Efficient Protection from Cyberattacks

Challenges and Solutions

Aleksandar Pavlović, Cisco Cybersecurity Solutions RSM for CEE

Infosec Conference, Budva, September 26th, 2024



In a hybrid, multi-vendor, multi-vector universe

Everyone is an insider

+30%

of all incidents involved stolen credentials or malicious insiders

Attacks start from anywhere

45%

of breaches occurred in the cloud, and 19% due to a compromise at a business partner Alert fatigue is worse

37%

of IT and SecOps pros say swelling alert volume, complexity increases job difficulty Expanding attack surface

22%

increase in the average cost of a data breach where hybrid work was a factor

According to "2024 Cybersecurity Readiness Index"

- Only 3% of companies are ready to tackle today's threats
- Despite the lack of readiness, 80% of companies feel moderately to very confident in their ability to stay resilient in this evolving cybersecurity landscape
- The industries that ranked the highest in cybersecurity readiness are Financial Services, Technology Services, Media and Communications, and Manufacturing



According to "2024 Cybersecurity Readiness Index"

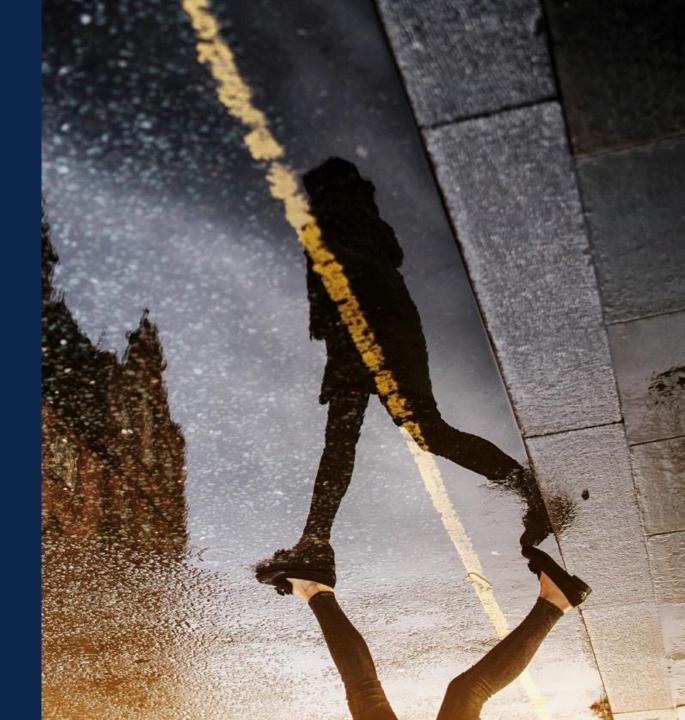
- Over half of the companies plan to significantly upgrade their IT infrastructure in the next 12-24 months (an increase from 2023 when just one-third said they planned an upgrade)
- In response to the heightened cybersecurity risk, 97% expect to increase their cybersecurity budgets in the next 12 months
- The talent gap persists with nearly 50% of companies having more than 10 open cybersecurity roles
- 11% of companies see Al-related cyber threats among the top three risks in the year ahead

Tactics, Techniques and Procedures (TTPs) that once only impacted nation-states are now being used by every-day attackers





To address the threats of tomorrow, we need to change how we look at detection and response today



Security Operations Simplified - XDR

Stop advanced threats like ransomware

Most attacks use a sequence like this...



A well-tailored and personalized email causes a user to click... Which goes to a questionable web site...

Which leads to a strange process being created locally on the user's device...

That process will connect to another machine or directly to their data

T1055: Process Injection

T1566: Spear phishing

T1189: Drive-by Compromise

T1570: Lateral Tool Transfer

T1087: Account Discovery: Domain Account

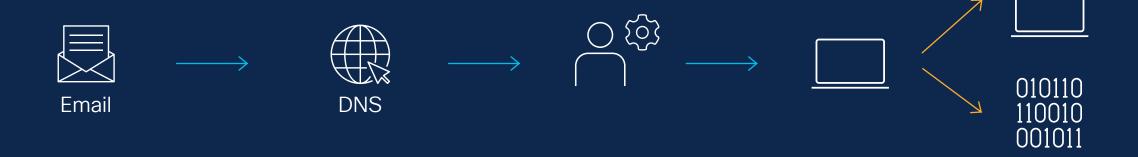
T1048: System Network Connections Discovery

Vendor A Vendor C Vendor E Vendor G Vendor D

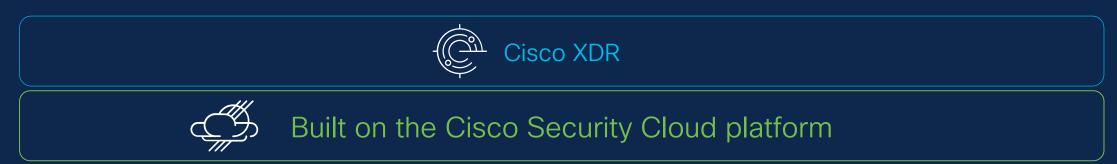


Anatomy of a real attack

Most attacks use a sequence like this...



