



Cisco Tech Day

Denver

March 3, 2026

Protect your applications everywhere



Cisco Tech Day
Denver

Hybrid Mesh Firewall with Cloud Protection Suite



Andrew Merica

Security Solutions Engineer

M.S. in Cybersecurity and Information Assurance – CISSP – USAF Vet
US Commercial West – Northwest – Denver, CO

Email: america@cisco.com

LinkedIn: [america0x79B](https://www.linkedin.com/in/america0x79B)

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Agenda

1. Why now?
2. Security Driven Outcomes
3. Secure Firewall 10.0
4. End-to-End Segmentation
5. AI Defense
6. Key Takeaways

Securing the enterprise is increasingly challenging

Highly distributed applications

Nothing can be trusted

More vulnerabilities, exploited faster

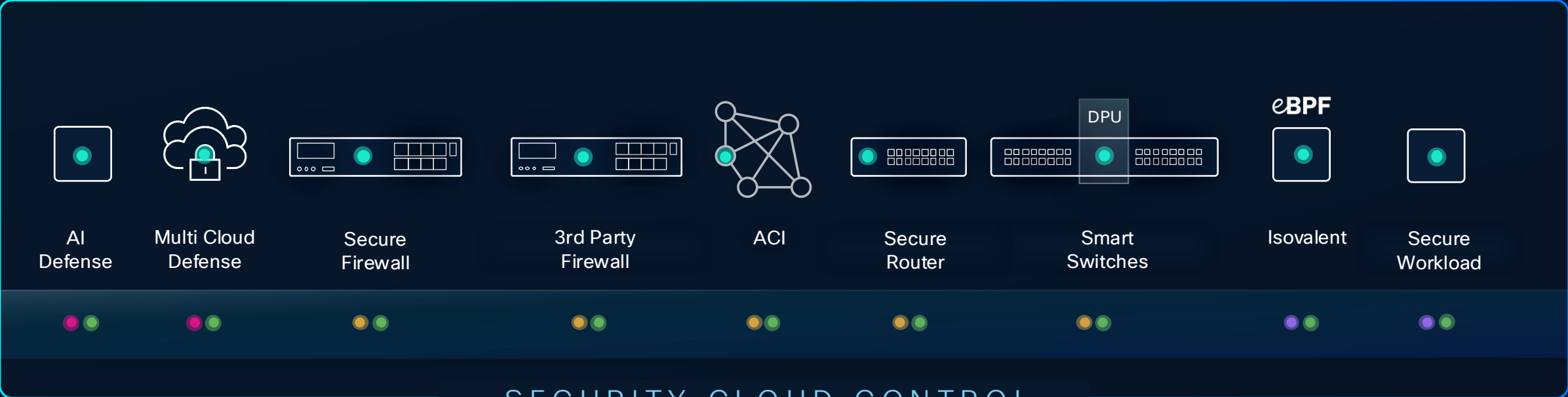
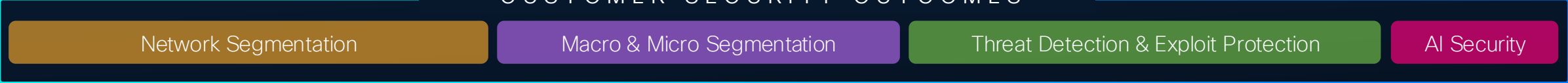
← AI adoption makes it more challenging →

Firewalling needs to evolve to meet today's challenges

	Stateful Firewall 1990-2007	Next Generation Firewall 2008-2024	Hybrid Mesh Firewall 2025->
Drivers	Growing internet access Basic attacks Need perimeter control	Rise of SaaS/cloud apps Mobile users App layer threats	Increasingly distributed apps Rise of AI Zero trust imperative
Needs	Tracks connection state Filters by IP/port Basic traffic control	App & user aware Integrated threat prevention SSL/TLS decrypt	Hyper-distribution Integrated AI protection AI-powered management

Cisco Hybrid Mesh Firewall

CUSTOMER SECURITY OUTCOMES



SECURITY CLOUD CONTROL

Write policy once, enforce across the mesh

Security Cloud Control

Define policy once and enforce anywhere

Cisco Firewalling

AI Defense

3rd Party Firewalls

Secure Firewall

Secure Workload

Hypershield

Secure Access (FW as a service)

Secure Router NGFW

Security Cloud Control

Industry's first multi-vendor intent-based policy



Absorb and optimize
existing rules

Change enforcement
points, not policy

No rip and
replace

Industry recognition

Gartner

2025 Magic Quadrant for
Hybrid Mesh Firewall

Visionary



2025 IDC MarketScape:
Worldwide Enterprise
Hybrid Firewall

Leader

Customer recognition

Gartner
Peer **Insights**™

Network Firewalls

Overall Rating

4.9/5



* vs Palo Alto Networks 4.6, Fortinet 4.7. All scores for last 12 months as of Jan 29, 2026.

