



You make **possible**



# Build with Duo

Zero Trust for your Workforce

Leya Leydiker, Product Manager, Technology Partnerships  
Ruoting Sun, Head of Technology Partnerships and Commercial Expansion

DEVNET-2088

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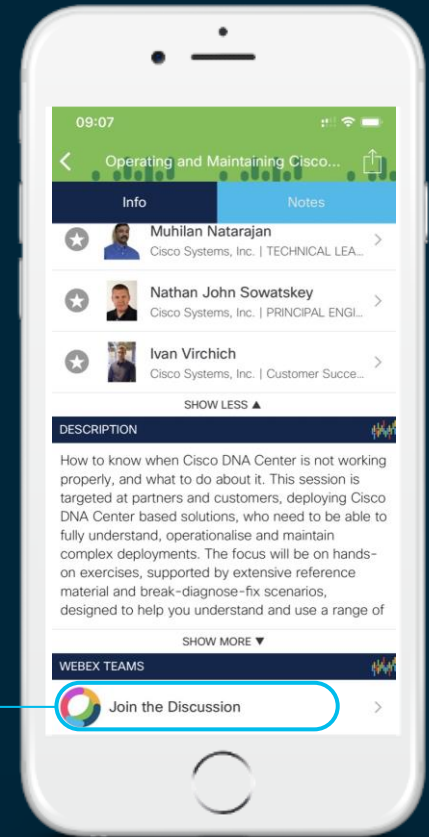
# Cisco Webex Teams

## Questions?

Use Cisco Webex Teams 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 Webex Teams or go directly to the team space
- 4 Enter messages/questions in the team space



# Agenda

- Cisco Approach to Zero Trust with Duo
- The reasons to integrate with Duo
- Who Can Build with Duo
- Benefits of Building with Duo
- Developer Resources

# Shift in IT Landscape

Users, devices and apps are everywhere

Remote Users,  
Contractors &  
Third-Parties



Personal &  
Mobile Devices



IoT Devices



## Evolving Perimeter



Cloud  
Applications



Hybrid  
Infrastructure



Cloud  
Infrastructure

# Threats Today, As a Result

A new approach to security is needed – zero trust – to address identity, app & network threats.



## Targeting Identity

81% of breaches involved  
compromised credentials



## Targeting Apps

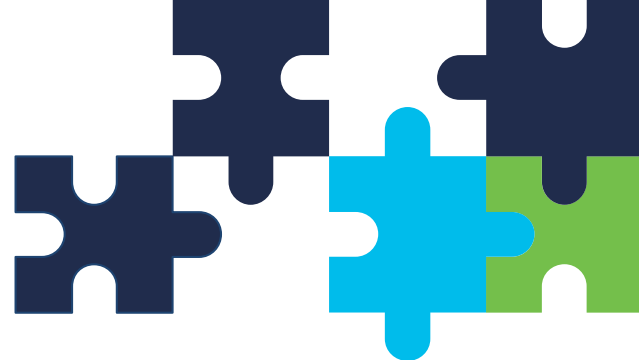
54% of web app vulnerabilities  
have a public exploit available



## Targeting Devices

300% increase in IoT malware  
variants

# What's Different in a Zero-Trust Approach



## The Traditional Approach

Trust is based on the network location that an access request is coming from.



Enables attackers to move laterally within a network to get to the crown jewels.

Doesn't extend security to the new perimeter.

## The Zero Trust Approach: Never implicitly trust, always verify

Trust is established for **every access request**, regardless of where the request is coming from.



