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The bridge to possible

# CX Cloud Your Digital Gateway to Success and Your Ally

One Stop Corner to Operate Your IT

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@mhgrisu

BRKOPS-1547

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#CiscoLive

CCIE #8087  
CCDE #20130015



# Cisco Webex app

## 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 17, 2022.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKOPS-1547>



# Agenda

- What is CX Cloud?
- Inventory and Assets
- Success Tracks
- Advisory
- Insights
- Summary

# The one stop corner to operate your IT



Las Vegas  
Flight LH456 to LAX



Source: <https://emojiteria.com/de/fallschirm/>  
<https://github.com/googlefonts/noto-emoji>

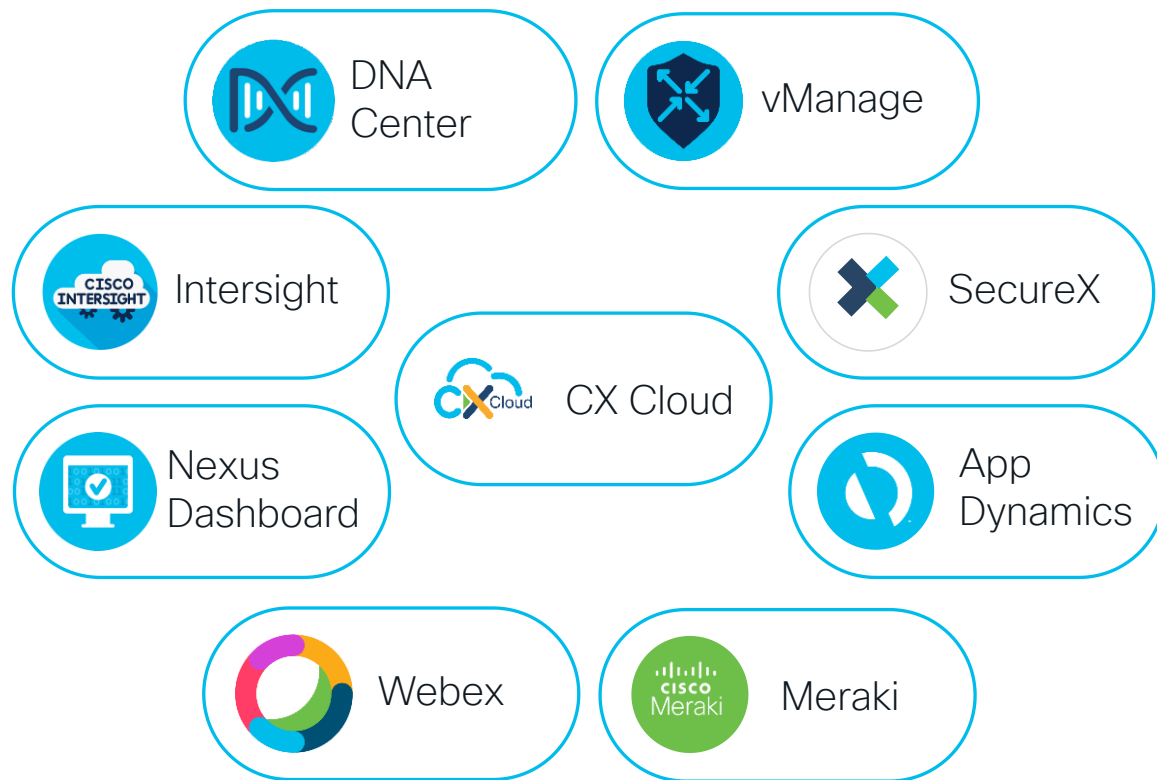
# What is CX Cloud?



1  
Where can i find all my assets incl  
the once on stock ? And what's the  
status of my contracts ?

2  
I need to be "compliant"  
and minimize down time!

3  
Can I predict outages and avoid them?  
(Predictive Maintenance)  
How about automatically detect and  
mitigate faults ?

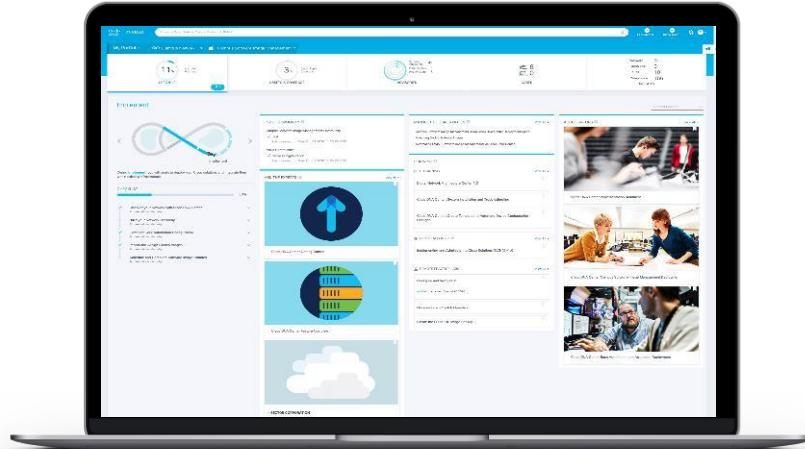




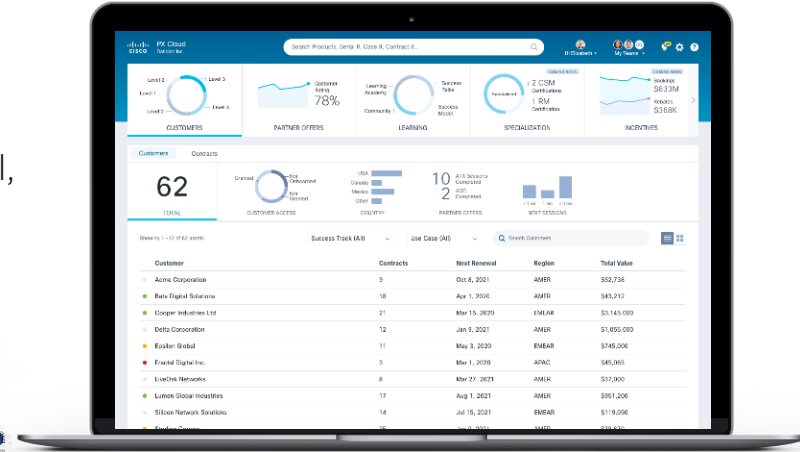
# Everything digital at your fingertips

CX Cloud  
(for customers)

PX Cloud  
(for partners)



Bi-directional,  
real-time  
information  
exchange



Cloud



Use case  
driven



Actionable  
telemetry



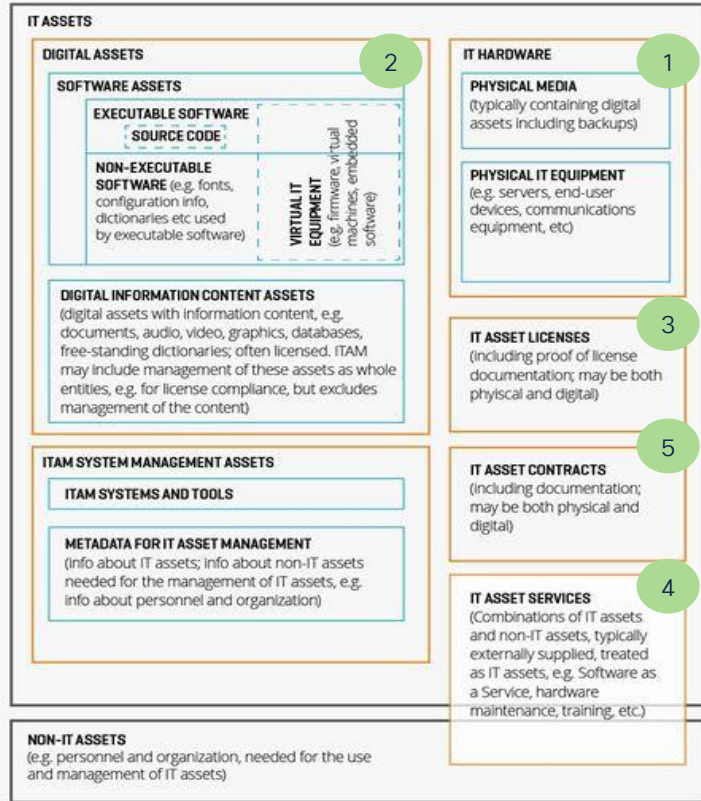
Contextual  
learning



AI / ML

# Inventory and Assets

# Asset classification – ITAM (ISO 19770-1-2017)



Source: ISO 19770-1:2017

## ITAM Applicability to Cisco Products and Services

- 1 IT Hardware → Hardware
- 2 Software Assets → Software
- 3 IT Asset Licenses → Licenses
- 4 IT Asset Services → Subscription and Services
- 5 IT Asset Contracts → Contracts (documentation)

