



# ThousandEyes and Splunk

Better Together

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BRKOPS-2167

# Agenda

- Quick poll on ThousandEyes
- What is ThousandEyes
- Key use cases for ThousandEyes
- Key integration concepts
- Integration examples
- Conclusion



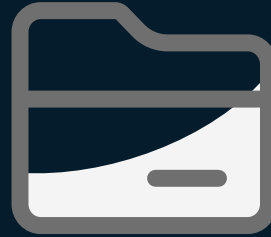
CISCO Live!



Please download and install the  
Slido app on all computers you  
use

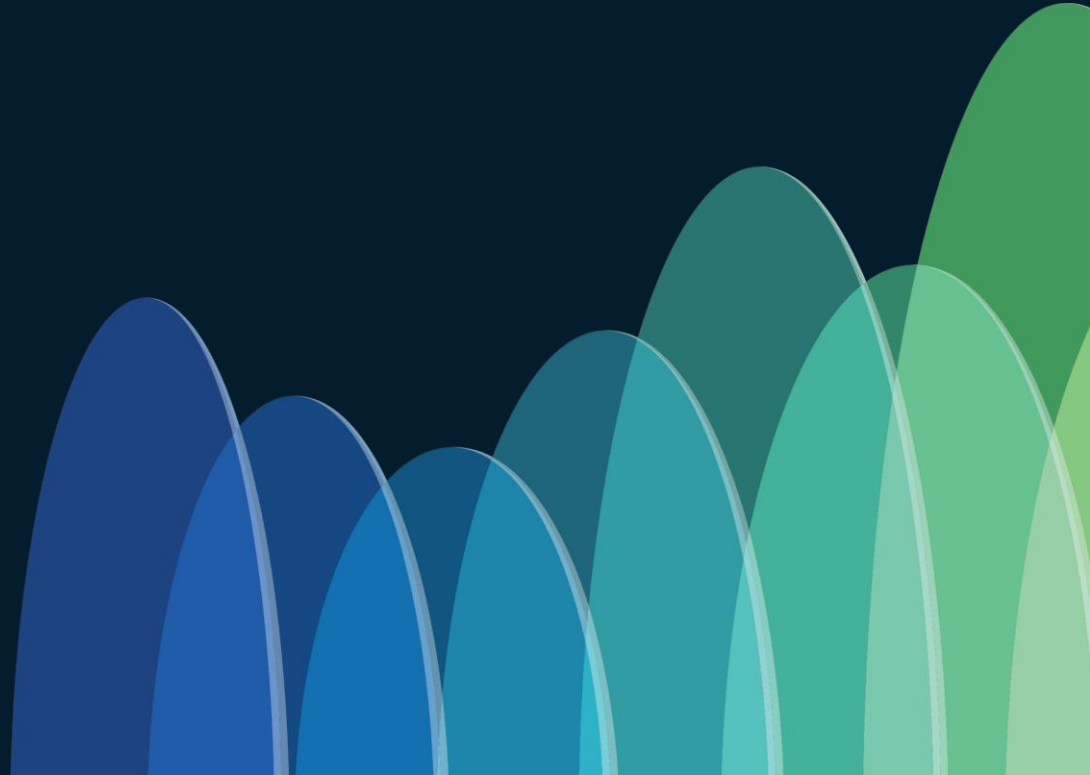


# ThousandEyes Poll

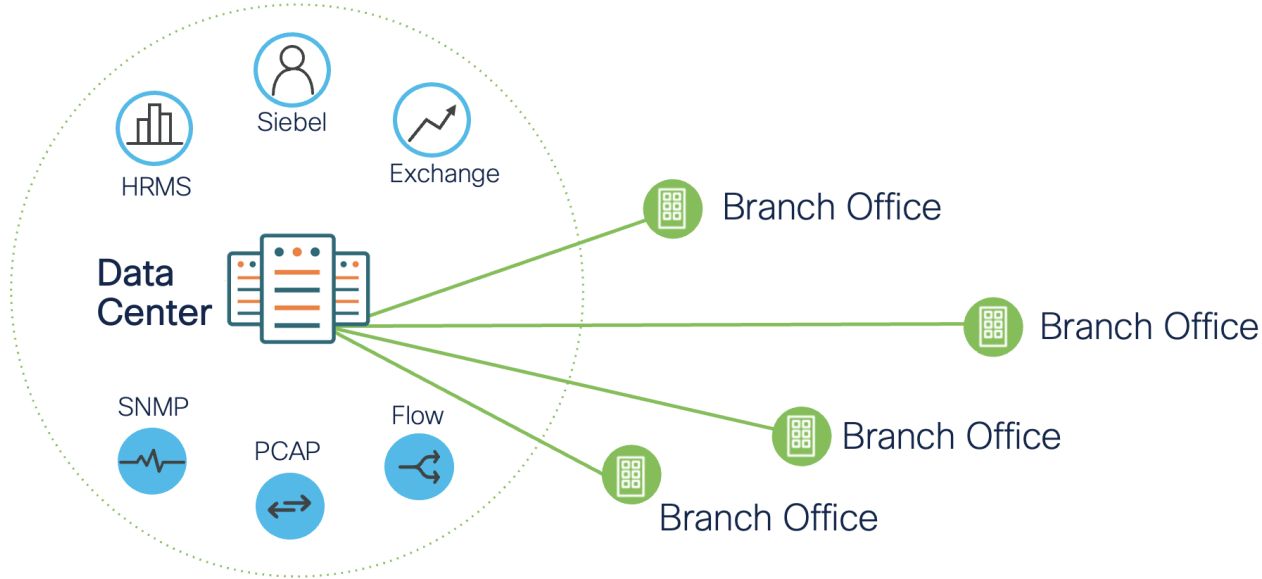




# What is ThousandEyes

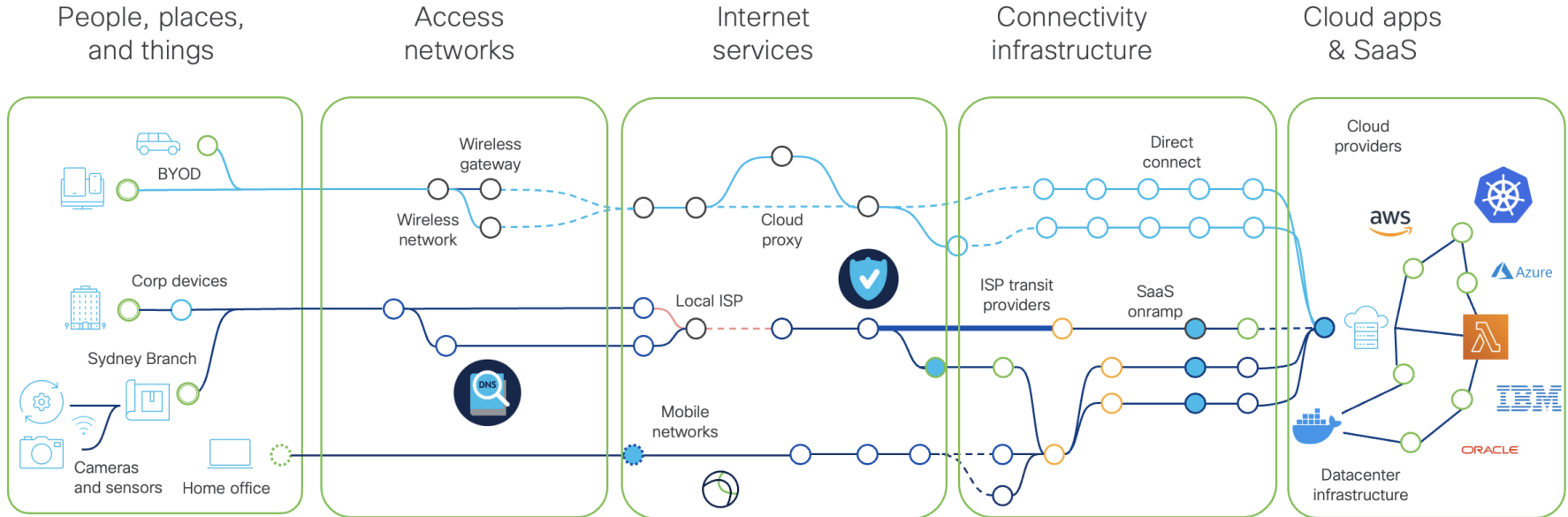


# The way it was

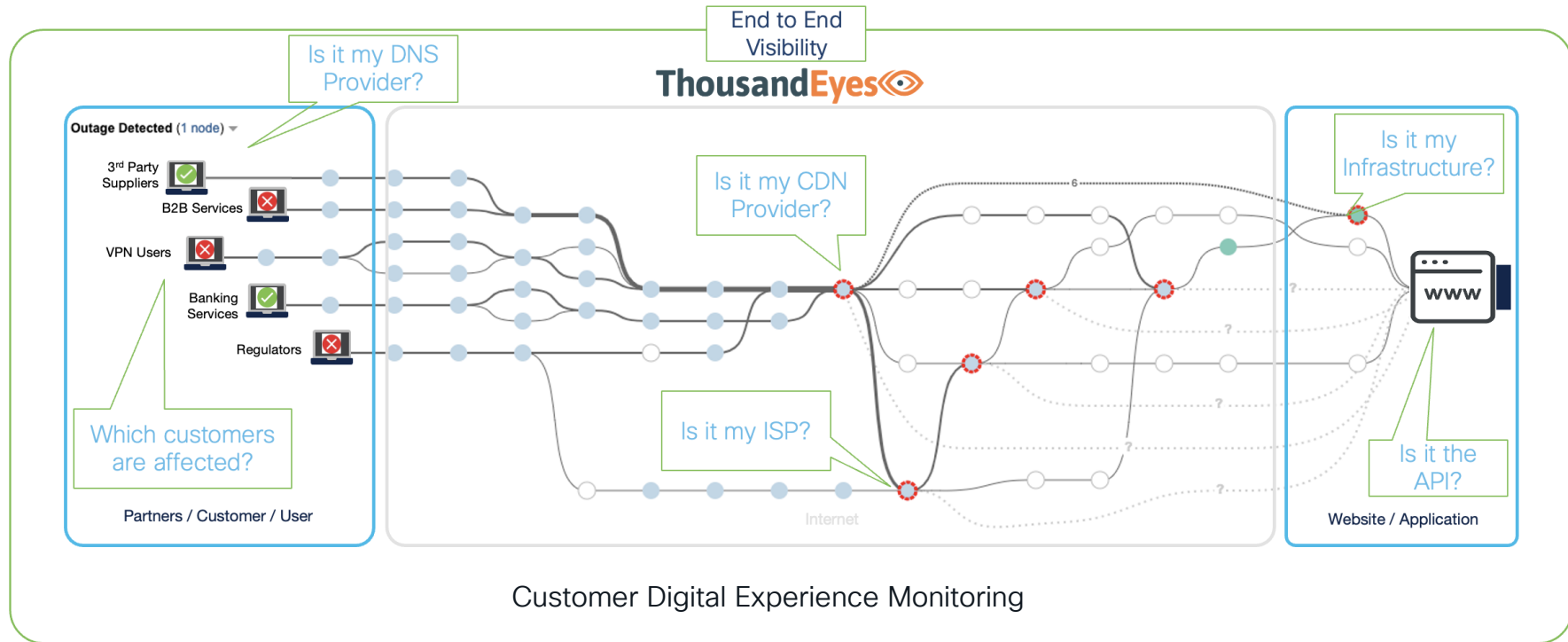


IT managed digital experience by owning networks and applications

