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The bridge to possible

Implementing a Zero Trust Security Strategy Without Disrupting the Business

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PSOSEC-1021



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Cisco Webex App

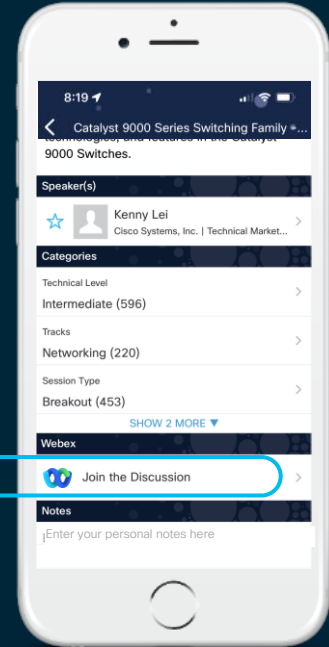
Questions?

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/#PSOSEC-1021>



Agenda

- How to define Zero Trust?
- Cisco's recommended strategy
- Key requirements
- How Cisco delivers Zero Trust
- Cisco's Zero Trust rollout
- Next steps

The old security model no longer works

- ▶ Move to the cloud
Lack of visibility and control
- ▶ Hybrid work
Increased attack surface
- ▶ Advanced threats
Malware as-a-service, nation state actors

