

The background is a vibrant, abstract graphic. It features a central bright white light source from which numerous colorful rays emanate, creating a sunburst or starburst effect. The rays transition through a spectrum of colors including yellow, orange, red, and various shades of blue and green. Overlaid on this are large, flowing, wavy shapes in similar colors, giving the impression of liquid or smoke. The overall effect is dynamic and energetic.

cisco *Live!*

Let's go

#CiscoLive



The bridge to possible

With Meraki, Network Assurance Doesn't Have to Be a Headache

Tony Carmichael
Product Management Director

Minyi Pan
Product Marketing Manager

PSOMER-1004

CISCO *Live!*

#CiscoLive



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 9, 2023.



<https://ciscolive.ciscoevents.com/ciscolivebot/#PSOMER-1004>

Agenda

- The good, the bad, and the ugly
- What does network assurance mean?
- How does it work?
- Engage with us!

Tell us:
What is your #1 pain
point in managing
a network?


Scan me



Or go to [Slido.com](https://slido.com) with #231004



What you **want** to see.



Too many ~~systems~~
inefficiencies

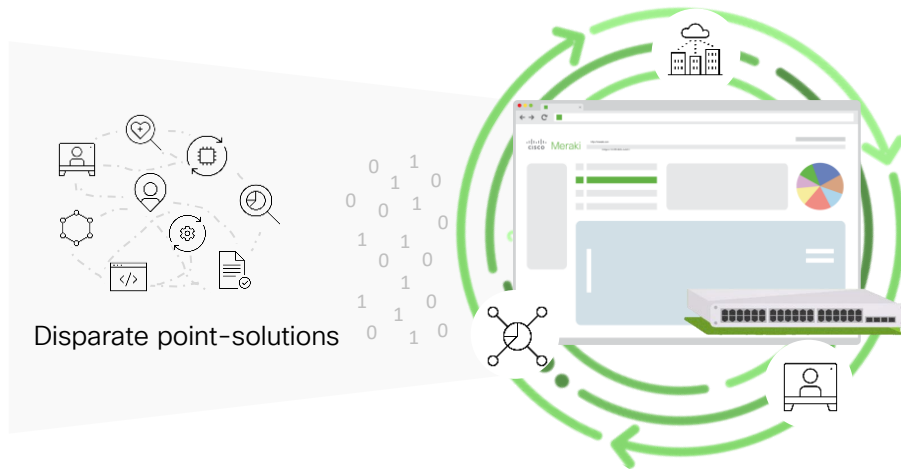
Too much ~~data~~
noise

Too many ~~standards~~
conflicts

What you see.

From **reactive**

To **proactive**



Turn “I guess” into “I know”.

The **right data** in the **right format** in the **right hand** to make
the **right decision** at the **right time**.

Network Assurance with Meraki Switching

Prevent.
Rely on the cloud to *prevent*
and *monitor* continuously.

See.
Have an *automated, comprehensive, and*
contextualized view of network
performance.

Resolve.
Quickly *heal* the network
and *record* the actions.

Understand.
Make informed decisions based on
data and a system that *learns*.



See the entire install-base from a centralized view that draws focus to what matters

Organization Summary New

Health

[View all devices](#)