# Today's service delivery chain

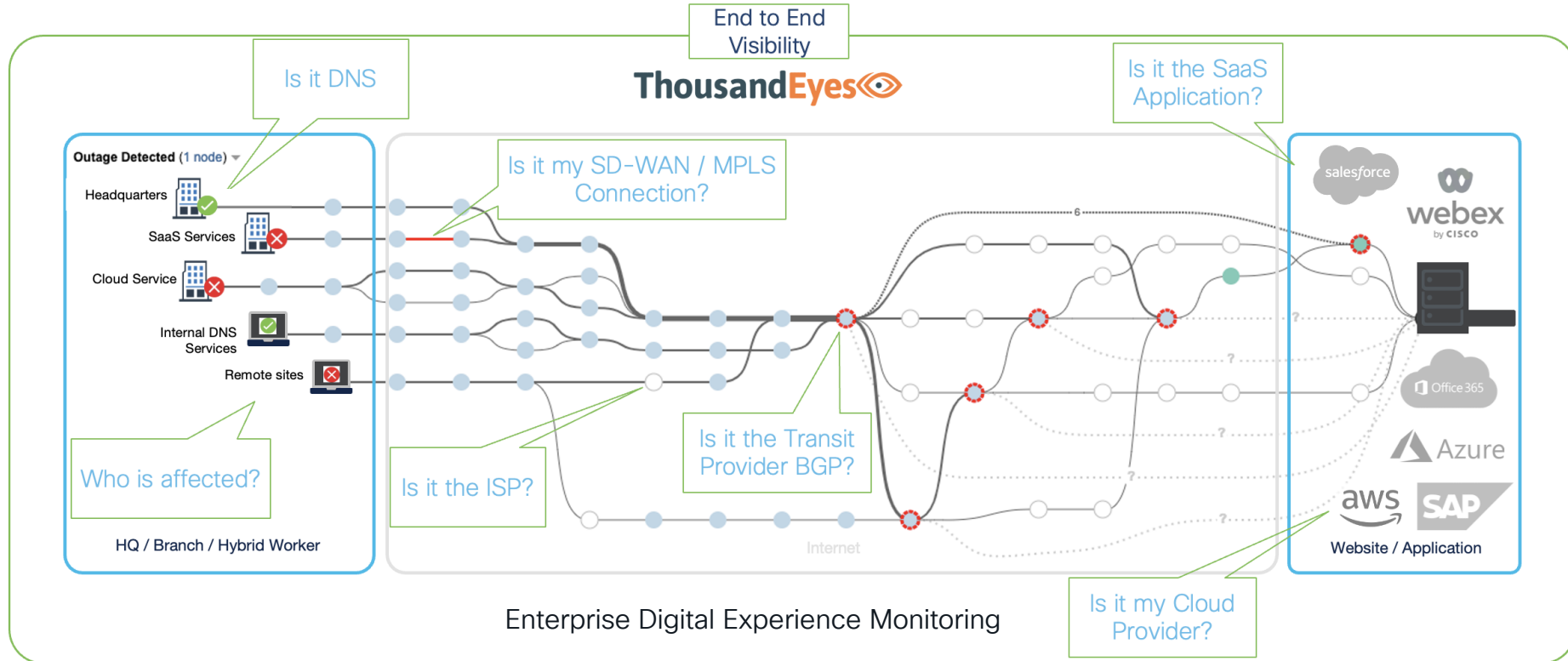


# Can customers, partners, and employees reach my external services

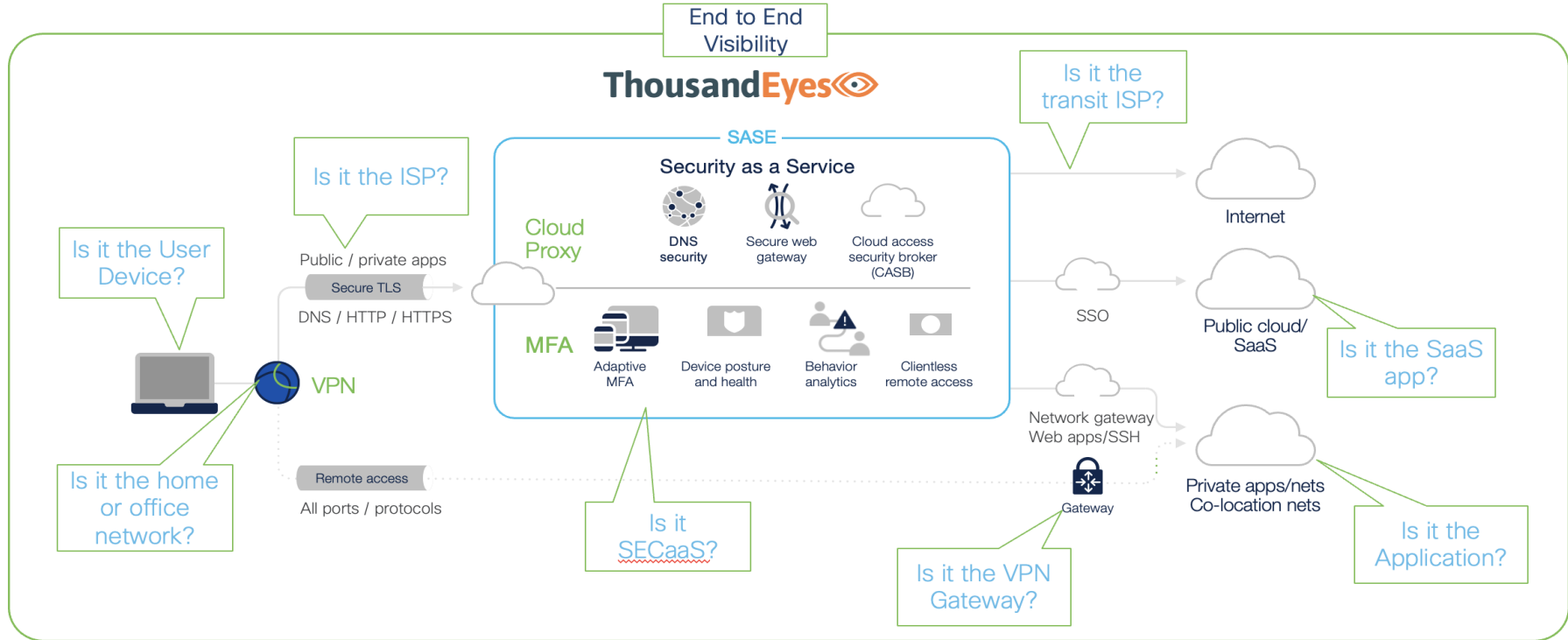




# Can my employees access their applications

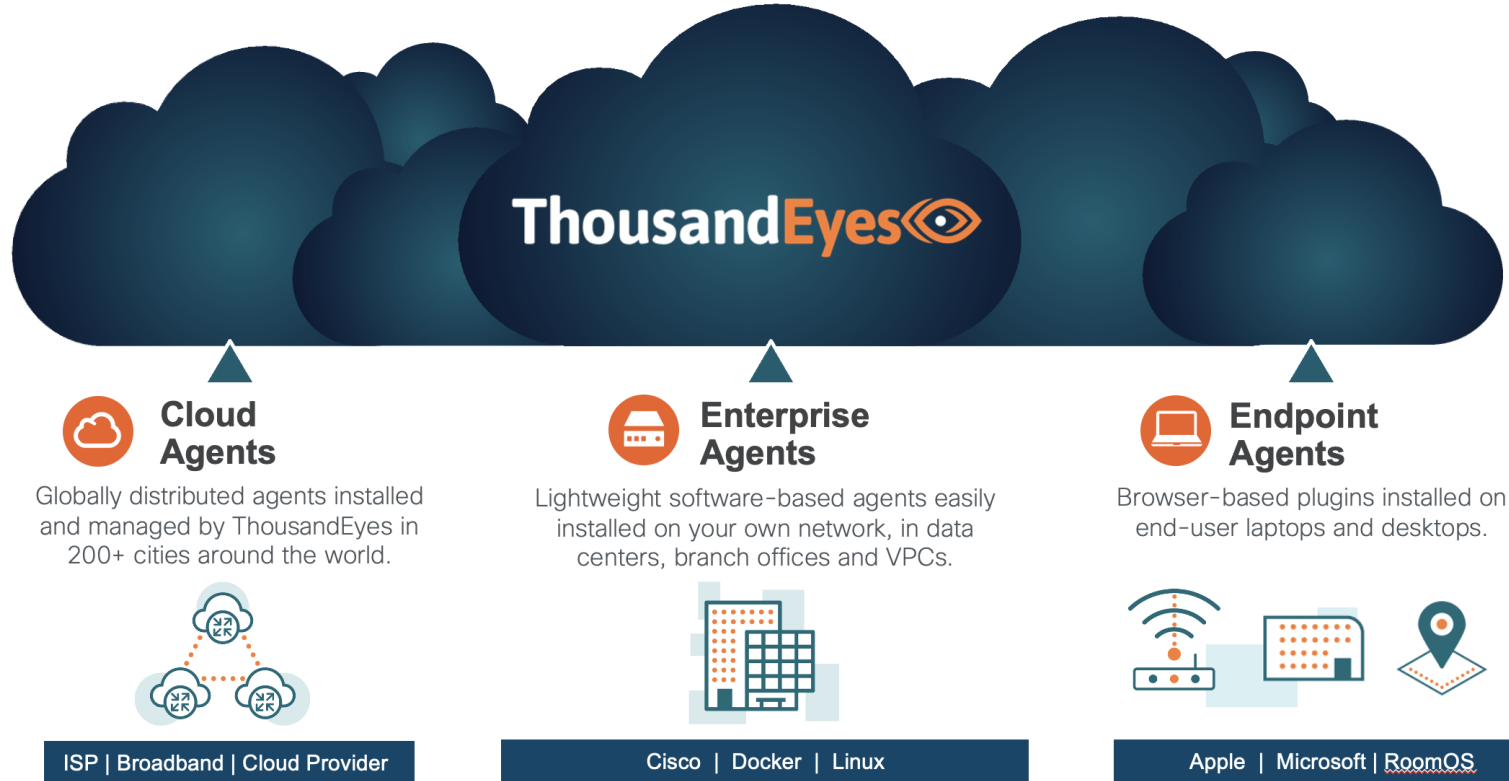


# How can I support my individual users ?



Workforce Digital Experience Monitoring

# ThousandEyes Architecture



# ThousandEyes Agent Comparisons

## Enterprise Agent

- Inside-Out monitoring
- Use for internal apps, SaaS and site-to-site / backbone
- On-prem deployment
  - OVA / Physical Appliance
  - Linux Package / NUC / rPI
  - Docker
  - Cisco Cat 9k / ASR / ISR / Nexus 9k
  - Meraki MX