You need a solution that sees deeply across the entire attack chain



The XDR promise



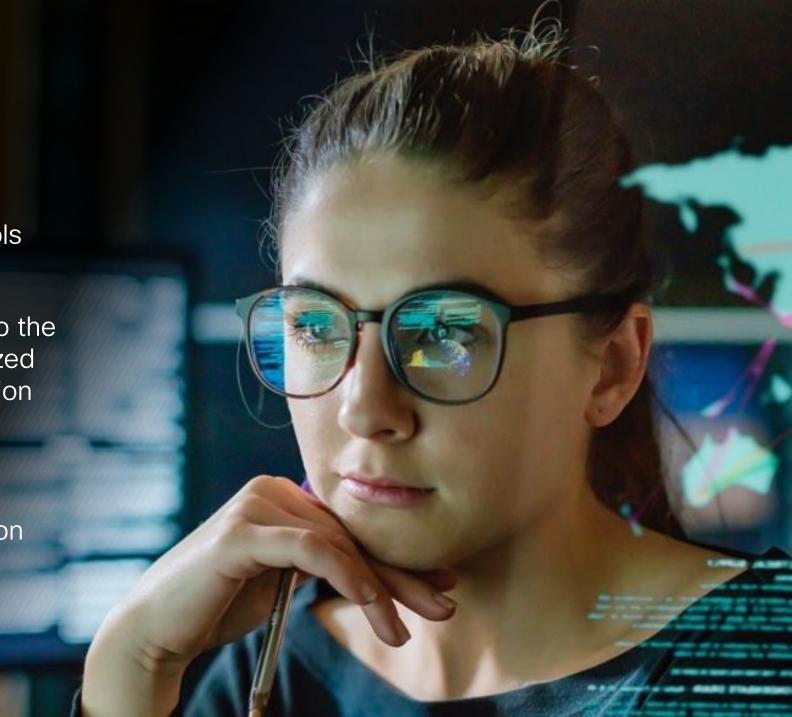
Collection of telemetry from multiple security tools



Application of analytics to the collected and homogenized data to arrive at a detection of maliciousness



Response and remediation of that maliciousness



Only an effective XDR solution can adapt to the changing nature of the threat







Security tools need to focus on the attacker

Turn potential false positives into validated incidents

Focus on initial compromise, lateral movement, privilege escalation and data exfiltration

Simplify with Cisco XDR



Shift the focus to outcomes

XDR-driven outcomes

Detect sooner

Where are we most exposed to risk?

How good are we at detecting attacks early?

Prioritize by impact

Are we prioritizing the attacks that represent the largest material impacts to our business?

Speed up investigations

How quickly are we able to understand the full scope and entry vectors of attacks?

Accelerate response

How fast can we confidently respond?

How much can SecOps automate?

Are we quantifiably getting better?

Key XDR use cases

Focus on the most critical security events for immediate attention



Prioritized incident response

Reduce the time between intrusion and discovery of attackers



On-demand threat hunting

Delivering XDR to meet you where you are



Cisco XDR



Network

Secure Network Analytics

Cisco networking

Cisco Secure Firewall

Third-party networking



User/ endpoint

Secure Endpoint

Secure Client

Email threat defense

Cisco Vulnerability

Management

Third-party endpoint



Cloud

Cisco Attack Surface

Management

Cisco Defense Orchestrator

Cisco Secure Workload

Public cloud logs

Third-party cloud



Application & identity

Cisco Duo

Cisco Identity Services Engine

Cisco Orbital

Cisco Secure Web Appliance

Cisco Umbrella

Third-party identity

Services: Talos Incident Response | Cisco Technical Security Assessments



Leveraging the Cisco security cloud

Combining core capabilities including a frictionless experience, open and extensible ecosystem, and Al-driven automation

Strategic integrations to deliver customer outcomes



11/11/11 CISCO Cloud **Telemetry**

Cisco Talos Threat Intelligence

CISCO **Endpoint**

Telemetry













Cisco Talos

Unrivaled, actionable intelligence for known and emerging threats. Identifies tactics, techniques, and procedures (TTPs) used