# Cisco products & services – examples

## Hardware

- Network Devices
  - Router
  - Switches
  - Firewalls
  - DNA Appliance
  - UCS servers
  - IoT Switch/routers
  - Meraki SW/RTR
- End Points
  - IP Phones
  - Video endpoints
  - Meraki IP phones
  - Meraki Cameras
  - Access Points
- FRU
  - Power supply
  - Fan Module
  - Optics – SFP's
  - Cables
  - Hard disks

## Software

- Virtual Network Devices
  - CSR 1000V
  - ASA 1000V
- Management Controllers
  - DNA Center
  - APIC
  - DCNM
  - Prime Infra
  - Communication Manager
  - IPAM
  - Viptela On-Prem

## Subscription (SaaS/NaaS)

- Collaboration
  - Webex
  - Security
  - Duo
  - AMP
- Data Center
  - AppDynamics
  - Intersight
- Viptela (Cloud Managed)

## Licenses

- Perpetual
  - ISE
  - Prime Infra
- Term
  - DNA E/A/P
  - ACI Fabric
  - NGFW
  - Anyconnect
- Subscription
  - AMP connector
  - Webex Meetings
  - Meraki
  - Viptela
- Cisco Plus
  - Remote Worker

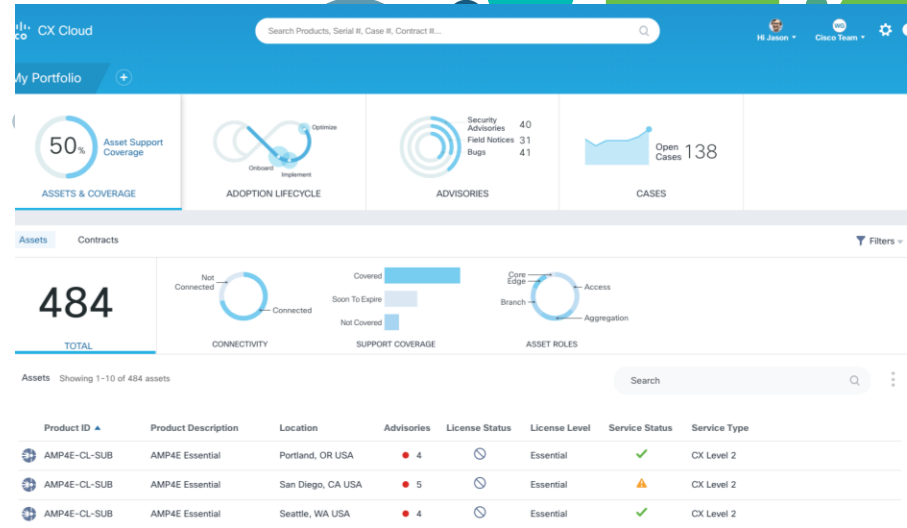
## Services

- Success Tracks
  - CX Level1
  - CX Level2
- Non-Success Track
  - SNTC
  - SWSS
  - Solution Support
  - Meraki (NOW)

# CX Cloud assets & coverage – core concepts

- Assets have an associated lifecycle (EoX milestones)
- Assets are activated through licenses
- Assets are covered by a service contract for getting support
- Assets are impacted by Cisco advisories (PSIRT, FN, Bugs)
- Assets have associated insights (Software, Crash Risk, Fault, Compliance)