Uplinks 327 total



2

Offline ✖

MX 334 total



All

Online ✓

MS 2,126 total



All

Online ✓

MR 4,939 total



All

Online ✓

Networks

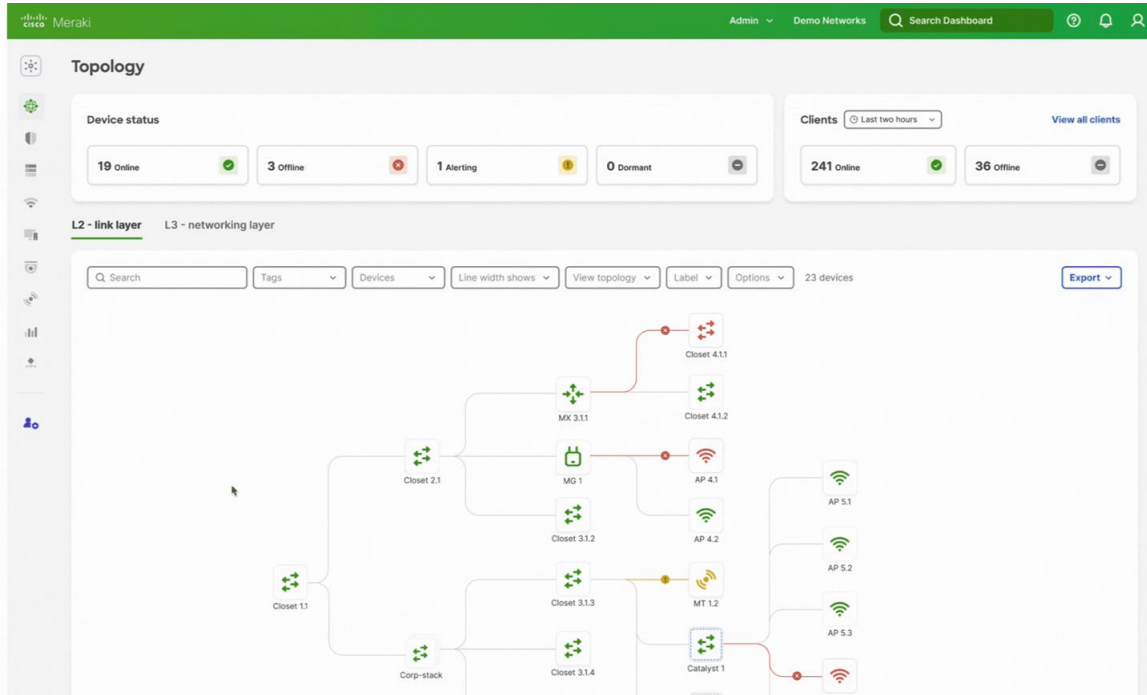
🕒 Usage and clients over the last week

≡ **Filters**

5 networks

①	Name	Usage	Clients	Tags	MX	MS	MR
✖	NYC Headquarters	4.2 TB	2,193	tag1	✓ 4	✓ 211	✓ 197