## Cloud Agent

- Outside-In monitoring
- Use for customer / public facing applications
- 400+ Locations
  - Tier 2 / 3 service providers, broadband, cloud



[www.thousandeyes.com/product/cloud-agents](http://www.thousandeyes.com/product/cloud-agents)

## Endpoint Agent

- Last-mile monitoring
- Use for full location-agnostic end-to-end visibility: networks and applications
- Operating Systems:



- Browsers:



# Introduction to the ThousandEyes and Splunk Integration

# End-to-End Observability for Predictive, Proactive Digital Experience Assurance



## Assurance

Assuring digital experiences through end-to-end visibility into all networks and services that affect app performance and delivery

- Assuring application reachability
- Troubleshooting remote worker issues
- Forecasting SD-WAN performance
- Correlating Internet health and events



## Observability

Enabling organizations to quickly identify and resolve business-impacting issues by providing unified visibility across network, infrastructure, and applications.

- Monitoring critical business processes
- Incident response & root cause analysis
- Performance optimization for apps & infrastructure
- Tracking critical user journeys

## Distinct Purposes

## Complementary Use Cases



# Key Splunk Tenants

**Splunk Enterprise** is the core product offered by Splunk.

- First released in 2006 and has since become the flagship product of the company
- Self-hosted solution that allows organizations to collect, index, search, analyze, and visualize the data generated by their technology infrastructure, security systems, and business applications.

**Splunk Cloud Platform** is essentially Splunk Enterprise offered as a Software-as-a-Service (SaaS) solution.

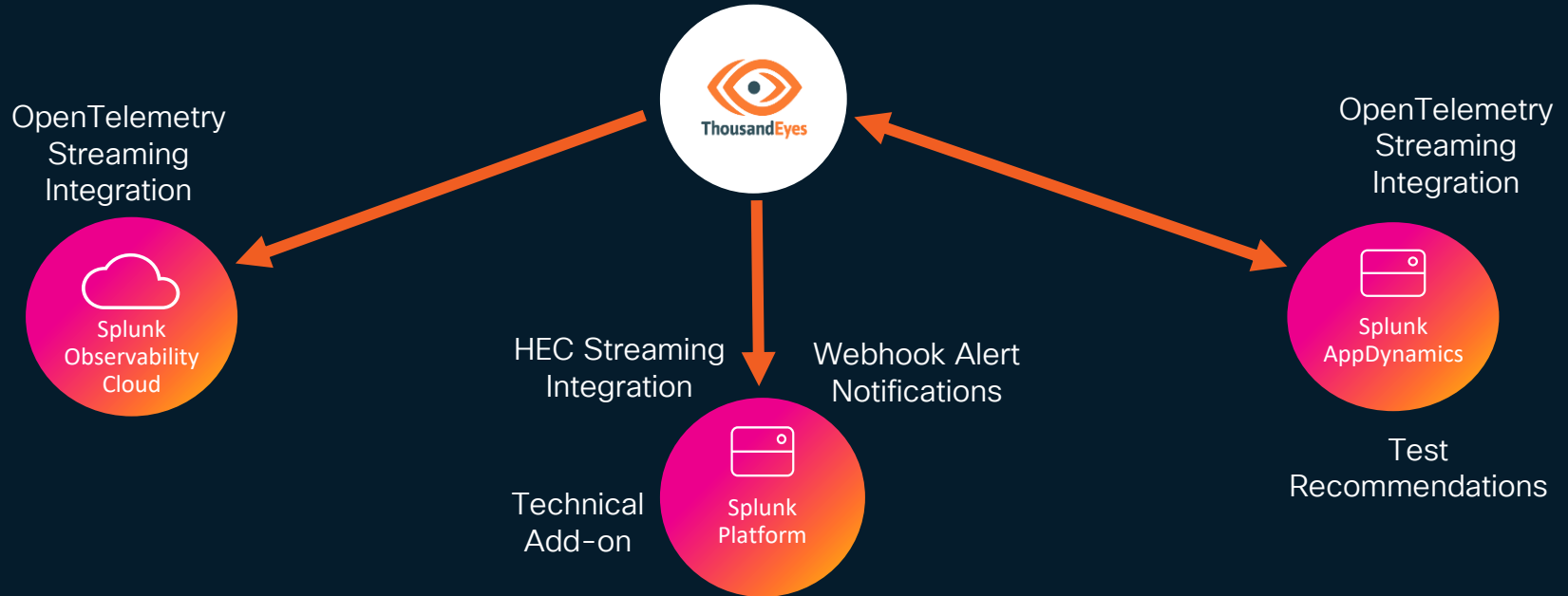
- Launched in 2013 to provide customers with the flexibility of the cloud while leveraging the powerful features of Splunk Enterprise.

**Splunk Observability Cloud** is a more recent addition to Splunk's product lineup, reflecting the company's expansion into the observability space.

- Launched in 2021, following Splunk's acquisitions of SignalFx and Omnitron, which helped to bolster its capabilities in monitoring and observability.

Splunk  
Core

# ThousandEyes integrations types with Splunk



# What is OpenTelemetry (Otel) ?

OpenTelemetry is an open-source project that provides a vendor-neutral, standardized way to instrument, generate, collect, and export telemetry data for cloud-native applications.