# CX Cloud demo asset & inventory

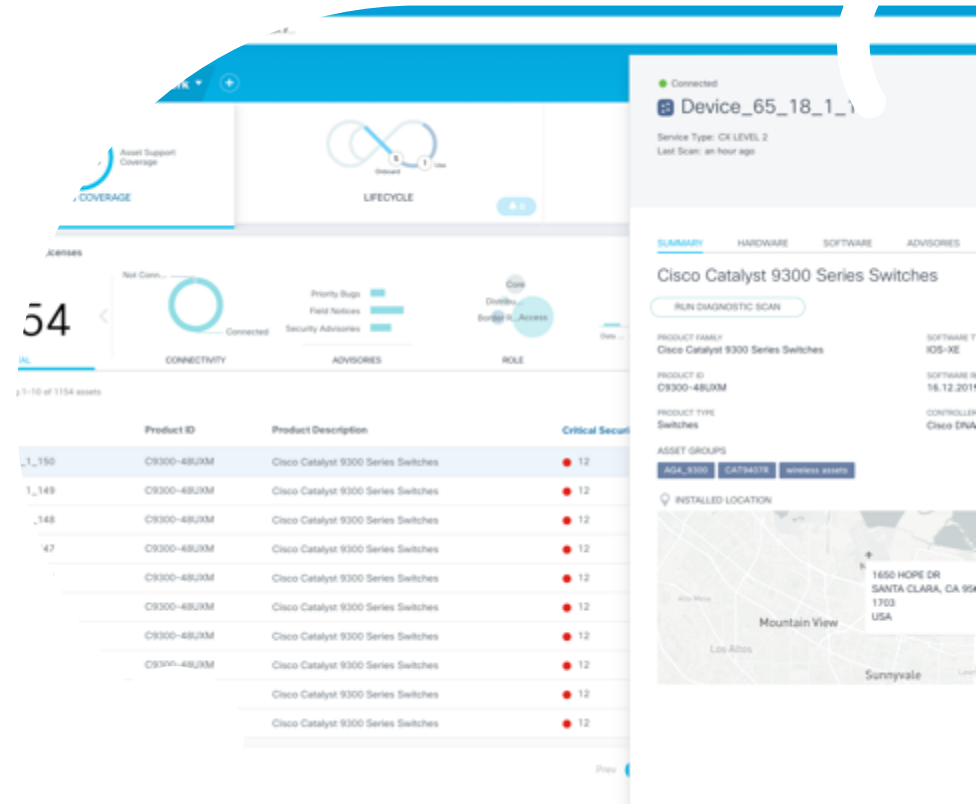


# Asset and Inventory

Detailed Infrastructure overview

Multidomain

Full view incl License and service



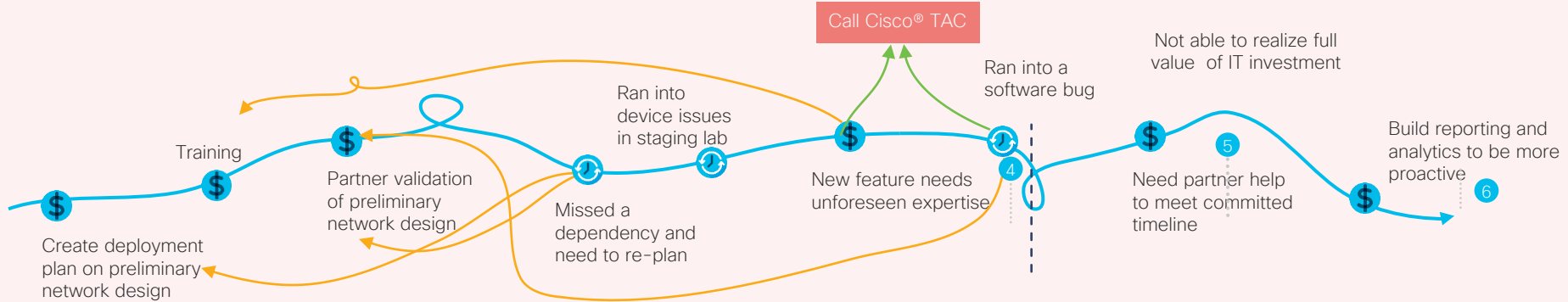


# Success Tracks



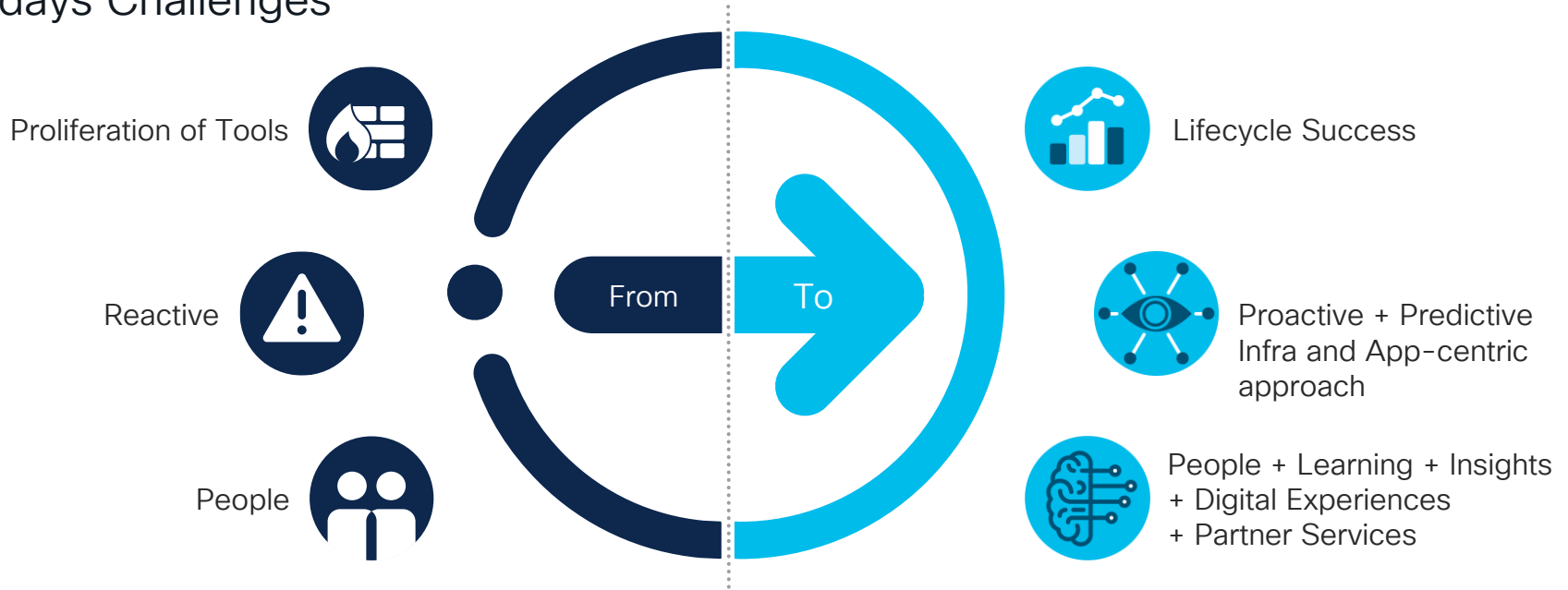
# How are your projects organized?

Customer's current path



# Delivering customer outcomes

## Today's Challenges



Requires: New service offers & enhanced customer engagements

# Introducing Cisco Success Tracks

## Accelerate customer success

Accelerate your path to success

Minimize complexity and risk

Transform the way you work

### Suite of services



Expert Resources  
Expert guidance



Trusted Support  
Prescriptive levels of support



Insights and Analytics  
AI/ML-driven intelligence



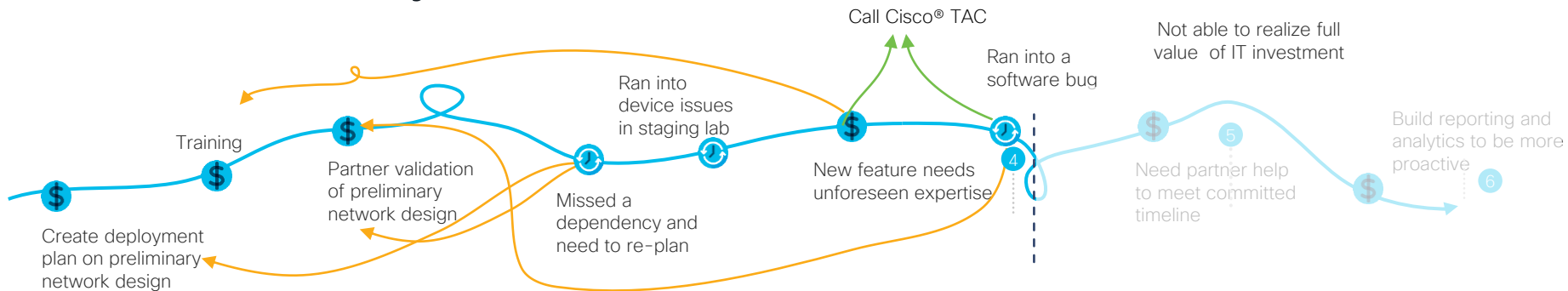
Contextual Learning  
Skills advancement