Threat Prioritiation **SECURE**

Prioritizing threats based on impact to the business





Network Telemetry Third Darty Threat Intelligence

CISCO

Apps/Email Telemetry



proofpoint.[©]







Easy to buy tiers for Cisco XDR

Cisco XDR Essentials

Full featured XDR

Native integration
of the Cisco security
portfolio enabling
analysts to detect and
respond to the most
sophisticated threats,
plus a repository for
data ingest and retention

Cisco XDR Advantage

Full featured XDR

Commercially supported and curated integrations with select third-party security solutions

Cisco XDR Premier

Full featured XDR

+

Third-party integrations

+

Cisco Secure Managed Detection and Response

+

Cisco Talos Incident Response

+

Cisco Technical Security Assessment

The Cisco approach to XDR

Detect more, act faster, elevate productivity, build resilience



Detect the most sophisticated threats

- Multi-vector detection: network, cloud, endpoint, email, and more
- Enriched incidents with asset insights, threat intel
- Optimized for multi-vendor environments



Act on what **truly** matters, faster

- Prioritize threats by greatest material risk
- Unified context to streamline investigations
- Evidence-backed recommendations





- Focus on what matters and filter out the noise
- Boost limited resources for maximum value
- Automate tasks and focus on, strategic tasks





Build resilience

- Close security gaps
- Anticipate what's next through actionable intel
- Get stronger, everyday with continuous, quantifiable improvement



Increasing demands on Security Teams

Business evolution



Unlimited devices



Distributed workforces

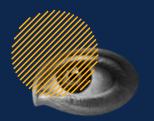


Transition to the cloud



Digital transformation

Security pressures



Too little visibility



Too little integration



Too few experts



Too much exposure

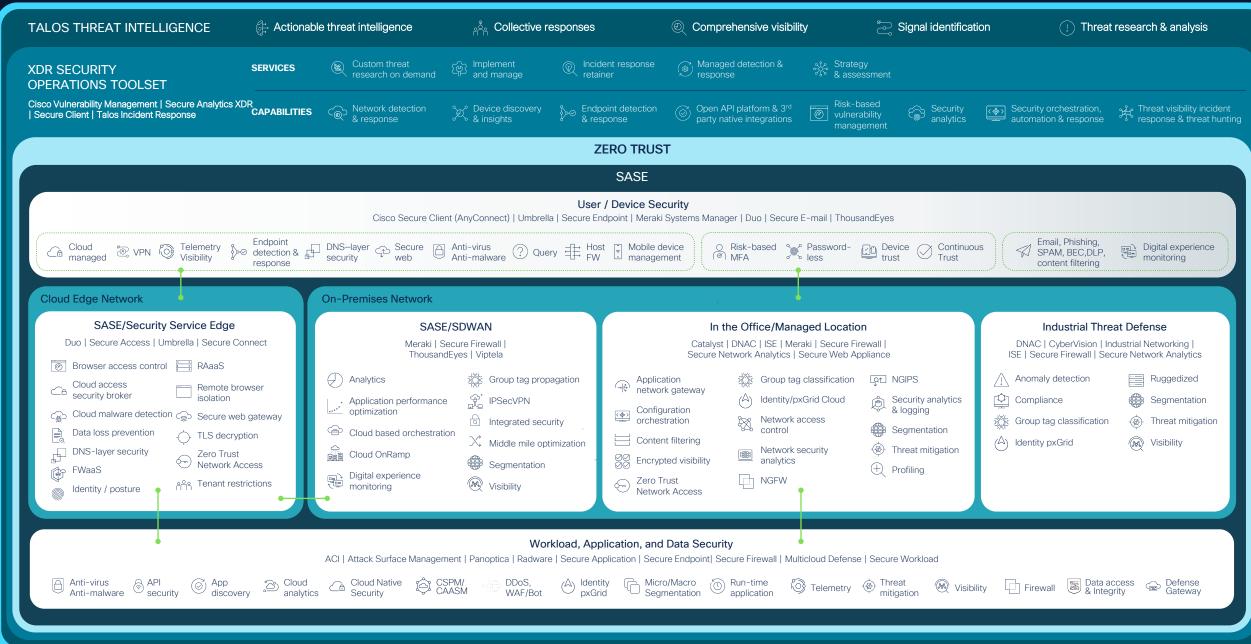


Cybersecurity Domains











Security Innovation is a Patchwork

New threats spawn new vendors, putting the burden on customers.



