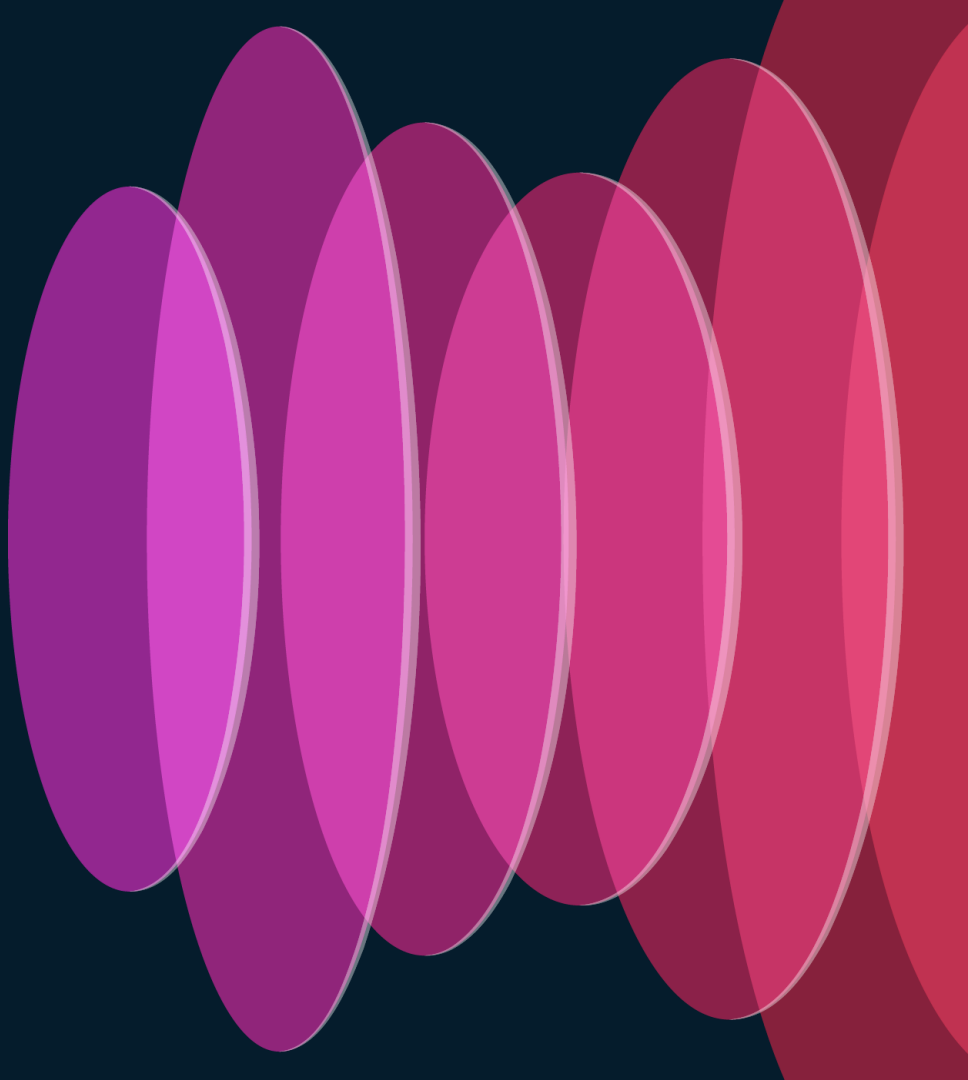




Leverage RF Optimizer for AP Redeployment Suggestions
starting from 2.3.3!

Day 0

Partner Integration



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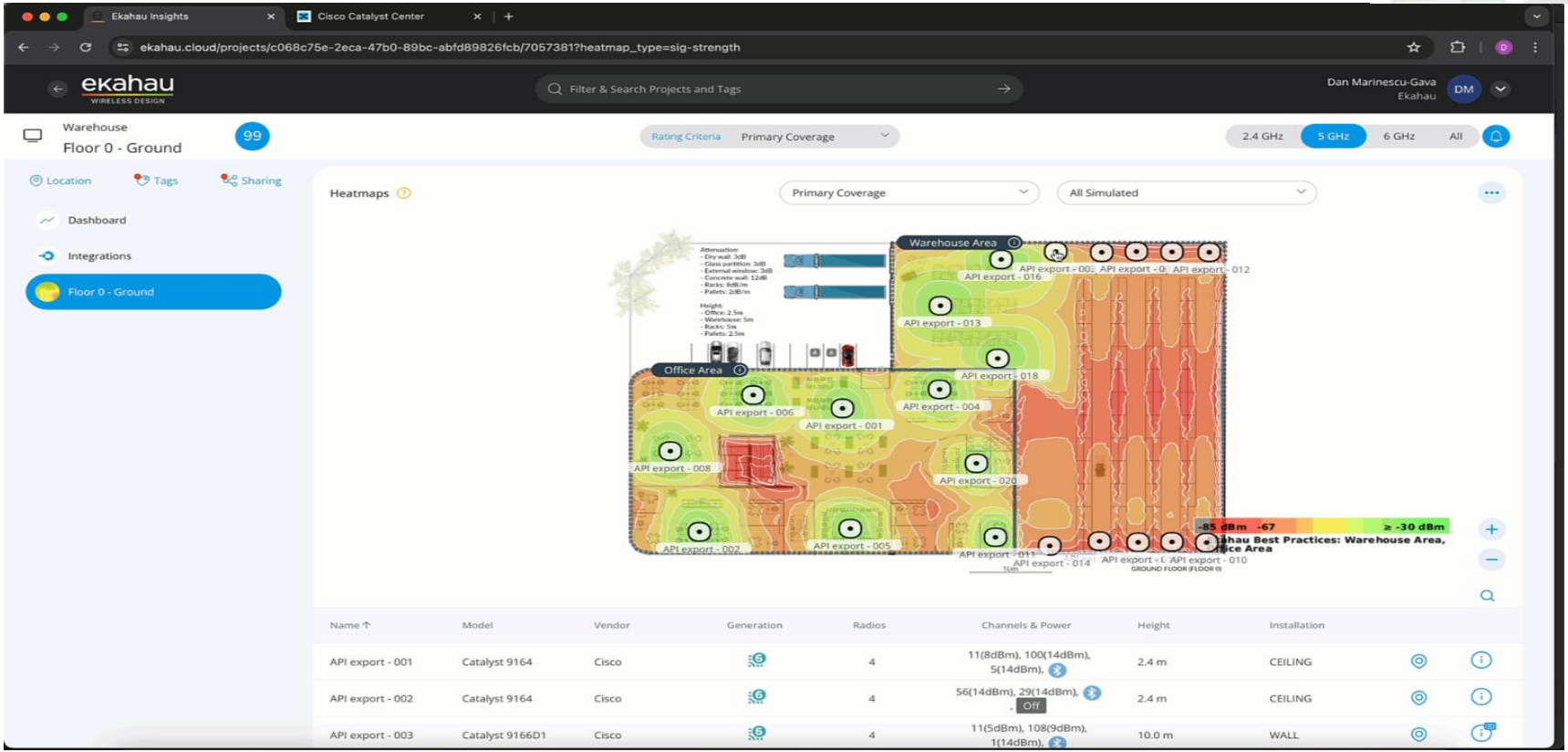
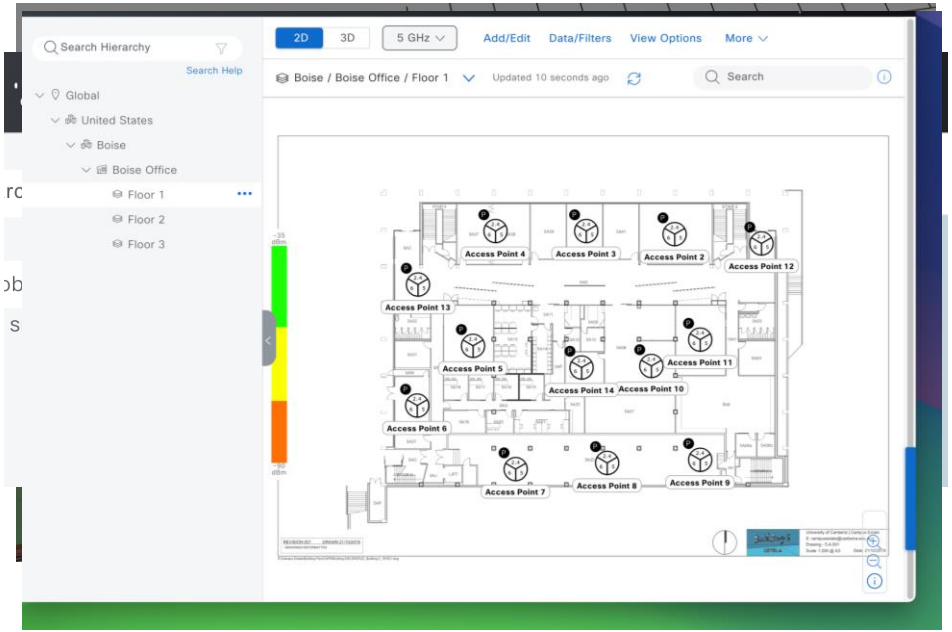
Ekahau Project import with API



Hamina import Integration

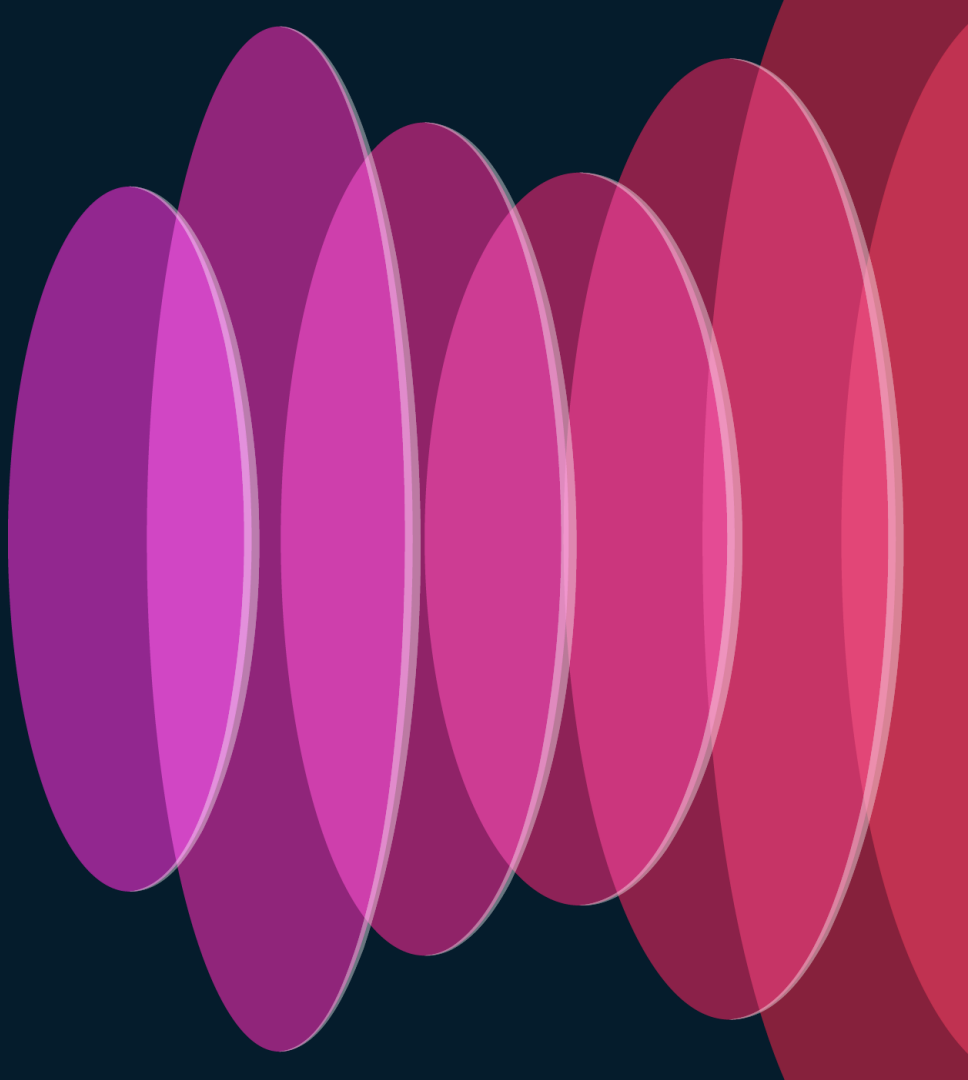
- Export project file from Hamina dashboard
- Define the area and building
- Download hierarchy and project file
- Upload the sites and then the floor map to Catalyst Center



Click here for a detailed Guide

Day 0

AnyLocate



Day 0

AnyLocate

Demo in IF

Available on Spaces now

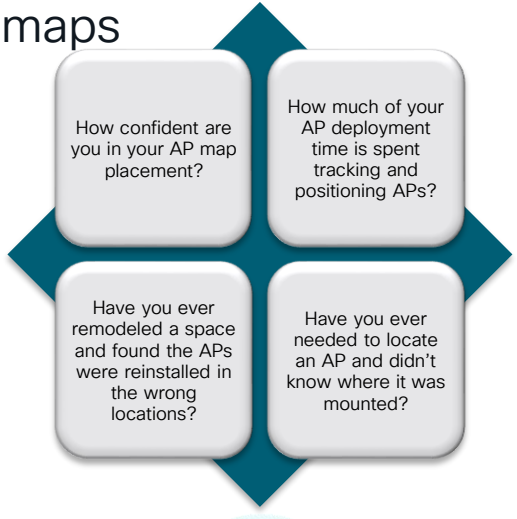
Catalyst Center beta July 2024

Automatically determine AP location and place them on maps

Reduce deployment time, complexity, and cost

Improve client location services accuracy

Easier, more accurate troubleshooting



AnyLocate also enables new technologies for client location!

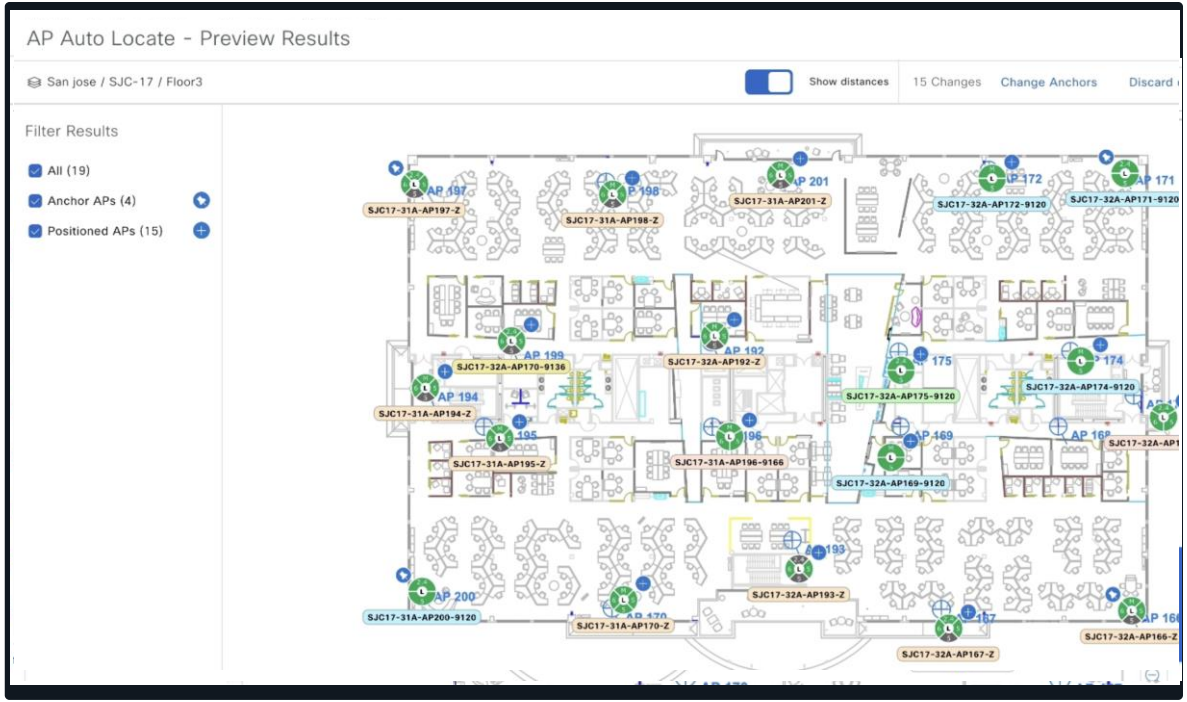
Supported on: CW9166, CW9164, C9136, C9130, C9120* with DNA-Advantage license

* AP-to-AP only

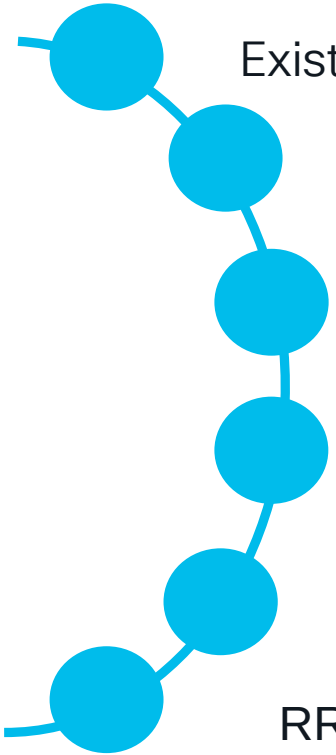
Catalyst Center
beta July 2024

AP Auto Locate Demo

APs are Auto Located on the Map



AP Auto Locate Ranging Process



Existing AP RF settings are stored

RRM is temporarily disabled to prevent unexpected channel change

AP channels are systematically changed to exchange Fine Timing

The time it takes for a signal to reach one AP from another AP is accurately measured to determine