### CX Cloud

A use case guided digital platform

Networking | Data Center | Security | Collaboration | Cloud | IoT

# That's how you want to work



## with Success Tracks



## One-stop digital experience

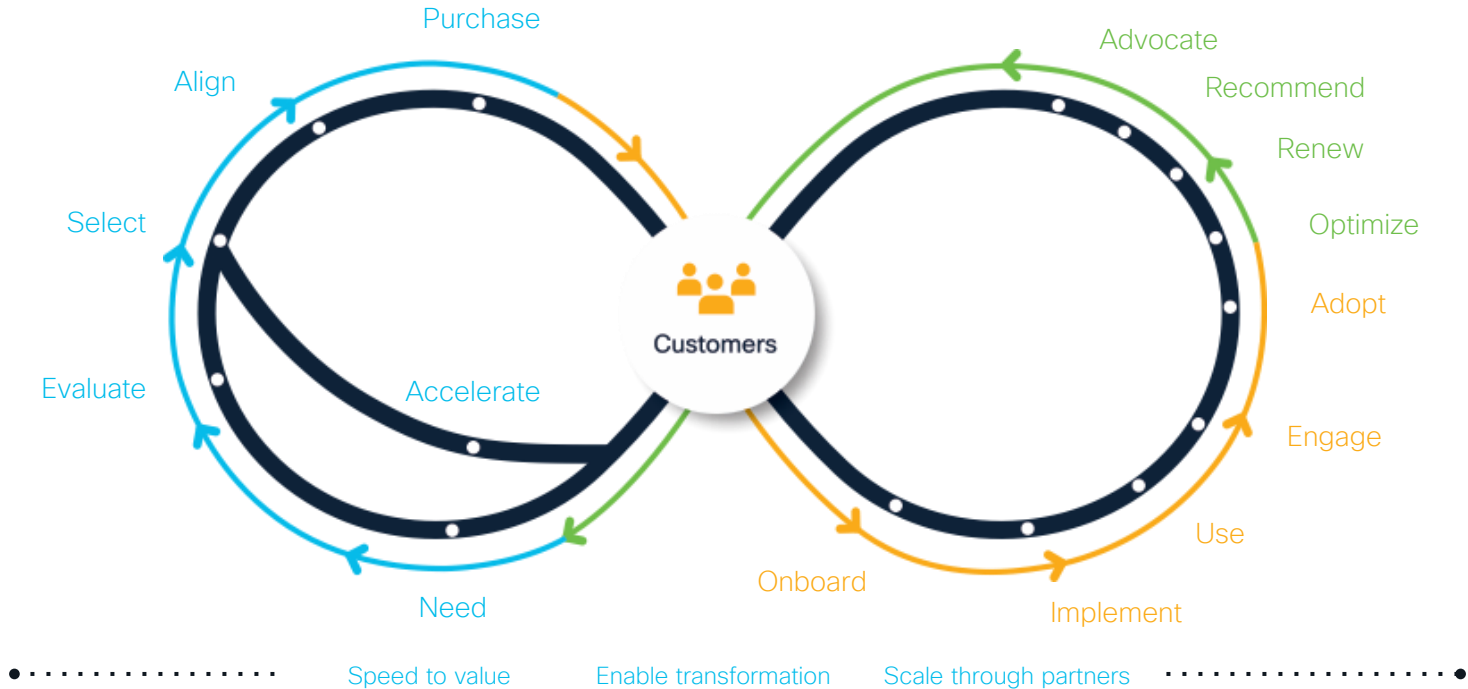
Guided, proven adoption path

## Meaningful use case-driven content

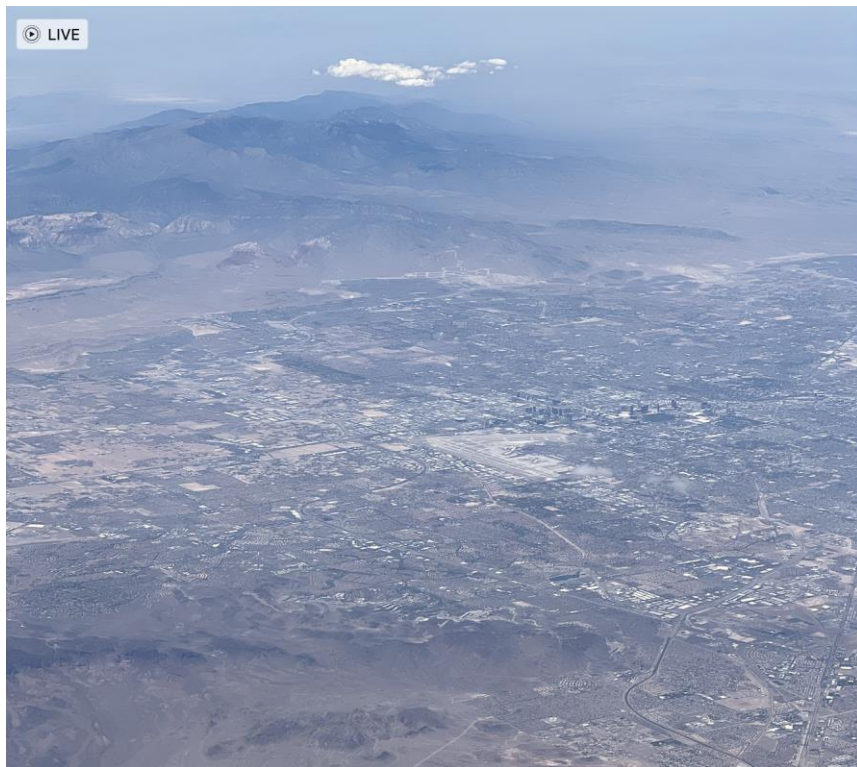
## Contextual learning

# Reimagining our Customers' Experience

Simplicity, Agility, Innovation



# The one stop corner to operate your IT



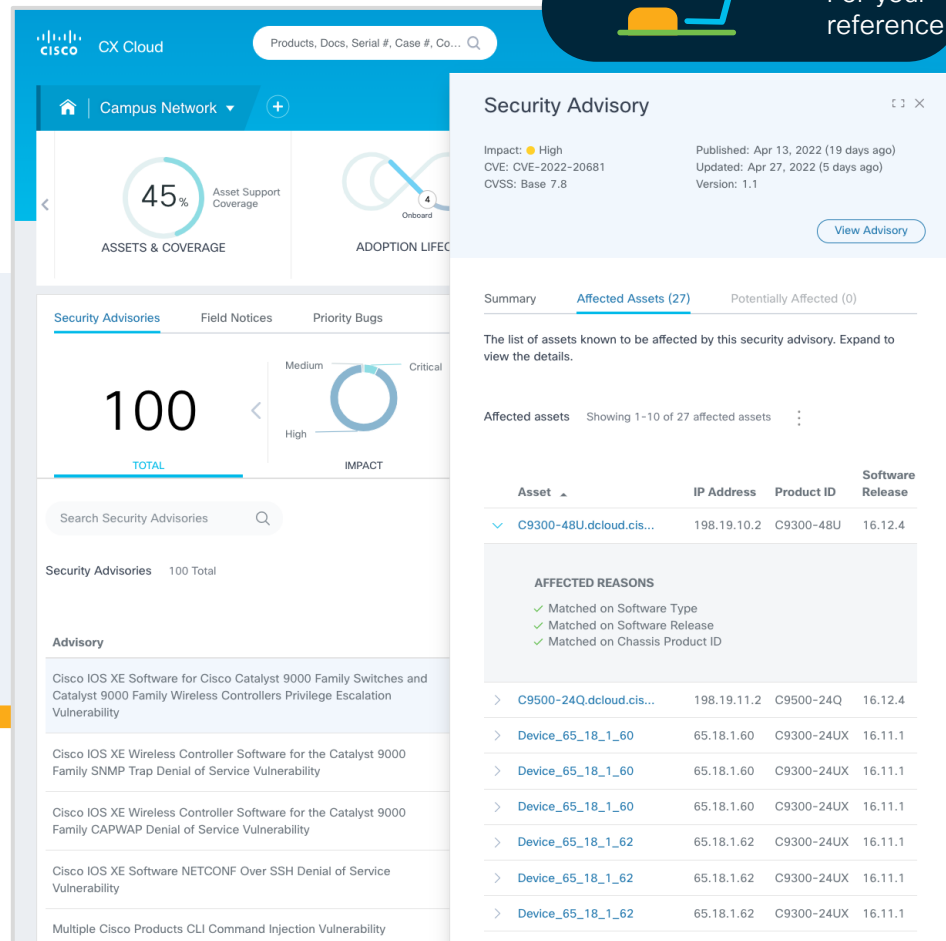


# Advisory

# Advisories

## Insights and Analytics

- Proactive visibility to known exposures (PSIRTs, FN, Bugs) for monitored assets
- Network wide corrective action to mitigate risks



**Security Advisory**

Impact: High  
CVE: CVE-2022-20681  
CVSS: Base 7.8

Published: Apr 13, 2022 (19 days ago)  
Updated: Apr 27, 2022 (5 days ago)  
Version: 1.1

[View Advisory](#)

**Summary** **Affected Assets (27)** Potentially Affected (0)

The list of assets known to be affected by this security advisory. Expand to view the details.

Affected assets Showing 1-10 of 27 affected assets

Asset	IP Address	Product ID	Software Release
C9300-48U.dcloud.cis...	198.19.10.2	C9300-48U	16.12.4
<b>AFFECTED REASONS</b>			
✓ Matched on Software Type			
✓ Matched on Software Release			
✓ Matched on Chassis Product ID			
C9500-24Q.dcloud.cis...	198.19.11.2	C9500-24Q	16.12.4
Device_65_18_1_60	65.18.1.60	C9300-24UX	16.11.1
Device_65_18_1_60	65.18.1.60	C9300-24UX	16.11.1
Device_65_18_1_60	65.18.1.60	C9300-24UX	16.11.1
Device_65_18_1_62	65.18.1.62	C9300-24UX	16.11.1
Device_65_18_1_62	65.18.1.62	C9300-24UX	16.11.1
Device_65_18_1_62	65.18.1.62	C9300-24UX	16.11.1

**Security Advisories** 100 Total

**Advisory**

Cisco IOS XE Software for Cisco Catalyst 9000 Family Switches and Catalyst 9000 Family Wireless Controllers Privilege Escalation Vulnerability