**Secures access** across your applications and network. Ensures only right users & devices have access.

**Extends trust** to support a modern enterprise with BYOD, cloud apps, hybrid environments & more.

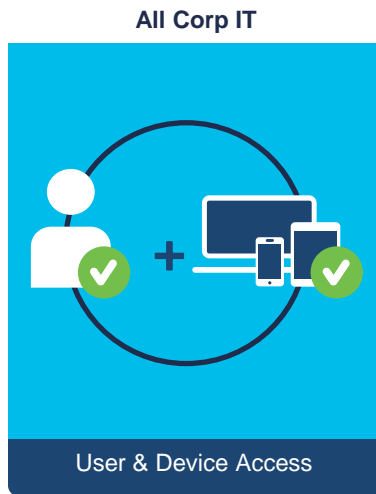
# Zero Trust The Cisco Approach



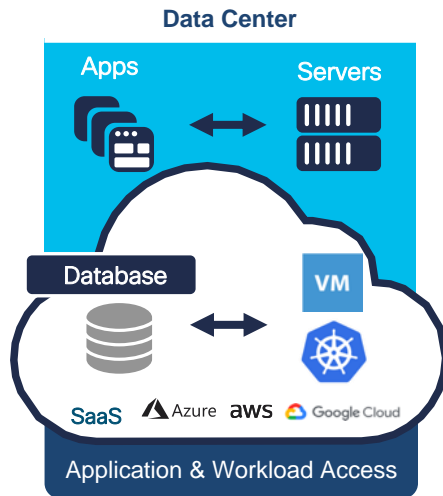
# Securing Access

Access happens everywhere – how do you get visibility & ensure secure access?