Both 5GHz and 6GHz bands are used to perform these measurements

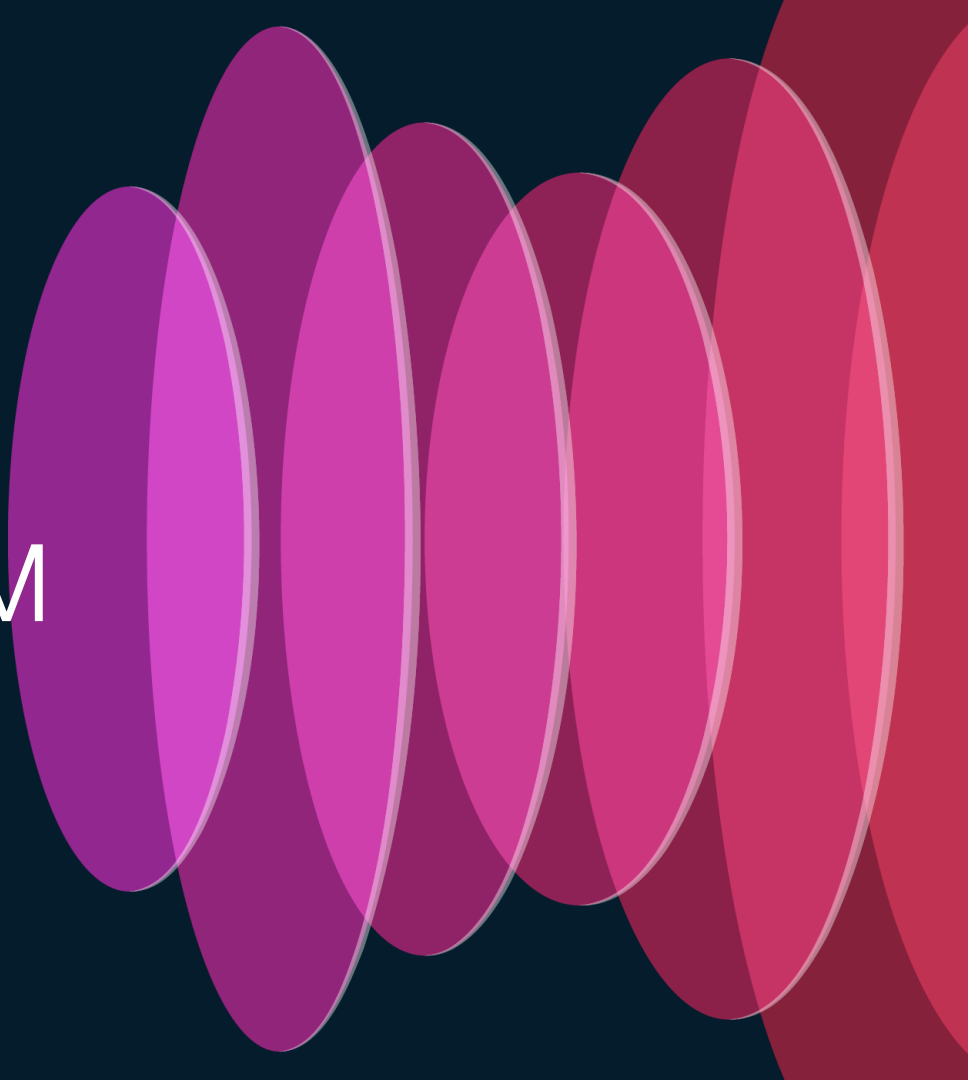
Measurements are stored

AP channel settings are returned to their previous state

RRM is re-enabled

Day 1

AI-Enhanced RRM



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AI-Enhanced RRM Vision

Create unified architecture to enable AI-Driven RRM services for all Cisco's customers

Simplify Network Programming

Client Assisted RF Optimizations

Deployment Agnostic RRM

What is radio resource management?

RRM is a Wireless Controller (WLC) feature that automatically optimizes wireless configurations to improve wireless performance.

Some examples

- Flexible Radio Assignment (FRA)
- Transmit Power Control (TPC)
- Dynamic Channel Assignment (DCA)
- Dynamic Band Selection (DBS)

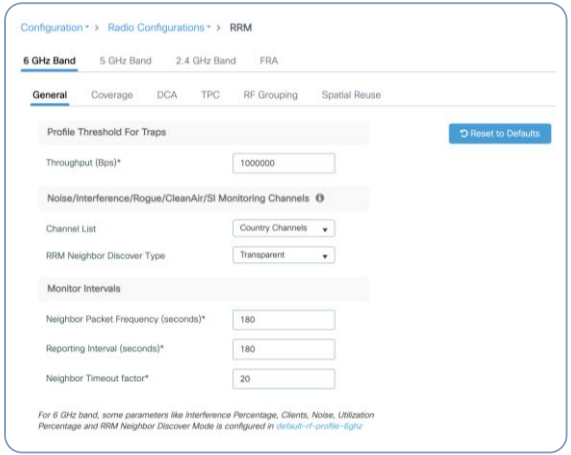
Traditional RRM

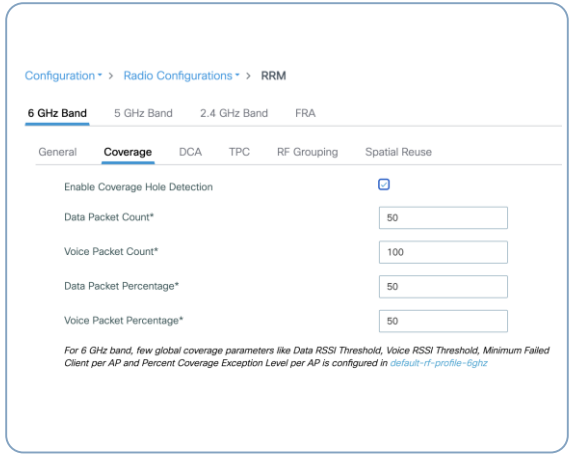
Requires Expert Tuning

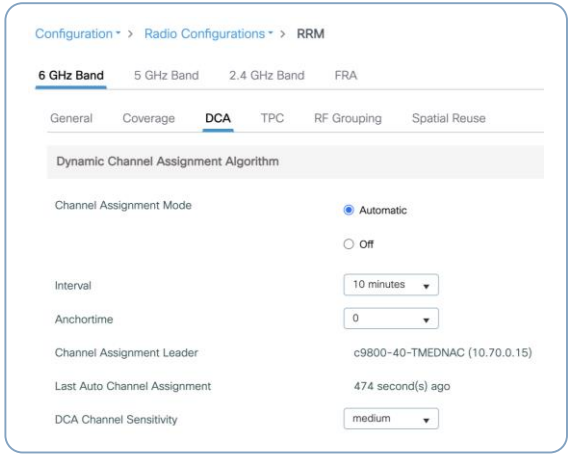
Lacks Visibility

Snapshot-Based Optimizations

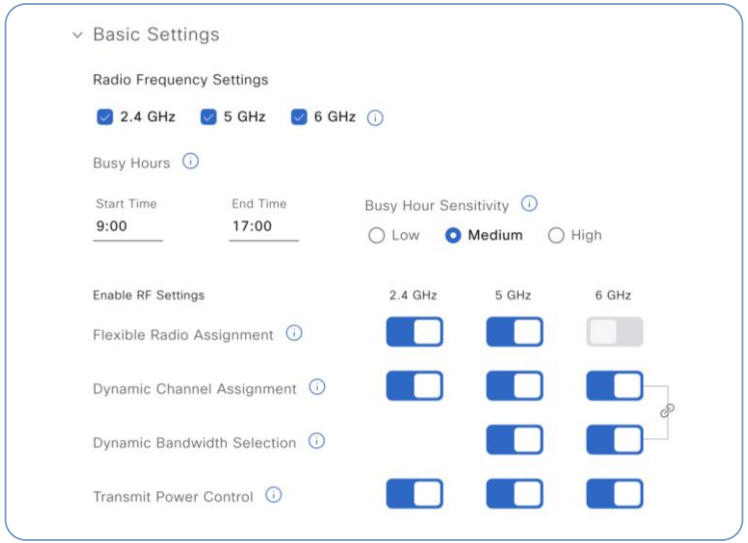
RRM configuration on the Catalyst 9800 UI



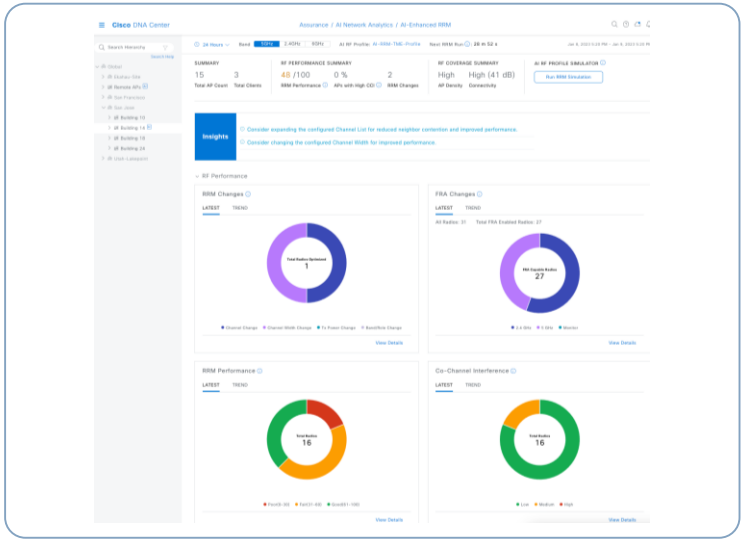




AI RF Profile



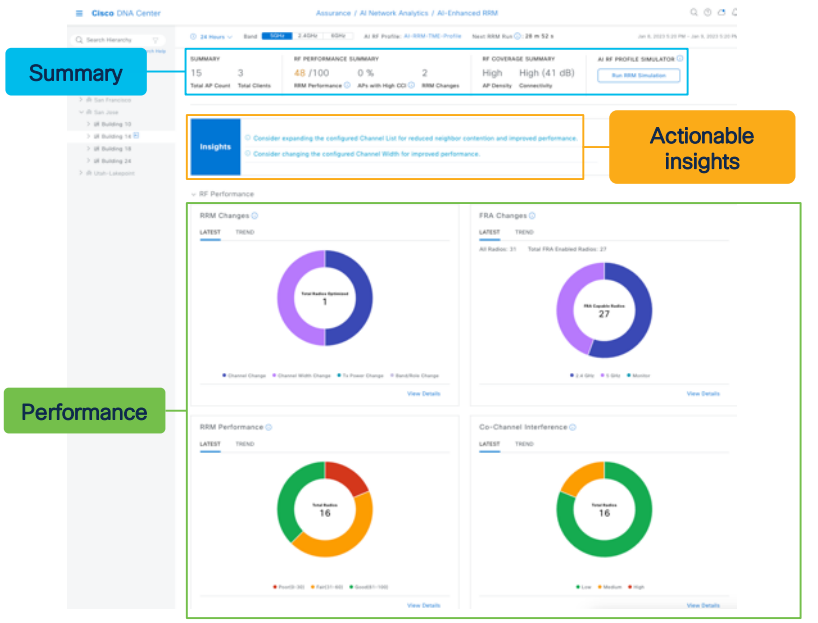
AI-Enhanced RRM control center



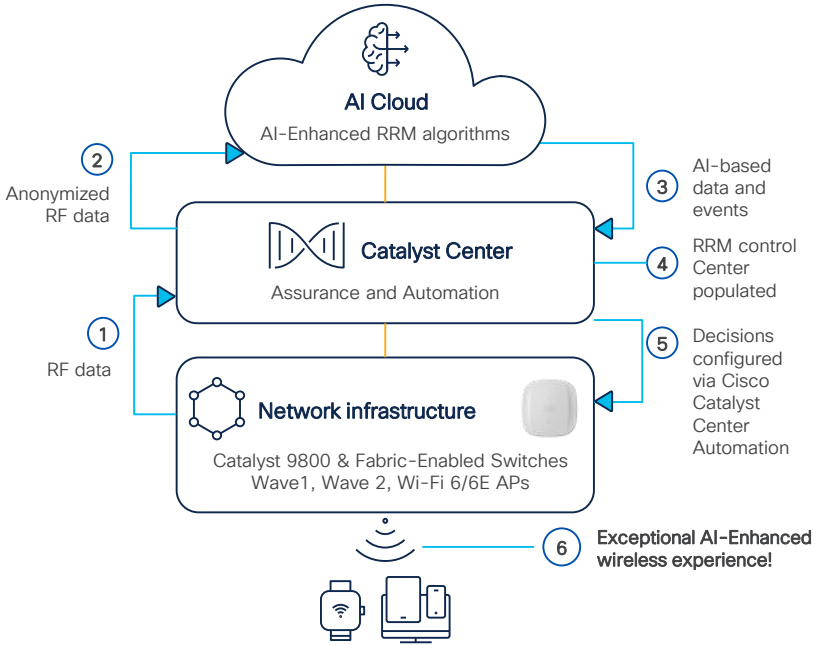
AI-Enhanced RRM is AI that Powers RF Optimization

Provides Users with Better Wi-Fi and Admins with a Better RF Management Experience!

Instantaneous visibility



Proactive optimizations



AI-Enhanced RRM key customer benefits

Better RF, better insights, reduced operational costs and time

AI-driven self-optimizing RF

Leverages machine learning to find patterns and optimize your RF before issues happen.

Performance visibility

Provides per-building visibility into RF health using Wireless Config Analyzer algorithm.

Complete historical context

Understand exactly what RRM changes occurred at a per-AP level, and how they benefit the network.

Measured Improvements in RF KPIs!

- CCI Reduction: Up to 40%
- SNR Downlink Gain: Up to 7 dB
- RRM Changes Reduction: Up to 75% at busy hours

Actionable insights

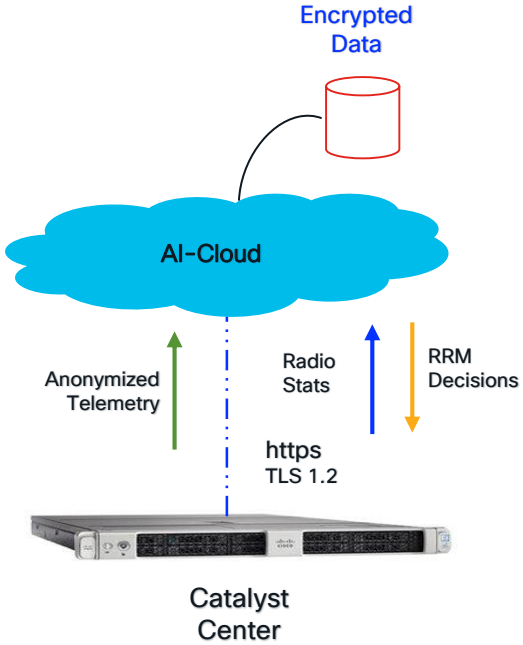
AI-derived recommendations on RRM setting changes for a more optimal performance.

Simplified RRM configuration

Complicated traditional RRM configurations are simplified, with policy toggles and thresholds.

AI Cloud telemetry collection

Utilizing Raw Device Telemetry Exclusively



RF Stats	Radio Configs	Network Information
PHY Stats	Channel	WLC IP
MAC Stats	Power	Base Radio MAC
Client Count	Bandwidth	WLC MAC
RF Events (Interrupts)	Operational Mode	AP Ethernet MAC

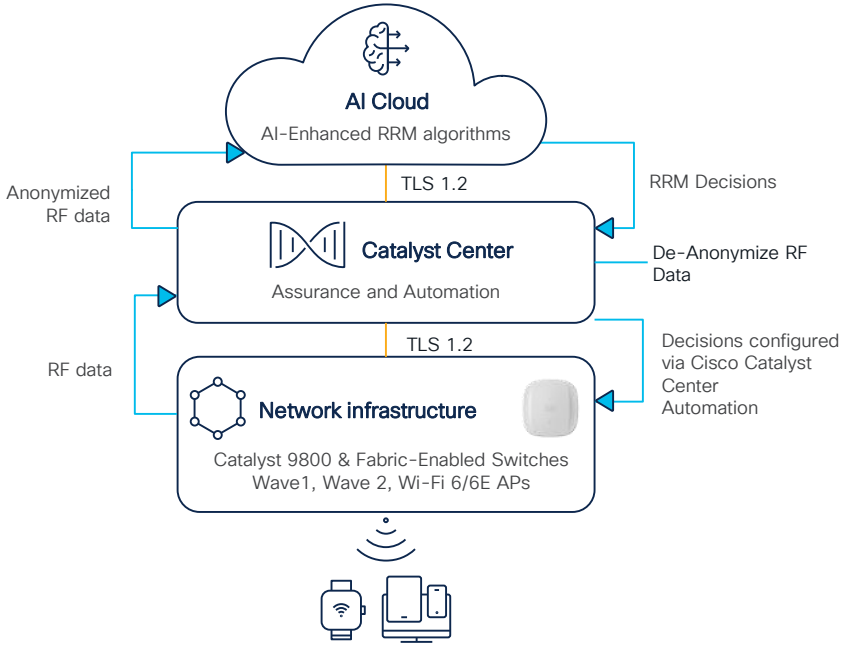
Protecting Your Data in the Cloud

with AI-Enhanced RRM Privacy Measures

Anonymized RF Data is encrypted with AES256 CTR and Base64 Encoding

Encryption Key is locally stored on Cisco Catalyst Center

All Data Stored in the AI Cloud is encrypted

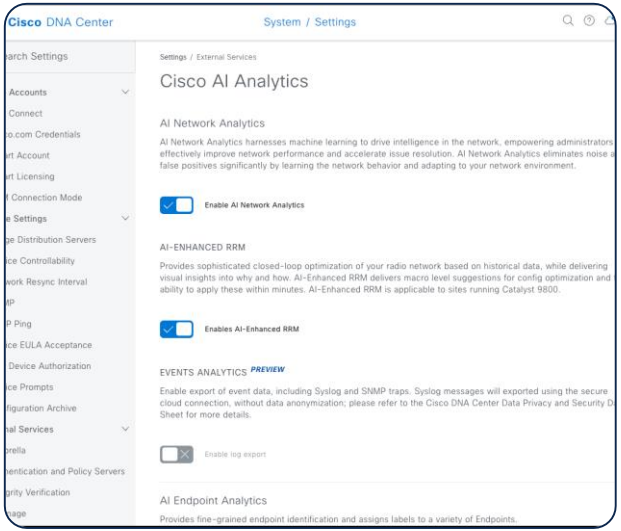


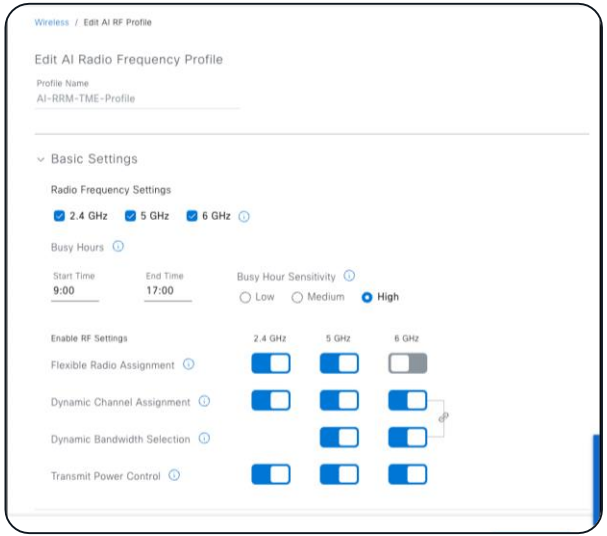
Refer to Cisco Catalyst Center Privacy Data Sheet for more information on Cisco Catalyst Center Data Privacy!