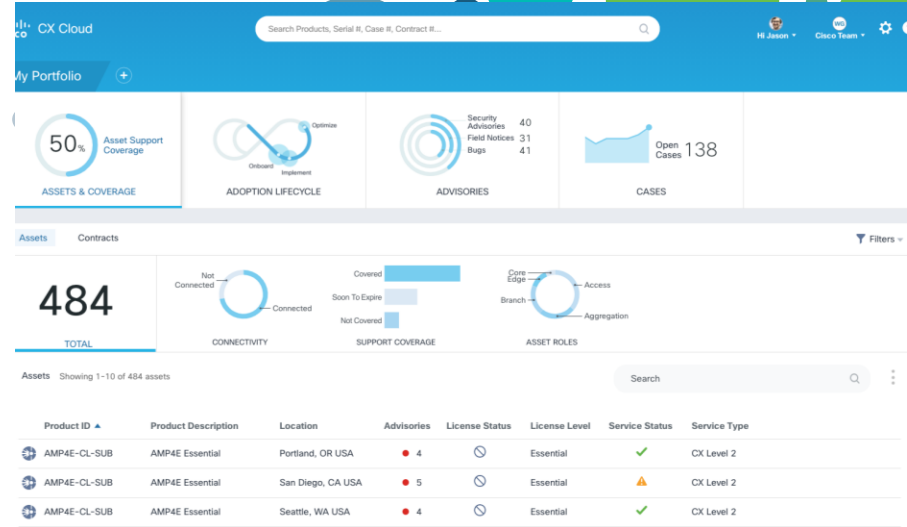
Cisco IOS XE Wireless Controller Software for the Catalyst 9000 Family SNMP Trap Denial of Service Vulnerability

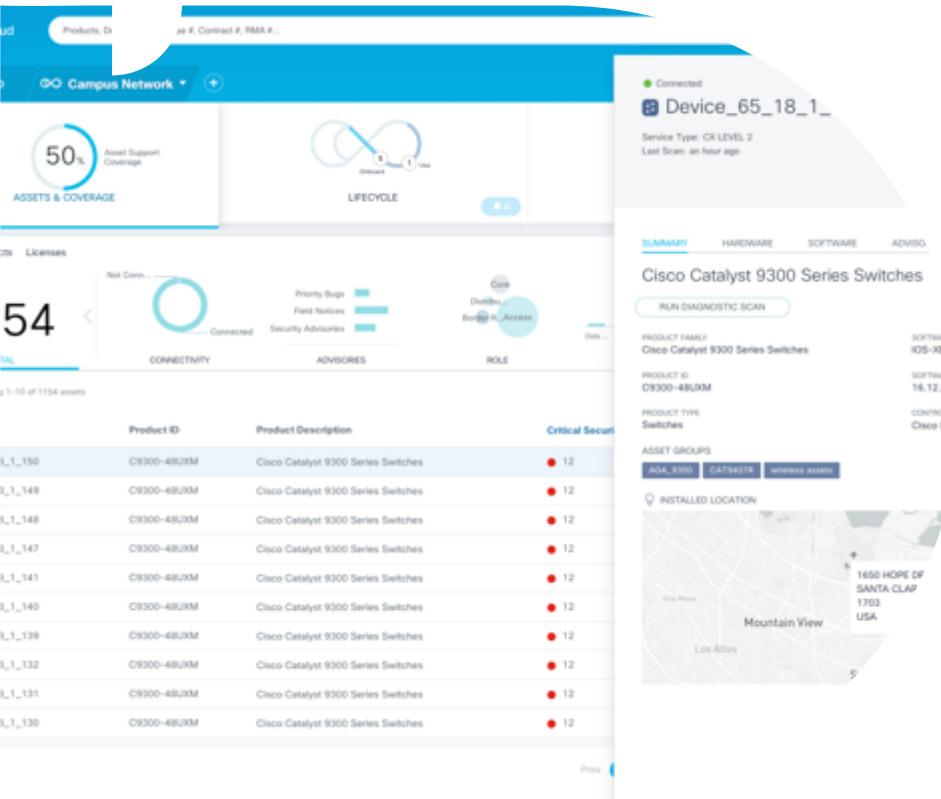
Cisco IOS XE Wireless Controller Software for the Catalyst 9000 Family CAPWAP Denial of Service Vulnerability

Cisco IOS XE Software NETCONF Over SSH Denial of Service Vulnerability

Multiple Cisco Products CLI Command Injection Vulnerability

# CX Cloud demo advisory





# Advisories

PSIRTs

Bugs

Field Notices

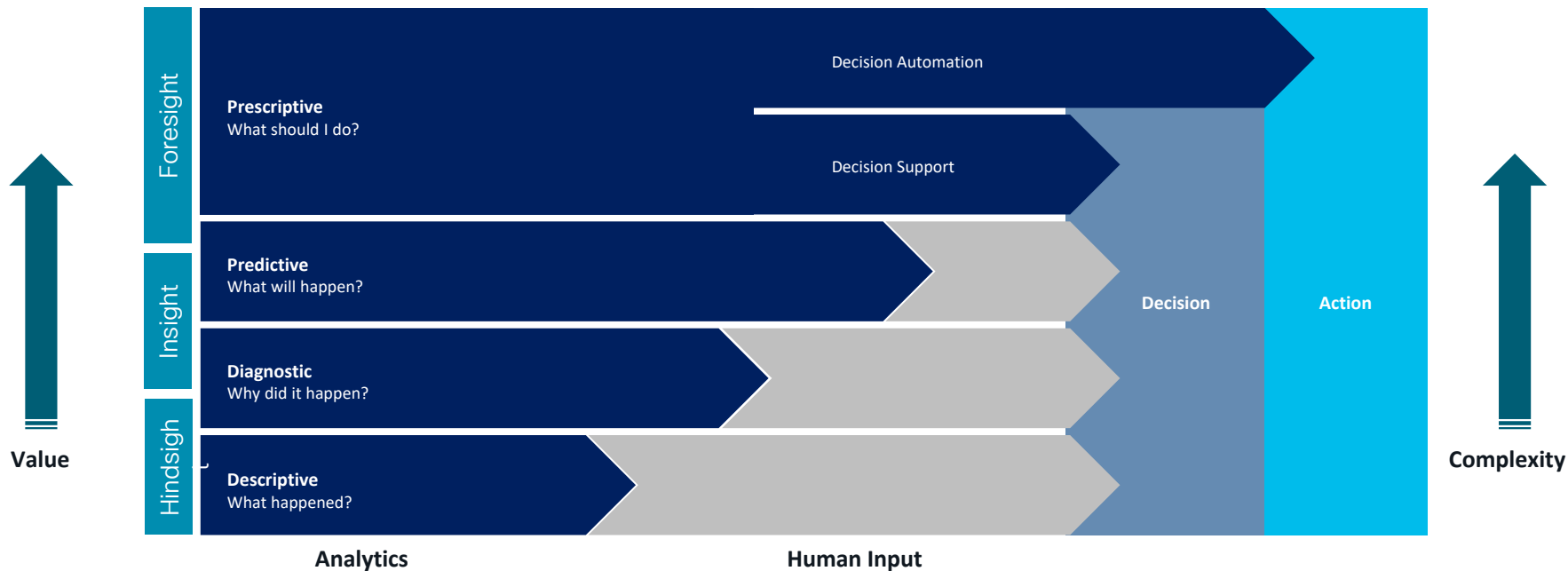
Compliance

→ Proactivity

# Insights



# Maturity model of analytics



# Insights & analytics



## Description

Examples:  
Google Maps

Examples:  
CX Cloud

### Descriptive

Summarizes what is happening or what has happened

Number of exits or commuters on US-101 between San Jose and San Francisco

10% DNA enabled assets are out of compliance

### Diagnostic

Aims at finding the root-cause of a problem or a trend that is building

A crash near Stanford causing 15 mins slowdown

Power Supply Failure on "Cat9k-SJC06" is impacting the PoE endpoint on port Gi1/20

### Predictive

Leverages patterns from past to estimate future outcomes

Traffic Building up, there will be 15 mins delay on US-101 due to the 49ers game

"Cat9k-SJC06" is likely to crash due to combination of PoE and IPv6 features enabled

### Prescriptive

Uses expert knowledge to recommend contextual actions

Leave by 10:15 AM to catch your 2:30 PM flight from SFO

Upgrade to IOS-XE 17.3 to minimize Software Risk on "Cat9k-SJC06"