# ThousandEyes API and OTEL Integration

API

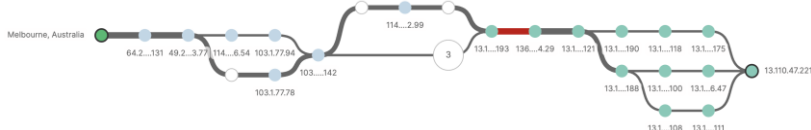
Cloud and Enterprise Agents

GET List Cloud and Enterprise Agents

DELETE Delete Enterprise Agent

GET Retrieve Cloud and Enterprise Agent

PUT Update Enterprise Agent




Configuration

ParametersCode Snippets

CurlPythonNodejs

```
curl -L --request GET \
--url https://api.thousandeyes.com/v7/agents \
--header 'Accept: application/hal+json'
```

Copy

 ThousandEyes for OpenTelemetry

Streaming

+ New Integration

Splunk Observability Cloud

Grafana

Honeycomb

Signoz

Dynatrace

Elastic

New Relic

ServiceNow Lightstep

Auth Type

BasicTokenCustom

Custom Headers

+ New Header

OpenTelemetry Signal

MetricTrace

Data Model Version ⓘ

V1V2

Test Data Configuration

Customize the data captured and transmitted for a more focused and meaningful observability experience.

Cloud and Enterprise Agent Tests

1 of 376 selected

Endpoint Agent Tests

1 of 9 selected

Tags ⓘ

1 of 42 selected

# ThousandEyes UI and TA Add On Integration

Integrations 1.0 Integrations 2.0 **New**

**Connectors** Operations

**Add Connector**

- Generic Connector
- Splunk Cloud Platform HEC
- Splunk Enterprise HEC

**Add Operation**

- Meraki Meraki Data Enrichment
- Splunk Enterprise, Splunk Cloud Platform

**Edit Splunk Enterprise, Splunk Cloud Platform Operation**

**Splunk Enterprise, Splunk Cloud Platform**

This operation connects your Splunk Enterprise or Splunk Cloud Platform instance and ThousandEyes for Open Telemetry allowing to stream real-time tests data.

Operation Name  
Todd Anscombe

Index  
main

Source  
ThousandEyesOTel

Source Type  
ThousandEyesOTel

OpenTelemetry Signal  
**Metric** Trace

☒ Enable

**Test Data Configuration**  
Customize the data captured and transmitted for a more focused and meaningful observability experience.

Cloud and Enterprise Agent Tests  
1 of 89 selected

Endpoint Agent Tests  
Select test(s)

Tags  
1 of 18 selected

Create New Input

Tests Stream  
Event  
Activity

**Add Tests Stream**

\*Name  
A unique name for the data input.

\*ThousandEyes User  
Select...  
ThousandEyes User to use for this input.

\*Account Group  
Select...  
Select Account Group.

CEA Tests  
Select...  
Select CEA Tests.

Endpoint Tests  
Select...  
Select Endpoint Tests.

\*HEC Token  
Select...  
Select HEC Tests.

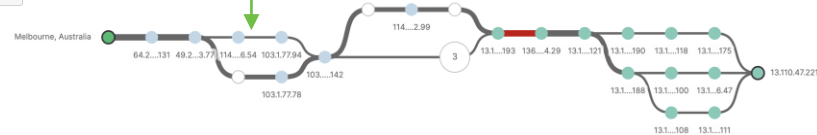
\*Test Index  
Select...  
Select Test Index.

Include Path Information ☒  
Check the checkbox if you want to collect Path Information.

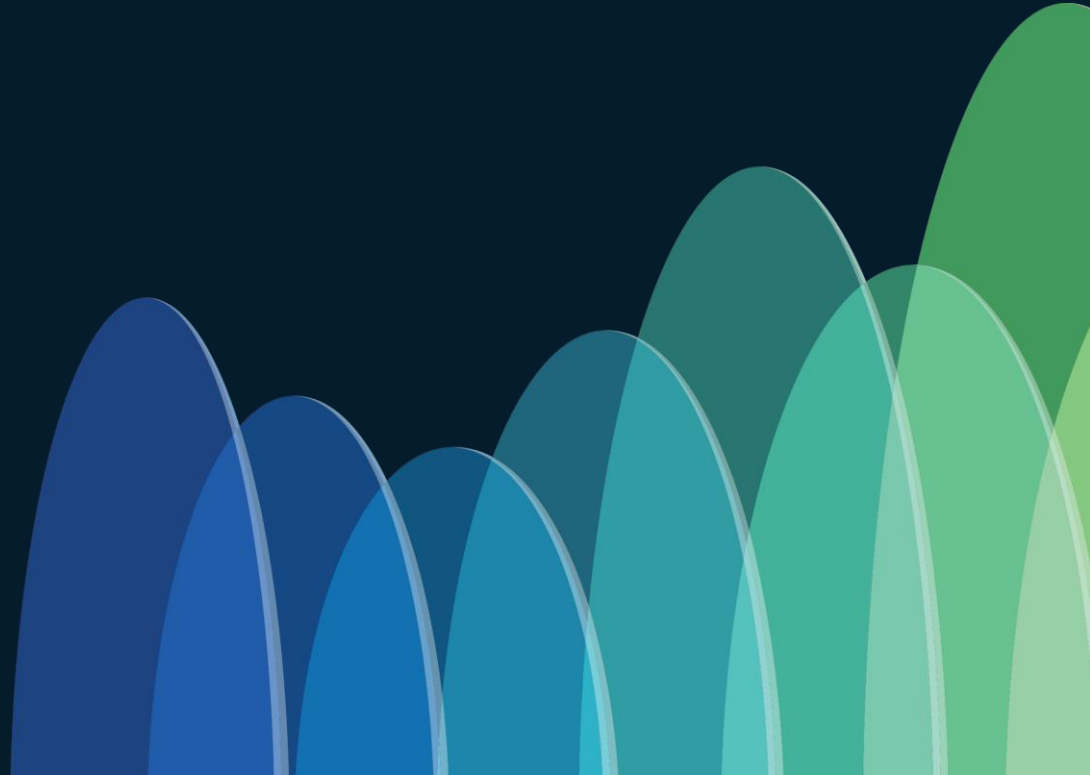
Path Index  
default  
Index for Path Information.