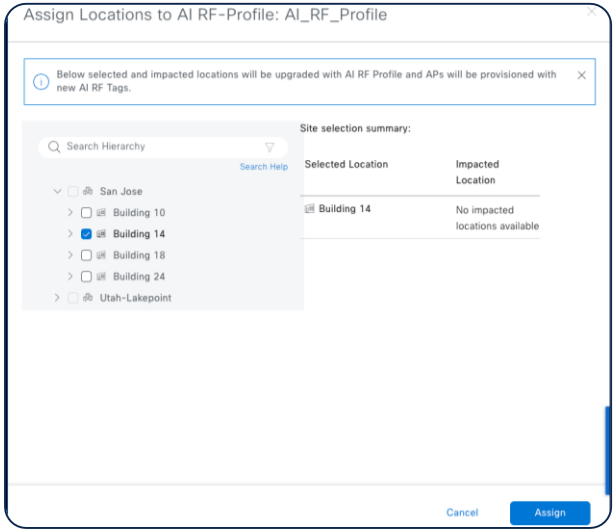
Enabling AI-Enhanced RRM for Provisioning-Enabled Deployments

Traditionally, this solutions requires customers to manage their Catalyst 9800 configurations through Catalyst Center's Network Settings

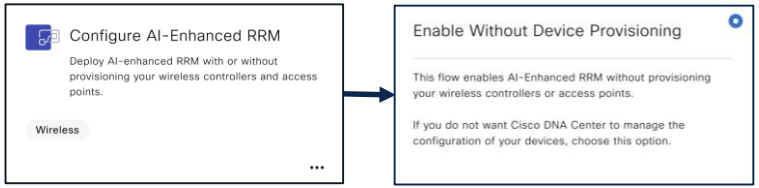
1. Give AI-Enhanced RRM Cloud Access in Settings.
2. Create an AI RF Profile.
3. Assign AI RF Profile to a building, and **provision** your C9800 & APs.







What mitigates these pain points?



New AI-Enhanced RRM Workflow for Assurance Only Customers!

Benefits of the AI-Enhanced RRM Workflow
Easier to Enable, with the Same Power of AI!

Doesn't Require C9800 to be Provisioned on Catalyst Center!

- Taking away this requirement means that all Catalyst Center users with supported hardware can leverage the power of AI.
- Users can continue managing their network settings on their C9800 directly.

Greatly Simplified Workflow!

- Combined all steps to enable AI-Enhanced RRM to a single workflow within the Workflow page titled, "Configure AI-Enhanced RRM -> Enable Without Device Provisioning".
- Admins no longer need to jump to different areas on Catalyst Center to figure out how to enable AI-Enhanced RRM!

Power of AI Remains the Same

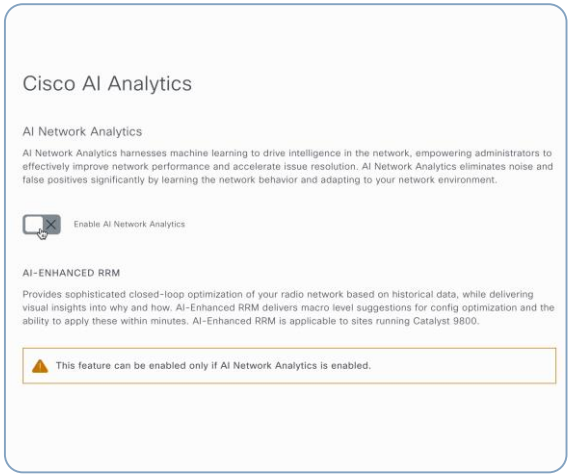
- While enabling AI-Enhanced RRM has gotten significantly easier, all the amazing customer benefits remain the same.
- There are no loss with regards to solution capability.

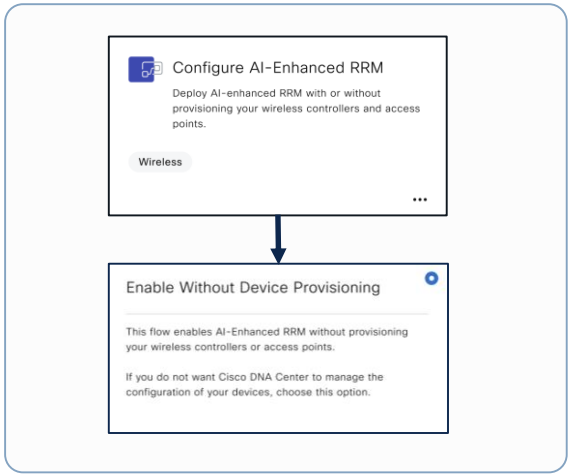
We've created a new enablement workflow that doesn't require admins to manage their network configurations on Catalyst Center!

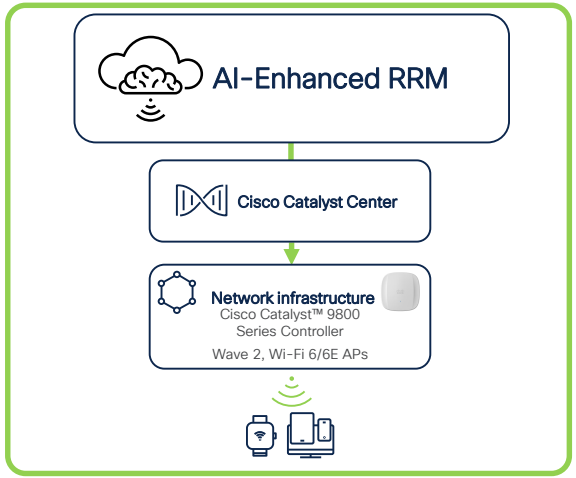
1 Enable AI-Enhanced RRM cloud access in Settings

2 Select the newly designed workflow and deployment option!

3 AI-Enhanced RRM is enabled without device provisioning!







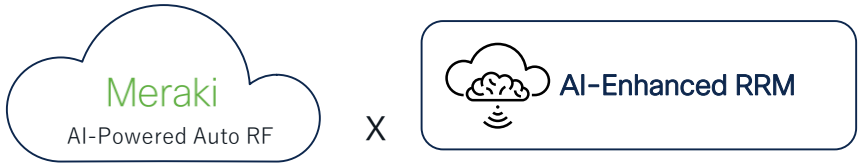
Software and Hardware Support Matrix
for AI-Enhanced RRM's Workflow for Assurance-Only Deployments

Cisco IOS XE WLC Software	Cisco Catalyst Center Software and Licensing
17.9.3 or newer (17.12.1 recommended)	2.3.7.4 (Patch 2) with DNA Advantage License

Cisco Access Point Hardware
Wave 1, Wave 2, Catalyst Wi-Fi 6 and 6E Access Points

Cisco IOS XE WLC Hardware
C9800-CL
C9800-L
C9800-40
C9800-80

How do we efficiently bring Auto RF towards the RRM North Star vision?



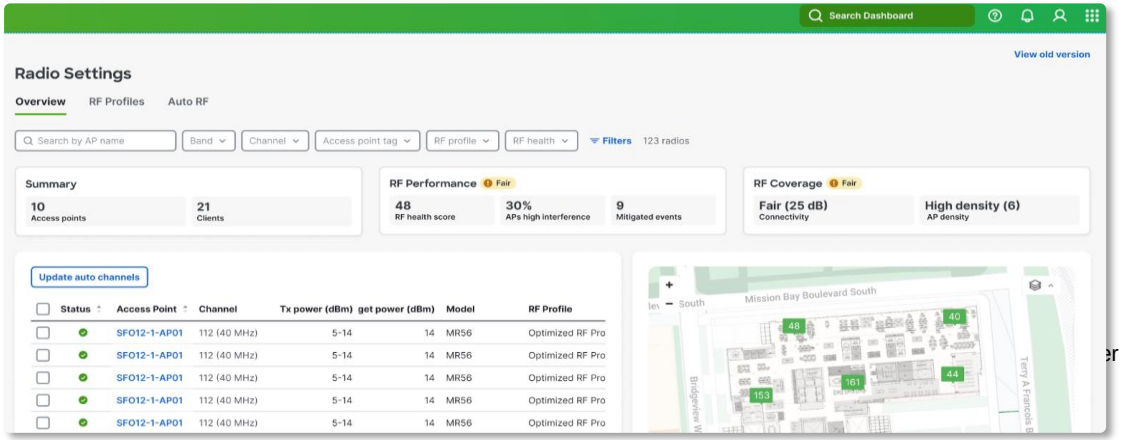
Integration with AI-Enhanced RRM

- Inherit advanced RRM features with less development cycles.
- Auto RF will be enterprise & high-density deployment ready

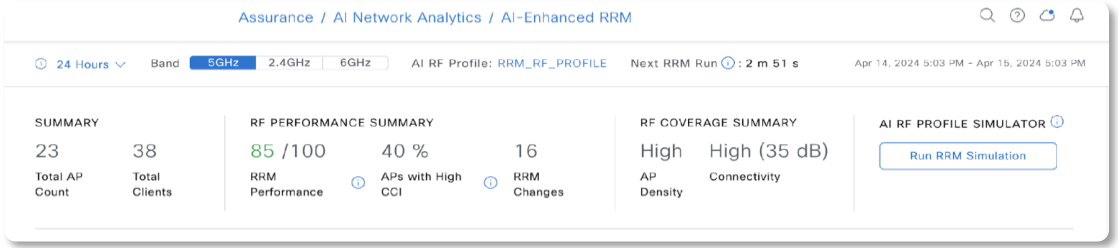
Unified AI-RRM

- Autonomous Wi-Fi for Zero-Touch Operation
- Closed-Loop AI Operations
- Unified AI Infrastructure,
- Unified Wi-Fi device Telemetry

Meraki Dashboard



Catalyst Center



AI-Enhanced RRM Will Significantly Improve Meraki's Wi-Fi!

Trend-Based RRM

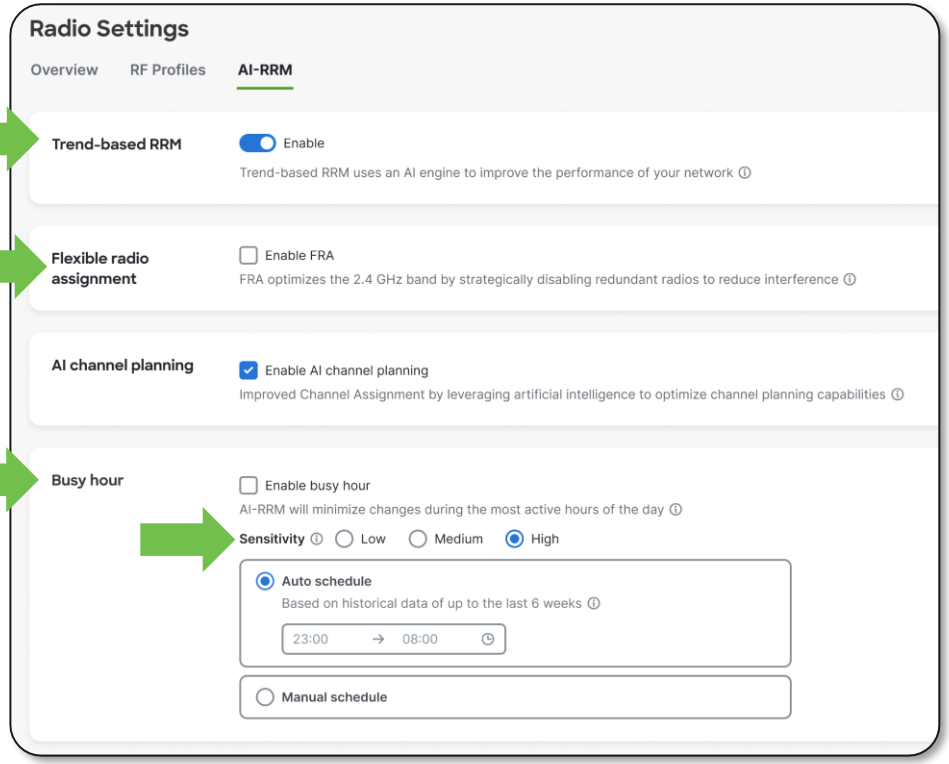
Optimize RF with 2 weeks of data enabling more sophisticated & efficient RRM optimization!

Flexible Radio Assignment

Place radios on the most optimal band/mode to minimize interference on 2.4 GHz at the touch of a button!

Enhanced Busy Hour

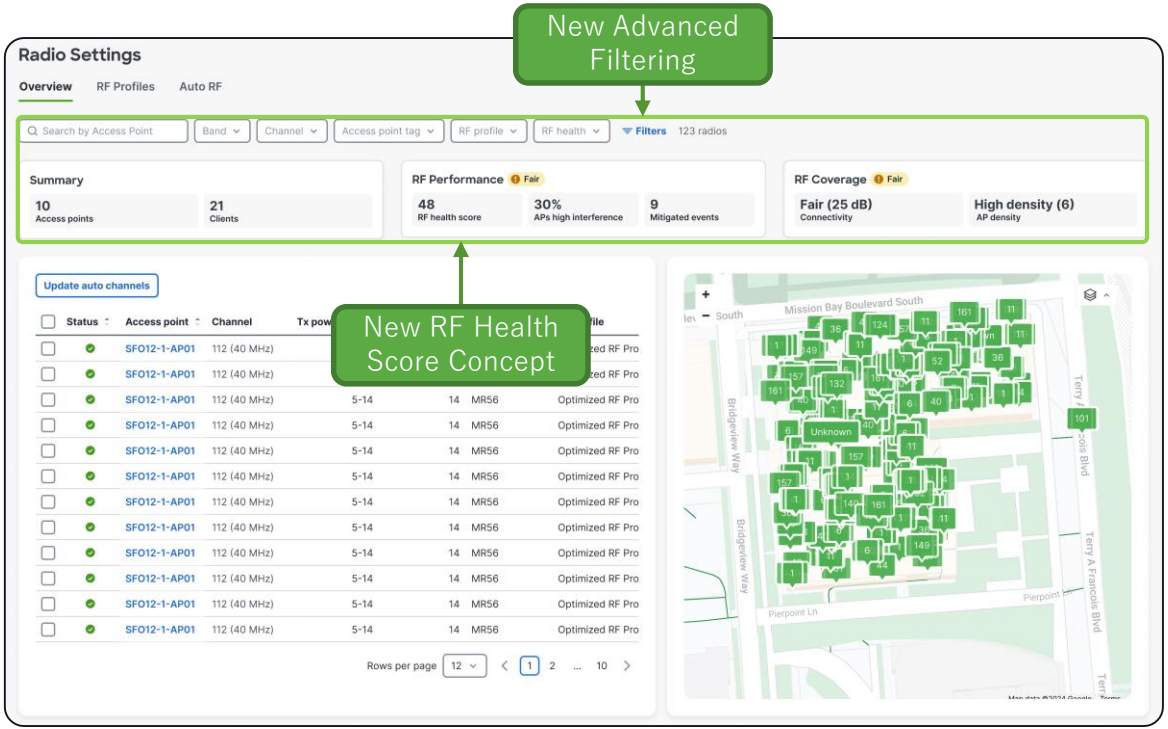
Optimizations are deferred until after the busy hour, using busy hour data, rather than just suppressed!



In Progress

RF Summary Bar in Radio Settings

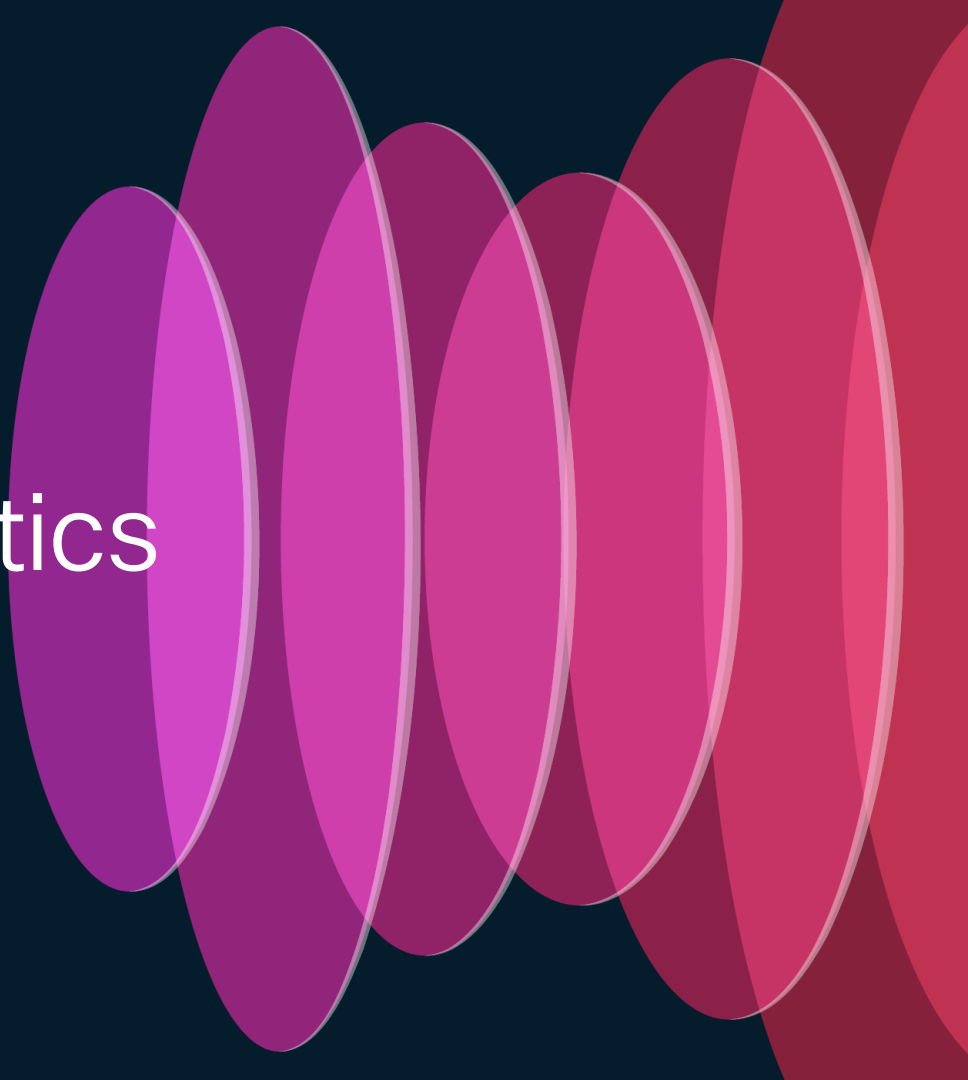
- Understand RF Performance at-a-glance per network
- RF health score considers all critical RF metrics
- Mitigated events shows benefits of AI Channel Planning
- New discovery workflow with advanced filtering



Same AI engine with similar visibility as Catalyst Center's AI-RRM Control Center!