Zero Trust means
different things to
different people



It's segmentation



It's ZTNA



It's endpoint security



It's firewall



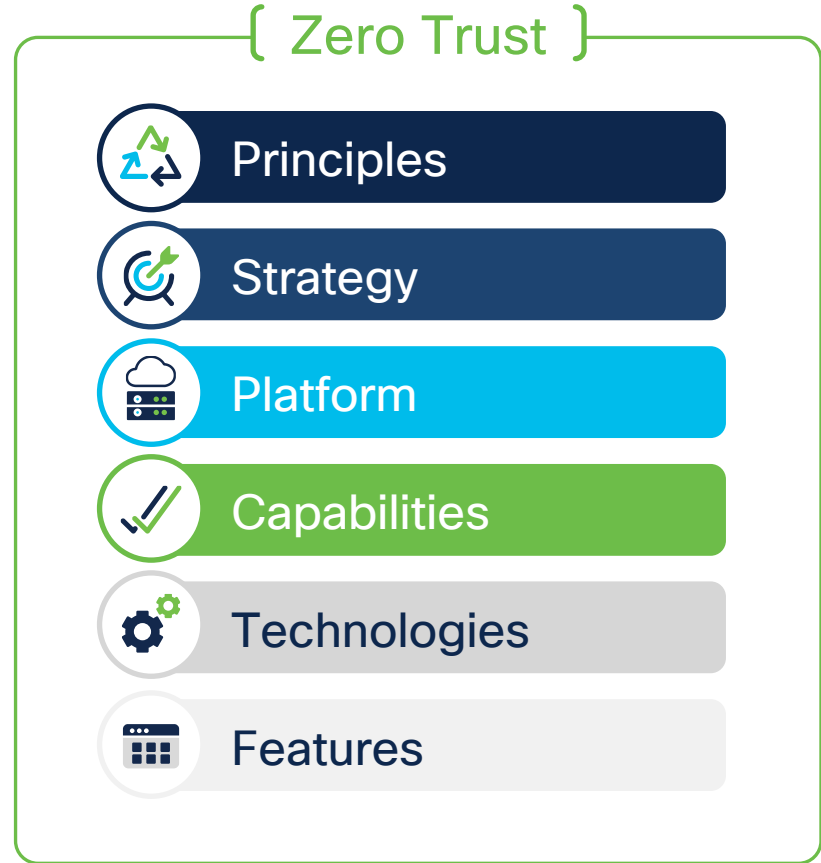
It's identity

Zero Trust Principles

The basics

- ▶ Never assume trust
- ▶ Always verify
- ▶ Enforce least privilege

Cisco believes
Zero Trust
must be defined
holistically



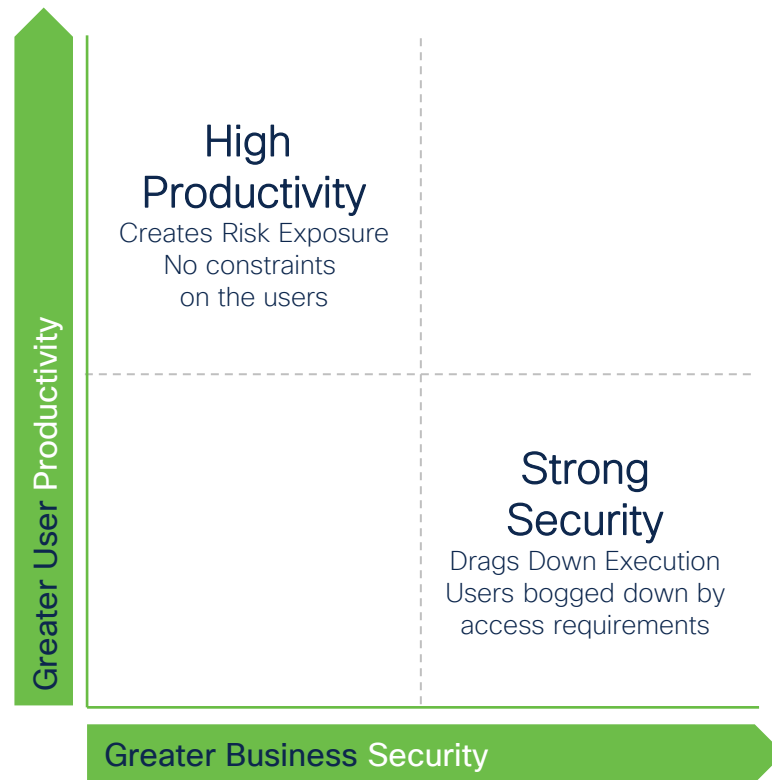
Cisco's Recommended Zero Trust Strategy

Embed Zero Trust
across the fabric of your
multi-environment IT...

...to protect the integrity
of your business by
securing access in a way
that frustrates attackers,
not users.

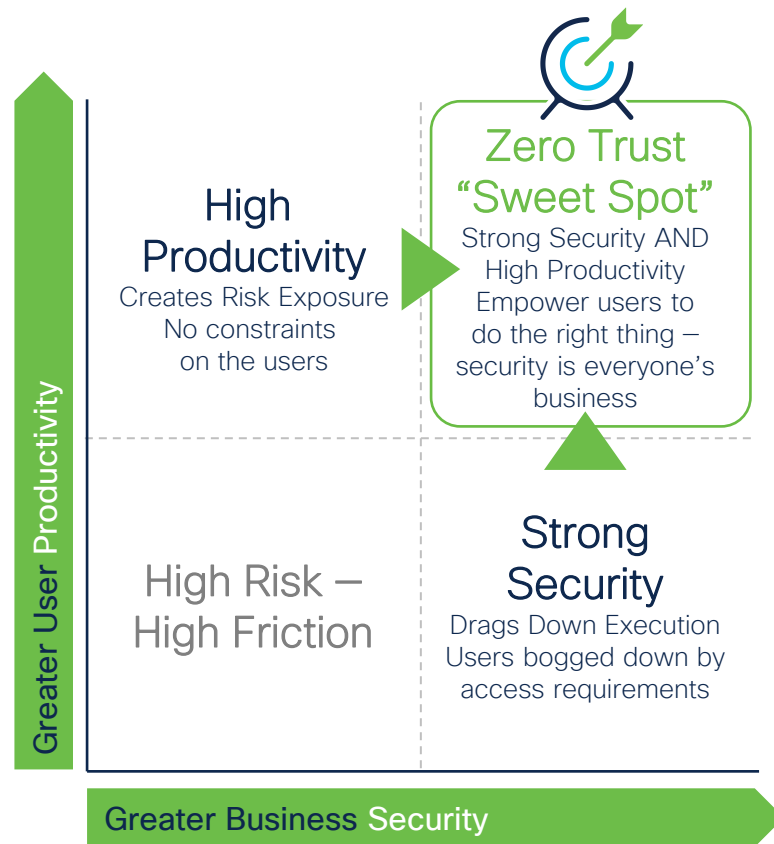
Today's trade-off is holding back Zero Trust