Result

3.500+ cyber security vendors in the market76 security tools used per enterprise today on average

Source: CyberDB

A Modern Approach to Business Resilience and Employee Satisfaction: Secure Access

Current patchwork approach exacerbates the problem

More products leads to more complexity within your business and IT environment

Exfiltration

Ransomware

Lateral movement

Web threats

Stolen credentials

Spam



76

Average number of security tools per enterprise



78%

Organizations report that high number of security tools is driving cybersecurity complexity*

Customer top priorities address the challenges



Boost Productivity

Empower users to do their best work



Optimize Costs
Address inefficiencies



Minimize Risk

Secure your organization

Hybrid work era creates unmanageable risk

Highly distributed environments make secure connectivity hard



According to "2024 Cybersecurity Readiness Index"

Employees are working and accessing data from anywhere, on multiple devices, and leveraging an array of applications from secured and unsecured networks.

- 85% of companies say their employees access company platforms from unmanaged devices
- 43% of those spend 20% of their time logged onto company networks from unmanaged devices
- 29% reported their employees hop between at least six networks throughout a week



According to "2024 Cybersecurity Readiness Index"

- Hyperconnectivity is creating vulnerabilities. Readiness is critical, as 73% said a cybersecurity incident will likely disrupt their business in the next 12 to 24 months
- The cost can be substantial, as 54% said they experienced a cybersecurity incident in the last 12 months, and 52% of those affected said it cost them at least US\$300,000
- Threats ranging from malware and phishing to ransomware, supply chain, and social engineering cyber attacks

Highly distributed and diverse IT landscape makes secure connectivity hard

41%

Say securing user access to cloud-based applications and mobile devices or cloud-based solutions is their biggest obstacle

86%

See having a consistent operational model across on-prem, private cloud, public cloud, and SaaS as important

85%

Say they value simplicity when it comes to technology management



SASE/SSE approach is the technology foundation

Fundamental to your security strategy for a hyper-distributed world

SASE brings networking & security capabilities into a single-service, cloud-native model to address today's challenges.

plan on adopting SSE in next 2 years





Customer priority use cases

Secure Internet Access





Secure Private Access



Security Service Edge (SSE)

Secure Access from anywhere to everywhere



Introducing an innovative new solution: Cisco Secure Access

Better for users, easier for IT, and safer for everyone



Introducing Cisco Secure Access Proven cloud-native security converged into one service