Day 1

AI Network Analytics



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Meet Alex, a professional facing WiFi issues. Frustrated by poor connectivity, Alex seeks a solution. Join us as we explore the journey to resolve Alex's WiFi problems.

Image generated by AI

Alex tried to google how to fix the Wi-Fi and found a gazillion types of issues and solutions to fix the issue. What could it be?

Image generated by AI

AI-Enhanced RRM, AI Network Analytics, Machine Reasoning Engine

Artificial Intelligence makes Cisco Catalyst Center smarter

Optimize: Personalized Recommendations

AI discovers your network's "normal" with live telemetry and transforms it into insights and recommendations.

Predict: Proactive Insights

AI analyzes long-term historical trends to proactively provide you into areas of the network that require attention.

Self-Heal: Intelligent Remediation

Create actionable resolution options for IT to act on for quick RCA and a great wireless experience.

Unleash AI Network Analytics

to Prioritize, Optimize, and Remediate with AI

Available from v2.1.2+ (2020+)

Predictive Analytics/Self-Heal
Anticipate and Prevent Failures

- AI-Enhanced RRM
- Wireless Data Collection Machine Reasoning Engine

Comparative Analytics
Compare KPIs Internally and to Peers

- Peer Comparison
- Network Comparison

Trends and Insights
Proactive exploration plus system generated insights

- Event Analytics
- AP Performance Advisories
- Network Insights
- Network Heatmaps

Personalized Anomaly Detection
Separate normal from abnormal and show RCA

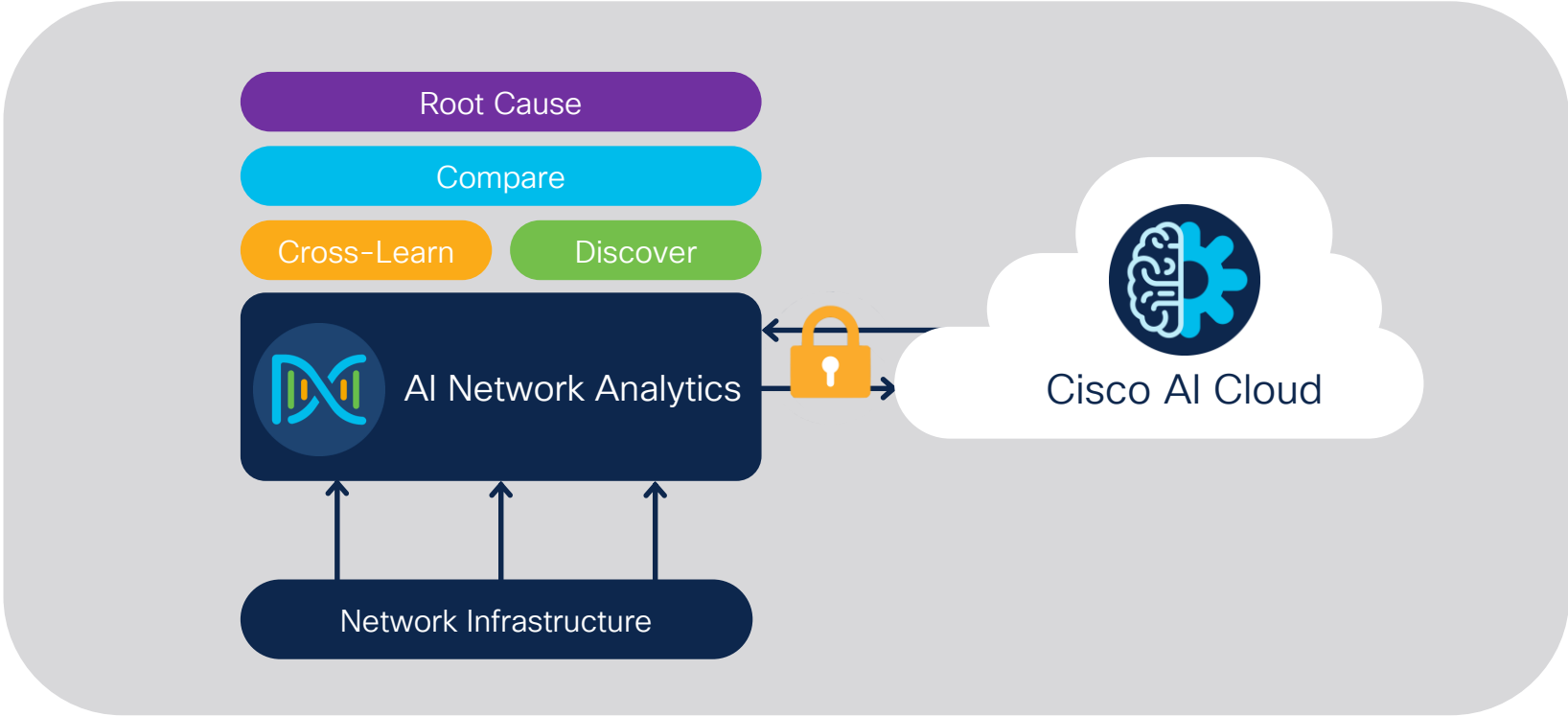
- AI-Driven RCA
- Site Analytics

Dynamic Baselining
Define Normal for a Given Network

- Baselines

Cisco AI Network Analytics Architecture

Proactively Discover and Root Cause Your Issues



Day 1

AI-Driven Baseline Dashboard

Pinpoint buildings with clients that have onboarding issues

Available
V2.1.2 (2020)

Pain Points

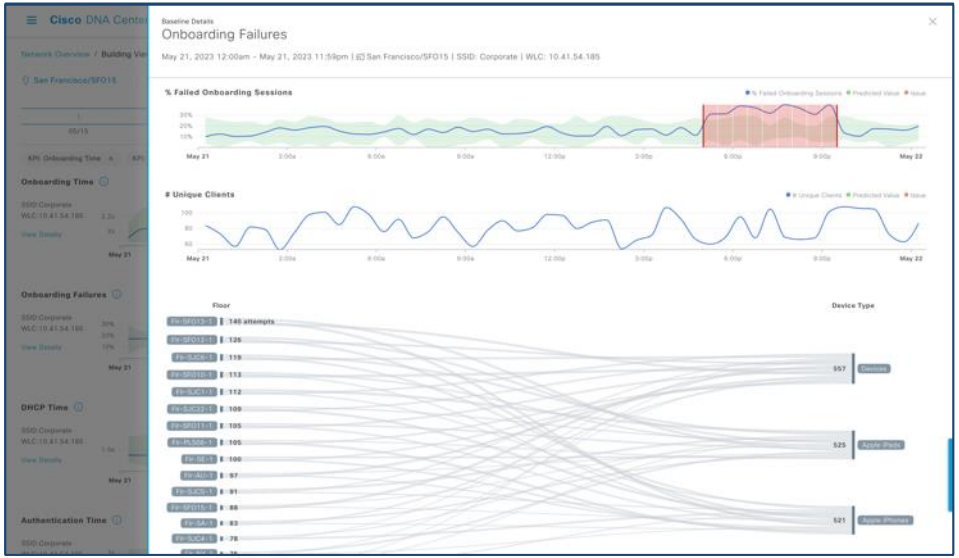
Wireless networks are dynamic and issues triggered with a static min/max threshold may result in false positives.

Feature Capability

Identifying client onboarding KPIs that deviate from the norm, and provides unique view to RCA the issues.

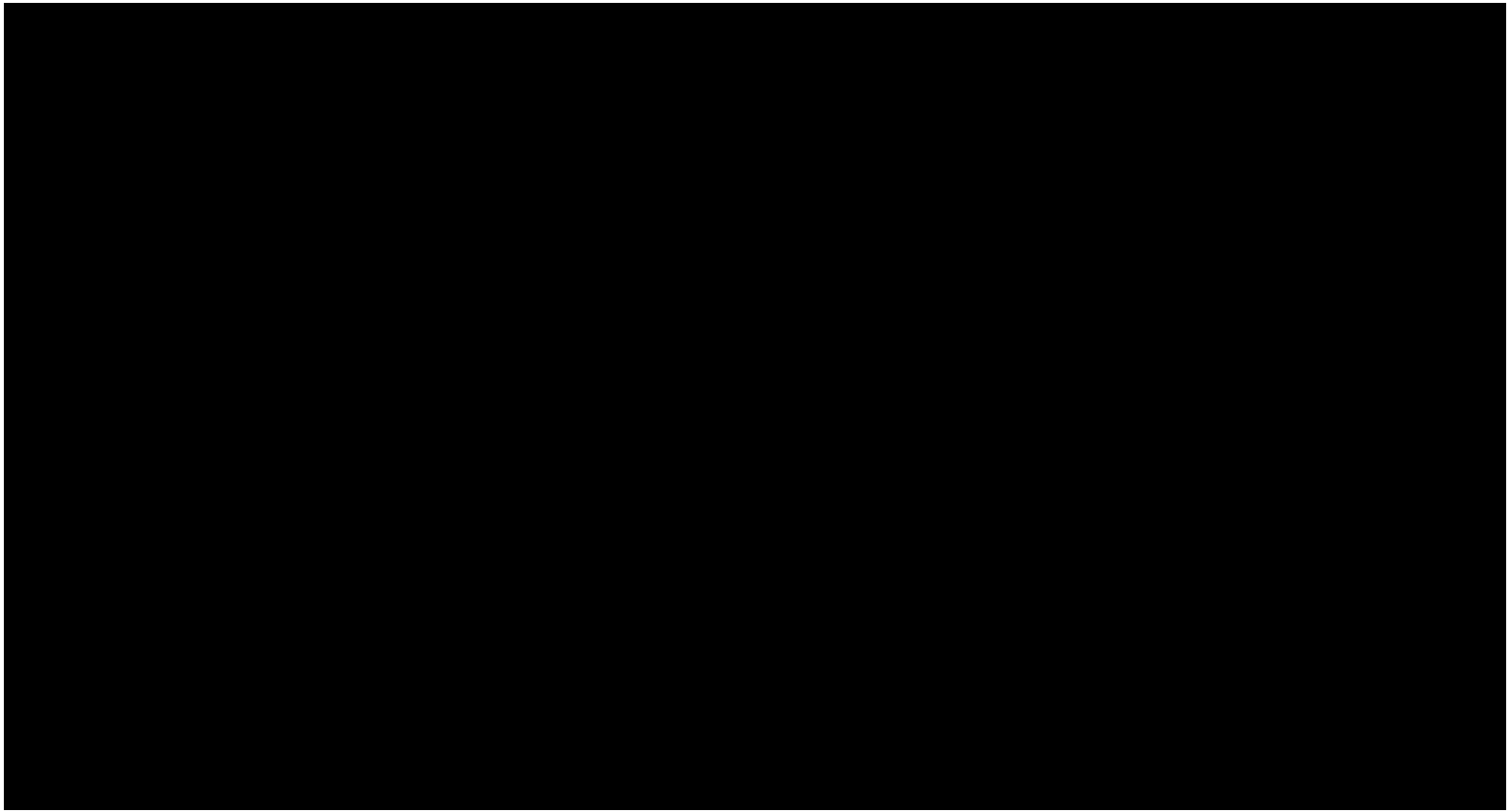
Customer Benefits

Users receive accurate alerts for significant deviations in onboarding issues, and providing a triaging view.



Intuitive View to Pinpoint the Source of Failure

AI-Driven Baseline Dashboard

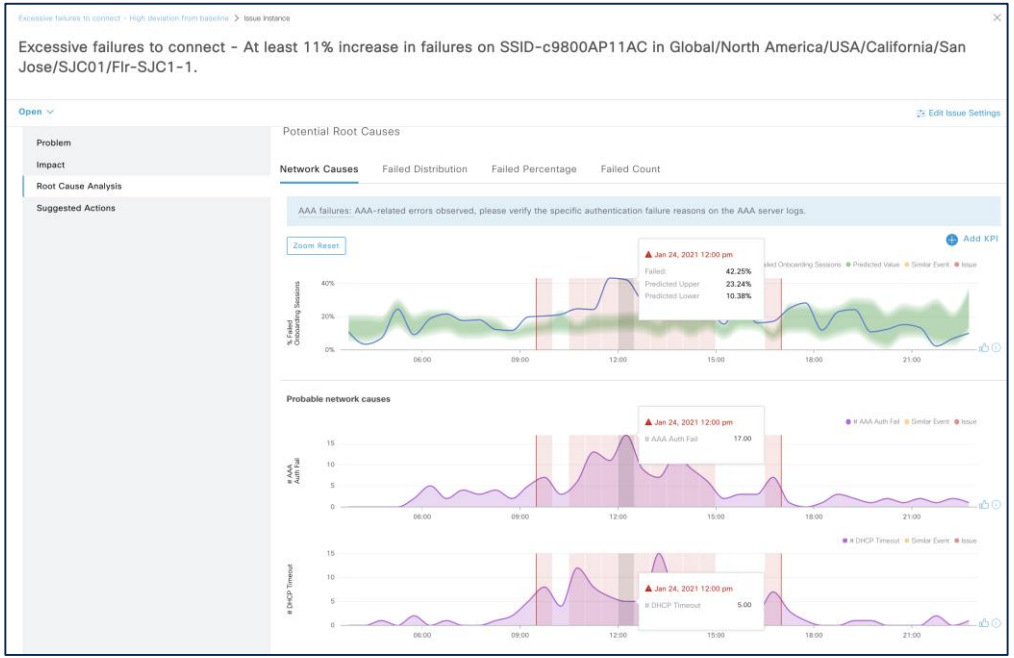


Cisco AI Network Analytics Feature Summary

AI Driven Issues

Discover and Root Cause network risks and anomalies from the AI-generated baselines

13 KPIs: Onboarding & Throughput

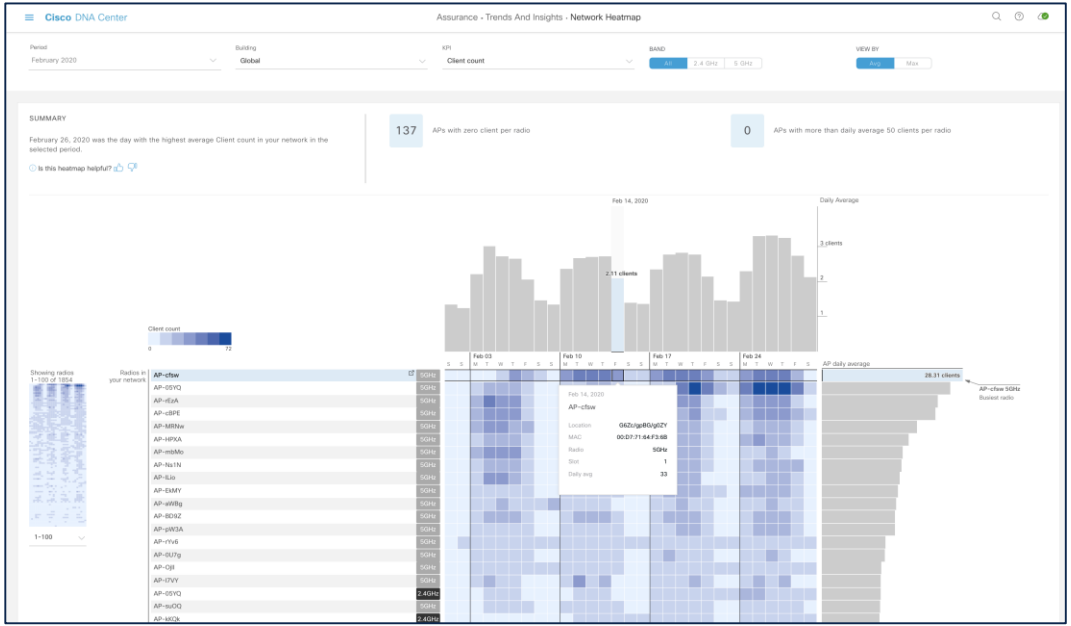


Cisco AI Network Analytics Feature Summary

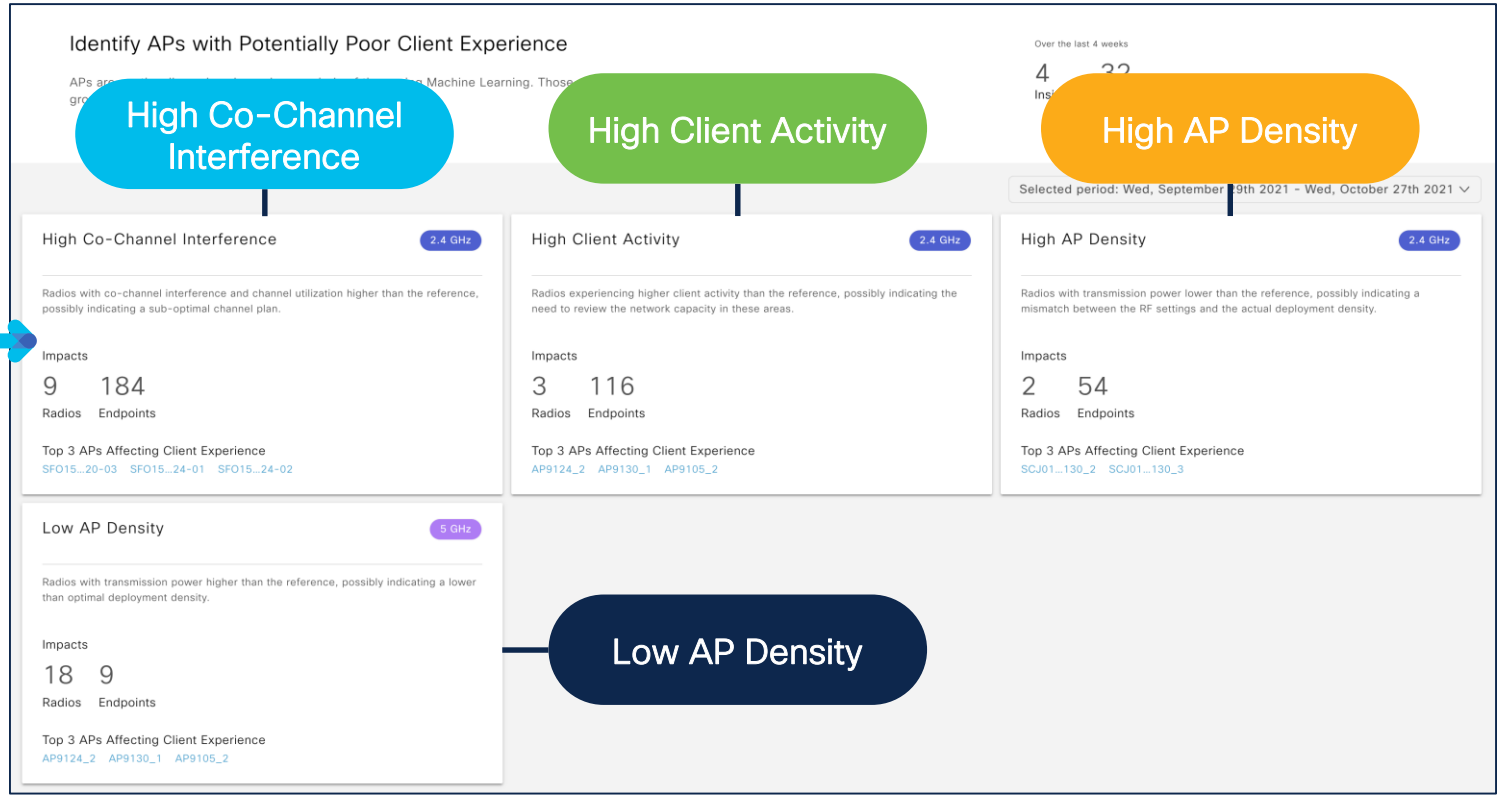
Network Heatmaps

Optimize AP Performance across the network through visual exploration of performance KPIs