Security Driven Outcomes and Use Cases

Security Outcomes

Network Zone Based Segmentation

Macro & Micro Segmentation

AI Security

Threat Detection & Exploit Protection

Cisco Hybrid Mesh Firewall

CUSTOMER SECURITY OUTCOMES

Network Segmentation

Macro & Micro Segmentation

Threat Detection & Exploit Protection

AI Security

Security Use Cases

Network (L4 /L7) Zone based Segmentation

Enhances security, performance, and compliance by dividing networks into application-aware zones. It minimizes the attack surface, controls access, limits congestion and supporting zero-trust with granular controls and visibility.

Macro & Micro Segmentation

Reduce risk by enforcing least-privilege access across networks and applications. Cisco strengthens this with AI-driven security that adapts to application behavior, ensuring protection without sacrificing agility.

DC Edge - Perimeter Firewall

Safeguard north-south traffic by blocking external threats, securing critical DC workloads, enforcing least-privilege access, supporting compliance, and ensuring uninterrupted business operations.

L4 Switch Fabric Segmentation

Enable high-performance, distributed stateful segmentation and enforcement directly within the data center fabric, simplifying network security architecture while reducing costs and improving scalability and operational efficiency

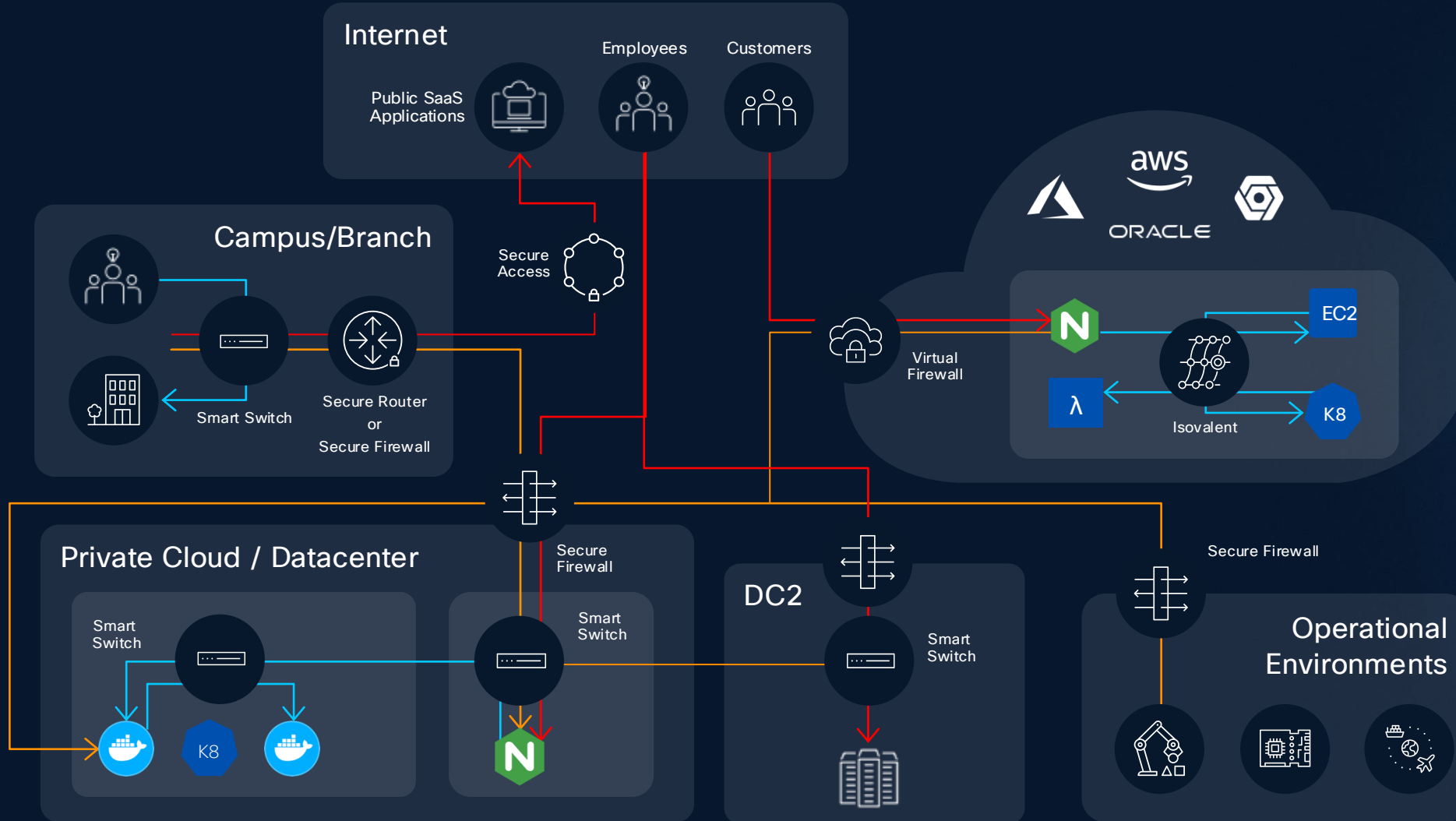
AI Model Protection

Safeguards intellectual property and development investments, ensures the integrity of AI-driven decisions, supports compliance with data and AI ethical standards and minimize financial and reputational risks.

Cloud Edge

Deliver consistent, automated, and scalable security across hybrid and multi-cloud environments, reduces operational complexity, enhances threat visibility, and enables scalable security enforcement closer to the cloud application workloads.

Cisco Hybrid Mesh Firewall goes broader and deeper



Secure connectivity between campus, branch, and private cloud

Securely connect campus to Internet and SaaS apps, and employees to private apps

Apply full security stack (IPS, WAF, DLP) at virtual public cloud (VPC) edge

Security inline at workload, microservice, and switch port

Secure Firewall

Firepower Threat Defense 10.0 for every use case

Superior visibility beyond deep packet inspection



Security
Intelligence



Encrypted
Visibility Engine



Snort 3
with SnortML



QUIC
Decryption



Advanced
Malware
Protection

Cisco Talos global threat intelligence

Our job is your defense.



Global Network Visibility



Analyzing **886B+** security events daily



from **46M+** devices



across **193** countries



in **46+** languages

A legacy of innovation. AI-optimized services for the future.