# Portfolio sub-categories



Descriptive

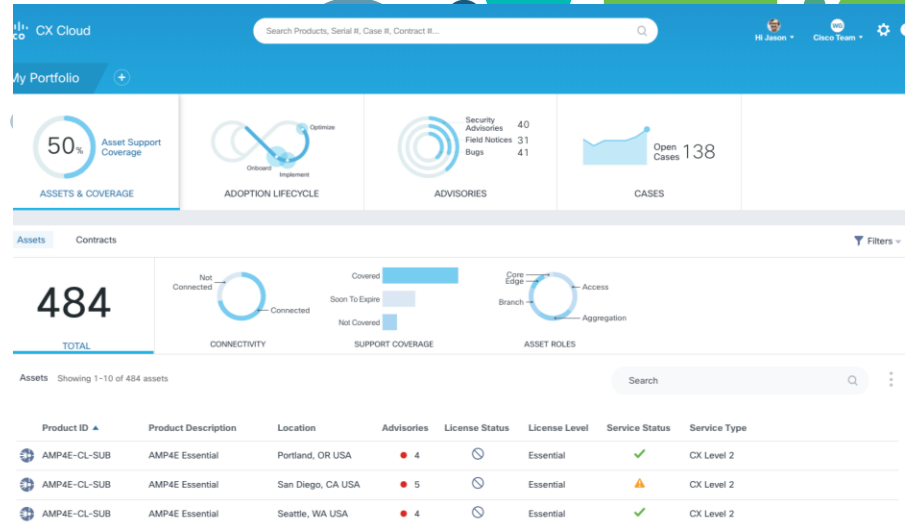
Diagnostic

Predictive

Prescriptive

Level 0	Level 1	Level 2	Level 3
<b>Asset View</b> <ul style="list-style-type: none"> <li>Installed Base View</li> <li>EoX Milestones</li> </ul>	<b>Asset Insights</b> <ul style="list-style-type: none"> <li>License Compliance</li> <li>Place in Network (L3 -&gt; L1)*</li> <li>Usage Analytics*</li> <li>Renewals and Refresh*</li> </ul> <b>Operational Advisories</b> <ul style="list-style-type: none"> <li>Field Notices</li> <li>Security Advisories</li> <li>Basic UC based insights</li> </ul>	<b>Operational Insights</b> <ul style="list-style-type: none"> <li>Support Metrics</li> <li>Peer Benchmarking*</li> <li>Software Conformance*</li> </ul>	
	<b>Event Insights</b> <ul style="list-style-type: none"> <li>Syslog Insights</li> </ul>	<b>Risk Management Insights</b> <ul style="list-style-type: none"> <li>Automated Faults</li> <li>Crashed Assets</li> <li>Priority Bugs (L1 -&gt; L2)</li> </ul>	<b>Health Insights</b> <ul style="list-style-type: none"> <li>Health Assessment*</li> </ul>
		<b>Risk Prediction and Mitigation Insights</b> <ul style="list-style-type: none"> <li>Crash Risk</li> <li>Network Early Warning*</li> </ul>	<b>Service Availability Insights</b> <ul style="list-style-type: none"> <li>SLA Prediction*</li> <li>What-if Analysis*</li> </ul>
		<b>Plan and Design Insights</b> <ul style="list-style-type: none"> <li>Use-case based Software Recommendations</li> <li>Readiness Assessment*</li> </ul> <b>Compliance Insights</b> <ul style="list-style-type: none"> <li>Regulatory Compliance</li> </ul>	<b>Optimization Insights</b> <ul style="list-style-type: none"> <li>Config Best Practices*</li> <li>Policy Variation Analysis*</li> <li>Risk Mitigation Assessment*</li> </ul> <b>Business Insights</b> <ul style="list-style-type: none"> <li>TCO and ROI*</li> </ul>