17 KPIs: RF & Application

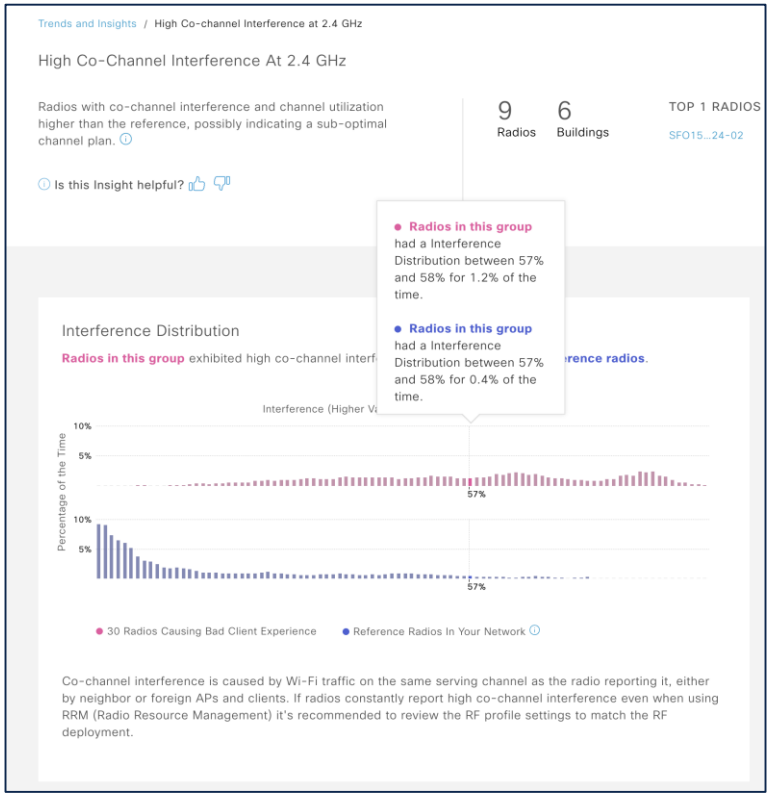


AI-Driven AP Performance Advisories



AP Performance Advisories

Leverage AI to Group APs Giving Poor Client Experience from 2.2.3 & 2.2.2.4



Pain Points

No view into groups of APs causing poor client experience due to similar reasons.

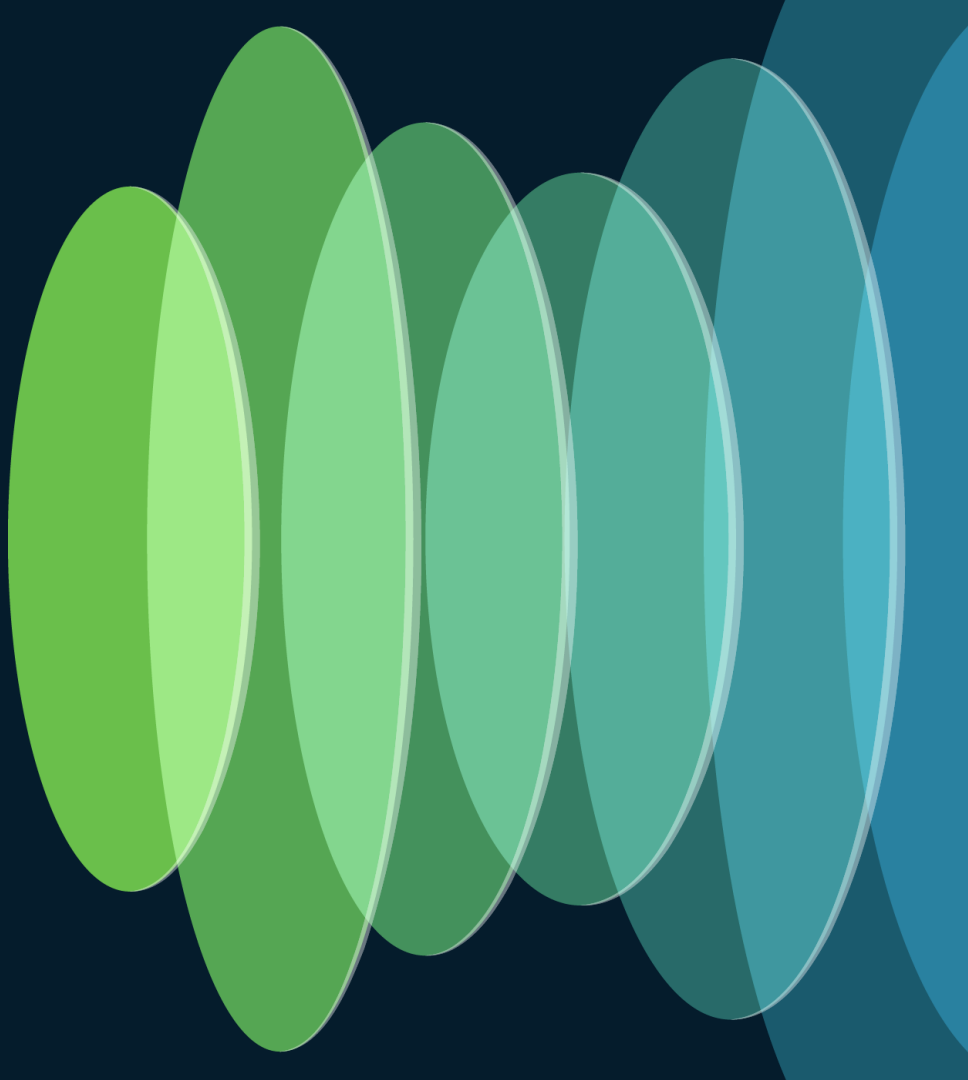
Feature Capability

Leverages AI to analyze 4 weeks of data to group APs and provides impact and root causes.

Customer Benefits

Identify poor performing groups of APs and mitigates potential risks more efficiently.

Event Analytics



Event Analytics

Challenge/Pain Points

- As a network administrator I would like the events dashboard to be more interactive and provide comprehensive analytics and powerful visualisation of the network events. It should provide valuable insights into network performance, security, and troubleshooting

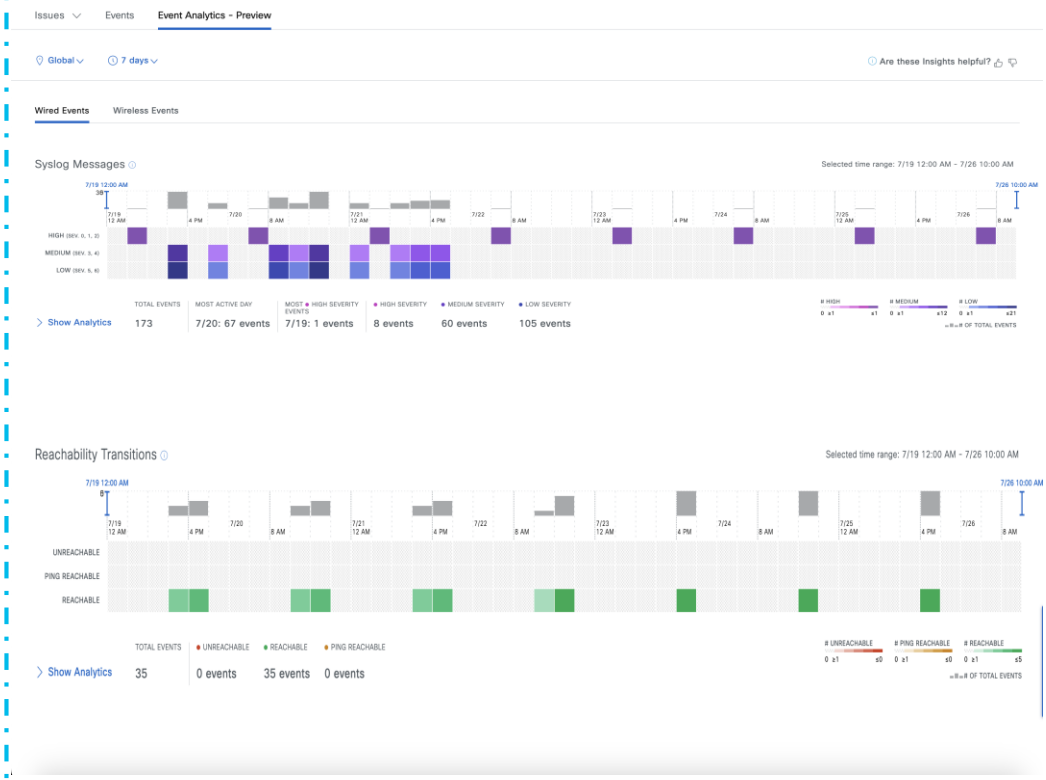
Feature Capability

- Event Analytics aggregates and processes event data, extracting relevant metrics and generating insightful analytics.
- It offers a user-friendly interface that allows users to explore data visually through intuitive graphs and charts to allow specific focus on areas of the network, time periods and event types of interest
- Type of events supported are Syslog and Reachability

Platform/Dependency

- Event Analytics needs to be enabled under AI Analytics
- Requires DNA Advantage License

Assurance -> Issues and Events -> Event Analytics - Preview



Event Analytics

Network event viewer & analytics platform for End-to-End Assurance

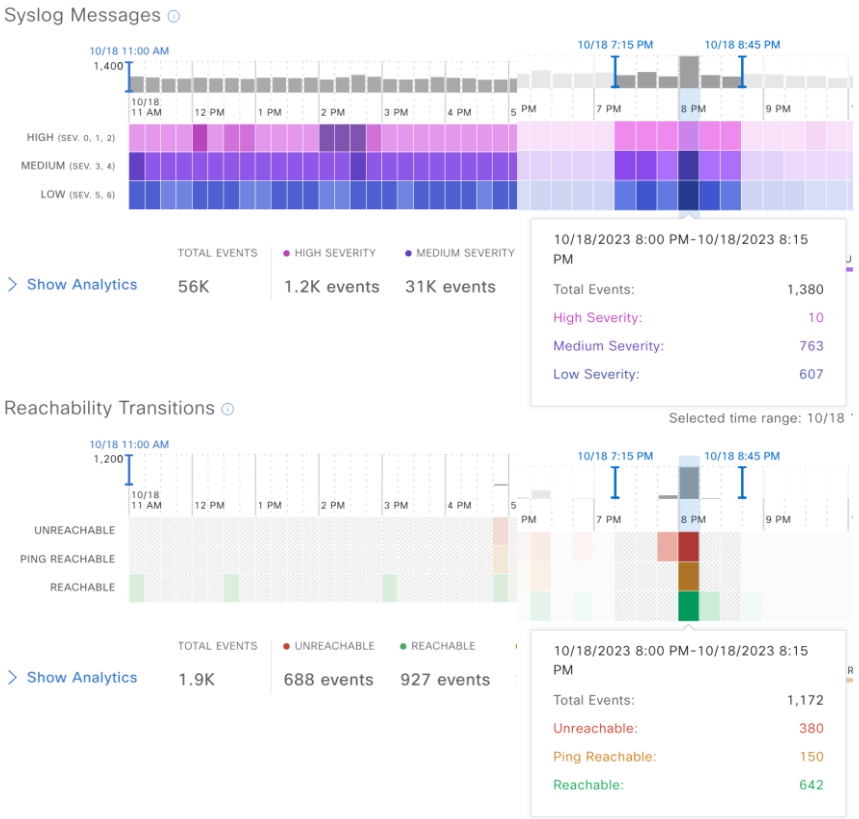
Single-pane-of-glass view across all network events facilitating observability & analytics

Realtime Analytics: Empower customer exploration & insight discovery

Effortlessly explore millions of events with intuitive synchronisation and correlation across event domains at different temporal scales

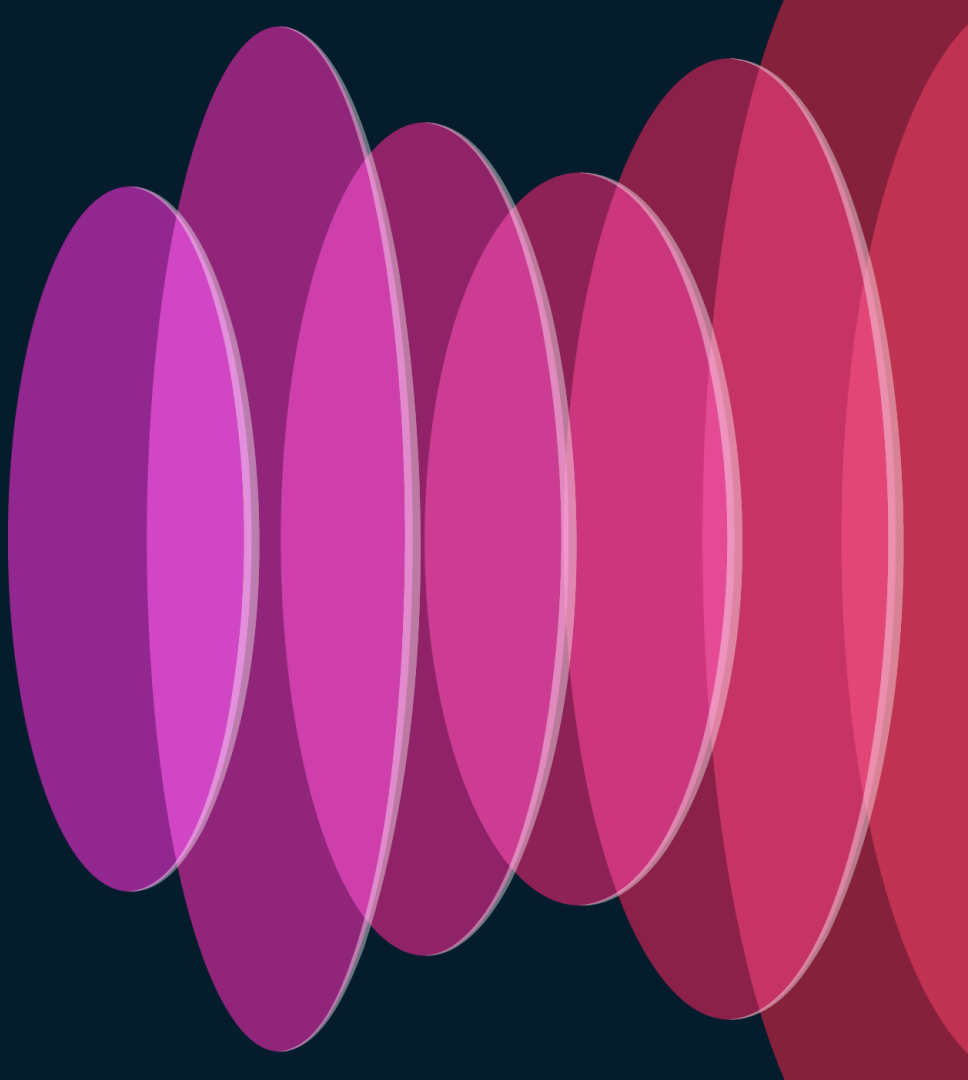
Event Analytics

- Intuitively navigate from millions of events to specific sites, devices or events of interest
- Correlate & compare trends & patterns across events & network domains
- Available in Catalyst Center 2.3.7.1 (phased rollout)



Day 1

Site Analytics



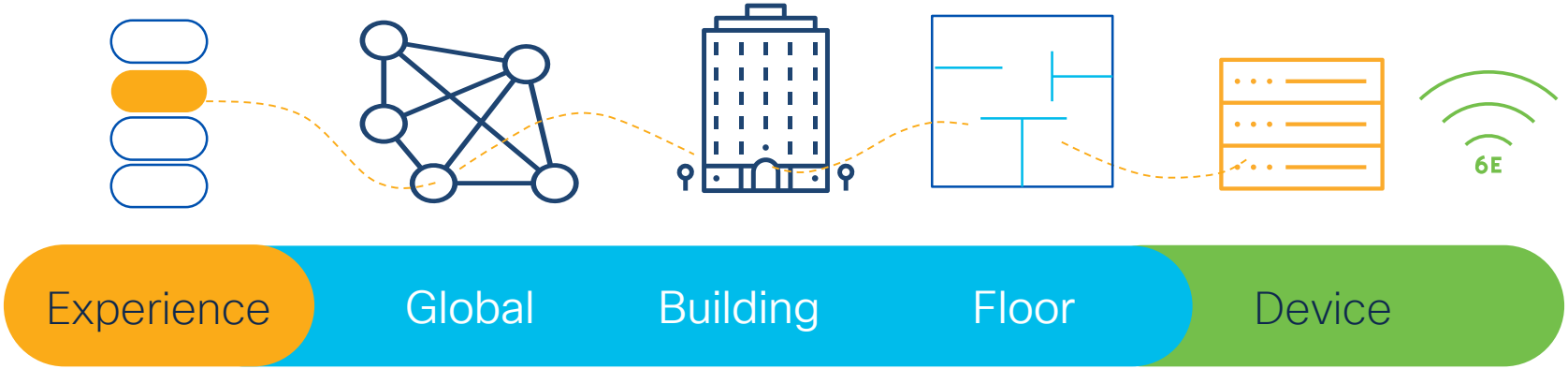
cisco Live!