Security vs. Productivity



Eliminate the trade-off

Frustrate attackers, not users



There is value in getting Zero Trust right

45–50%

Decreased risk and cost of data breach¹

Better
Security

191%

ROI²

Higher
Performance

90%

Increase in
SOC efficiency³

Faster
Threat Response

Source:

1. [TEI \(Total Economic Impact\) study](#) of Cisco's integrated security platform
2. [TEI \(Total Economic Impact\) study](#) of Cisco's network access control solution
3. [TEI \(Total Economic Impact\) study](#) of Cisco's integrated security platform

Getting Zero Trust right is **essential** for Security Resilience

The ability to protect the integrity of every aspect of **the business to withstand unpredictable threats or changes...**

...and **emerge stronger**

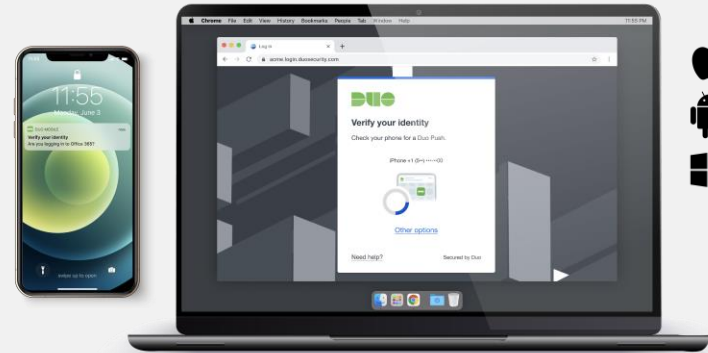
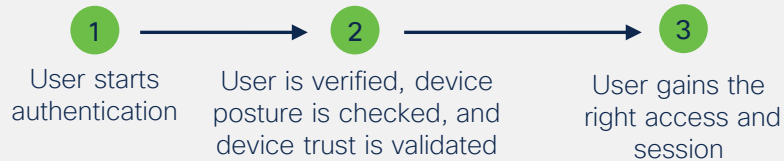
What it takes to get Zero Trust right

Zero Trust requirements



Establish trust

Remote user trying to access a cloud app from their device



Strong Security

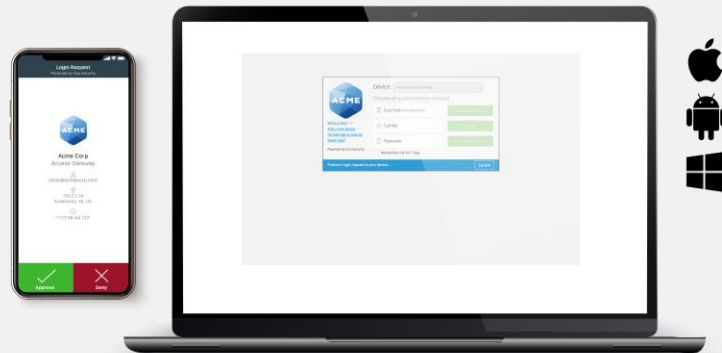
- **Multi-factor authentication (MFA)** – Broadest range of MFA options such as push, calls, SMS, biometrics, wearables, passwordless, tokens
- **Device Trust** – device risk level, compliance, management and compromise status
- **Adaptive policies** – Global, App & Group level access to 100's of apps based on verified business need

High Productivity

- **Frictionless access** – authenticate in seconds, least number of clicks
- **Jumpstart zero trust, adoption in days** – SaaS deployment, users enroll in few easy steps
- **Reduced help desk tickets** – user self-enrollment, self-service to update and reset devices