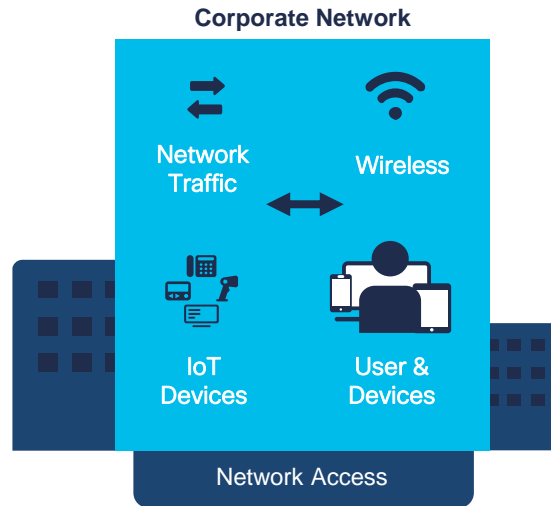
## Workforce



## Workload

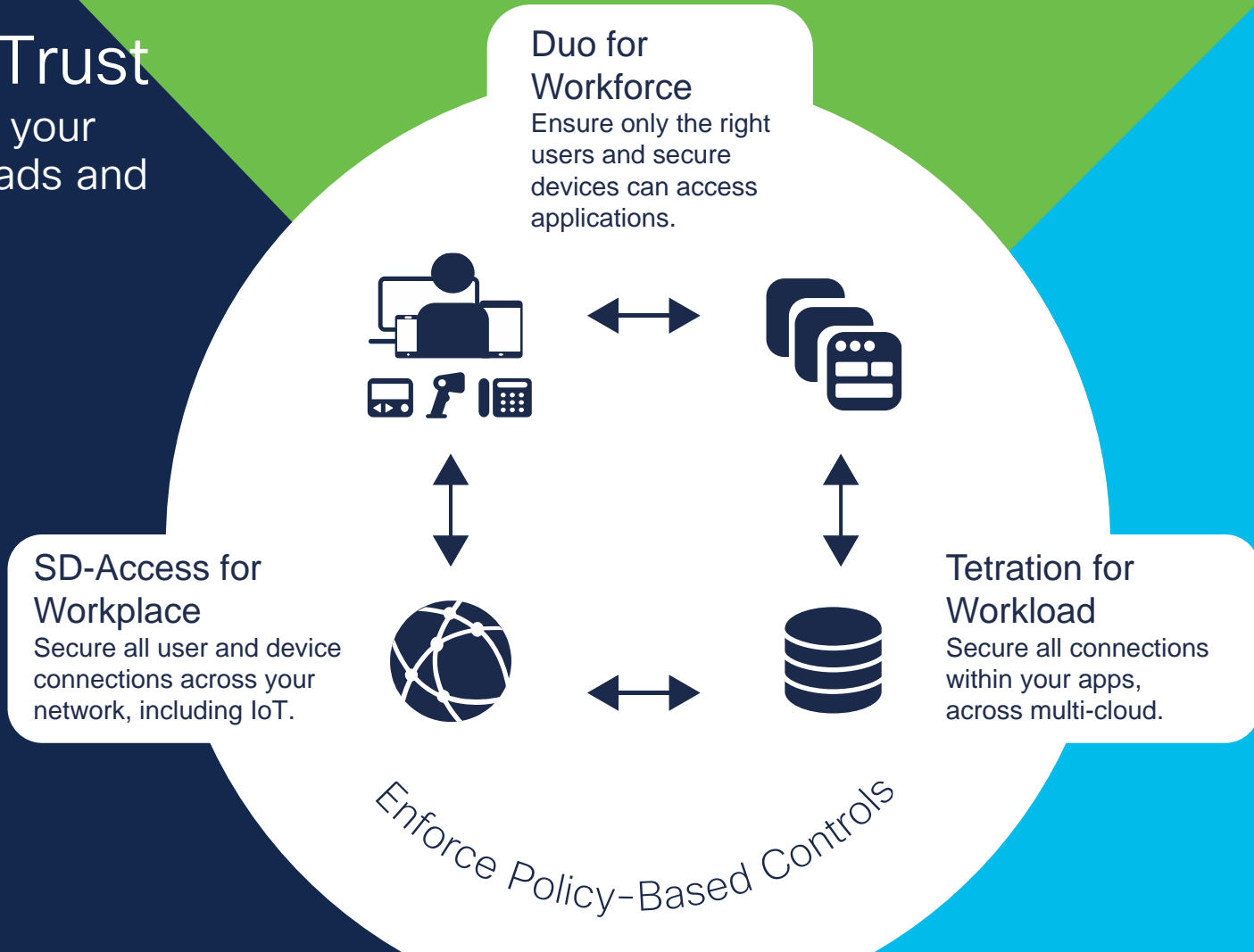


## Workplace



# Cisco Zero Trust

Secure access for your workforce, workloads and workplace.