An automated, comprehensive, and contextualized view of network performance



Identify patterns and anomalies faster

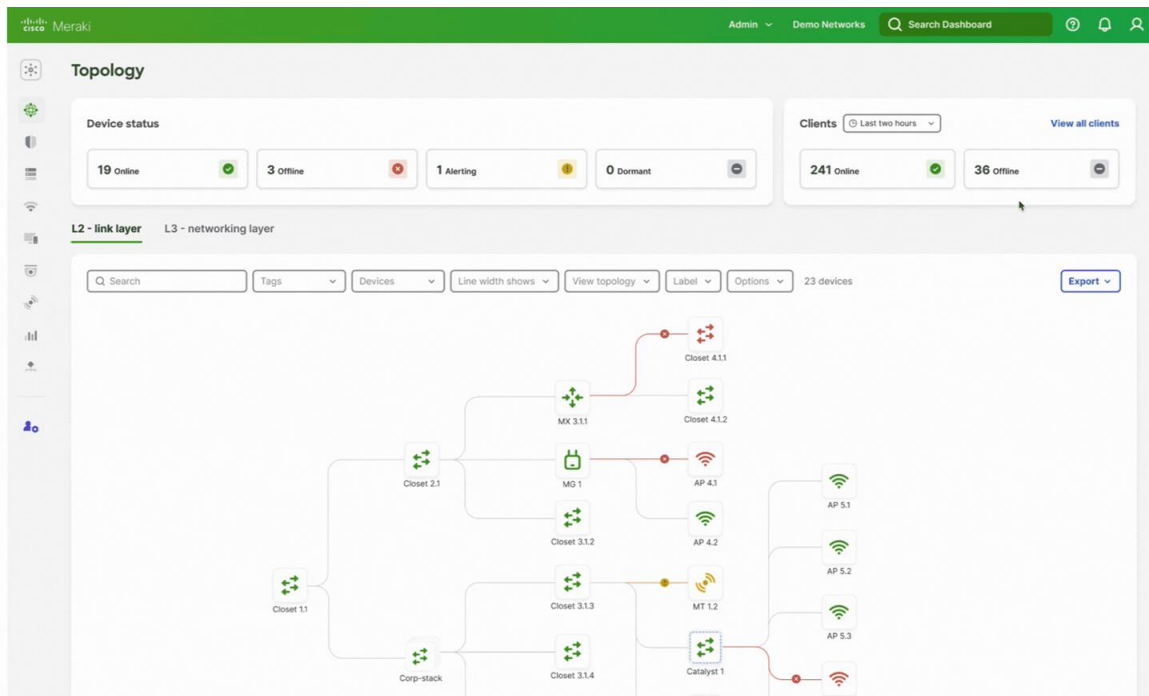


Understand the interconnection and dependencies with ease



Manage and troubleshoot proactively

An automated, comprehensive, and contextualized view of network performance



Identify patterns and anomalies faster

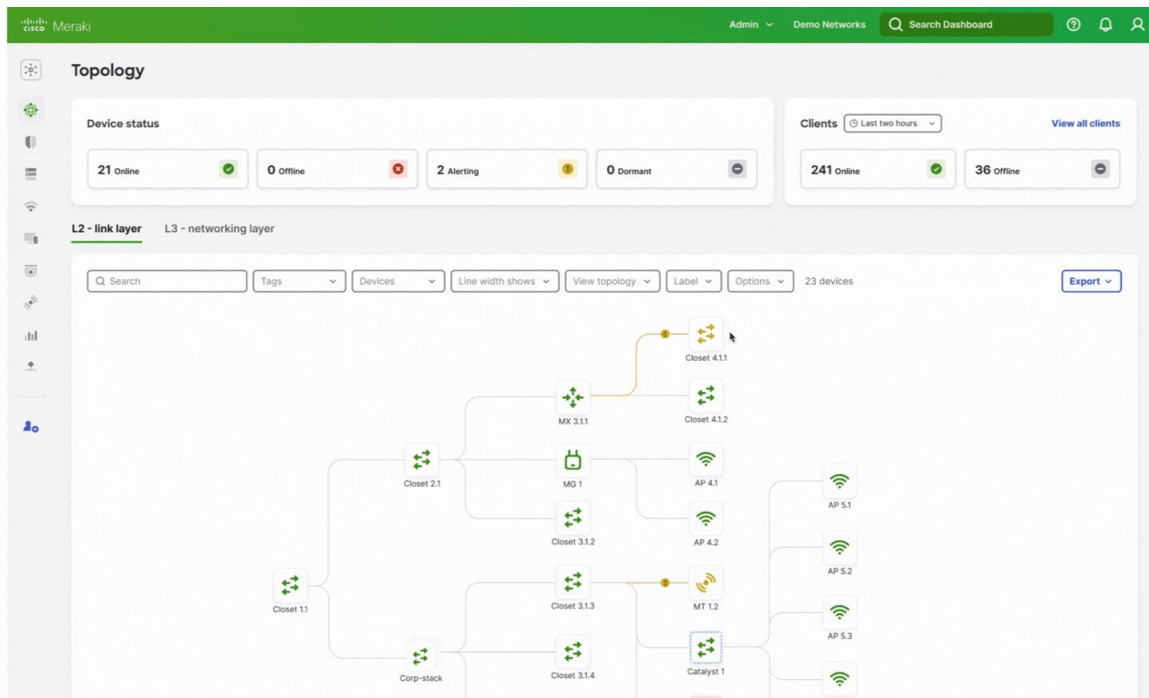


Understand the interconnection and dependencies with ease



Manage and troubleshoot proactively

An automated, comprehensive, and contextualized view of network performance



Identify patterns and anomalies faster




Understand the interconnection and dependencies with ease





Manage and troubleshoot proactively



See full-site health and drill down






Active 630
 Dismissed 0

11 Critical 

609 Warning 

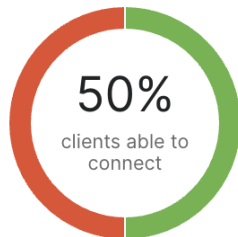
10 Informational 

Alert Type 
Device Type 
630 matching results

