

Universal ZTNA from Cisco, powered by single vendor SASE

Ensures zero trust for all users, apps, and locations

Andreas Häggander, Solutions Engineer



How do the industry define Universal ZTNA

“Universal Zero Trust Network Access applies zero-trust principles uniformly to all users, devices, and things for consistent, risk based least-privilege access everywhere.”

Zero Trust principles

- 1 Never assume trust
- 2 Always verify
- 3 Enforce least privilege

Zero Trust success factors

- 1 Respect user privacy and user experience
- 2 Adjust policy to risk
- 3 Consistent experience across environments

Zero Trust must be defined holistically



Principles



Strategy



Architecture



Capabilities



Technologies



Features

Key focus areas



Principles

Single vendor SASE



Strategy

Secure Access Service Edge (SASE)



Architecture

Segmentation

ZTNA

Phishing-resistant MFA



Capabilities

SD-WAN

SWG, CASB, FWaaS,
DLP, DEM

Security Service
Edge (SSE)



Technologies

Single client, single
management (SCC)

Identity Intelligence

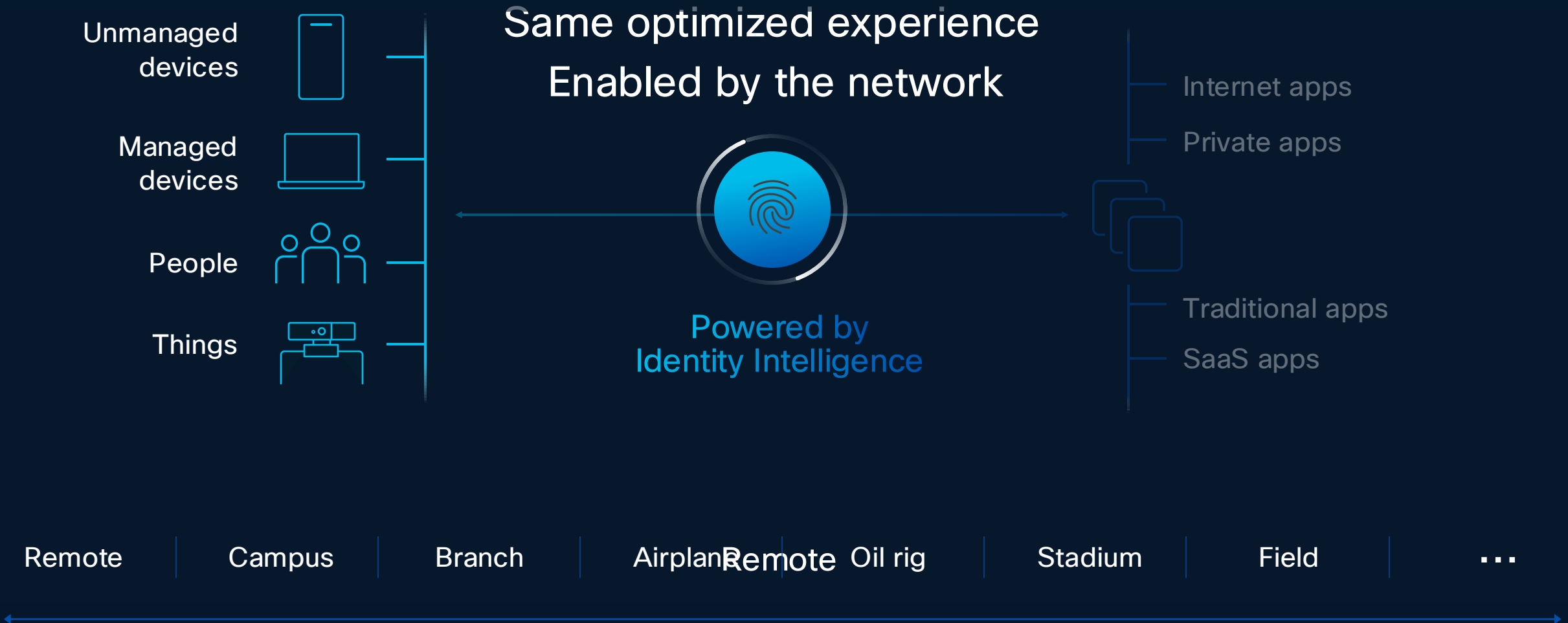


Features

Traditional ZTNA was designed for a different time and different needs