Enforce Trust-Based Access

Remote user trying to access a private application without VPN



1

User needs to access private app from managed or unmanaged device

2

User is not required to use a VPN

3

User gets access only to the necessary apps

Strong Security

- **Explicit trust** – Default closed access model with access on a per-app basis
- **Secure highly used and high-risk protocols** – RDP and SSH
- **Secure BYOD** – device posture assessment for unmanaged devices

High Productivity

- **Access apps without latency** – VPN-less access
- **Consistent, frictionless access experience** – Reverse access proxy, cloud and on-premise implementation options
- **Instant access to Cloud and on-premise apps** – Single-sign-on (SSO) integration

Continuously verify trust

Remote user and device behavior impacts trust levels



Strong Security

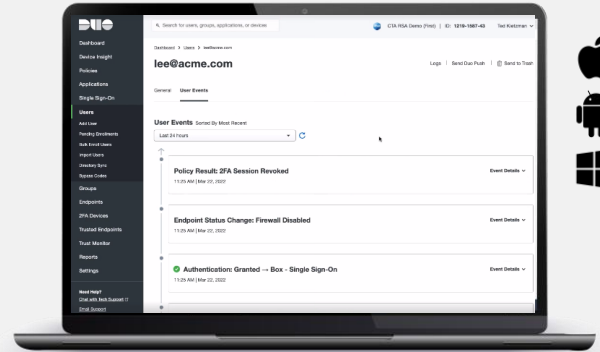
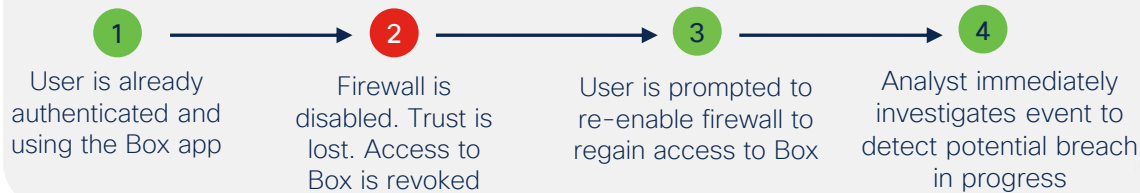
- **Shared Signals** – device posture, disabled security features, vulnerabilities, etc.
- **Contextual awareness** – GeoIP, Wi-Fi fingerprint, authentication history, etc.
- **Session control** – integration with Cisco apps and third-party apps such as Box and Webex.

High Productivity

- **Uninterrupted work** – session extension for high trust
- **IT efficiency** – automatic access revocation
- **Expedited restoration of access** – User self-service remediation

Respond to change in trust

User's device potentially compromised



Strong Security

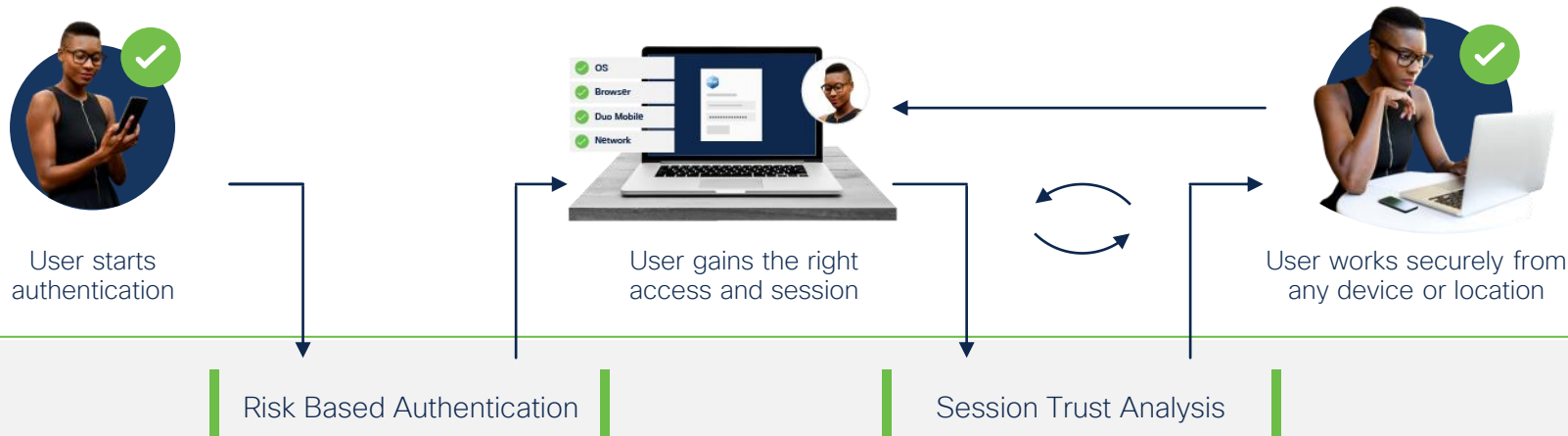
- **Early breach detection** – Immediate notification of changes in trust, integrated threat intelligence
- **Quickly pinpoint incident scope and origin** – Forensic analysis, file and device trajectory
- **Prevent data theft and lateral movement** – Device isolation