Protecting 70,000+ customers

More than 220M endpoints

Cisco Secure Access



- Single Console
- Single Client
- Unified Policies

Cisco Secure Access

Modernize your defense with converged cloud security grounded in zero trust



Better for Users
Empower their best work
with a frictionless
user experience



Easier for IT

Lower cost and increase efficiencies



Safer for Everyone Reduce risk and improve

business resilience

Imagine cybersecurity that's safer and easier for everyone



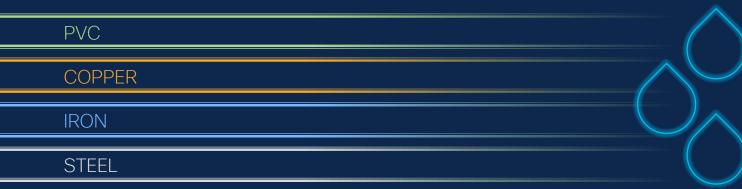
Introducing Cisco Secure Access

Modernize your defense with converged cloud security grounded in zero trust



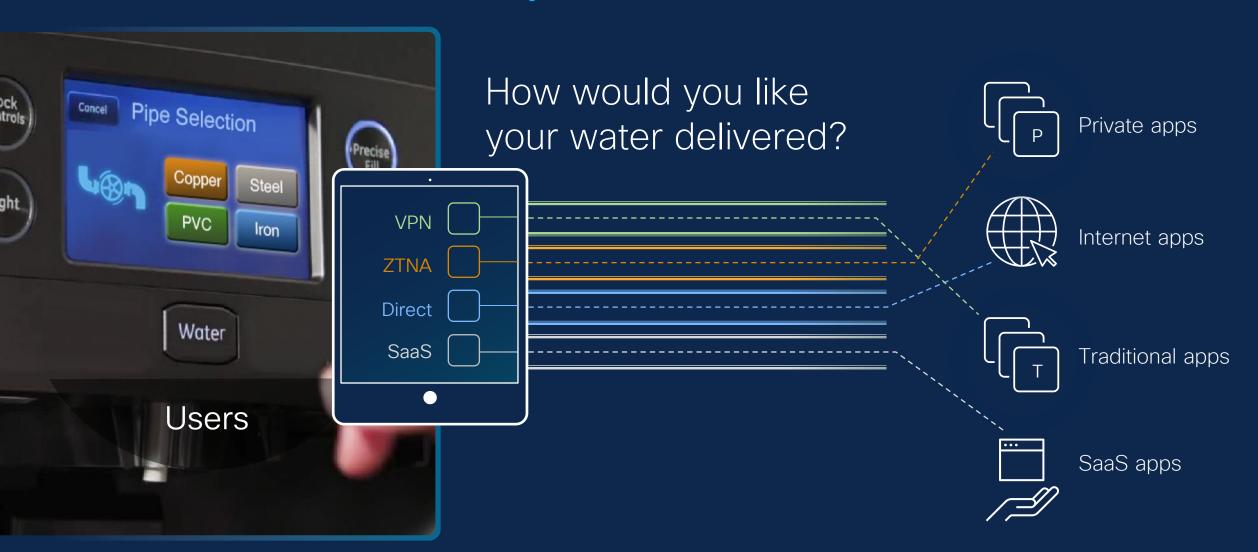




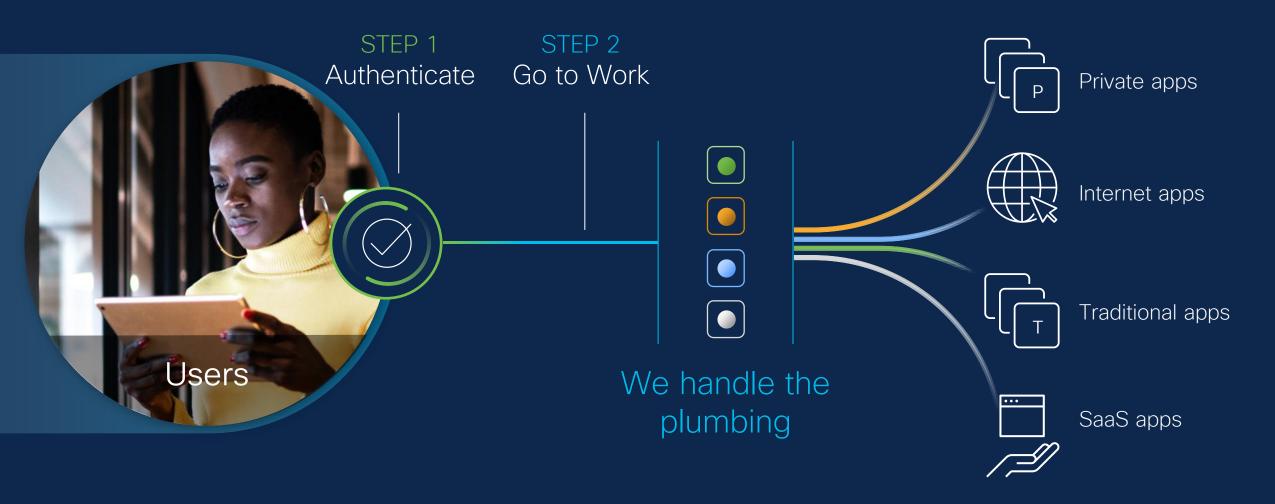




Eliminate unnecessary decisions



Seamless user to app Zero Trust

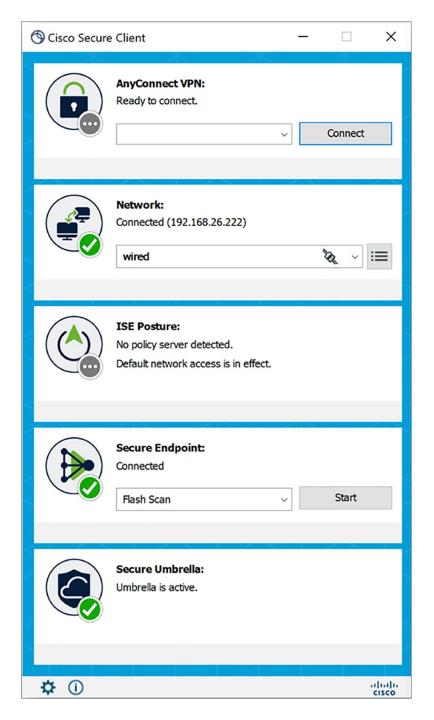


Cisco Secure Client

Unify your stack by consolidating agents

Simplifies security with **ONE agent** across **SASE**, **XDR** and **Zero Trust**

- ONE agent driving operational efficiency
 - Unifies deployment, updates and management
- ONE agent radically reducing agent fatigue
 - Single agent for Secure Endpoint, Umbrella, AnyConnect
- ONE platform
 - Cloud-native, cloud-managed
 - Unmatched customer value as it comes included with:
 - Device Insights for deep visibility of all your endpoints, apps and more
 - · Indicator of device compromise for easy and fast disposition lookup
 - Fast response actions and remediation