Path Interval  
300

Cancel Add

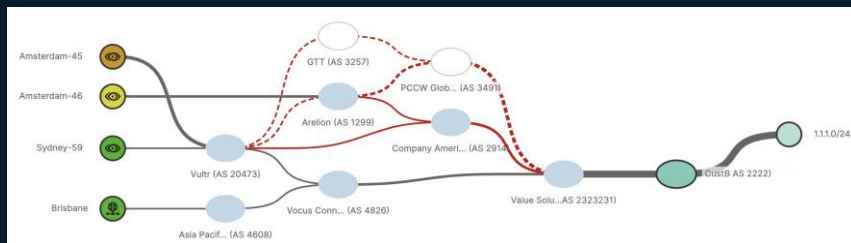


# ThousandEyes and Splunk Integration Examples





**CISCO** *Live!*



# Splunk & ThousandEyes

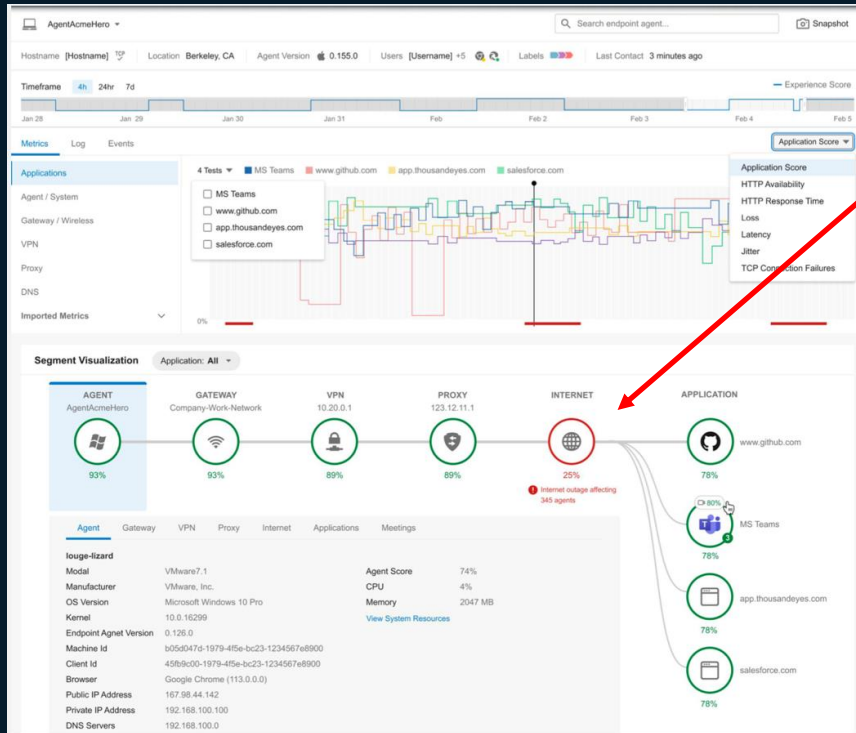
## Extending Proxy Visibility



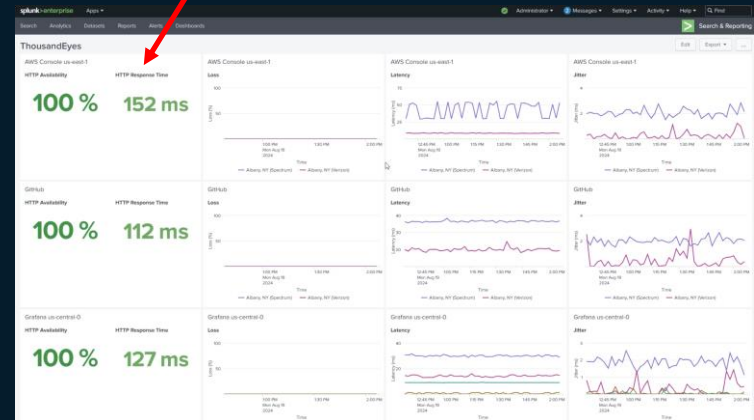
The API test is completing but the network path is being obscured by the proxy.