High Productivity

- **Accelerate threat response** – Unified visibility, aggregation and correlation of data across entire environment
- **Uninterrupted work** – BYOD support
- **Accomplish more with current teams** – Playbooks, workflows, and playbook-driven automations

Continuous Trusted Access

Our vision to achieve frictionless Zero Trust



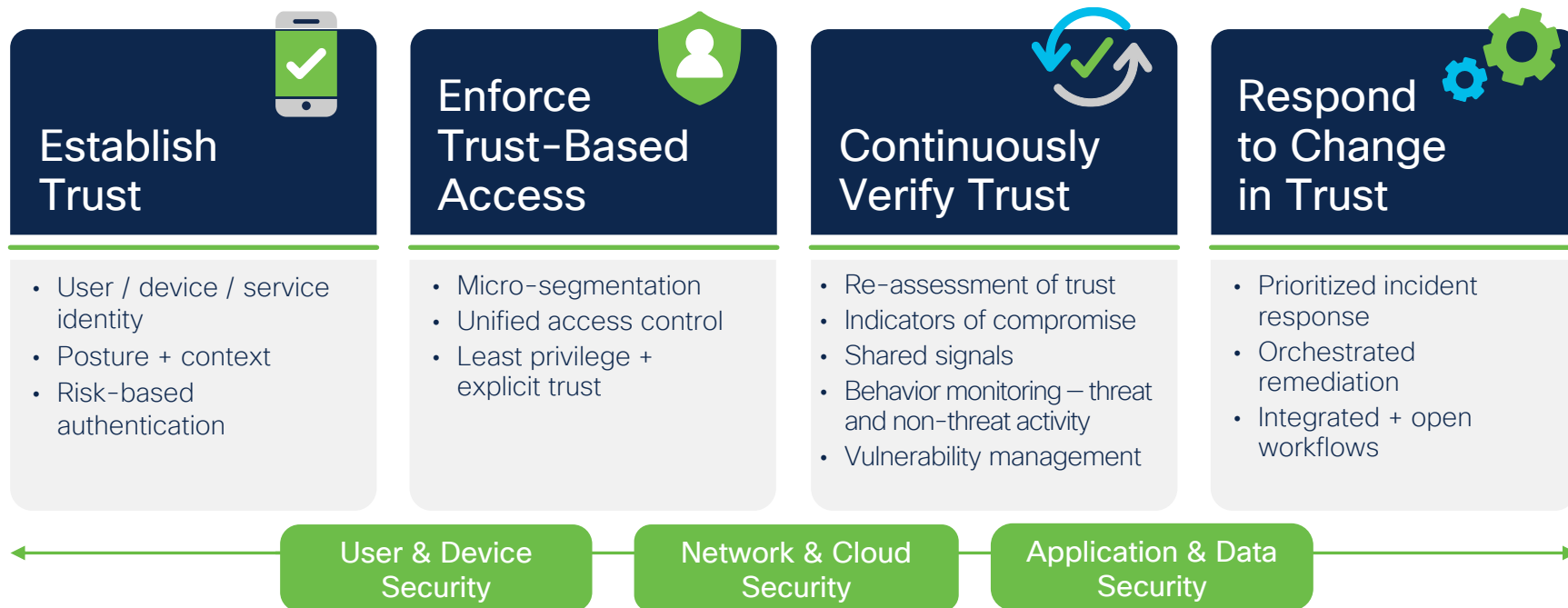
Implementation of Zero Trust Principles

“Never assume trust, always verify”