Universal ZTNA from Cisco



Cisco's Universal ZTNA

Secure
SD-WAN

+

Security
Service Edge

+

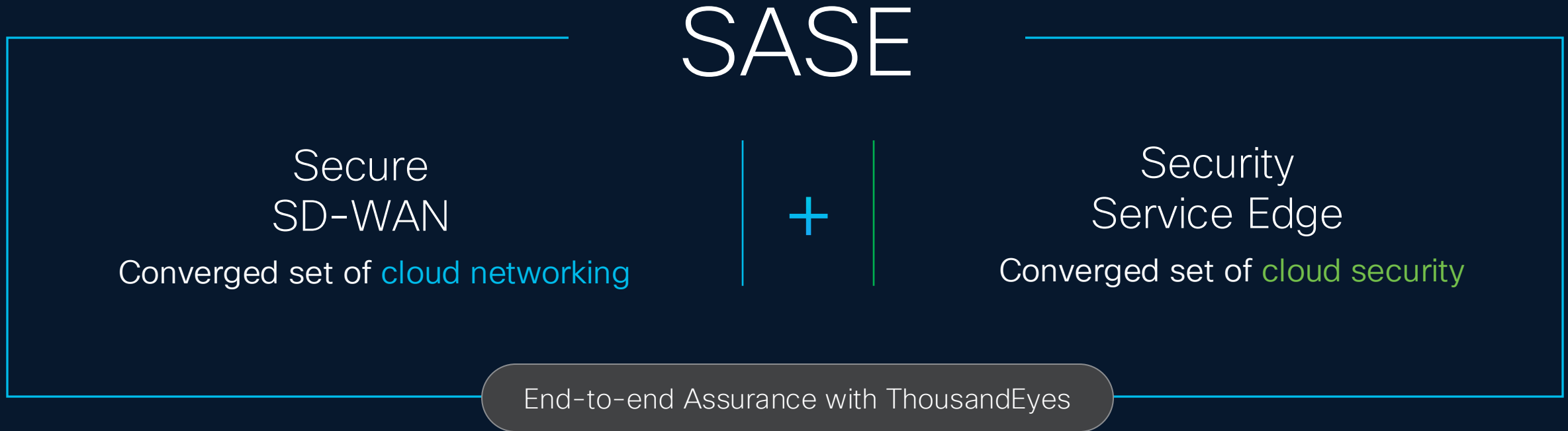
Trusted
Identity Edge

SINGLE VENDOR SASE

End-to-end Assurance with ThousandEyes

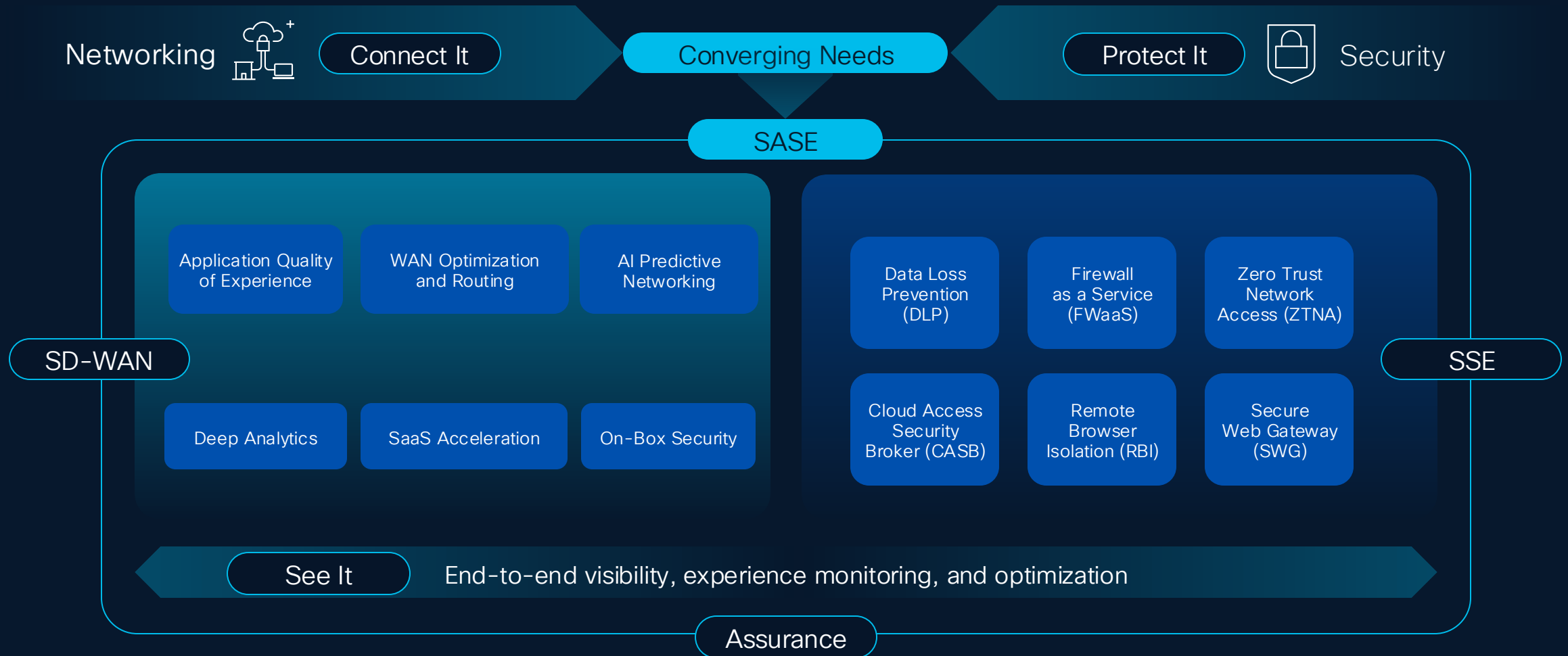
SASE: Secure Access integrated with Cisco SD-WAN

Your security strategy for a hyper-distributed world



Secure Access Service Edge (SASE)

Single vendor SASE from Cisco helps you see it all, protect it all, and perform everywhere.



**See
it all**

**Protect
it all**

**Perform
everywhere**

Simplified management and connectivity across everything in one platform

The background of the entire slide is a photograph of two IT professionals, a man and a woman, seen from behind, sitting at a desk in a server room. They are looking at several large computer monitors that display complex network diagrams and data. The room is dimly lit, with blue light emanating from the screens and server racks in the background.

See it all.

Cisco SASE for the Future-Proofed Workplace

Find the
best route

Fix issues
fast

Discover
Shadow AI

See it all.