Use Case- Proactive Insights of the wireless environment

As a network admin, I would like to use various Assurance Capabilities in Catalyst Center to get proactive insight into the wireless network to understand how the network is performing

Focus on End User Experience with Site Analytics

Visualize Critical Wireless SLAs from global to Endpoint Level

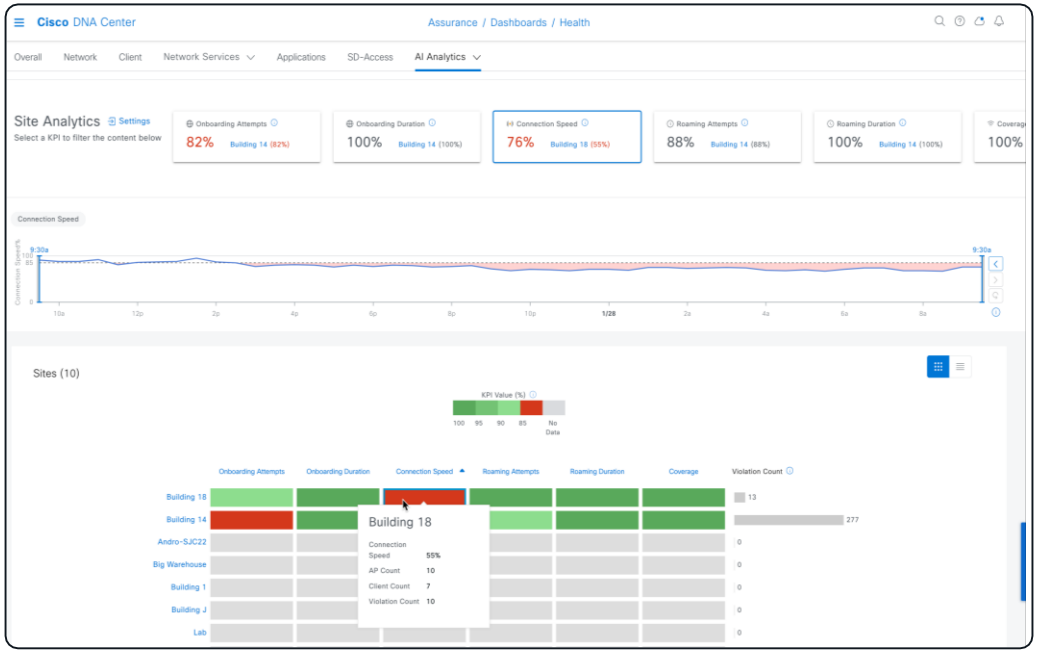


SLAs Personalized to your network

Critical SLAs such as onboarding speed, connection speed, and coverage visualized at every level!

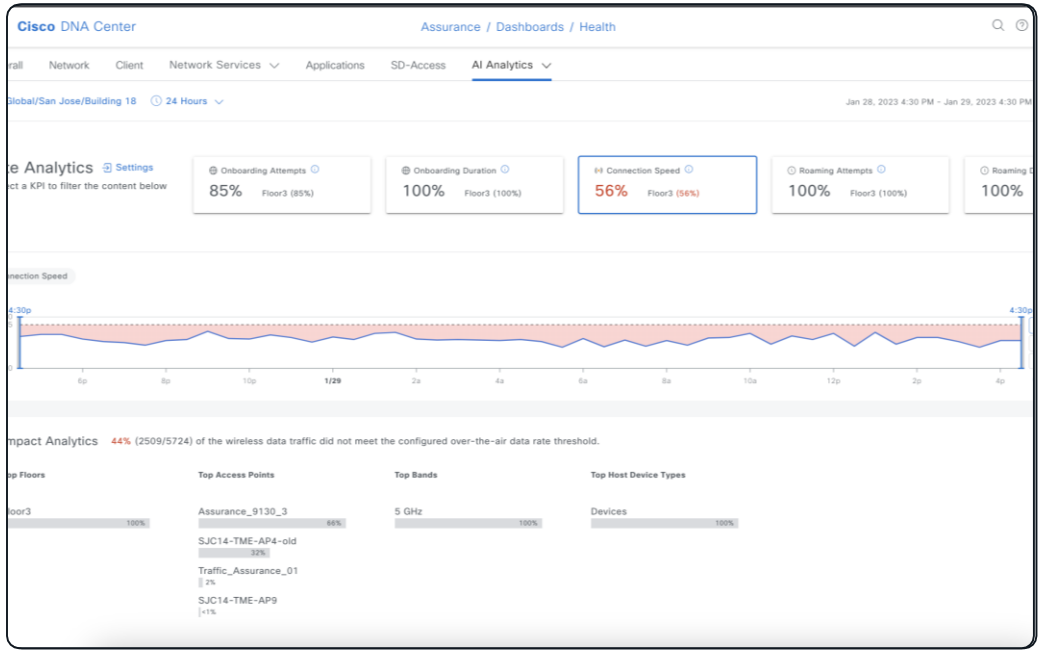
Isolate Problem Devices Supporting Up to Wi-Fi 6 & 6E

Network experience from a Global to Endpoint level
with Site Analytics



Global view of per-site Wireless experience via SLAs

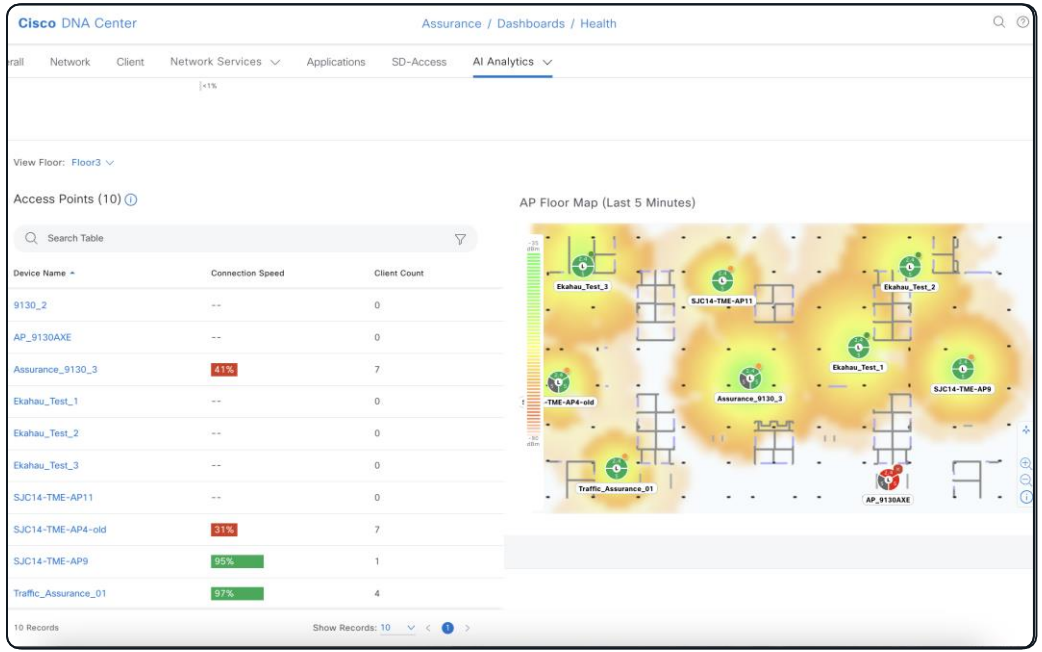
Network experience from a Global to Endpoint level
with Site Analytics



Global view of per-site Wireless experience via SLAs

Building view of KPI trendline and Impact Analysis

Network experience from a Global to Endpoint level
with Site Analytics



Global view of per-site Wireless experience via SLAs

Building view of KPI trendline and Impact Analysis

Floor view device level KPIs with heat map

In Progress
Target 2HCY24

Day N

ISE Failure Integration

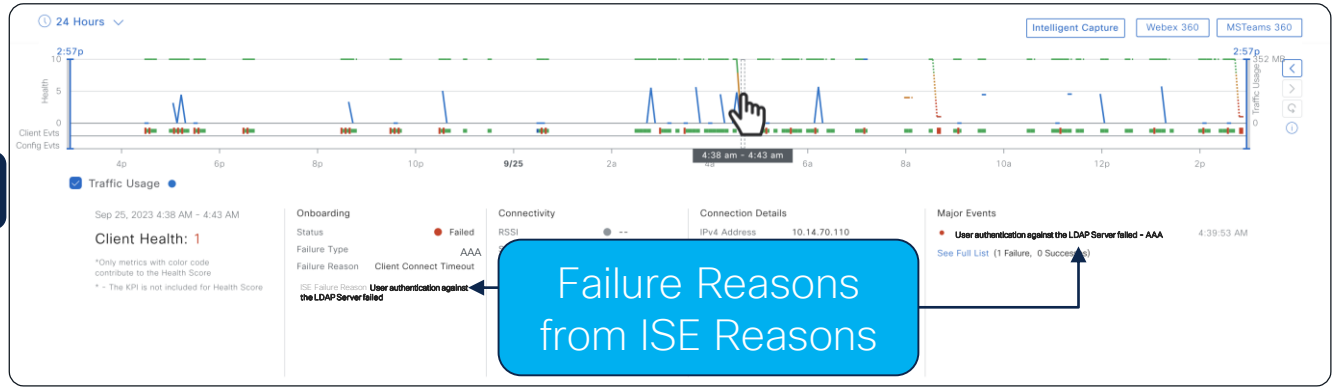
Triaging Authentication Issues Made Easy!

cisco Live!

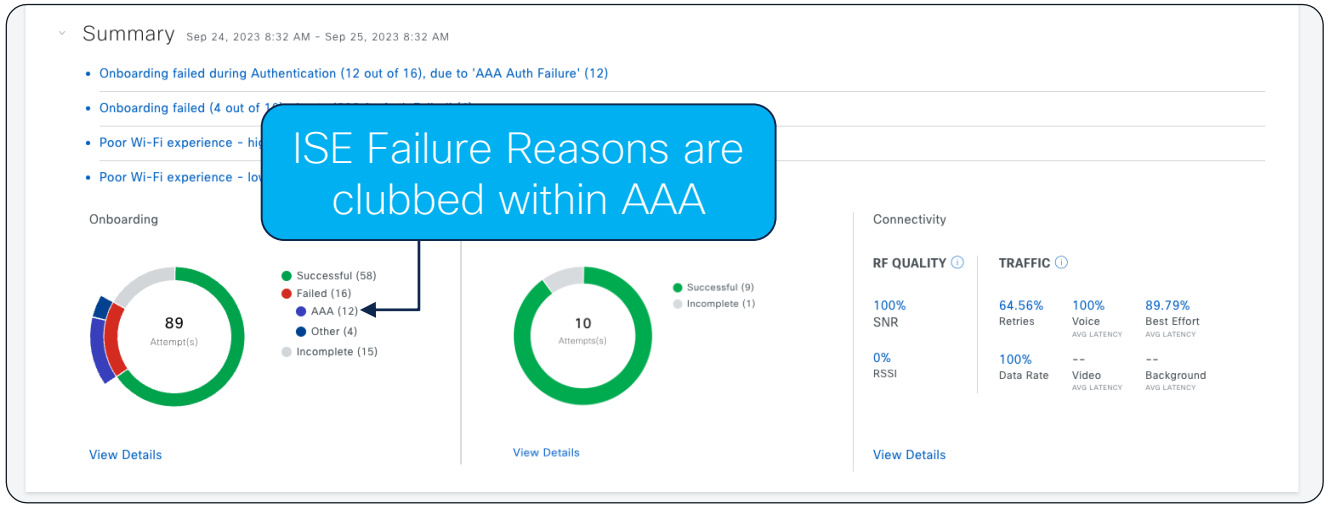
ISE Failures Added to Client 360

Catalyst Center License: Advantage
Catalyst Center Version: TBD
ISE Version: 3.2p7 & 3.3p3
ISE License: Advantage

Network Timeline

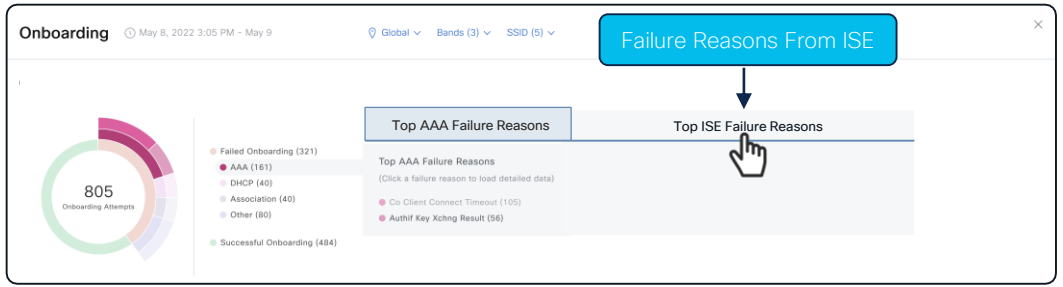


Summary Widget

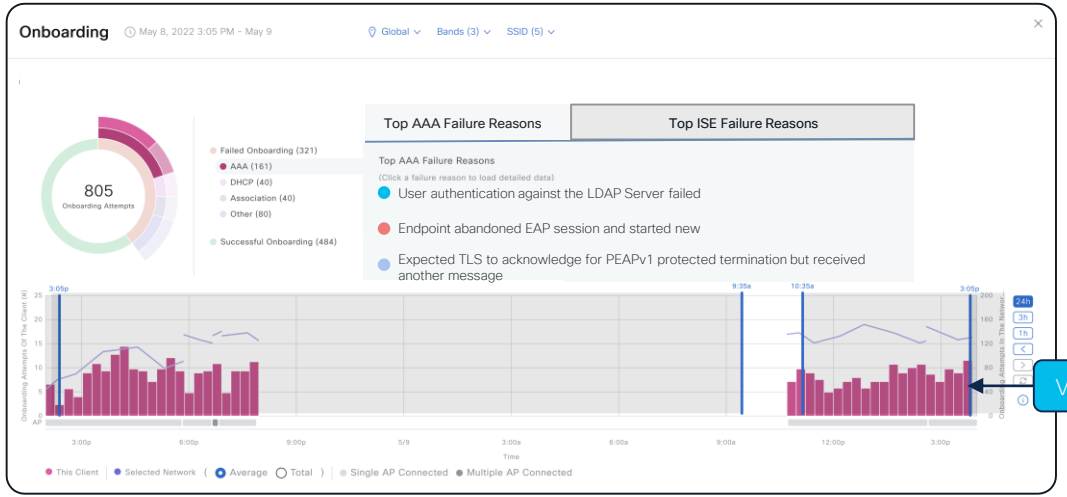


Detailed ISE Failures Summary Widget Integration

AAA Failures (Sent from WLC)

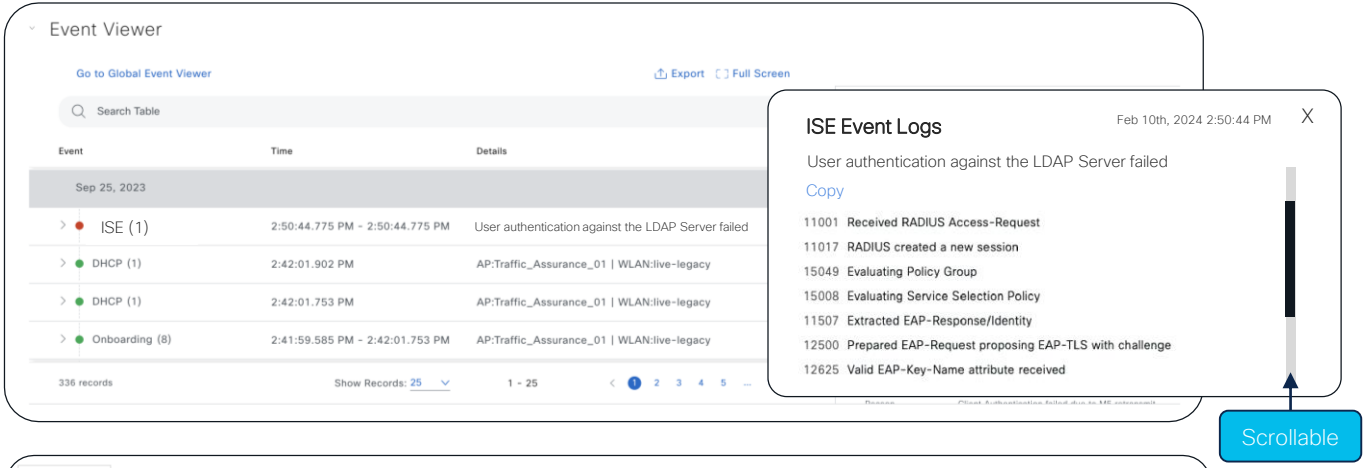


ISE Failure (Sent from ISE)