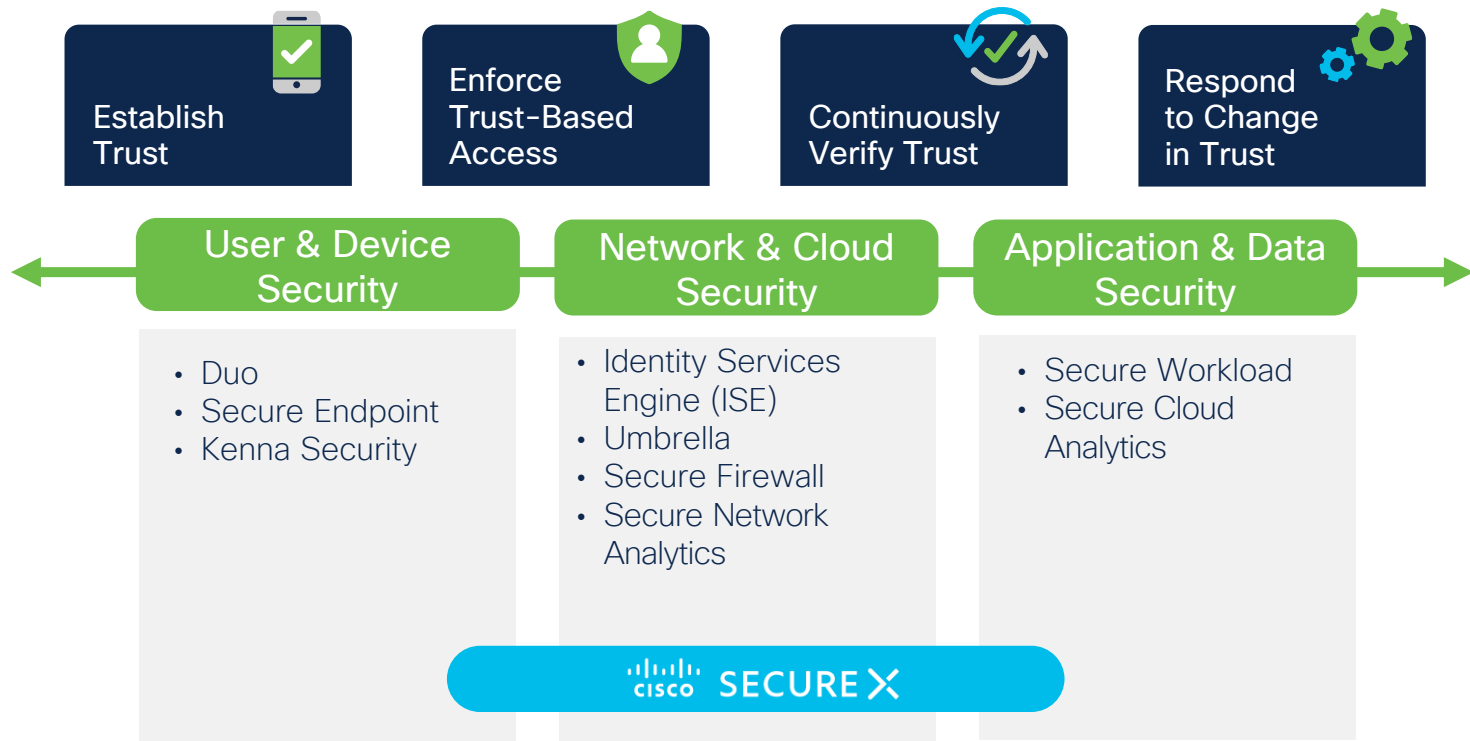
Learn more:

Blog: <https://duo.com/blog/evolving-our-strategic-vision-to-continuous-trusted-access>

Cisco's Zero Trust capabilities

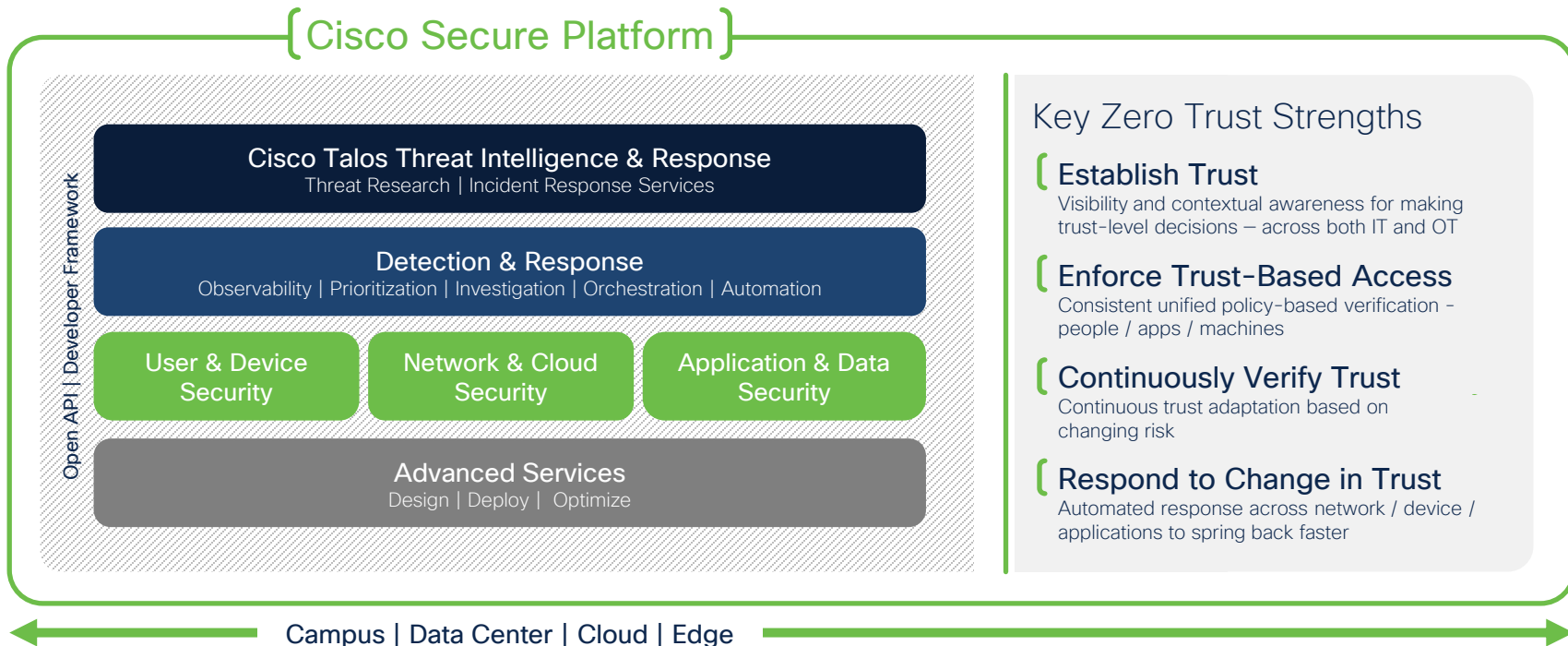


Sharing signals across all control points



Enforce zero trust policies across the broadest set of control points

Delivering Zero Trust to meet you where you are



The Cisco advantage

Why customers choose us

**Frustrate Attackers,
Not Users**

Strong security AND
high productivity

**Meeting You Where
You Are**

Protect your multi-env IT
ecosystem

**Experience
You Can Trust**

We are proof

Powering **Security Resilience** across the organization

Cisco's Journey

We've made our \$50B global company a test-bed for Zero Trust

"It's not often that you can say you are improving security while also improving the user experience, but that's what we have achieved with this rollout."