Easy migration to Zero Trust Access

- ✓ You set the pace of ZTNA adoption
- ✓ Same client
- ✓ Common policy



VPN as-a-Service

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



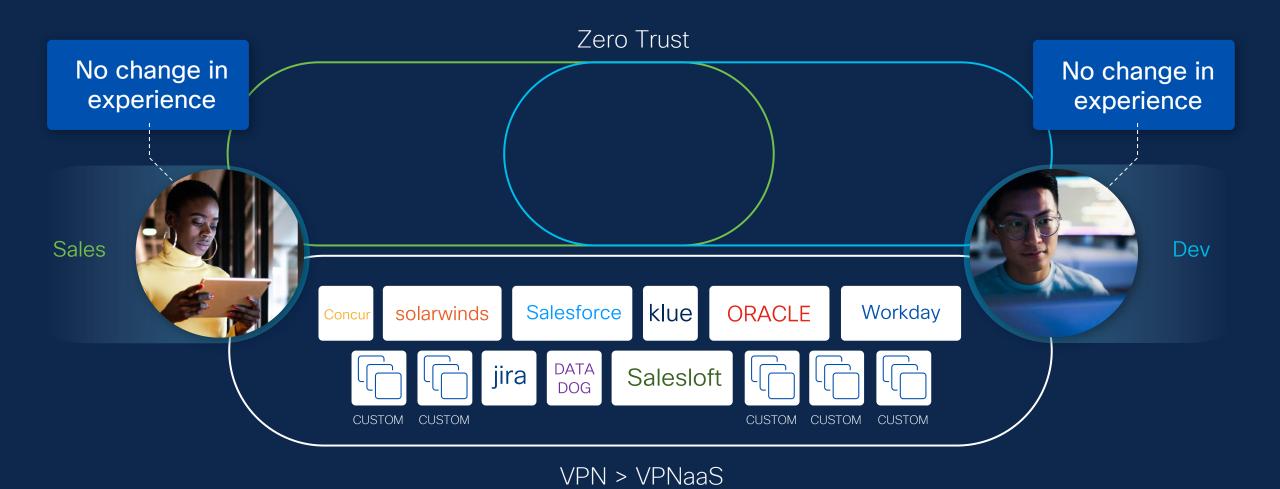
Granular controls at the application level + VPNaaS and Digital Experience Monitoring



Network level access - cannot control at app level

cisco SECURE

Simplifying the journey to zero trust





The Why?

Talos



Why Cisco?



Talos powers Secure Access with intelligence



Collect

Enormous scale and reach for inputs



Analyze

Rapid speed of correlation and detection



Defend

Global distribution and protection

We see more and automate more, so you can block more and respond faster to threats.

2.1M+ malware samples processed daily

625B

web requests resolved daily

new vulnerabilities discovered yearly

- Backed by robust expert team of fulltime researchers and data scientists
- Machine learning and automation intelligence

550 B

security events observed daily



Talos Powers The Cisco Portfolio With Intelligence





Go beyond core Security Service Edge (SSE)

Better connect and protect your business



Cisco Secure Access

Built on the Cisco Security Cloud platform to avoid patchwork IT dilemma



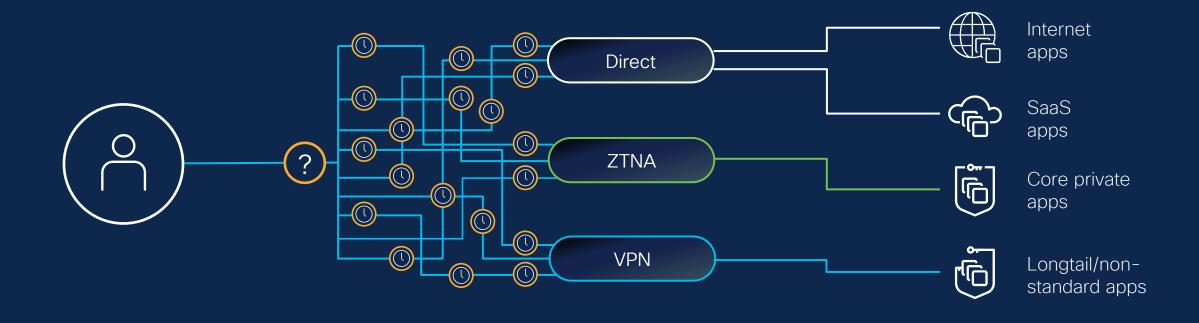
A common platform makes it easier to extend and manage your IT environment with better integration across the Cisco security portfolio and major 3rd-party solutions.