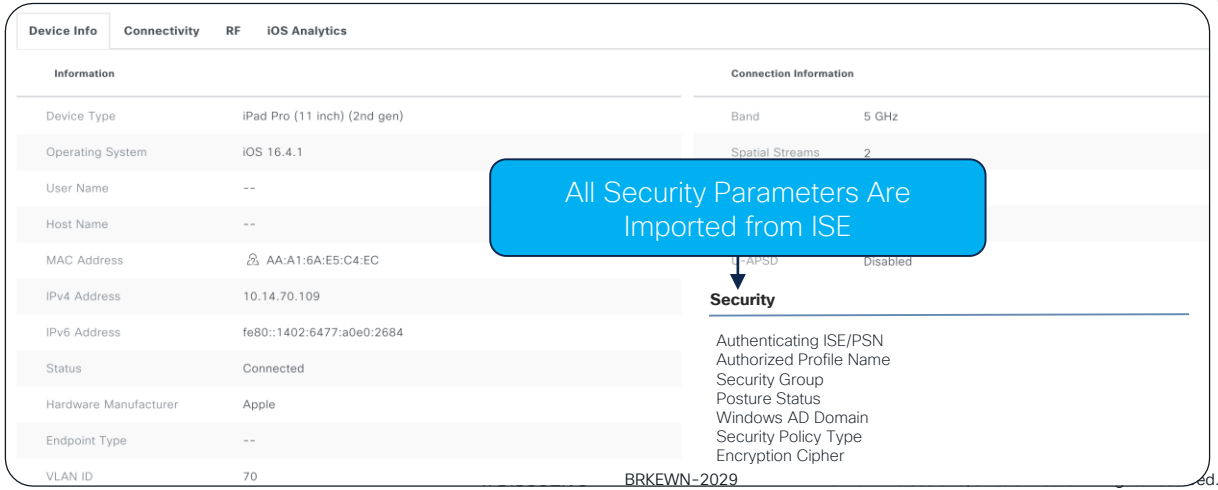


Showing Detailed ISE Failure Logs on Client 360's Event Viewer

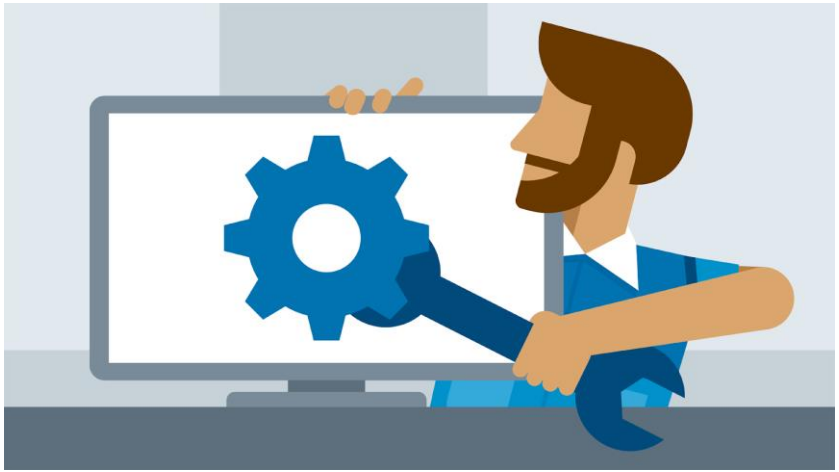
ISE Integration in Event Viewer



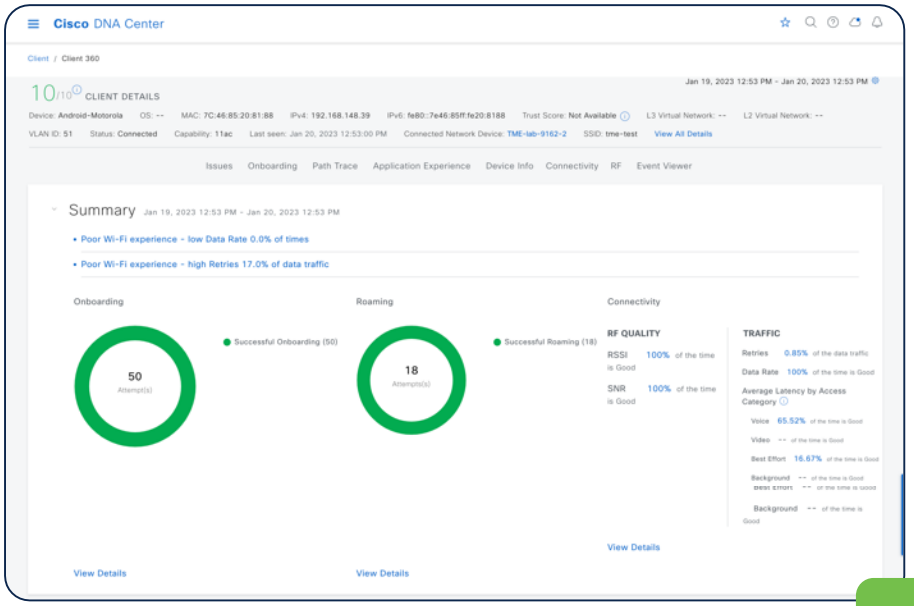
New Security Section in Device Info



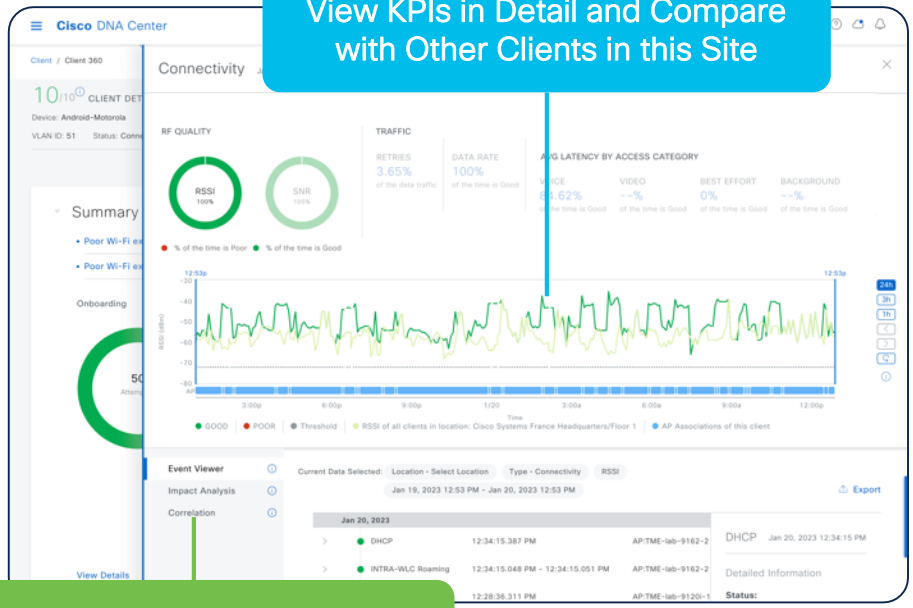
Reactive Troubleshooting of wireless client connectivity/latency issues



Enhanced Troubleshooting on the Client 360!
Critical KPIs that Define Wireless Experience from v2.3.6



View KPIs in Detail and Compare with Other Clients in this Site



Correlate KPIs with Onboarding Events and Other KPIs

Client 360- Latency per Client data

Challenge/Pain Points

- When Client reports Connectivity or Slowness issue, as a Network admin I should be able to view and understand overall experience of that client for a given time range and check its Latency across access categories and correlate if this issue is because of any problem in Network Devices or Network Services.

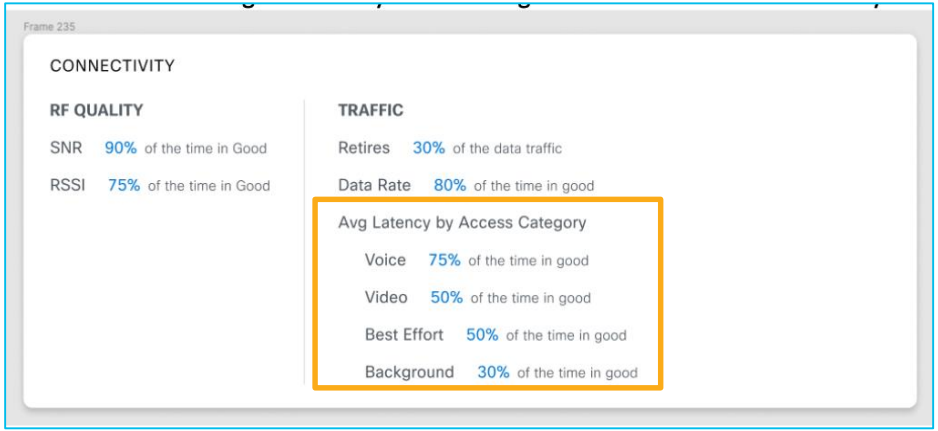
Feature Capability

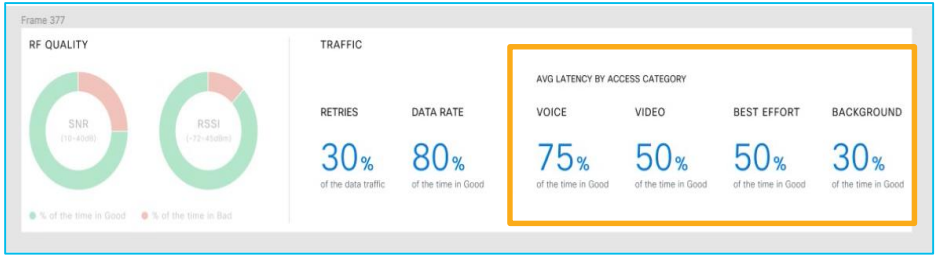
- New Client latency Stats added to Client360 page under overall Summary. This will help customer to debug and correlate the Client connectivity and slowness issue.
- Trendline to view the latency per client by category and band
- Client Latency stats comes every 5mins from AP to Controller and Catalyst Center receives the data using “ClientRfStats” event

Platform/Dependency

- Supported on IOS XE starting from 17.11
- Requires DNA Advantage License

Assurance -> Dashboard -> Health -> Client





SSID Monitoring on C9800

Challenge/Pain Points

- As a network administrator, I want to see assurance data only for specific critical SSID's like corporate SSID's and Catalyst Center should filter out data for non-critical SSID's.

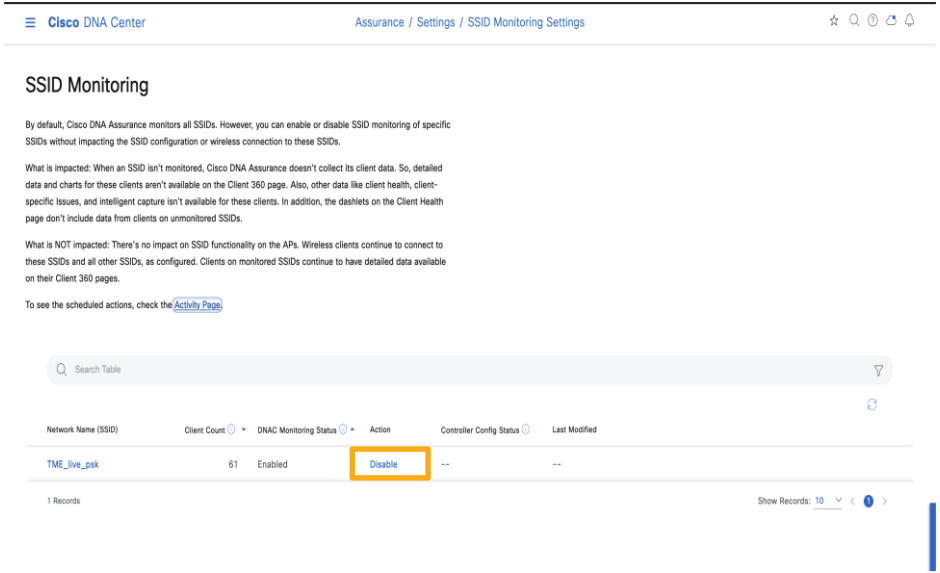
Feature Capability

- New capabilities added to WLC to send WSA data per SSID and update Catalyst Center with all clients present on WLC
- Ability from Catalyst Center Assurance settings to Disable/Enable SSID filtering

Platform/Dependency

- Supported on IOS XE starting from 17.11

Assurance -> Settings -> SSID Monitoring Settings



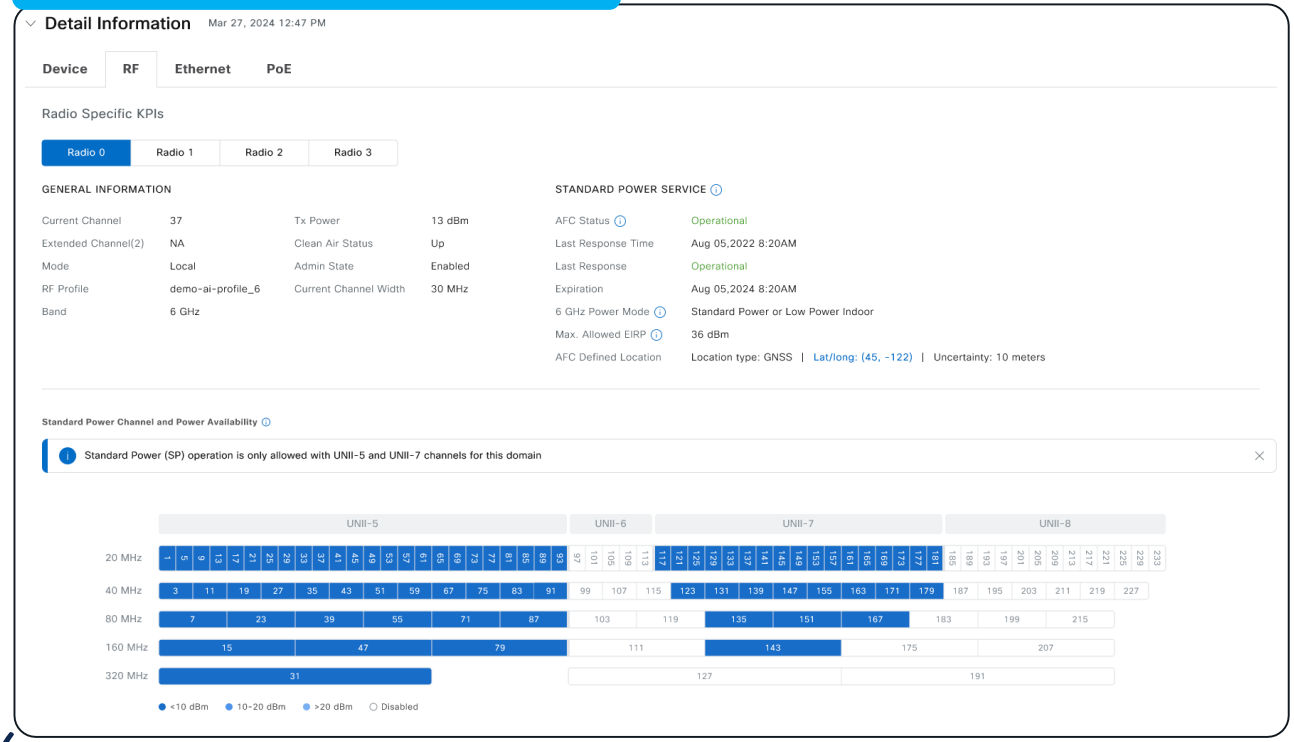
Screenshots are mockups and subject to change

In Progress

AFC Assurance for Catalyst Center

Integrated with AP 360, WLC 360, and Network Health pages

AP 360 – Standard Power Service



AP and Client Tools

Challenge/Pain Points

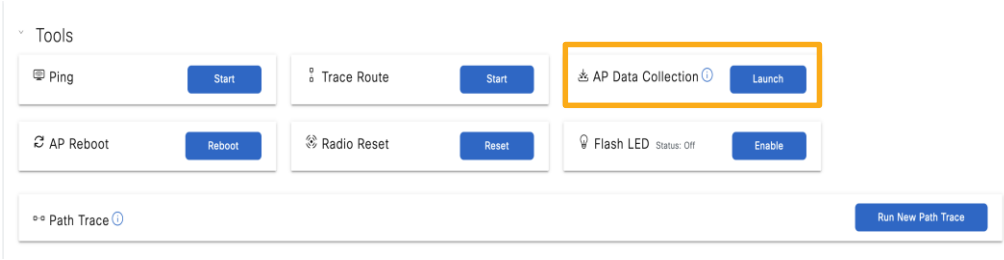
- For Wireless AP and Wireless Client Data Collection, we manually need to go to Tools > Network Reasoner, which is a disconnect in flow if I am on the Client or AP 360 page

Feature Capability

- Ability to launch into Wireless Client Data Collection Workflow on the Network Reasoner Page from the Tools section of Client 360
- Ability to launch into AP Data Collection Workflow on the Network Reasoner Page from the Tools section of AP 360