# CX Cloud demo insights

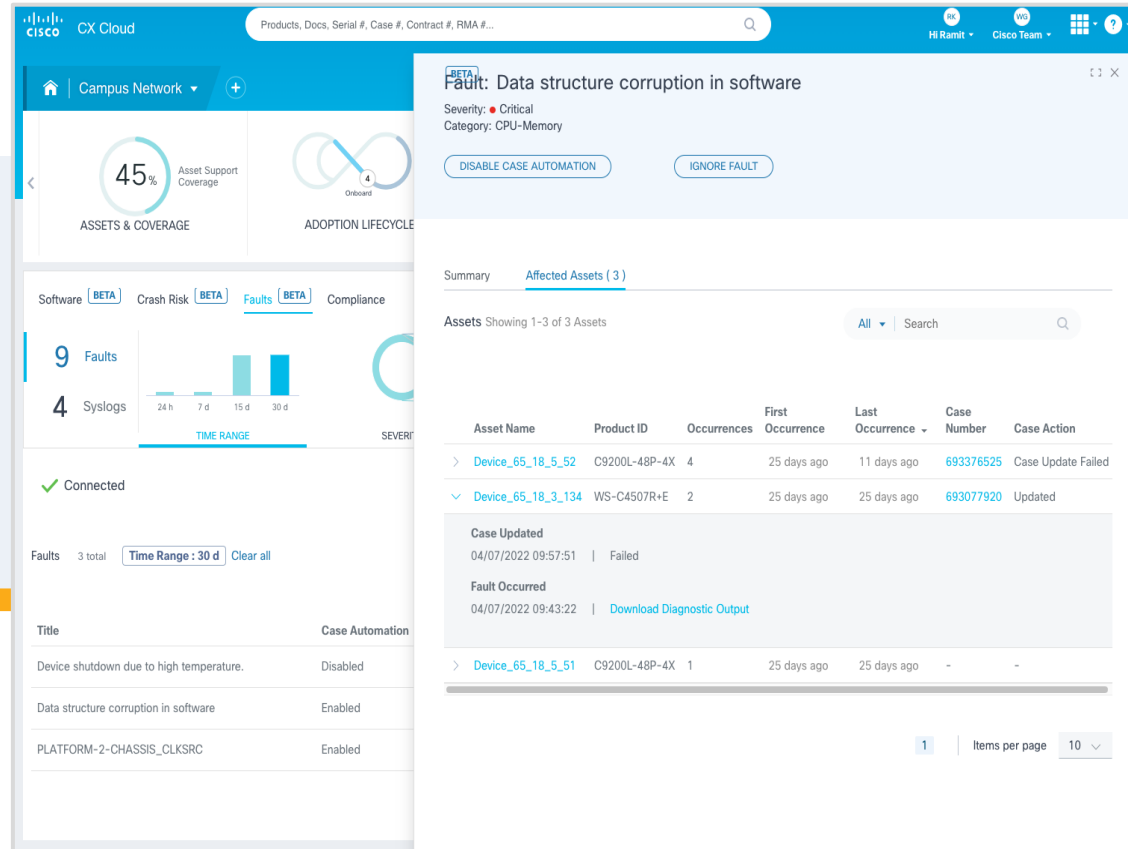


# Automated fault management

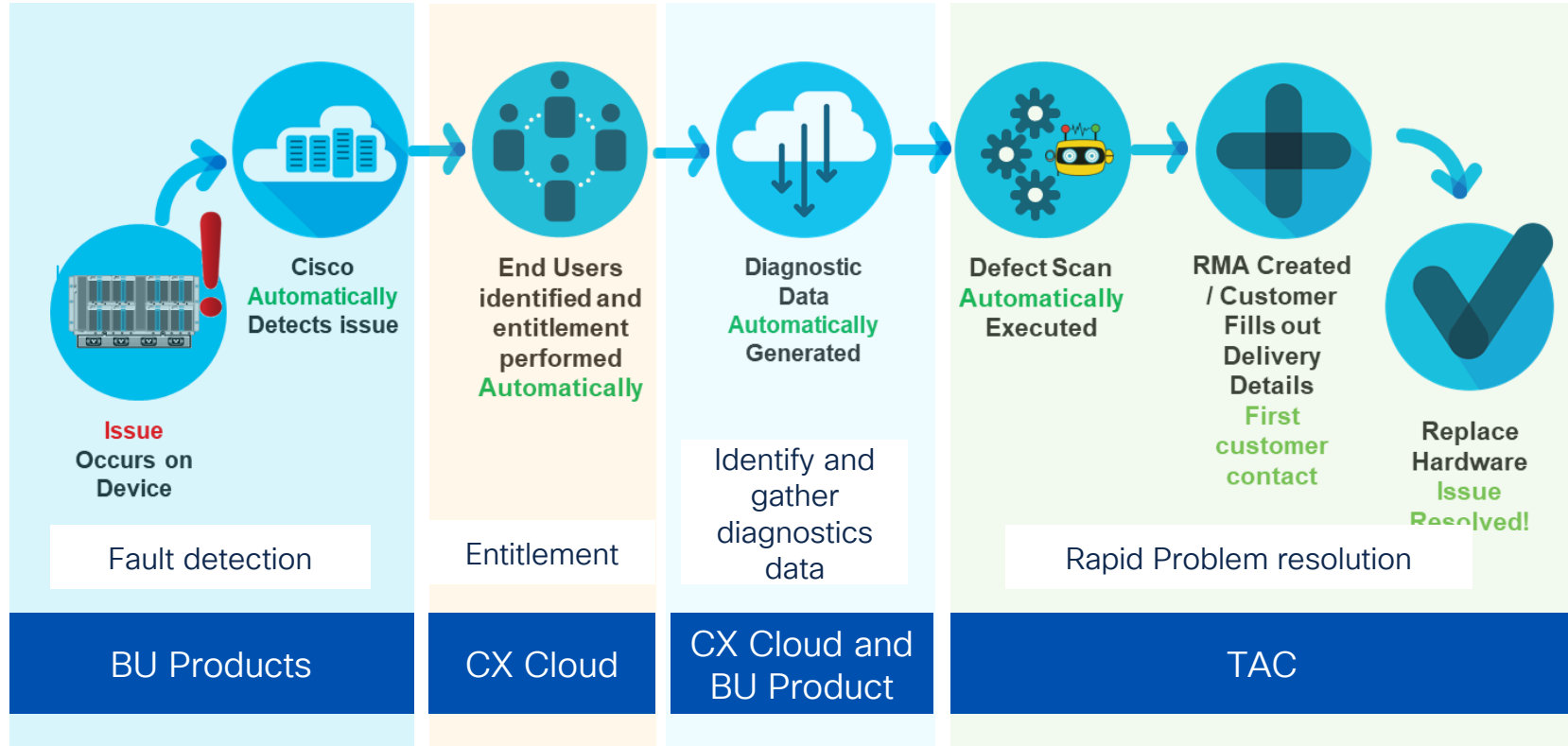
## Insights and Analytics



- Machine Learning enabled detection of critical network faults
- Automated case creation, reducing mean time to resolution and downtime



# Automated fault detection

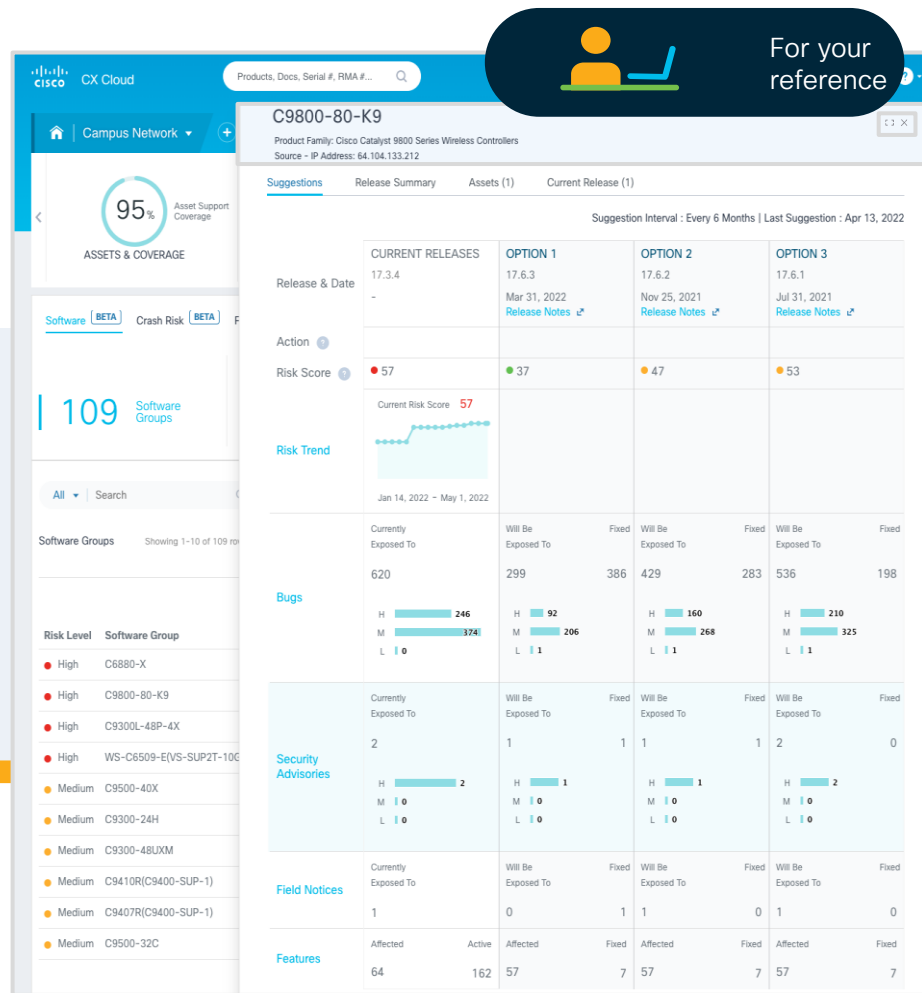


# Optimal software versions

## Insights and Analytics



- AI assisted platform software recommendation based on 30+ different evaluation metrics
- Optimized operations via standardized software releases
- Reduced risk from known software defects, security vulnerabilities and field notices



# Regulatory compliance checks

## Insights and Analytics



- Automated checks to ensure compliance with regulatory policies
- Configuration and design recommendations to remediate violations and avoid penalties

The screenshot displays the Cisco CX Cloud interface for regulatory compliance checks. The main dashboard shows a 45% Asset Support Coverage and a 125 Rule Violations count. A detailed view of a specific violation is shown on the right, titled "Enable password strongest encryption should be configured - Type 8/9". This view includes a table of affected assets and a table of violations.

Asset Name	IP Address	Product ID	Last Checked	Violations	Controller
C9500-48U.dcloud.cisco.com	198.19.10.2	C9300-48U	4 hours ago	1	dnac.dcloud.cisco.com

Severity	Violation Message	Violation Age	Suggestion
Medium	Did not find: enable secret not configured. Use Type-9 encryption. Update software, if necessary.	198 Days	enable algorithm-type script secret PW\$S\$H