Find the best route

End-to-end visibility for optimal network performance and security

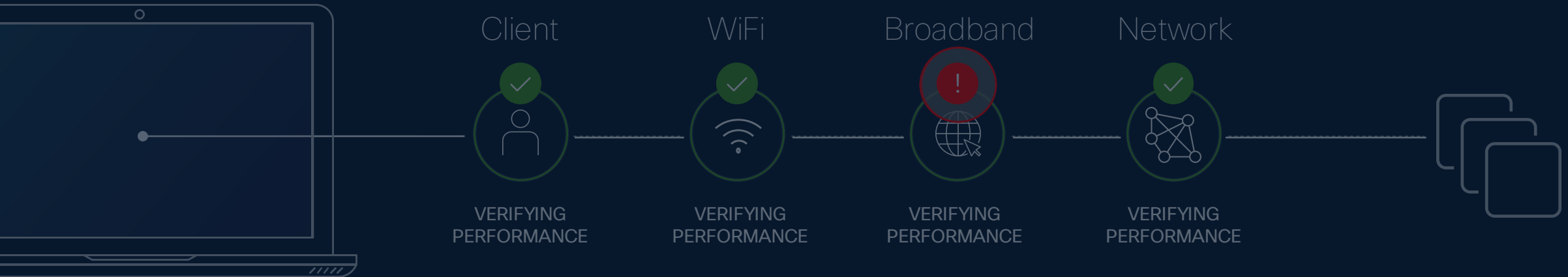


See it all.

Fix issues fast with Experience Insights

○ Node: 01.ca.comcast.net

IP Address	88.86.143.25
Forwarding Loss	32% (6 of 17 packets)
Ave. Response	67.9 ms



See it all.

Discover GenAI app usage with AI Access

Superior visibility & control

- Discover Shadow AI
- Define acceptable use
- Machine learning finds unstructured data
 - Patent applications
 - M&A
 - Financial statements and more

AI App Discovery			Secure Access
Leverage Secure Access to identify 3rd party generative AI applications, their usage, risk score and protection status. Learn more			
Risk	First detected date	48 results	
Application name	Risk score		First detected
AI Assistant New	High		Dec 29, 2024
Code Copilot New	High		Dec 14, 2024
HelperAI	High		Nov 22, 2024
AI Creator	High		Nov 21, 2024
GrammarAI	Medium		Nov 13, 2024
WriterBot	High		Oct 30, 2024

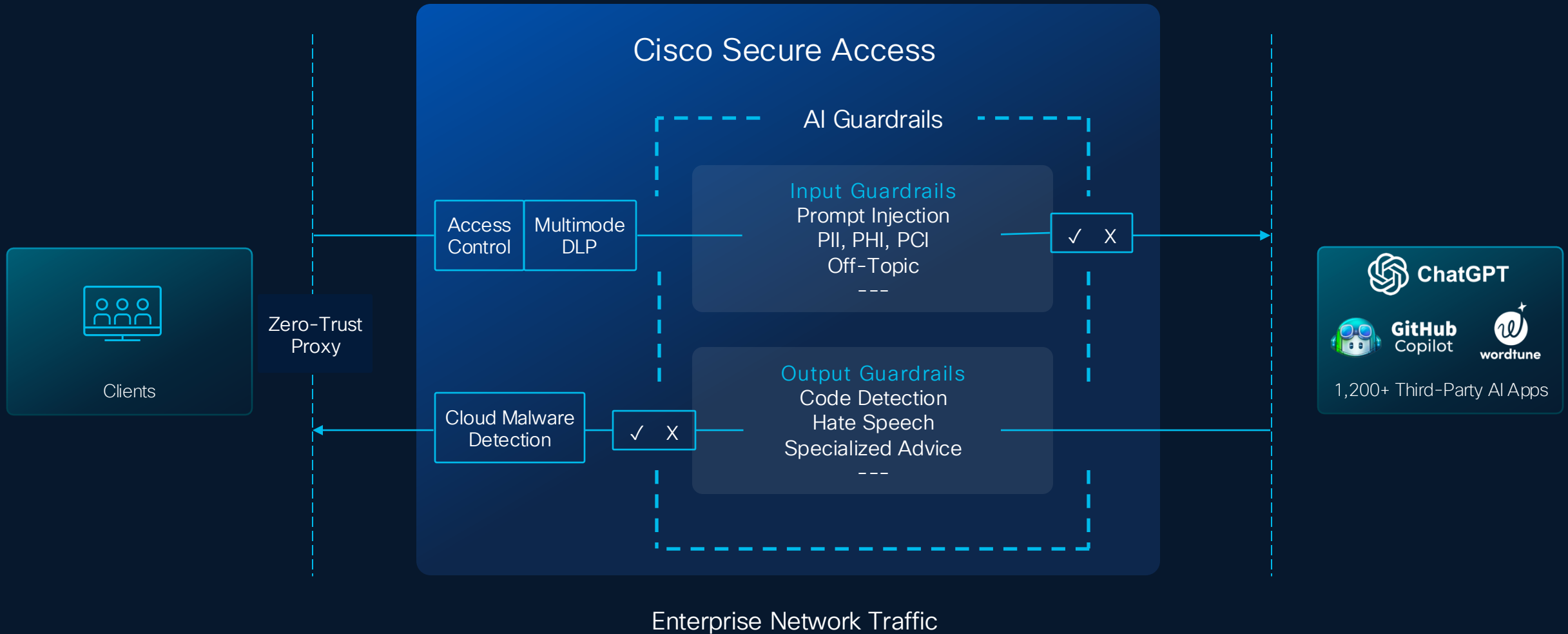
1200+
AI Apps Protected

100%
Guardrails for top AI Apps

1
Unified Security Framework

See it all.

Protecting usage of third-party AI apps



Protect it all.

Networking designed for security everywhere.

Single client,
single policy

Seamless
transition to
ZTNA

Secure access
for all users,
and things*

*Including protecting GenAI app usage

Protect it all.

One client, **multiple functions**



Protect it all.

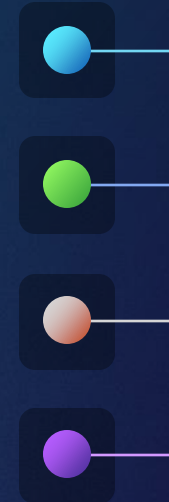
Seamless Access

The evolution of our AnyConnect client makes access easy.