# Workforce

## Zero-Trust Security



**Establish  
Trust**

**Verify** user & device trust with multi-factor authentication (MFA)



**Enforce  
Trust-Based  
Access**

**Enforce** access policies for every app with adaptive & role-based access controls

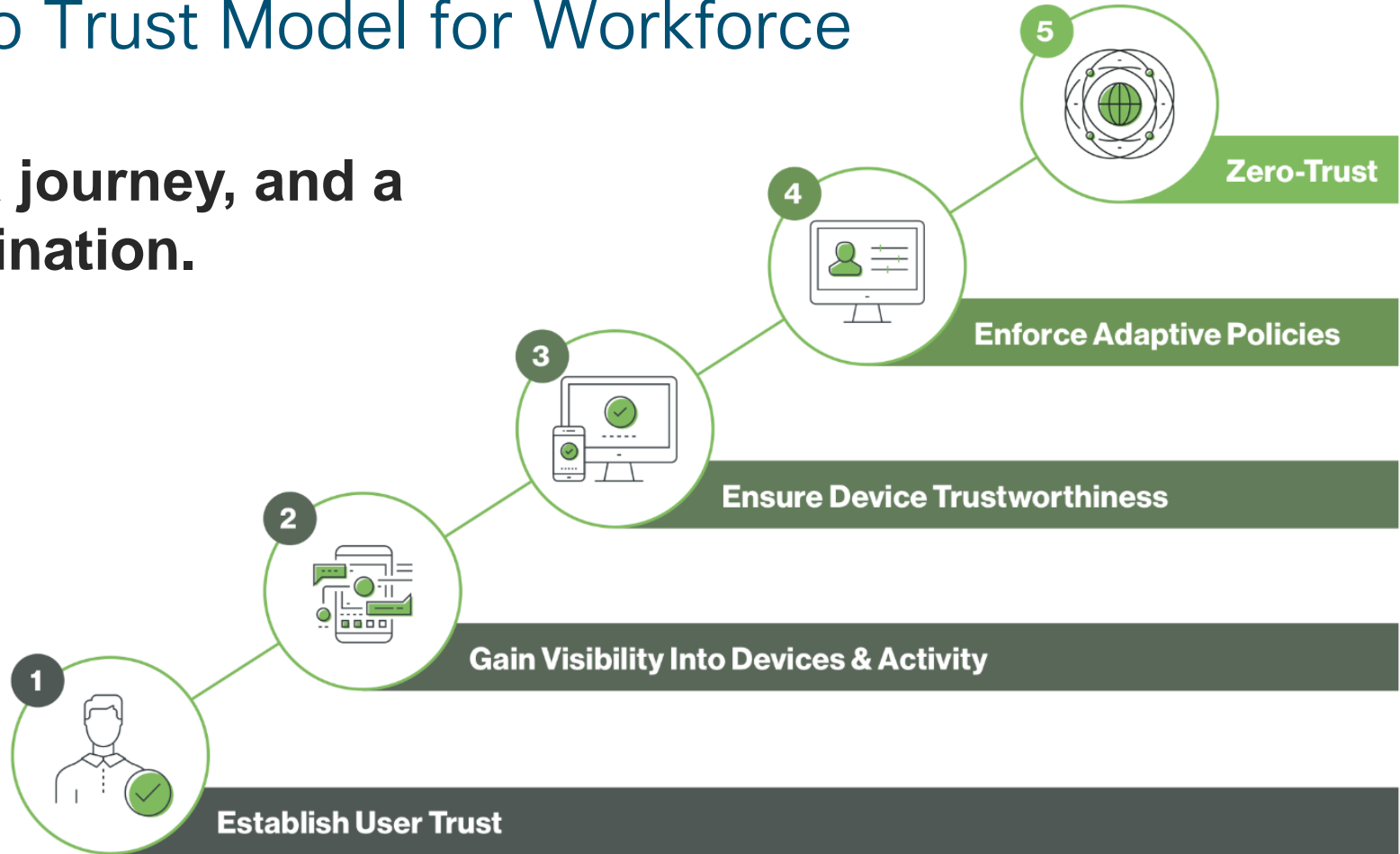


**Continuously  
Verify Trust**

**Continuously monitor** risky devices with endpoint health & management status

# Zero Trust Model for Workforce

It's a journey, and a destination.



# The reasons to integrate with Duo

# Multi-Factor Authentication (MFA)

## How it works

A user logs in using primary authentication (**something they know** = username + password).

Duo prompts the user with secondary authentication (**something they have** = push notification sent via Duo Mobile app on their smartphone).



## What this does

- ✓ Prevents identity-based attacks.
- ✓ Thwarts attackers using stolen or compromised passwords.
- ✓ Provides zero-trust access for applications.
- ✓ Creates less reliance on passwords alone.



# Broad MFA Options for Every Use

You can configure authentication

- Per-application or user group
- Based on sensitivity of application data
- Or based on user scenario

Additionally, allow multiple options for ease of user and flexibility

- Push notification
- Mobile passcode
- Phone
- SMS
- HOTP token
- U2F/WebAuthn



# Ease of User Enrollment



## Automatic Enrollment

Admins can import users from existing [Azure, LDAP and AD directories](#)



## Self Enrollment

Users can [self-enroll into Duo in less than 1 minute](#)



## Import Users

Provision users using Duo's REST API or add users manual one at a time or through CSV

[Learn more about Enrollment Options](#)



# Why Device Trust?

Compromised devices can access your data.