<input type="checkbox"/>	Alert	Details	Device	Network	Time (UTC) 	Category
<input type="checkbox"/>	 802.1X failure	IDF-LAB-3.1.1	MS	Z - San Francisco - Lab and Guest	Jun 06 15:35	Connectivity
<input type="checkbox"/>	 Unreachable device	[AQI]SFO12-1-Wired Lab	MT	Meraki San Francisco SFO12	Jun 06 15:34	Connectivity
<input type="checkbox"/>	 Unreachable device	4th Floor - Deck	MV	Meraki San Francisco SFO12	Jun 06 15:33	Connectivity
<input type="checkbox"/>	 802.1X failure	Lab Core 2	MS	Z - San Francisco - Lab and Guest	Jun 06 15:33	Connectivity

Or **focus** in on a problematic client with contextual info in one click

Historical health data for the last 2 hours



Most problematic SSID

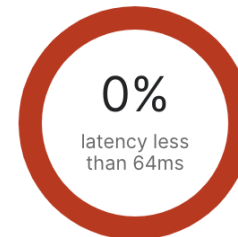
[REITweek](#)

Most problematic client

[42:51:ed:bd:b8:b9](#)

Connection Steps

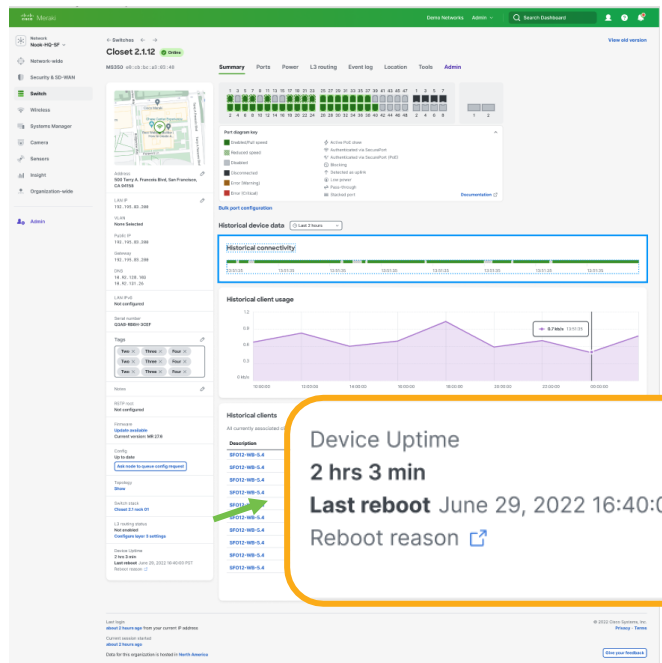
Association	●	0% failed
Authentication	●	50% failed
DHCP	●	0% failed
DNS	●	0% failed