— Josephina Fernandez
Director, Security Architecture & Research, Cisco



170,000+ devices secured

5.76 million health checks/month
86,000 devices/month remediated



100,000+ users onboarded

Only < 1% contacting helpdesk



410,000+ fewer VPN auths/month

Users no longer need the VPN for access to over 100 applications (on-prem and SaaS)



5-month deployment timeline

From defining requirements in July to enterprise-wide rollout of 98 countries in December

Cisco's Journey

Compelling ROI with the zero-trust model

\$3.4M

Annual savings in
employee productivity¹

\$500K

Annual savings in IT
helpdesk support costs²

86K

Potential compromises
averted per month³

Source: Cisco IT based on the [implementation of a zero-trust framework](#)

1. As a result of 410,000 fewer VPN authentications per year
2. With <1% users contacting IT help desk vs 7% for typical security technology rollouts
3. 86,000 vulnerable devices self-remediated/month based on 5.76M device health checks/month

Cisco is Named a Leader in Zero Trust

“Cisco pushes the Zero Trust envelope the right way”

The Forrester Wave™: Zero Trust extended Ecosystem Platform Providers, Q3 2020

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THE FORRESTER WAVE™

Zero Trust eXtended Ecosystem Platform Providers

Q3 2020



Let's talk

What does Zero Trust mean to you?

How do we enable secure access to SaaS and on-prem apps?

Can we verify user identity when our teams are remote?



**Business
leaders**

Can we defend against potential threats?

Can we roll out zero-trust policies without disrupting the business?

Can I connect to work apps from anywhere and any device?

Would remote access slow me down?



Users



**IT/ Network/
Security teams**

How would my job be easier if all these security products worked together?

What type of devices are connecting to the network?

Next Steps

Sign up for a
Cisco Zero Trust workshop at
cisco.com/go/zero-trust-workshops

- ▶ Define objectives:
Desired zero-trust outcomes
- ▶ Perform gap analysis:
Current zero-trust challenges
- ▶ Draft roadmap:
Action plan for zero-trust strategy

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.



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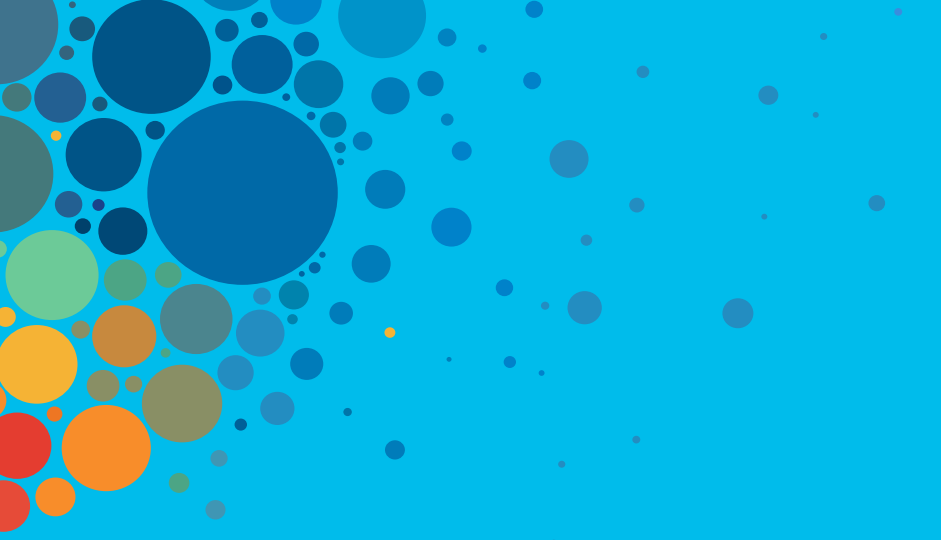
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The bridge to possible

Thank you

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