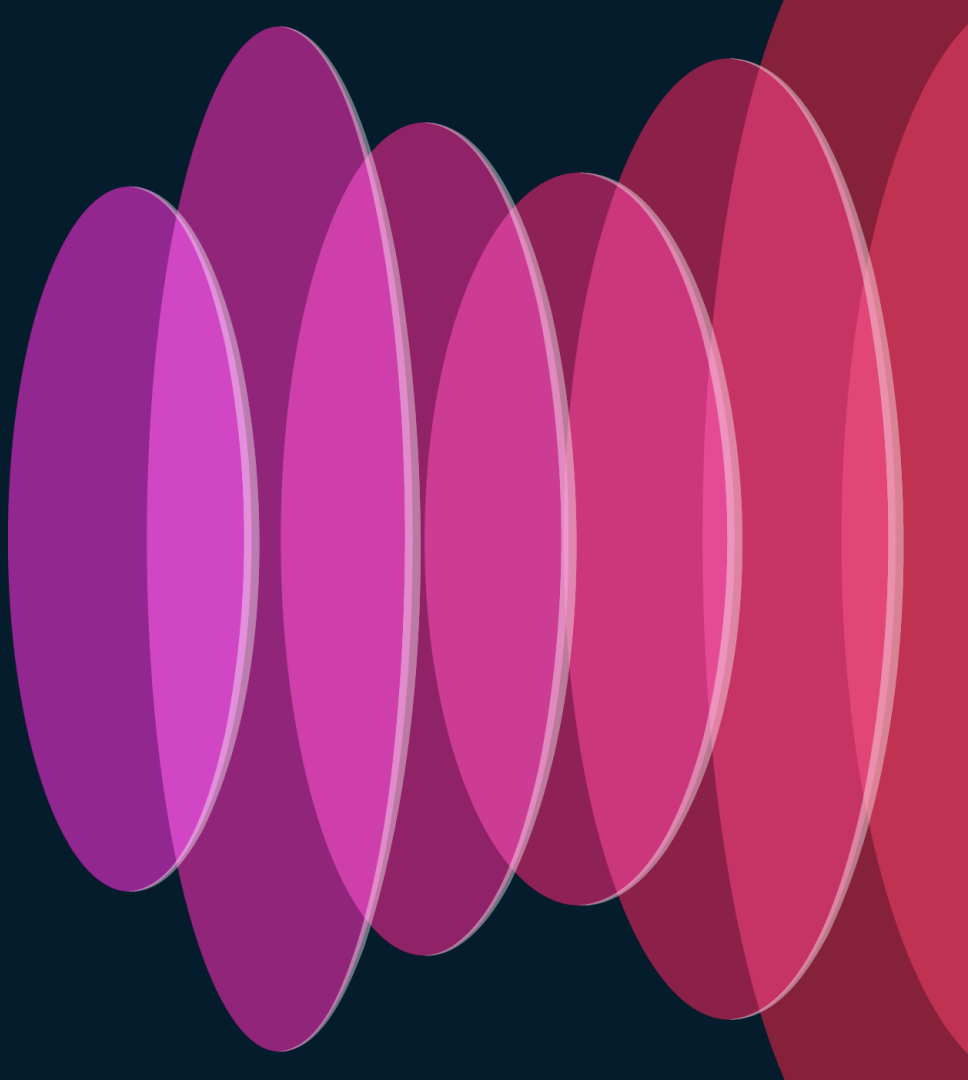
Platform/Dependency

- NA



Day N

OTA Sniffer



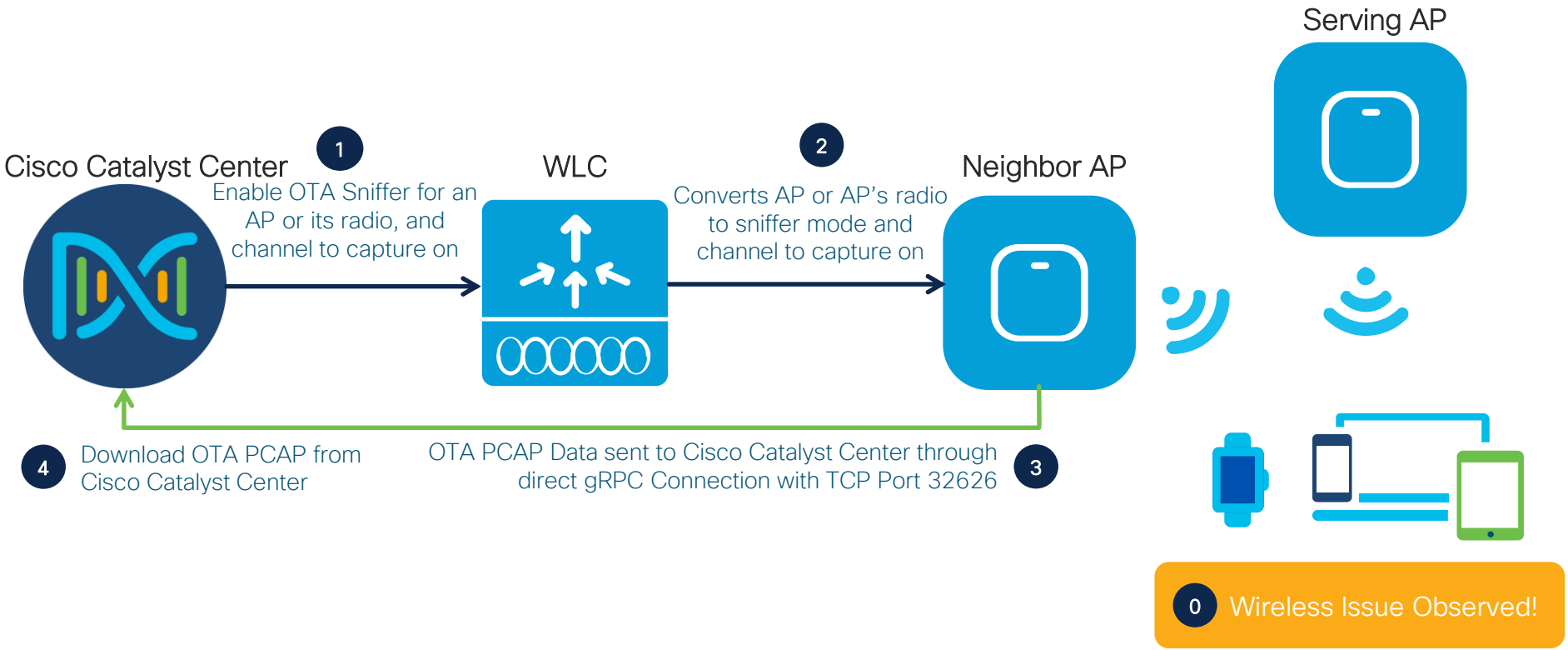
Introducing OTA Sniffer with Intelligent Capture

Capture All Packets on AP Supported Bands from 2.3.6!

1. Perform OTA channel packet capture from anywhere in your wireless network remotely.

2. Diagnose wireless roaming, non-roaming, and any other issues at the channel level.

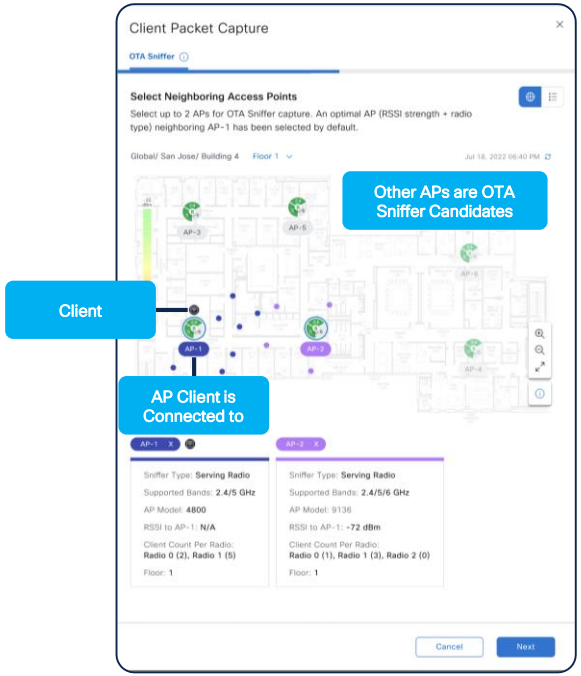
Intelligent Capture OTA Sniffer Topology



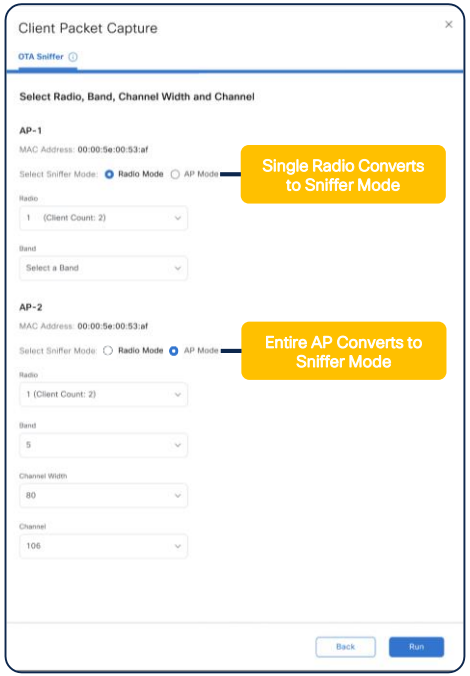
Next Level Serviceability with the OTA Sniffer Capture

Intelligent Capture can now capture ALL packets on a defined band from 2.3.6!

1 Start OTA PCAP on **Client or AP 360** and Select Up to 2 APs



2 Define Radio and Band to Capture and Start it!



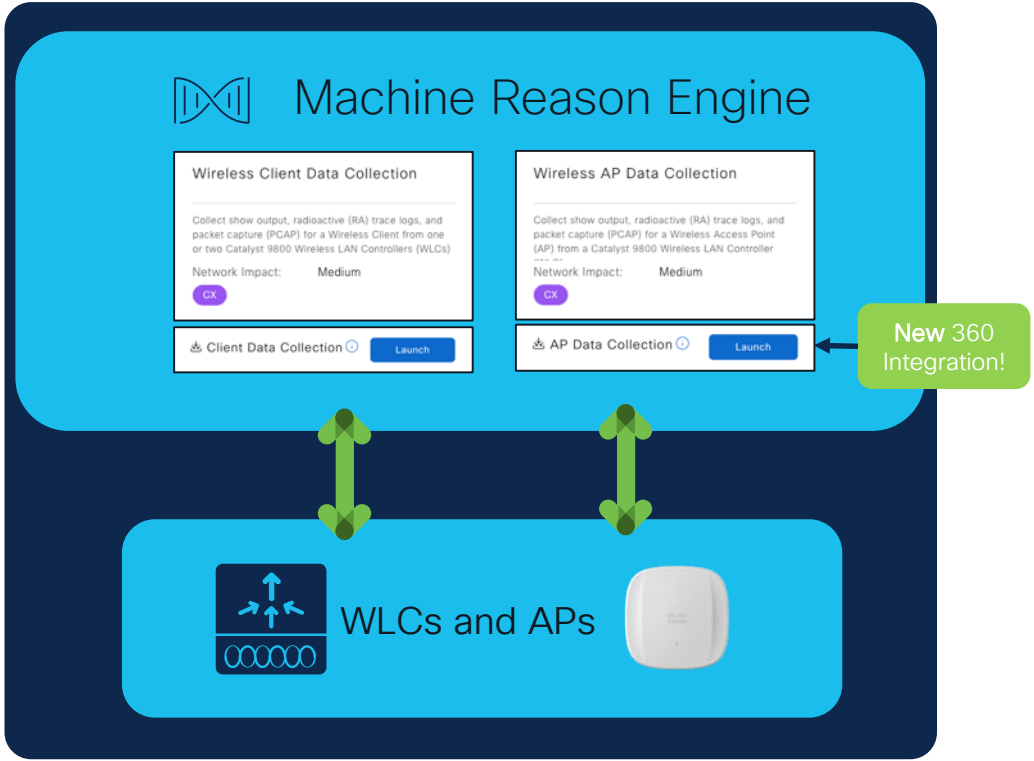
3 Download the OTA PCAPs Directly on the Page!

Machine Reasoning Engine for Wireless Serviceability
With Client and AP Data Collection Catalyst Center v2.3.6

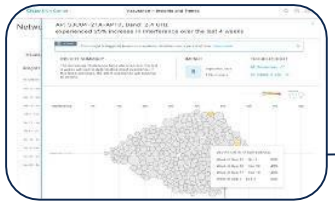
Use case:
Cisco Catalyst Center can grab AP and Client debug logs needed for troubleshooting via the Wireless Client and AP Data Collection MRE Workflows on the Network Reasoner page.

Key Benefits:

- Significantly improves serviceability experience as logs are collected for you and made available directly on the MRE UI.
- No need to manually SSH into WLC/APs, run CLI/Debug commands then copy paste logs into .txt files any longer.
- Integration into Client and AP 360 page under tools from Cisco Catalyst Center v.2.3.7.



Unleash the True Potential of Your Wireless with Cisco Wireless AIOps!



AI Network Analytics

Site Analytics

Event Analytics

AI-Enhanced RRM

OTA Sniffer

Networking

Wireless Automation & Troubleshooting

Learn from experts on wireless topics such as automation and analytics for enterprise wireless networks, and best practice in troubleshooting wireless networks from speakers who are at the forefront of wireless innovation. You will understand our AI/ML strategy for Cisco Wireless.

START

Monday, June 3 | 8:00 a.m.
BRKEWN-2014
Meraki AIOps & Assurance – Optimizing Wireless User Experience at Scale!

Monday, June 3 | 9:30 a.m.
BRKEWN-2029
7 Ways to Save your Wireless OpEx using Catalyst Center AIOps

Tuesday, June 4 | 10:30 a.m.
BRKEWN-2039
Let's Troubleshoot Your Wi-Fi Using Cisco Meraki Wireless

Tuesday, June 4 | 1:00 p.m.
BRKEWN-3007
Demystifying the Role of Applied AI in Your Cisco Wireless Deployments

Tuesday, June 4 | 4:00 p.m.
BRKEWN-2097
Monitoring Cisco Catalyst Wireless with the Meraki Dashboard

Wednesday, June 5 | 2:30 p.m.
BRKEWN-1108
Design, Validate and Certify your Wireless Streaming Telemetry Deployment

Thursday, June 6 | 8:30 a.m.
BRKEWN-3628
Troubleshoot Catalyst 9800 Wireless Controllers

Thursday, June 6 | 10:30 a.m.
BRKEWN-3002
Make a Wireless Engineer's Life Easy by Using Automation to Troubleshoot and Analyze Logs

Thursday, June 6 | 1:00 p.m.
FINISH
BRKEWN-2306
Wireless Network Automation and Assurance with Cisco Catalyst Center

Networking

Secure Wireless Design

Learn about design best practices for Cisco wireless solution, including many security optimizations. You will also learn about energy optimizations for Cisco Wireless deployments. Finally you will learn how to enable Smart Workspaces and locations based services that leverage your Cisco Wireless and BLE solution.

START

Monday, June 3 | 8:30 a.m.
BRKEWN-2054
Designing the Right Enterprise Wireless Architecture for Challenging Environments (On-Premises, Cloud, and Hybrid)

Monday, June 3 | 10:30 a.m.
BRKEWN-2035
Design your Enterprise Wireless Network with Cisco Meraki

Monday, June 3 | 11:00 a.m.
BRKENS-2834
IPv6-Enabled Wireless (Wi-Fi) Access: Design and Deployment Strategies

Tuesday, June 4 | 10:30 a.m.
BRKEWN-3004
Understanding Wireless Security and the Implications for Secure Wireless Network Design

Wednesday, June 5 | 10:30 a.m.
BRKEWN-2926
Tune Your Cisco Wi-Fi Designs for the Most Demanding Clients and Applications, Boosted with Applied AI

Thursday, June 6 | 9:30 a.m.
BRKEWN-2658
Implement and Troubleshoot Cisco Spaces to Deliver Next-Generation Location-Based Solutions

FINISH

Thursday, June 6 | 1:00 p.m.
BRKEWN-2037
OpenRoaming Under the Hood

Networking

Wi-Fi 6/6E

Learn from experts on wireless topics such as WiFi6 and WiFi6E standards enhancements. You will understand what you need to know about designing for 6GHz, migrating from AireOS to Catalyst 9800 or to Cloud management with Meraki, and what you need to know about 5G and WiFi6E coexistence.

START

Monday, June 3 | 1:00 p.m.
BRKEWN-2087
High-Density Wi-Fi Design, Deployment, and Optimization

Monday, June 3 | 3:00 p.m.
BRKEWN-2339
Catalyst 9800 Configuration Best Practices

Tuesday, June 4 | 1:00 p.m.
BRKEWN-2094
Successfully Configuring Catalyst 9800 Wireless Controllers on Your First Shot

Tuesday, June 4 | 2:30 p.m.
BRKEWN-1107
Cut the Cord: Design Principles to Deliver a Wireless-First Enterprise

Tuesday, June 4 | 3:00 p.m.
BRKEWN-2043
Saving Energy and Money with Your Cisco Wireless Network

Tuesday, June 4 | 3:00 p.m.
BRKOPS-2402
Automate the Deployment of a Wireless Network with the Help of Cisco Catalyst Center

Wednesday, June 5 | 10:30 a.m.
BRKEWN-3413
Advanced RF Tuning for Wi-Fi 6E with Catalyst Wireless: Become an Expert While Getting a Little Help from AI

Wednesday, June 5 | 2:30 p.m.
BRKEWN-2024
Wi-Fi 6E Adoption and a Sneak Peek into the Future with Wi-Fi 7

FINISH

Wednesday, June 5 | 4:00 p.m.
BRKEWN-1538
Internet of Things on the Next Generation Cisco Catalyst Wireless Wi-Fi 6E Access Points

Complete Your Session Evaluations

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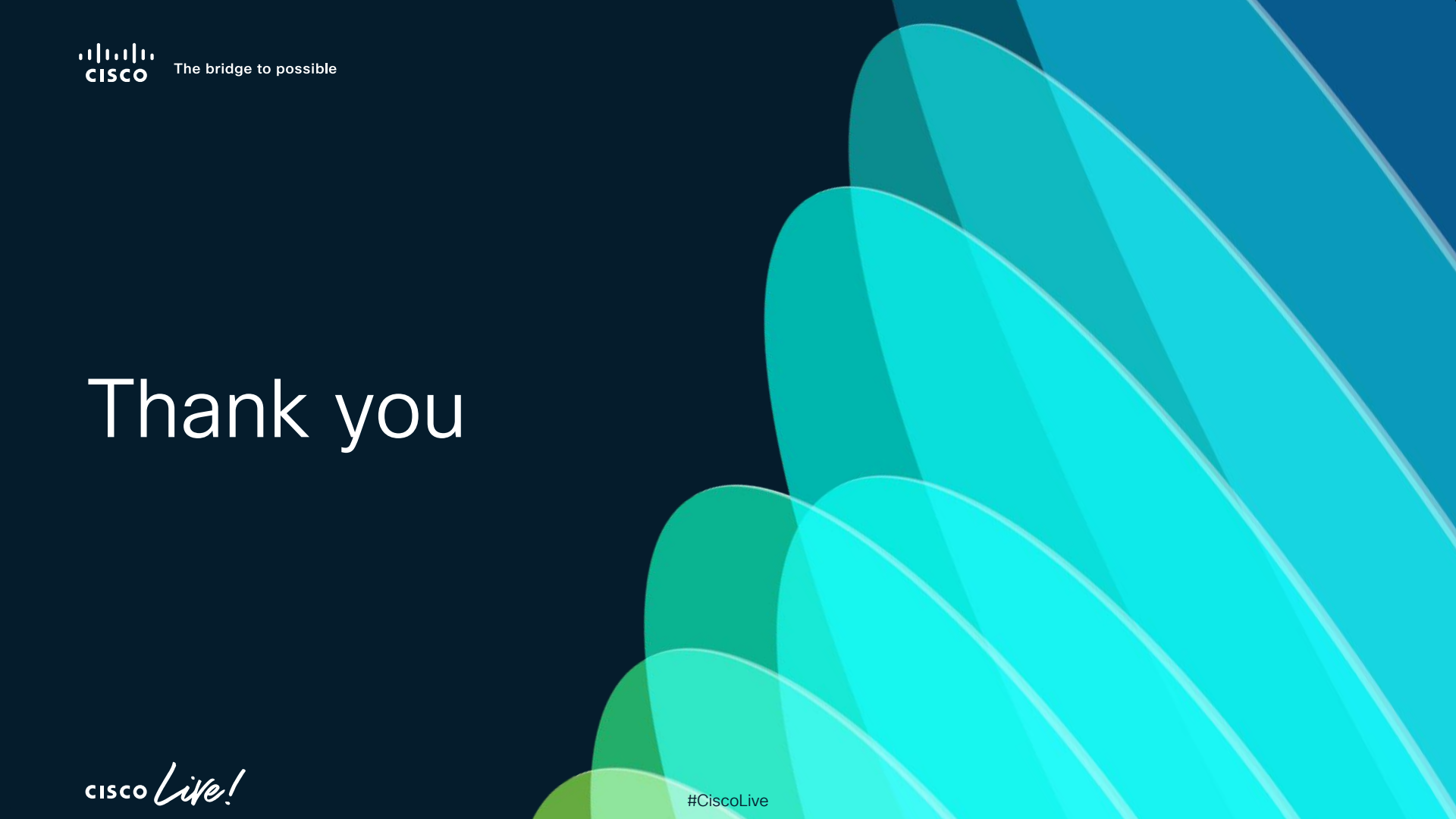
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