Better for users

Facilitate frictionless workforce experience for better productivity



Users experience fatigue, friction, repetition



- Many connection decisions
- Various processes
- Multiple steps
- Repetitive authentication tasks

49%

Employees frustrated with tech

Employees leaving job because of tech experience

cisco SECURE

Easy, frictionless user experience

Connect to a network 2 Get to work Internet apps SaaS apps Cisco Secure Access Core private apps Longtail/nonstandard apps

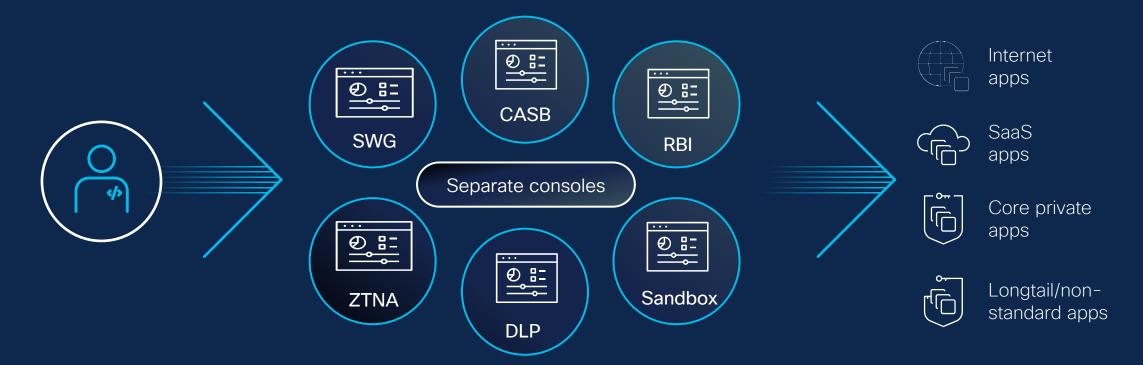


Easier for IT

Lower costs and improve efficiencies



The multi-vendor approach is problematic



Multiple products increase cost and inefficiencies

- Licenses/hardware
- Policy management
- Client management
- Reporting
- Elevated staffing levels



of enterprises plan on consolidating vendors for better risk posture

Easier for IT

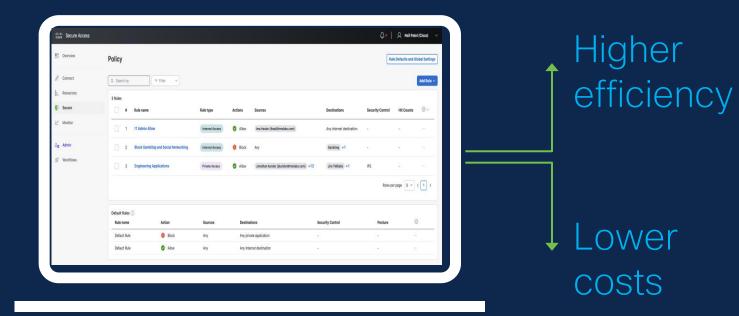
Simplification with fewer consoles



Secure Access converges multiple consoles into one

Easier for IT

Converged cloud security for lower cost and improved efficiencies



- Single agent, console, identity and posture, policy management
- Digital Experience Monitoring (DEM)*
- Single SLA

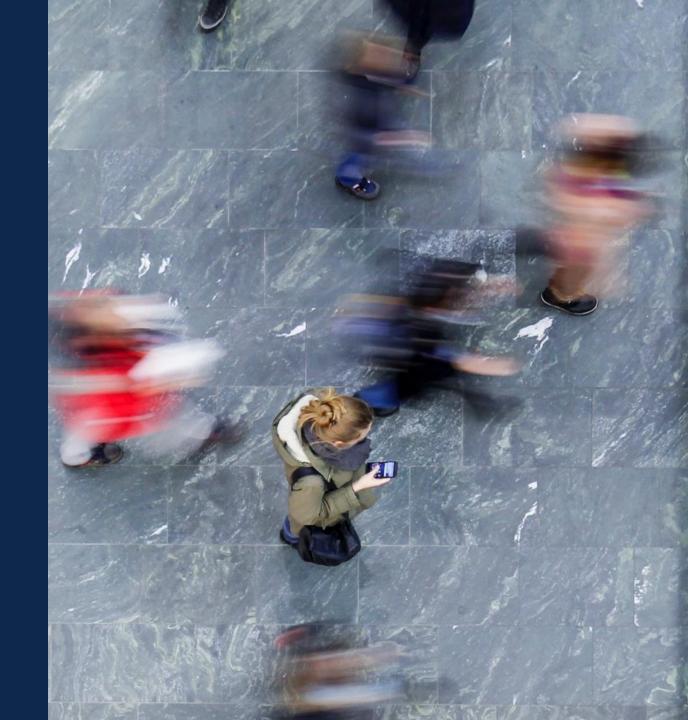
- Consolidated licensing
- Less hardware
- Ecosystem

One place to see traffic, set policies, and analyze risk.