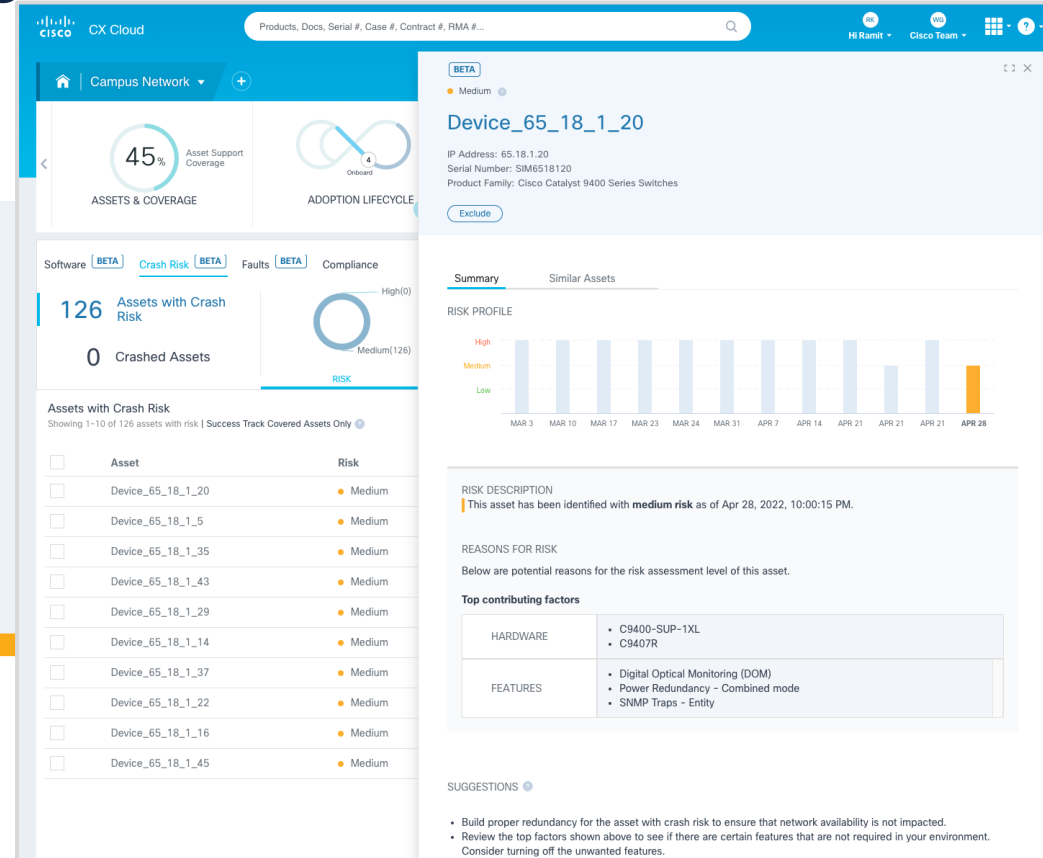
  

Asset Name	IP Address	Product ID	Last Checked	Violations	Controller
C9500-24Q.dcloud.cisco.com	198.19.11.2	C9500-24Q	4 hours ago	1	dnac.dcloud.cisco.com
Device_65_18_1_1	65.18.1.1	C9407R	4 hours ago	1	dnac.dcloud.cisco.com
Device_65_18_1_10	65.18.1.10	C9407R	4 hours ago	1	dnac.dcloud.cisco.com
Device_65_18_1_11	65.18.1.11	C9407R	4 hours ago	1	dnac.dcloud.cisco.com
Device_65_18_1_12	65.18.1.12	C9407R	4 hours ago	1	dnac.dcloud.cisco.com
Device_65_18_1_13	65.18.1.13	C9407R	4 hours ago	1	dnac.dcloud.cisco.com

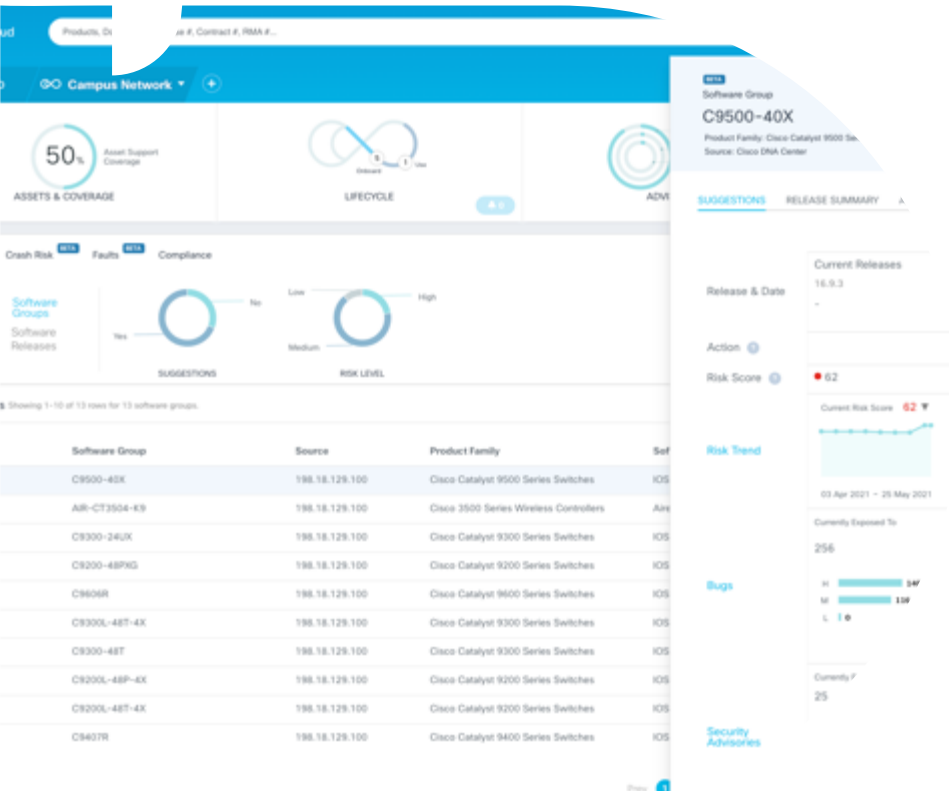
# Risk mitigation checks

## Insights and Analytics

- AI assisted detection of at-risk devices based on advanced machine learning algorithms
- Remediation plan with corrective actions focused on mitigating risk and minimizing unplanned outages







# Insights

Software status  
Last day of support management

Software recommendations  
& automated upgrades

Insight collection and predictive  
maintenance

# The one stop corner to operate your IT



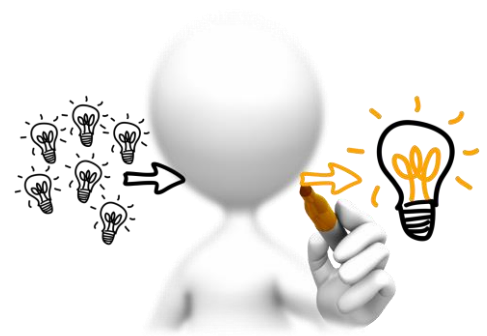
Back again after learning

# Conclusion



# Additional resources

Discover the business benefits of Cisco Success Tracks



- CX Cloud on CCO:
- <http://www.cisco.com/go/cxcloud>
- We invite you to download the Forrester report (in English) to learn more about Cisco Success Tracks.
- Please use this [link](https://cloud.path.cisco.com/forrester-study-lp?ccid=cc001428&oid=otrsas026489&dtid=odicdc000509) for download.
- (<https://cloud.path.cisco.com/forrester-study-lp?ccid=cc001428&oid=otrsas026489&dtid=odicdc000509>)

# Next steps

1. Learn about CX Cloud and connect to your Account and CX Team
2. Test it out and experience the value
3. Get a personal Demo in CX Village at WoS

As Angus said:  
*Have a drink on me*



# The one stop corner to operate your IT

Here is how you can accelerate

with Success Tracks



One-stop digital experience

Guided, proven adoption path

Meaningful use case-driven content

Contextual learning

# Technical session surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.



# Cisco learning and certifications

From technology training and team development to Cisco certifications and learning plans, let us help you empower your business and career. [www.cisco.com/go/certs](https://www.cisco.com/go/certs)

## Pay for Learning with Cisco Learning Credits

(CLCs) are prepaid training vouchers redeemed directly with Cisco.



## Learn

### Cisco U.

IT learning hub that guides teams and learners toward their goals

### Cisco Digital Learning

Subscription-based product, technology, and certification training

### Cisco Modeling Labs

Network simulation platform for design, testing, and troubleshooting

### Cisco Learning Network

Resource community portal for certifications and learning



## Train

### Cisco Training Bootcamps

Intensive team & individual automation and technology training programs

### Cisco Learning Partner Program

Authorized training partners supporting Cisco technology and career certifications

### Cisco Instructor-led and Virtual Instructor-led training

Accelerated curriculum of product, technology, and certification courses



## Certify

### Cisco Certifications and Specialist Certifications

Award-winning certification program empowers students and IT Professionals to advance their technical careers

### Cisco Guided Study Groups

180-day certification prep program with learning and support

### Cisco Continuing Education Program

Recertification training options for Cisco certified individuals

Here at the event? Visit us at **The Learning and Certifications lounge at the World of Solutions**





# Continue your education

- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at [www.CiscoLive.com/on-demand](https://www.CiscoLive.com/on-demand)



The bridge to possible

# Thank you

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