Attackers exploit known vulnerabilities

Patching devices (especially user-owned) is complex

Accessing critical data from vulnerable devices can be risky

# 99%

of vulnerabilities exploited  
will be ones known by  
security team for at least  
one year (through 2021)

Source: Gartner, Dale Gardner,  
2018 Security Summit

# How Duo Establishes Device Trust



## Device Insight

Duo's Unified Endpoint Visibility inspects users' devices at login -- without installing any endpoint agents.



## Managed or Unmanaged

Duo's Trusted Endpoints integrates with endpoint management systems to detect if the device is managed by your IT.

# Inform Users

Improve your security posture & notify users of out-of-date devices

If users do not update by a certain day, the endpoints are blocked.

End users get notified about out-of-date OS, browsers, Flash and Java.

Quickly improve security without support desk help

**Duo**

[What is this?](#) [Add a new device](#)  
[My Settings & Devices](#)  
[Need help?](#)

Powered by Duo Security

Choose an authentication method

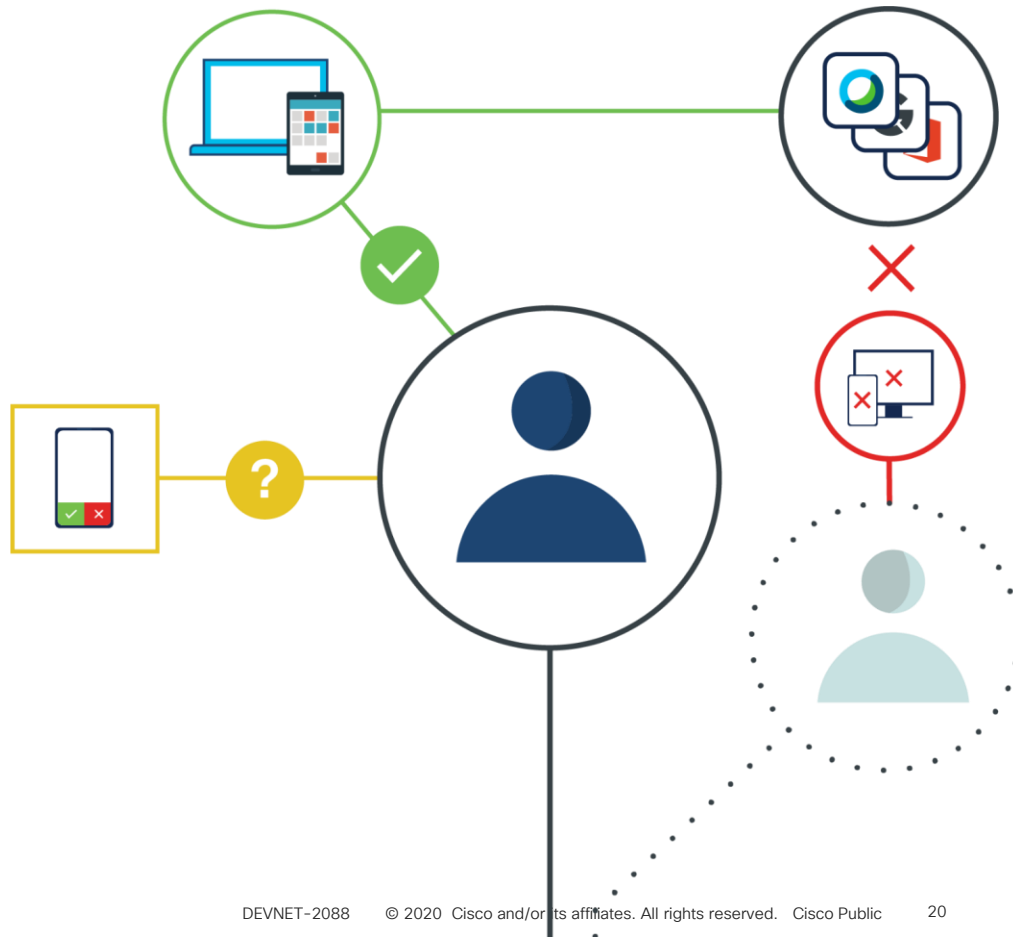
	Duo Push	Send me a Push
	Call Me	Call Me
	Enter a Passcode	Enter a Passcode