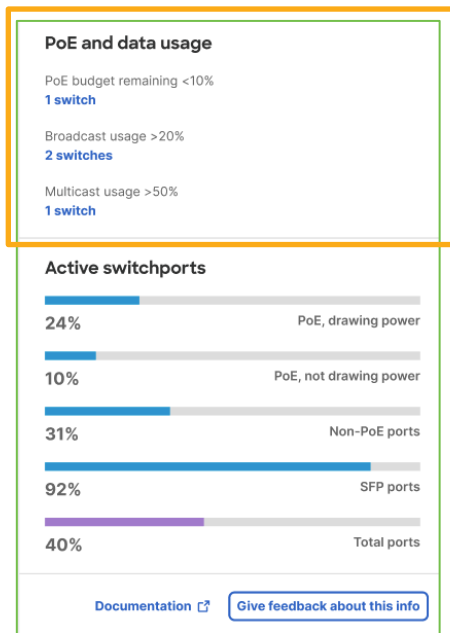
Port	Link	Length	Status	Pair 1	Pair 2	Pair 3	Pair 4
8	100fdx	96.75 m	Failure	abnorm	abnorm	-	-

Make informed decisions based on data and a system that **learns**

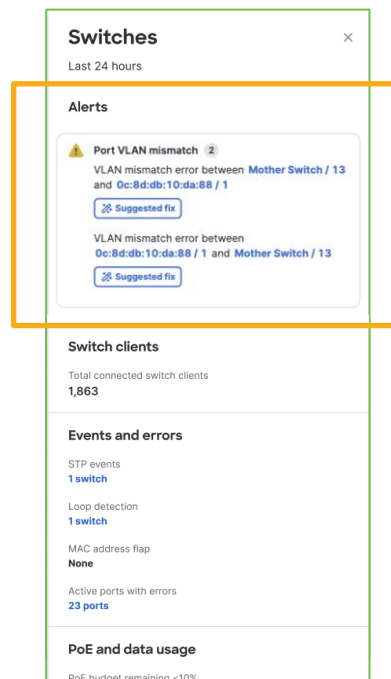
Device uptime



Capacity and current utilization



Intelligent alerts



Identify the problem and heal the network with guided troubleshooting flows

CRC Error Detection

Suggested fix

CRC errors detected
Very high CRC error detected on MS120-8FP / 1

Results of cable test

✓ The cable is healthy

Tested element	Result
Link	100hdx
Length	39 m
Status	✓
Pair 1	✓
Pair 2	✓

Cancel Run test again **Next suggestions**

Next suggestions

VLAN Mismatch Detection

Suggested fix: Match VLAN configuration

The recommendation is to match the VLAN settings from standalone 2 / 1 / MA-MOD-4X10G / 4.

Change log

Port	31	1/MA-MOD-4X10G/4
Device	MS425	standalone 2
Type	Trunk	Trunk
Native VLAN	1	1
Allowed VLANs	1-1000 1	1-999 Suggested

Cancel Edit manually **Accept suggestion**

Auto VPN Error Detection

Suggested fix

MX is over recommended tunnels
SFO12-MX1 is designed to support up to 250 tunnels. Currently, it has 251 tunnels.

Review MX configuration

⚠ This MX may handle more than the recommendation. However, this can cause some AutoVPN issues and impact performance, depending on traffic and other features in use.

Ensure the number of configured tunnels is under the recommended maximum of site-to-site VPN tunnels.

[MX Sizing Guide](#)