# Splunk & ThousandEyes

## Extending Remote User Visibility

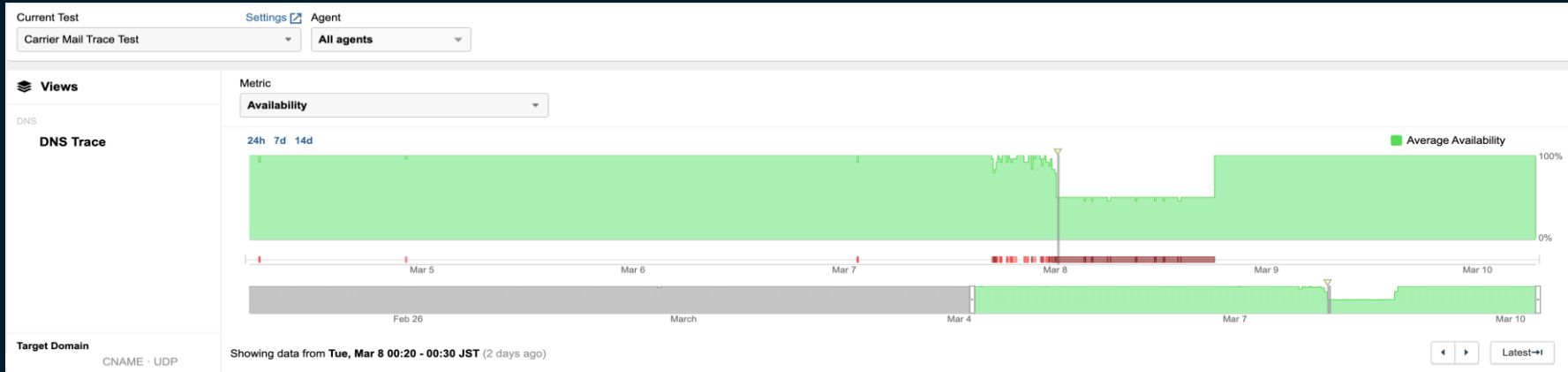


APM performance remains consistent, yet remote users are complaining about poor app experience



# Splunk & ThousandEyes

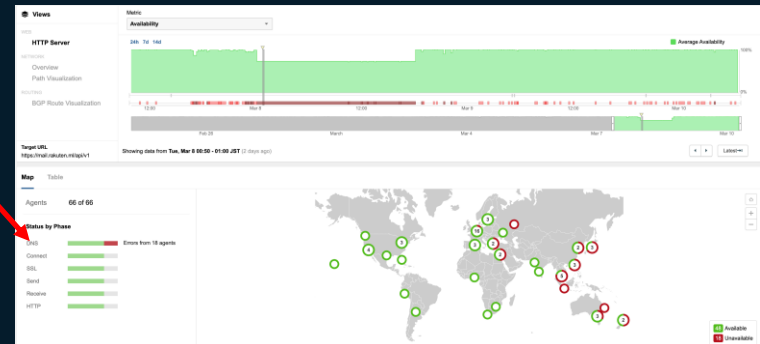
## Extending application availability



```
ml. 172800 IN NS a.ns.ml.
ml. 172800 IN NS b.ns.ml.
ml. 172800 IN NS c.ns.ml.
ml. 172800 IN NS d.ns.ml.
;; Received 276 bytes from 199.7.83.42(l.root-servers.net.) in 69 ms

;; WARNING: No response from 185.21.169.1(b.ns.ml.)
;; WARNING: No response from 185.21.171.1(d.ns.ml.)
;; WARNING: No response from 185.21.170.1(c.ns.ml.)
;; WARNING: No response from 185.21.168.1(a.ns.ml.)
;; ERROR: No servers could be reached
```

The HTTP Server test indicates problems resolving. The trace test indicates a problem with the TLD

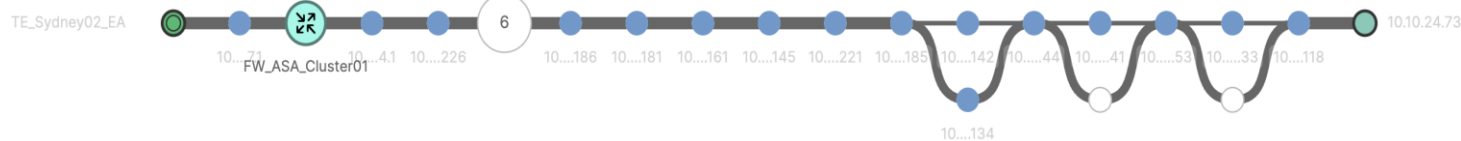


# Splunk & ThousandEyes

## SIEM Security – Policy Management



Users from a specific subnet are being blocked by segmentation policy.



# Webex App

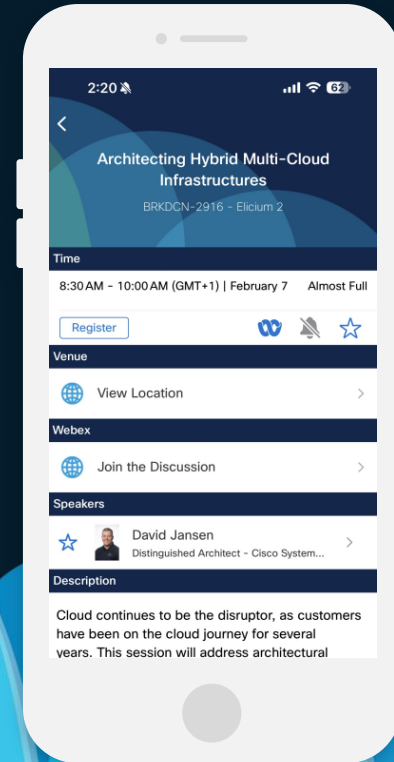
## Questions?

Use the Webex app to chat with the speaker after the session

## How

- 1 Find this session in the Cisco Events 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 February 28, 2025.





# Fill Out Your Session Surveys



Participants who fill out a minimum of 4 session surveys and the overall event survey will get a unique Cisco Live t-shirt.

(from 11:30 on Thursday, while supplies last)



All surveys can be taken in the Cisco Events mobile app or by logging in to the Session Catalog and clicking the 'Participant Dashboard'



Content Catalog

# 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 [ciscolive.com/on-demand](https://ciscolive.com/on-demand). Sessions from this event will be available from March 3.



Thank you



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GO BEYOND

The background of the slide features a series of overlapping, teardrop-shaped elements in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are arranged in a way that creates a sense of depth and movement, resembling a stylized horizon or a series of waves. The overall aesthetic is clean and modern.