Your computer software is out of date. You will be blocked in 5 days if you don't update. [Let's update it](#)

# Enforce Adaptive Policies

## How Adaptive Access Policies Should Work

- Role Based
- Device Based
- Location Based
- Network Based



# Simplify With Secure SSO

## Pair single sign-on with user & device trust:

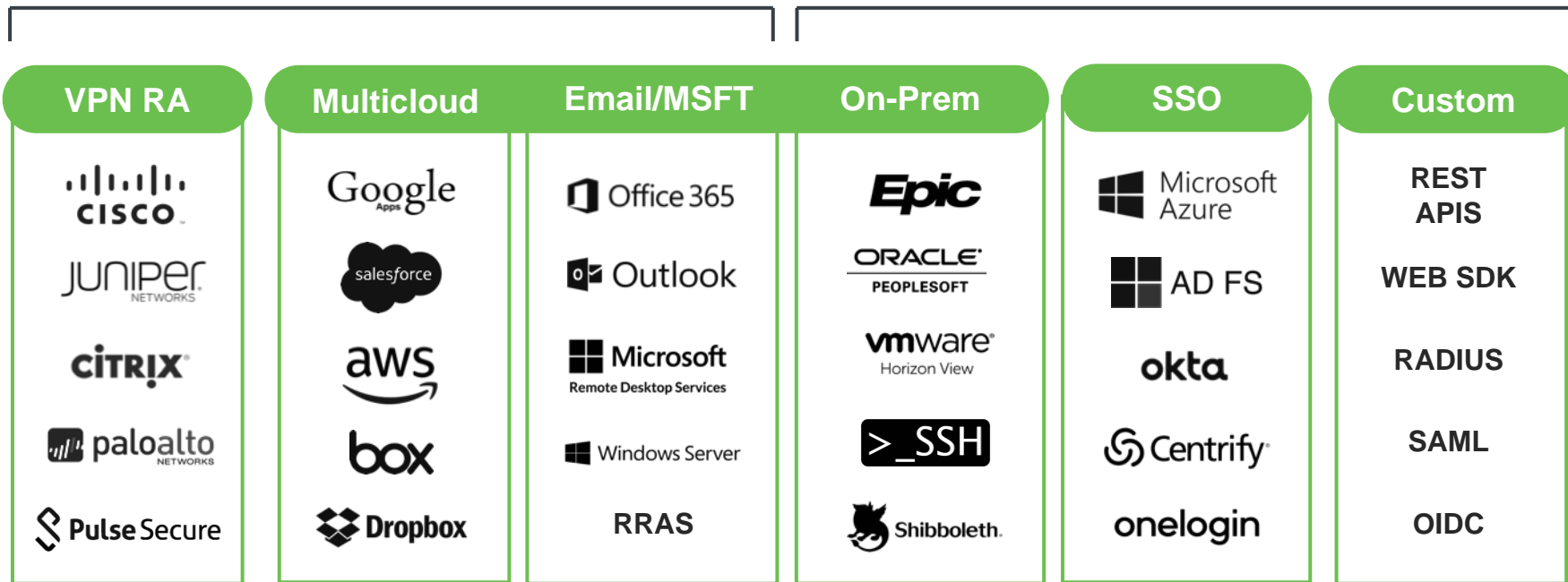
- Easily access all cloud applications from a single dashboard
- Enforce consistent security controls across cloud applications
- Secure every cloud application