Safer for everyone

Reduce risk and improve business resilience



Advanced cybersecurity benefits

Block more, investigate faster, and remediate fully



Improved security efficacy

- Deeper visibility and insights
- Reduced alert volume
- Stronger threat correlation
- Faster detection

- High analyst effectiveness
- Least privileged app access
- Reduced exposure

Reduction in successful attacks



Zero Trust Network Access (ZTNA) journey

Intelligent private application access from anywhere



Benefits

- App-specific access
- Undiscoverable IP address
- Least privileged user access

- Reduced threat surface
- Automated selection of ZTNA or VPNaaS

- Posture verification
- Access segmentation



If it's connected, it's protection

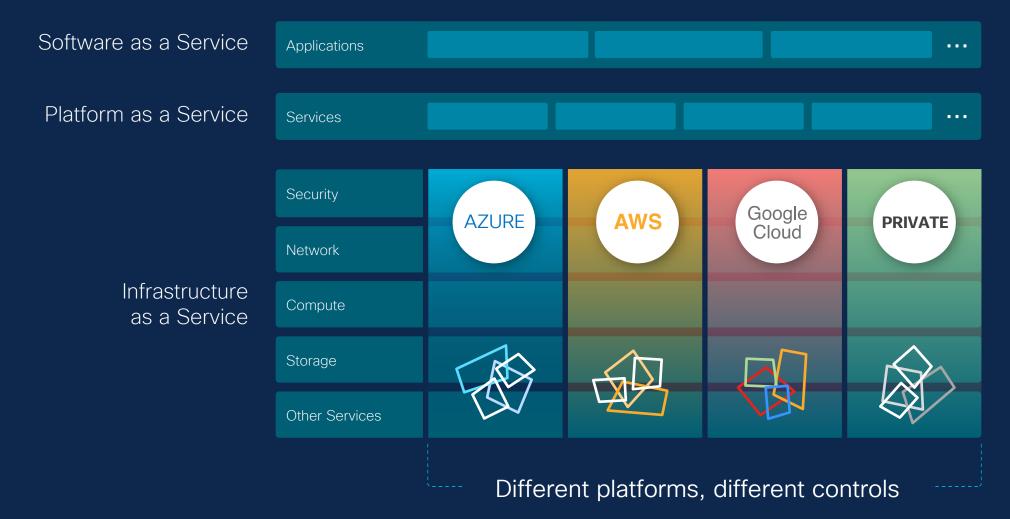


The Next Step:

Cisco Multicloud Defense

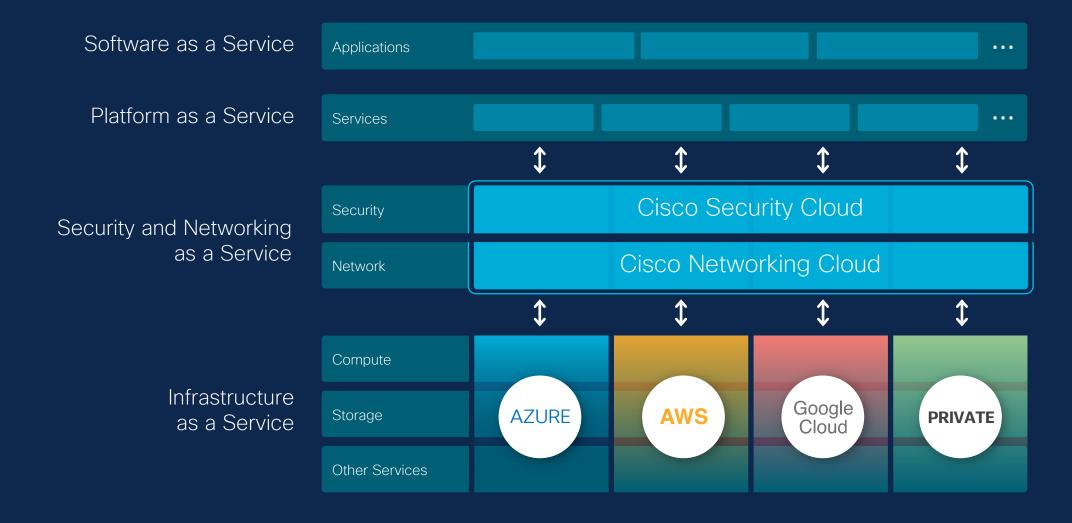


Multiple clouds makes tool sprawl worse





Introducing Cisco Security Cloud





uluili SECURE