We handle the plumbing

Go to work



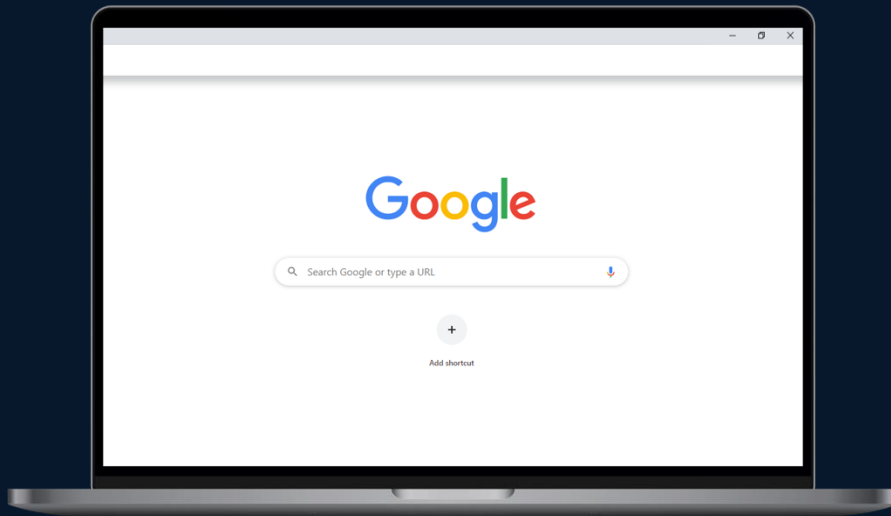
- 
- A vertical stack of four colored circles (blue, green, orange, purple) inside a dark blue rounded rectangle, representing different types of applications and the internet. A bracket is positioned above the stack.
- Modern Private Apps
 - Legacy Private Apps
 - SaaS Apps
 - Internet

Protect it all.

Mobile OS and Browser Integration

Secure access for contractors using unmanaged devices

BYOD via enterprise managed Google Chrome
Advanced protocol support for Apple, Samsung



Chrome Enterprise Browser



Native OS Integration

Protect it all.

Extend consistent identity context across SD-WAN and cloud security enforcement

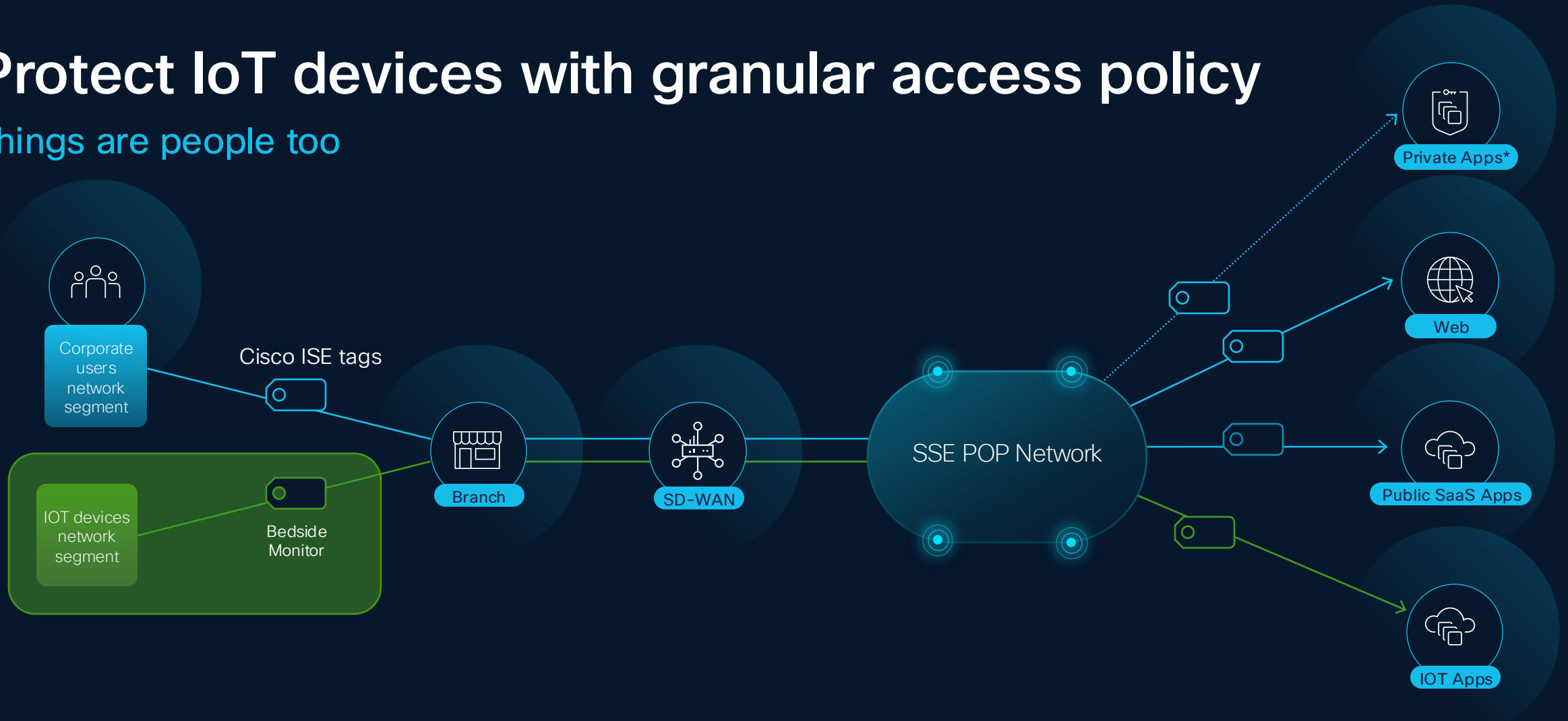
ISE security group tags (SGTs) for granular access policy



Protect it all.