# Protect Every Application

## Start Here

## Then Expand



# Duo for Workforce



## Customer Story: University of Louisville Hospital

### Challenge

- Protect against phishing attacks & block malicious attempts to access their applications
- Comply with HIPAA & PCI DSS

### Solution

- Consolidated MFA, single sign-on (SSO) & mobile device management (MDM)
- Reduced their overall total cost of ownership by more than 50%

### Business Outcomes

- Secure & convenient remote access for every user
- A zero-trust approach to workforce security, plus a single view into mobile devices & risk



# U<sup>OF</sup>L Hospital

**“We are adopting a zero-trust security framework, and we know we needed MFA to start with, and multiple clinician leaders recommended Duo. It was an easy choice for us. It was the first ever security solution recommended by the users and by clinicians. This never happens in healthcare.”**

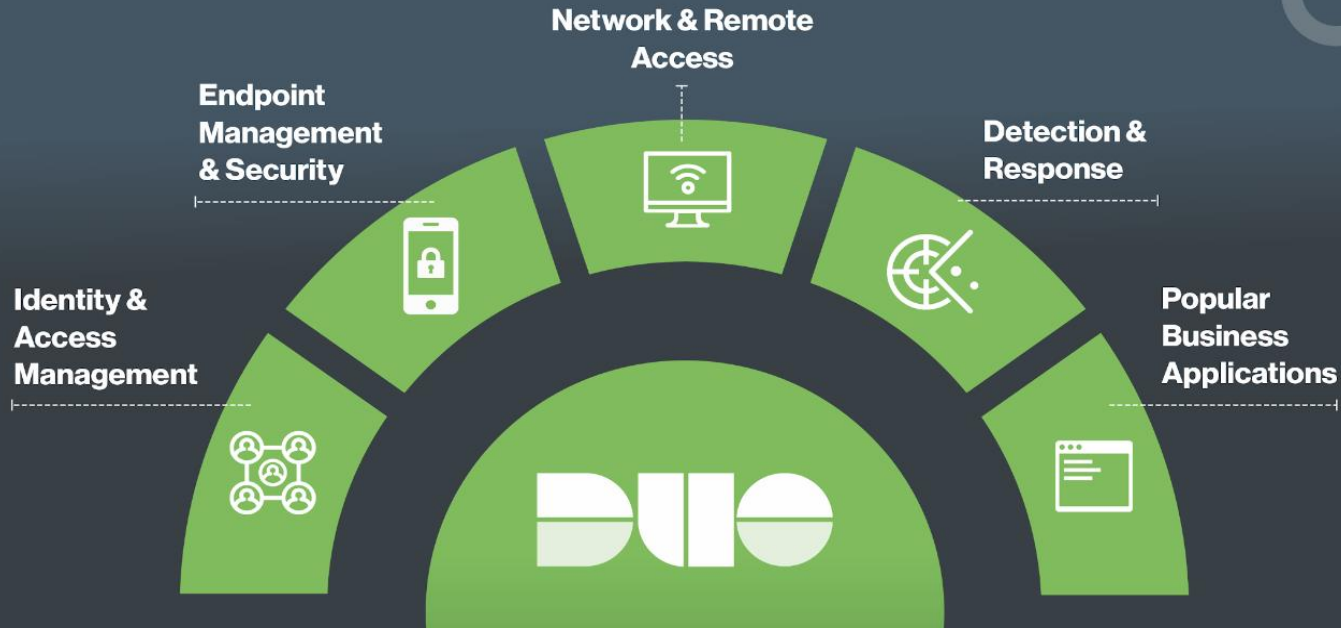
- John Zuziak, CISO

[Learn more](#)