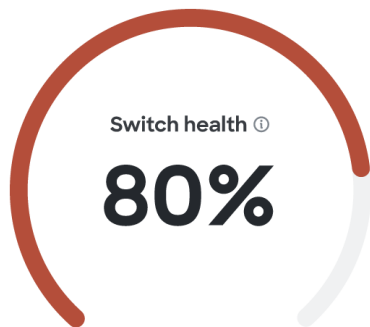
Accept suggestion

Live Tour

Troubleshooting flows

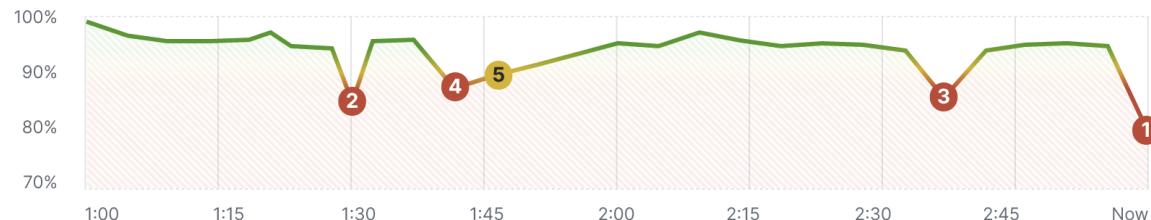


Rely on the cloud to prevent and monitor continuously – a look ahead



Switch health trend

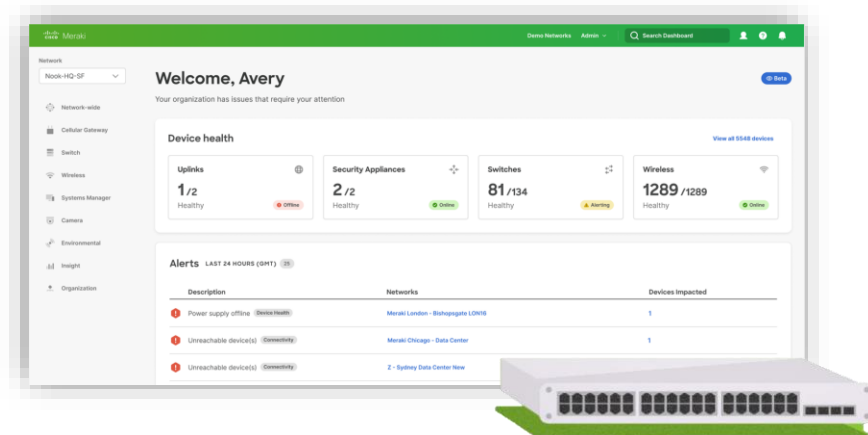
5 instances where the Switch health was 90% or below in the last 2 hours.



#	Switch health ⓘ	Time	Client onboarding	Connectivity	Device health
1	80%	3:00:15	✖ 58%	✓ 99%	⚠ 83%
2	83%	1:30:04	✓ 92%	✖ 75%	⚠ 82%
3	85%	2:36:11	✓ 91%	⚠ 87%	✖ 77%
4	88%	1:44:01	⚠ 88%	⚠ 90%	⚠ 86%
5	90%	1:46:00	✓ 93%	⚠ 90%	⚠ 87%

Let's simplify.

At scale.
Securely.
From day 0.





Tell us your thoughts!

CISCO *Live!*

- Look for Early Access Program
- Join Meraki Community

Fill out your session surveys!



Attendees who fill out a minimum of four session surveys and the overall event survey will get **Cisco Live-branded socks** (while supplies last)!



Attendees will also earn 100 points in the **Cisco Live Challenge** for every survey completed.



These points help you get on the leaderboard and increase your chances of winning daily and grand prizes

Continue your education



- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Participate in 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