Protect IoT devices with granular access policy

Things are people too

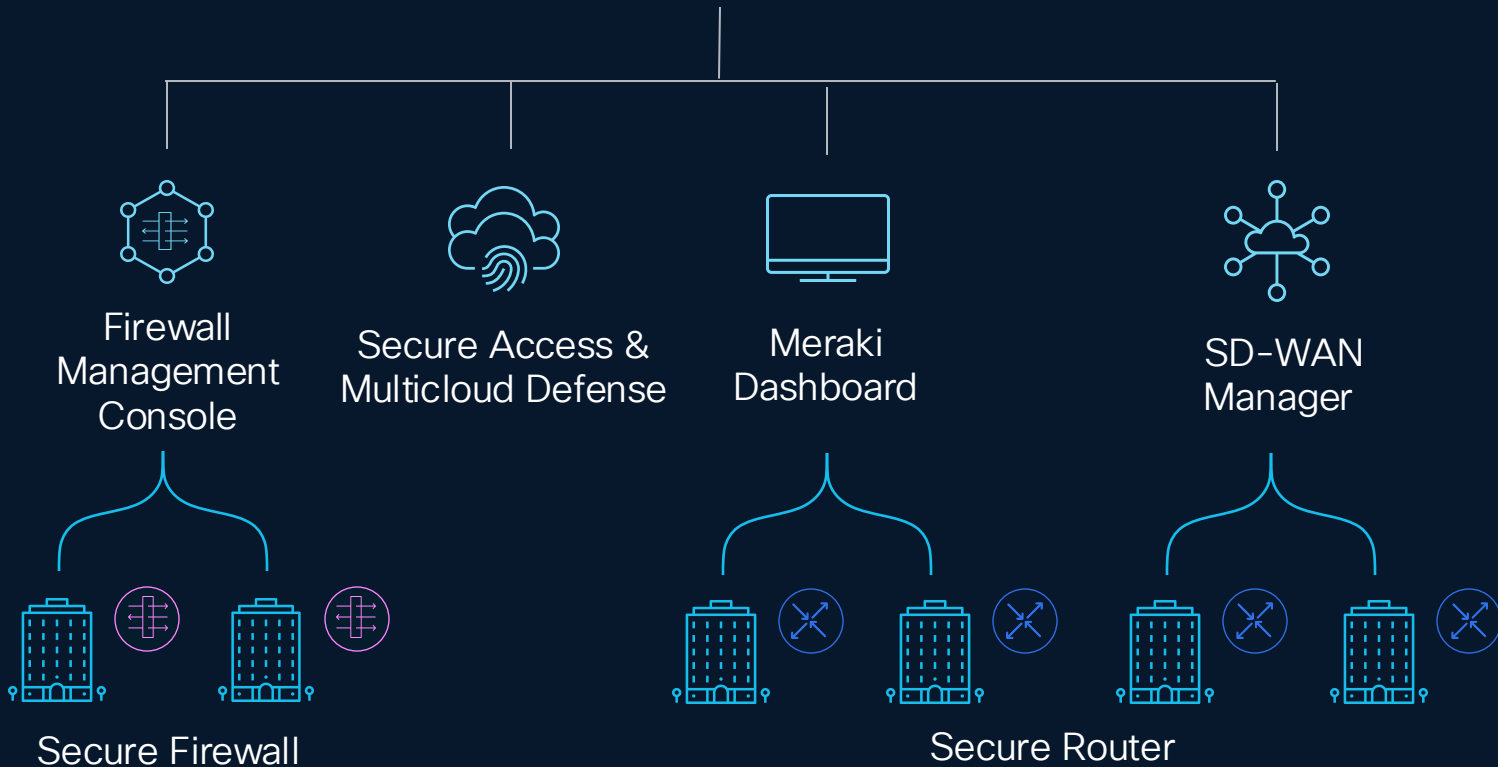


Protect it all.

Cisco Security Cloud Control – One place for Policies

Security Cloud Control

Things are people too



Security Object/Policy Configuration

- Push security policies to different security solutions using single orchestrator

Monitoring

- Common logging repository via SAL (Security Analytics and Logging)

Troubleshooting (Future)

- Leverage SCC tools for security troubleshooting

Perform everywhere.

Simplified networking for zero downtime, always-on resilience.

Cloud-agnostic,
high-performance
connectivity

Consistent user
experience -
everywhere

Integrated policy
and traffic
management

Perform everywhere.