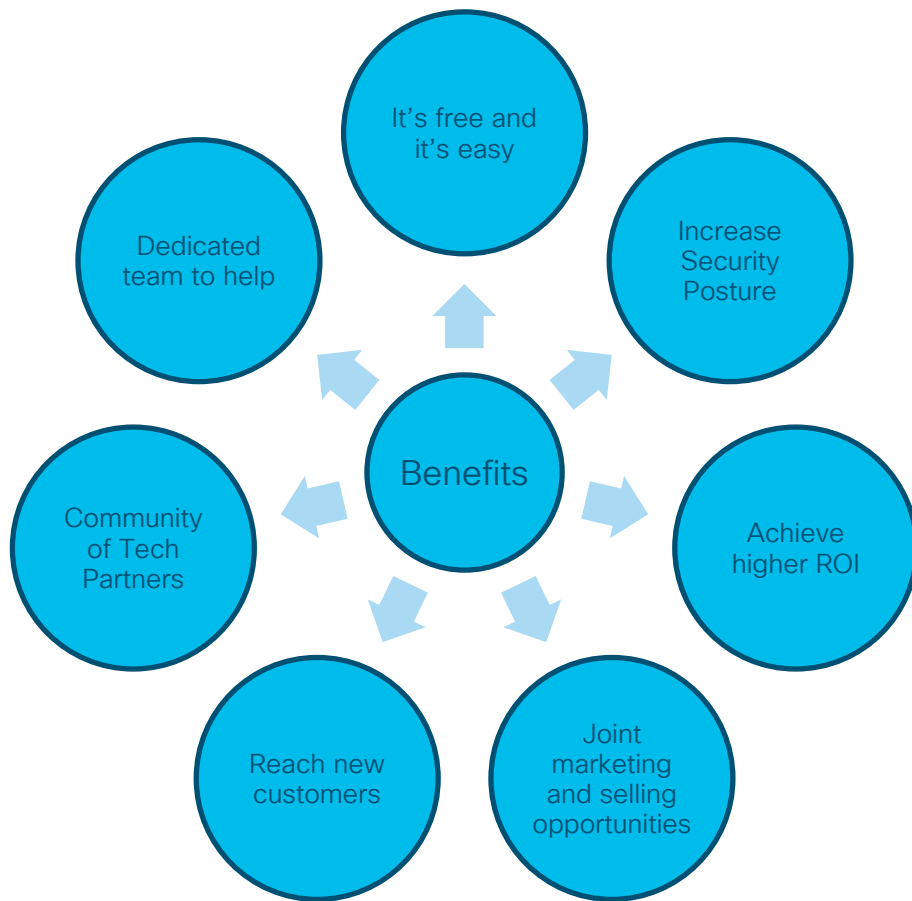
# Integration partners



# Duo's Tech Partnership Ecosystem



# Benefits of partnering with Duo



# Developer resources

# Get Started

For  
Developers

<https://duo.com/assets/pdf/Duo-Tech-Partner-Integration-Guide.pdf>

For  
Technology  
Partners

<https://duo.com/partners/technology-partners>

Contact us:

techpartners@duo.com

# Learn More

## Attend another Duo session..

- Tuesday 28 January  
16:40 - 17:00 -  
“Making Security  
Easier: Refine the  
Grind” presented by  
Ash Devata
- Wednesday 29 January  
14:00 - 14:30 -  
“Adopting a Zero Trust  
architecture with Cisco  
Zero Trust” presented  
by Amanda Rogerson &  
Jeff Groesbeck

## Sign-up:

- <https://duo.com/trial>

# Complete your online session survey



- Please complete your session survey after each session. Your feedback is very important.
- Complete a minimum of 4 session surveys and the Overall Conference survey (starting on Thursday) to receive your Cisco Live t-shirt.
- All surveys can be taken in the Cisco Events Mobile App or by logging in to the Content Catalog on [ciscolive.com/emea](https://ciscolive.com/emea).

Cisco Live sessions will be available for viewing on demand after the event at [ciscolive.com](https://ciscolive.com).

# Continue your education



Demos in the  
Cisco Showcase



Walk-In Labs



Meet the Engineer  
1:1 meetings



Related sessions





Thank you





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