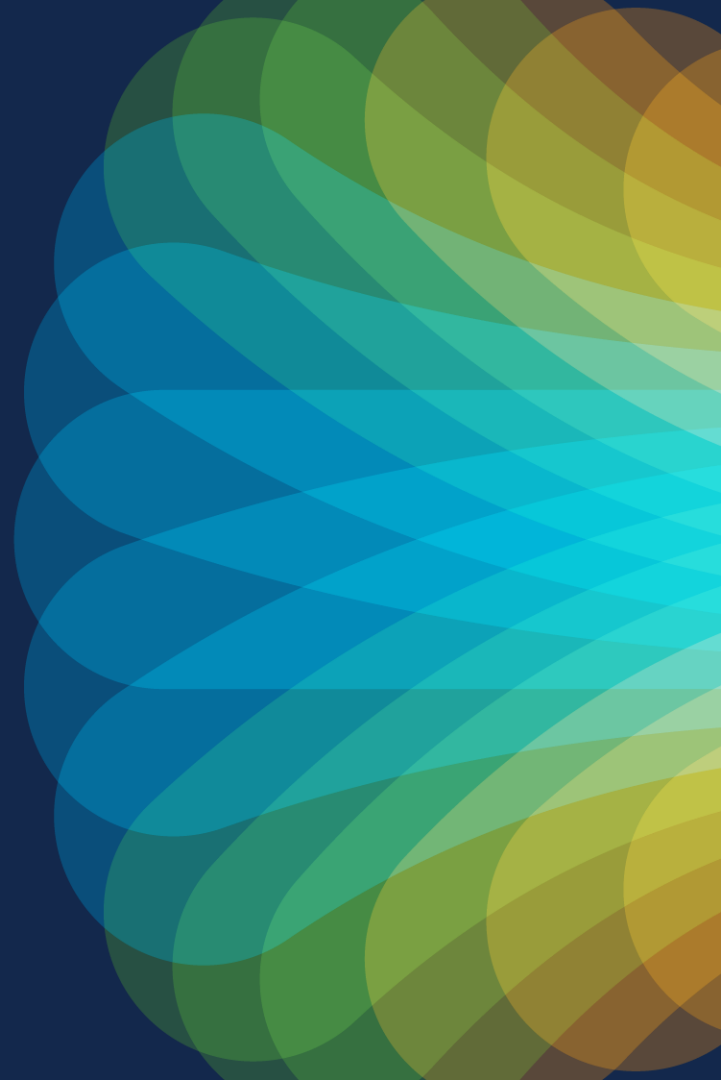


The bridge to possible

Thank you

CISCO *Live!*

#CiscoLive

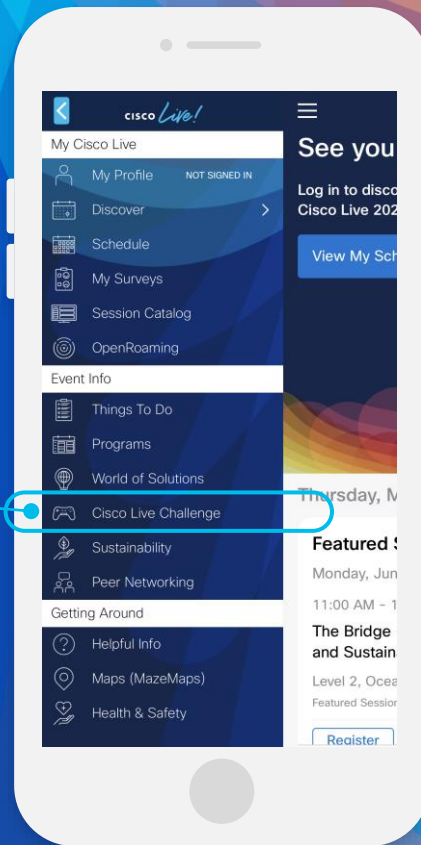
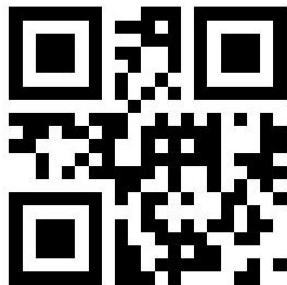


Cisco Live Challenge

Gamify your Cisco Live experience!
Get points for attending this session!

How:

- 1 Open the Cisco Events App.
- 2 Click on 'Cisco Live Challenge' in the side menu.
- 3 Click on View Your Badges at the top.
- 4 Click the + at the bottom of the screen and scan the QR code:



The background features a vibrant, multi-colored abstract design. On the left, there are overlapping, wavy, organic shapes in shades of red, orange, and yellow. On the right, a bright white light source emits a series of sharp, radiating lines in various colors, including blue, green, and yellow, creating a sunburst or starburst effect. The overall composition is dynamic and energetic.

cisco *Live!*

Let's go

#CiscoLive