Predictive path recommendations for zero downtime

AI-powered insights for smarter and faster networking

AI-Powered Insights

Predicts network issues before they happen

Proactive Optimization

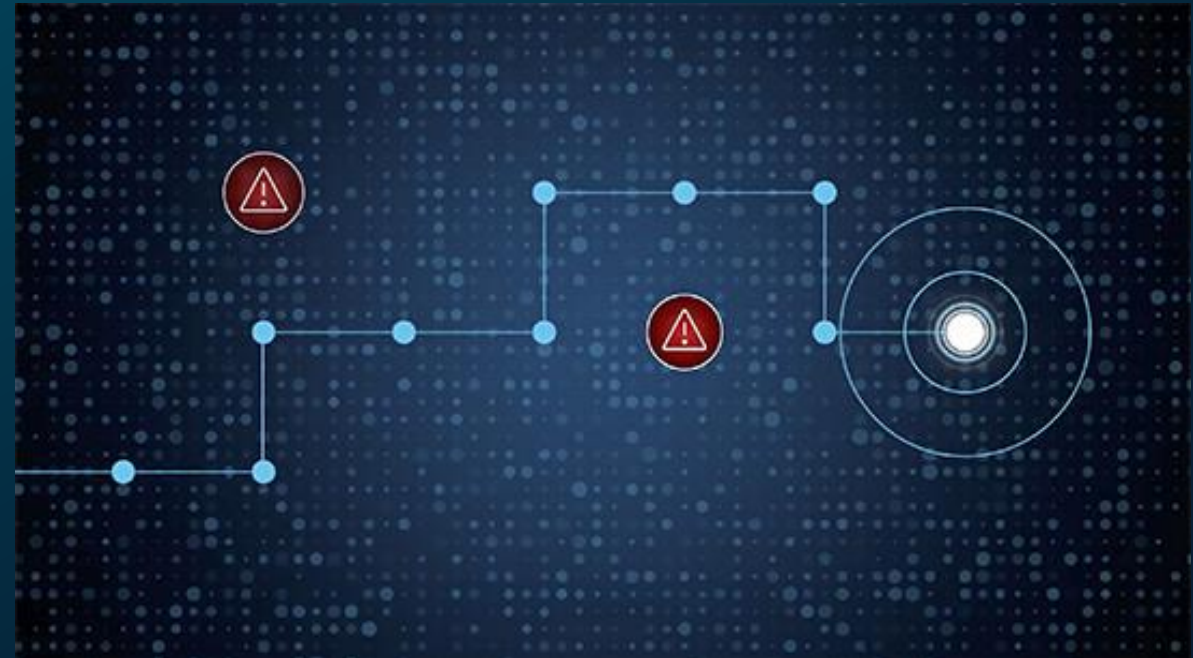
Dynamically selects the best path for each application

Reduced Disruptions

Minimizes downtime and improves efficiency

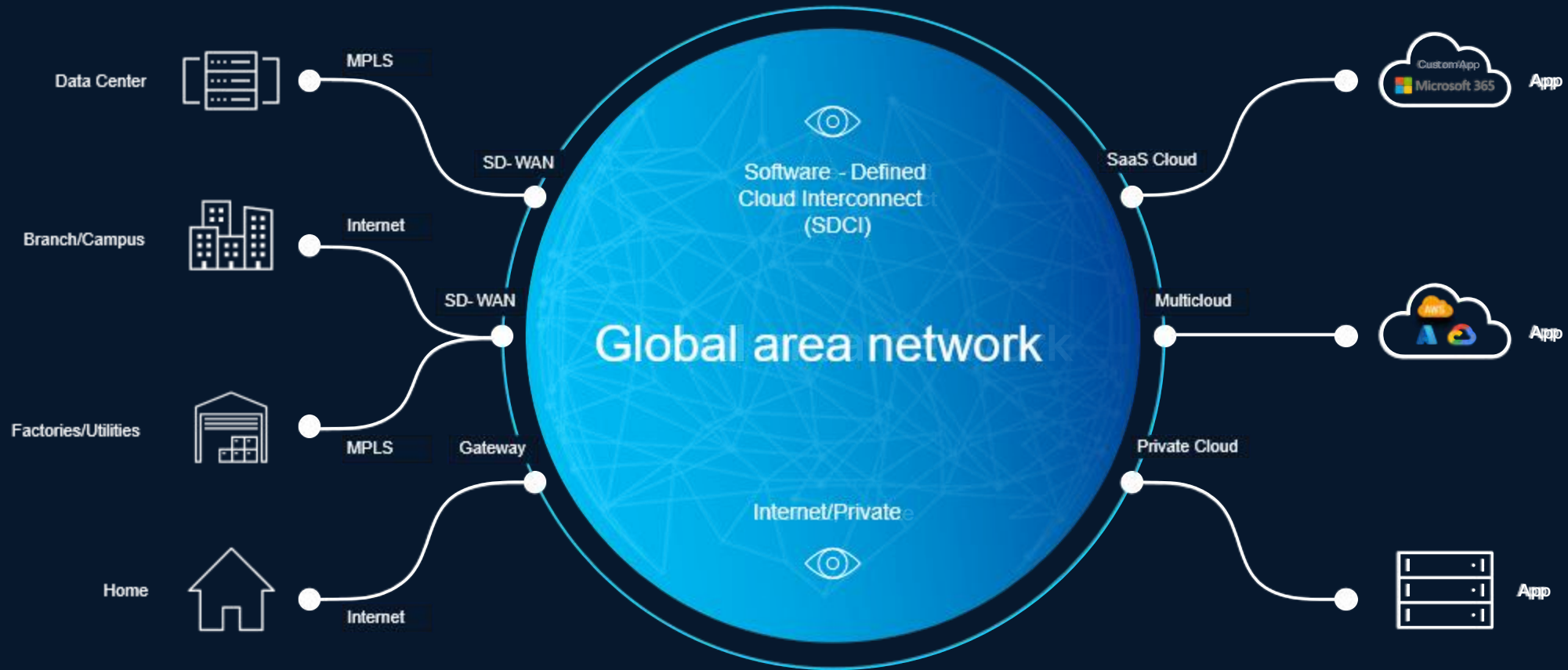
Seamless Performance

Ensures consistent and reliable user experience



Perform everywhere.

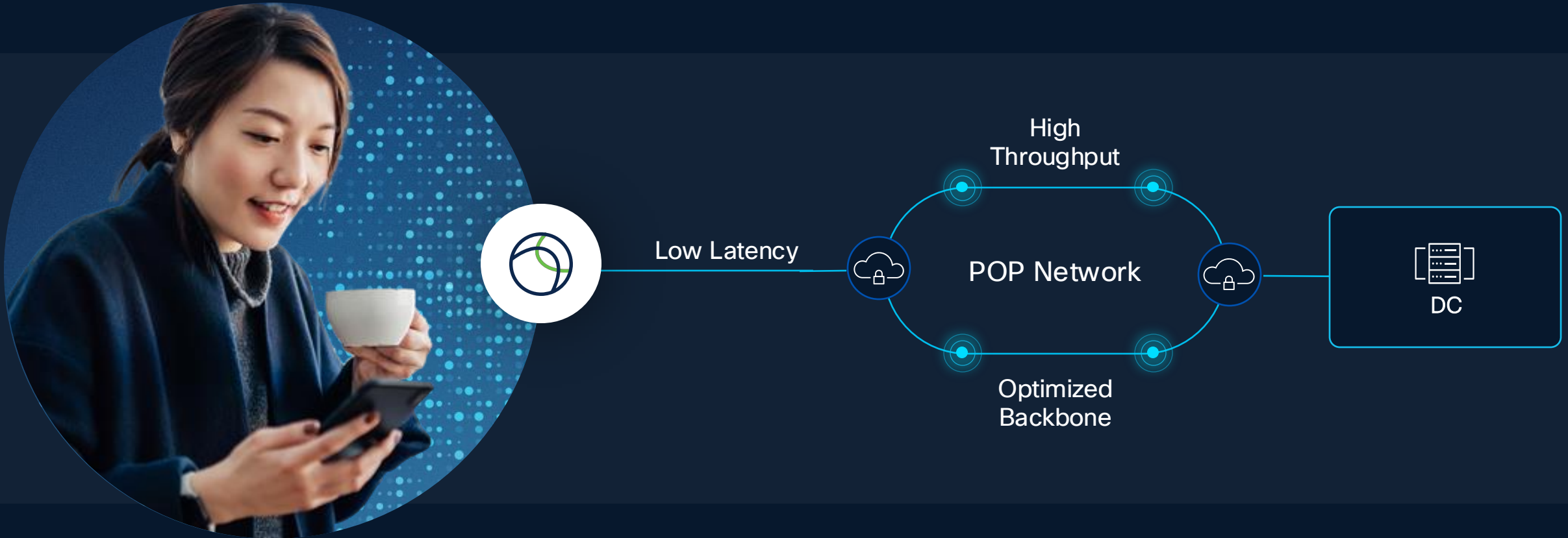
Cloud OnRamp: Making cloud easy for the hybrid world



Perform everywhere.

Cisco's modern PoP architecture optimizes user experience

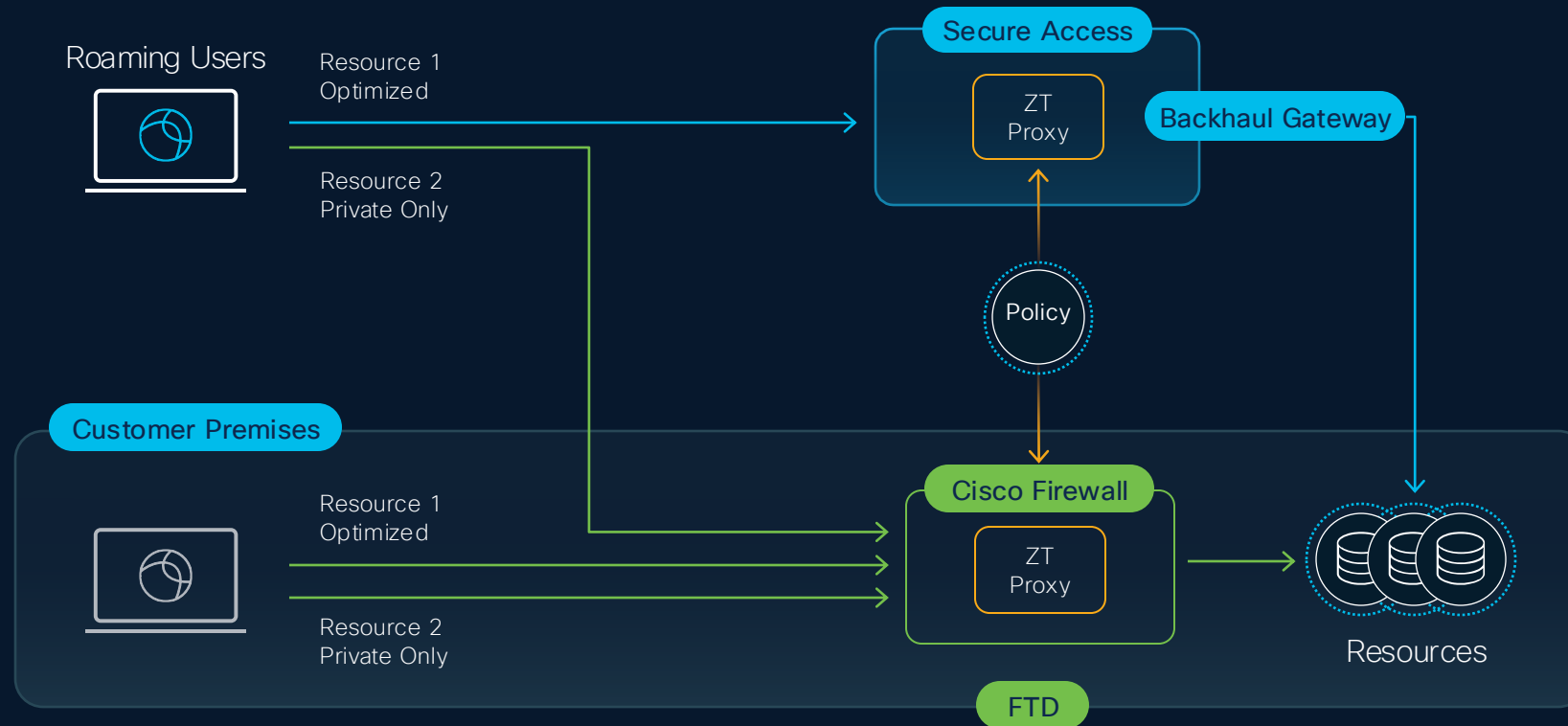
Leverages MASQUE/QUIC, Vector Packet Processing (VPP), and a global peering



Perform everywhere.

Hybrid Private Access for flexible enforcement

Single set of ZTNA policies used in cloud and on-premise



Cisco's Universal ZTNA

Secure
SD-WAN

+

Security
Service Edge

+

Trusted
Identity Edge

SINGLE VENDOR SASE

End-to-end Assurance with ThousandEyes

Cisco Identity Intelligence



USERS



MACHINES



SERVICES



HRIS



DATA



APPS



PLATFORMS



SailPoint

Dragos

CrowdStrike

Salesforce

Cisco ISE

Okta

PingIdentity

Auth0

Microsoft

Google

Cyberark

Amazon

Cisco Identity Intelligence



Identity Intelligence continually assesses user trust

The screenshot shows the Cisco Identity Intelligence interface for a user named Aalto Helmig (helmig@simubiz.com). The user is marked as 'Active'. The interface is divided into two main sections: 'Summary' and 'Trust Score'.

Summary:

- Internal, Non Employee
- N/A
- N/A
- Simubiz
- N/A
- MFA Configured
- Sep 13, 2024 04:11:25 UTC (18 hours ago)
- N/A

Created Oct 13, 2015

Trust Score: Untrusted

Special account signed in using weak MFA
Risk from Entra ID reported special account
New country for tenant and special account.
Special account engaged in impossible travel activity

Additional details:

- Special Account
- Resurrected Account
Failing Checks: [Access From Dormant Account](#)
- Weak MFA Used
Failing Checks: [Weak MFA Was Used To Successfully Sign In](#)
- Risk From Azure
Failing Checks: [Sign in Threat Detected](#)
- New Country for Tenant
Failing Checks: [New Country for Tenant](#)
- Impossible Travel
Failing Checks: [Impossible Travel](#)



User Trust Score

Identity Intelligence provides a dynamic user trust score based on user behaviors, actions, and posture to Secure Access for continuous zero trust enforcement.



Easy Workflows

After assessment, take response action from the console.

Key Scores

- Trusted
- Questionable
- Favorable
- Untrusted
- Neutral
- Unknown

Identity Intelligence

Continuously assess you are
who you say you are



Works with existing IDPs

How do we start ?

Flexible journey to Universal ZTNA

- ✓ You set the pace
- ✓ Same client
- ✓ Common policy



Traditional VPN

Network level access – difficult to control at app level



VPN as-a-Service

Lift your VPN to the cloud – more control and easier to manage



ZTNA

Enable remote users to securely connect with least privilege access to any private app.

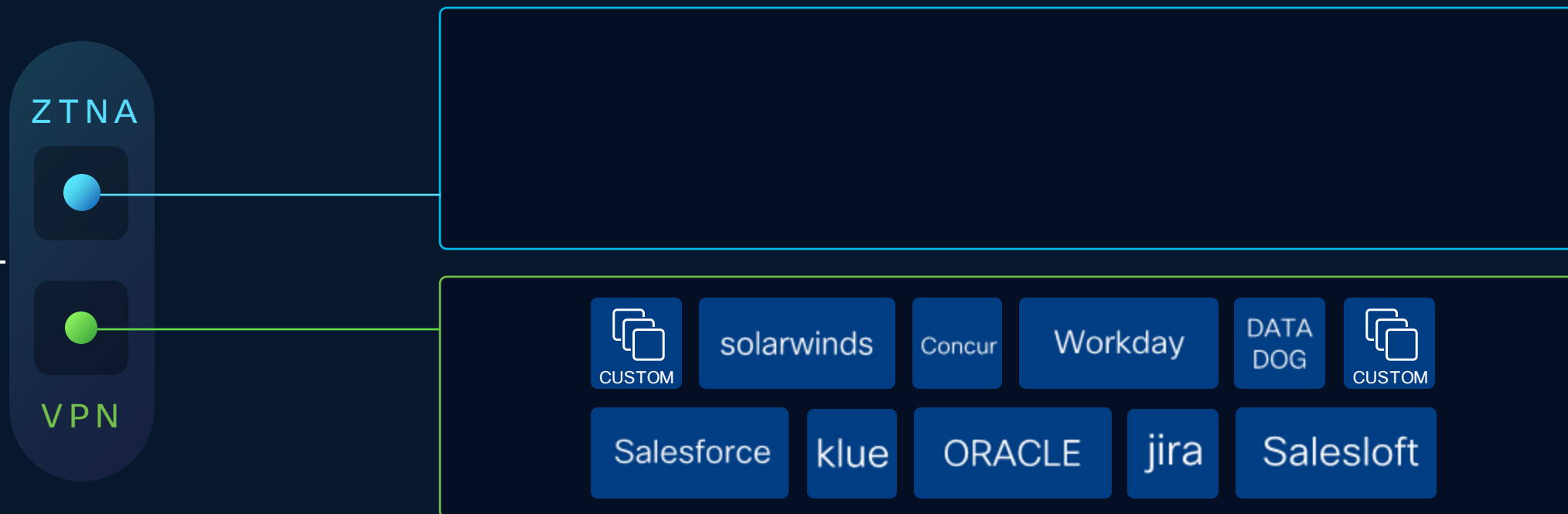


Universal ZTNA

Any user/device/thing securely connect with least privilege access to any app – anywhere.

Seamless Experience

One client simplifies ZTNA roll-out



Summary



Cisco SASE for the Future-Proofed Workplace

See
it all.

Find the best route, fix issues fast,
and discover Shadow AI

Protect
it all.

Secure access to all apps
for all kinds of users and things

Perform
Everywhere.

Zero trust with latency of ~40ms
or less for 99% of business users

Simplified management and connectivity across everything in one platform

Thank You !