Talos Intrusion Prevention

65K Rules targeting threat actor behavior

Talos Vulnerability Research

200+ vulnerabilities discovered annually

Talos Web Filtering

5B malicious URIs blocked annually

Talos Malware Protection

95M malware samples blocked monthly

Talos DNS Security

400M malicious domains blocked monthly

Talos Anti-Virus

85K malicious files found daily

Encrypted Visibility Engine

Visibility for malicious flows in encrypted traffic

1B+TLS

fingerprints,
10K+ malware
samples daily

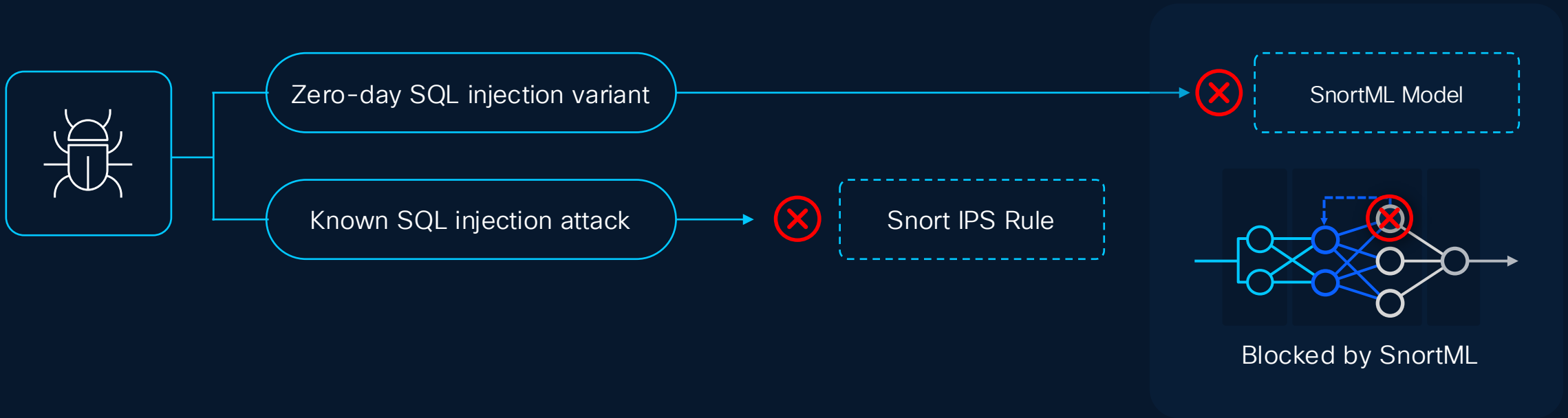


Machine learning
(ML) technology

10x

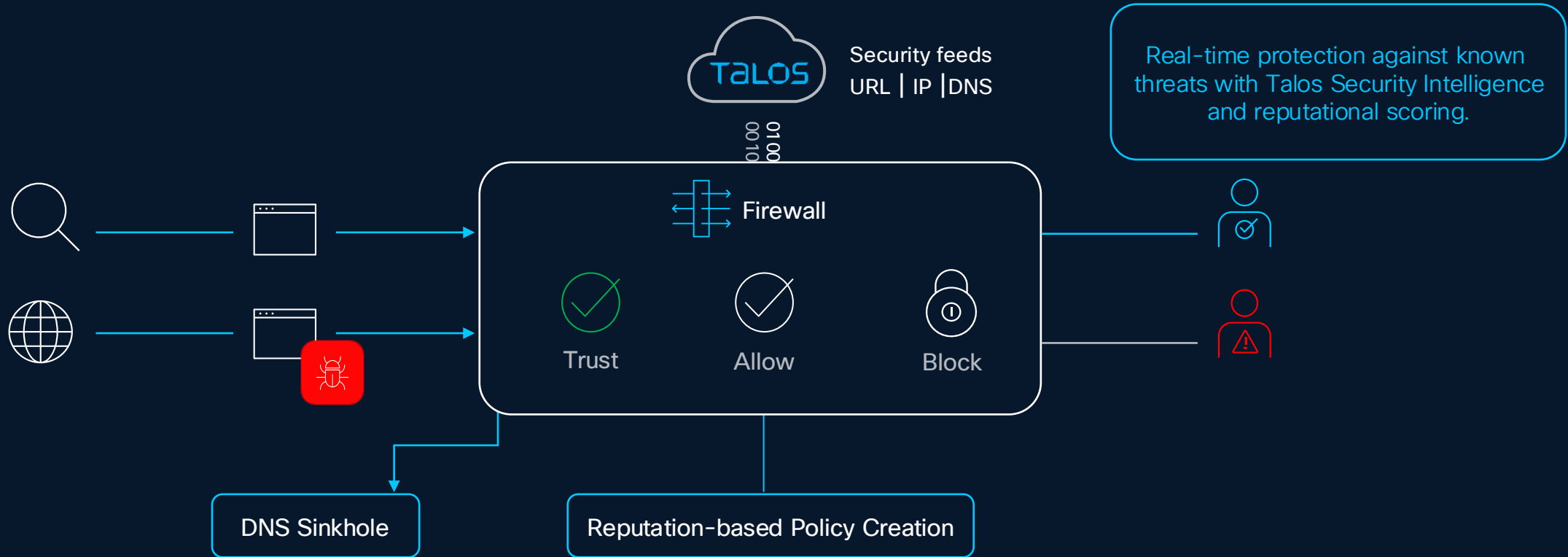
performance
with selective
decryption

Stop known and unknown attacks



Supercharge access control

Enhanced by Talos Security Intelligence and AppID



Security Intelligence:
Up-to-the-minute protections from known-bad IP/URL/DNS

Application ID:
Identify and control over 7,300+ pre-defined apps

AVC with OpenAppID:
Easily create custom application detectors

URL Reputation:
Allow/Block sites based on reputational scoring from Talos

Firewalls for every use case

ISA 3000 Series



≤0.4Gbps NGFW

200 Series



1.5Gbps NGFW

1010 & 1100 Series



≤3Gbps NGFW

1200 Compact Series



≤9Gbps NGFW

1200 Series



≤18Gbps NGFW

3100 Series



≤45Gbps NGFW
16x Clustering

4200 Series



≤145Gbps NGFW
16x Clustering

6100 Series



520-630Gbps NGFW
16x Clustering

IOT

Branch

Campus / Data Center

Private Cloud



HyperFlex

NUTANIX

KVM

openstack



VMware ESXi

Public Cloud



Google Cloud Platform



rackspace technology

ORACLE
CLOUD INFRASTRUCTURE

EQUINIX



Alibaba Cloud

alkira

Gov/IC Cloud



Google Cloud Platform

Multicloud Defense Deploys FTDv



- Comprehensive visibility of clouds, assets, and their risks
- Cloud-agnostic automation and orchestration
- Automatically deploy, scale, and heal, from Multicloud Defense
- Hourly price; unlike other offers based on size and bandwidth
- Or use with your existing FTDv licensing

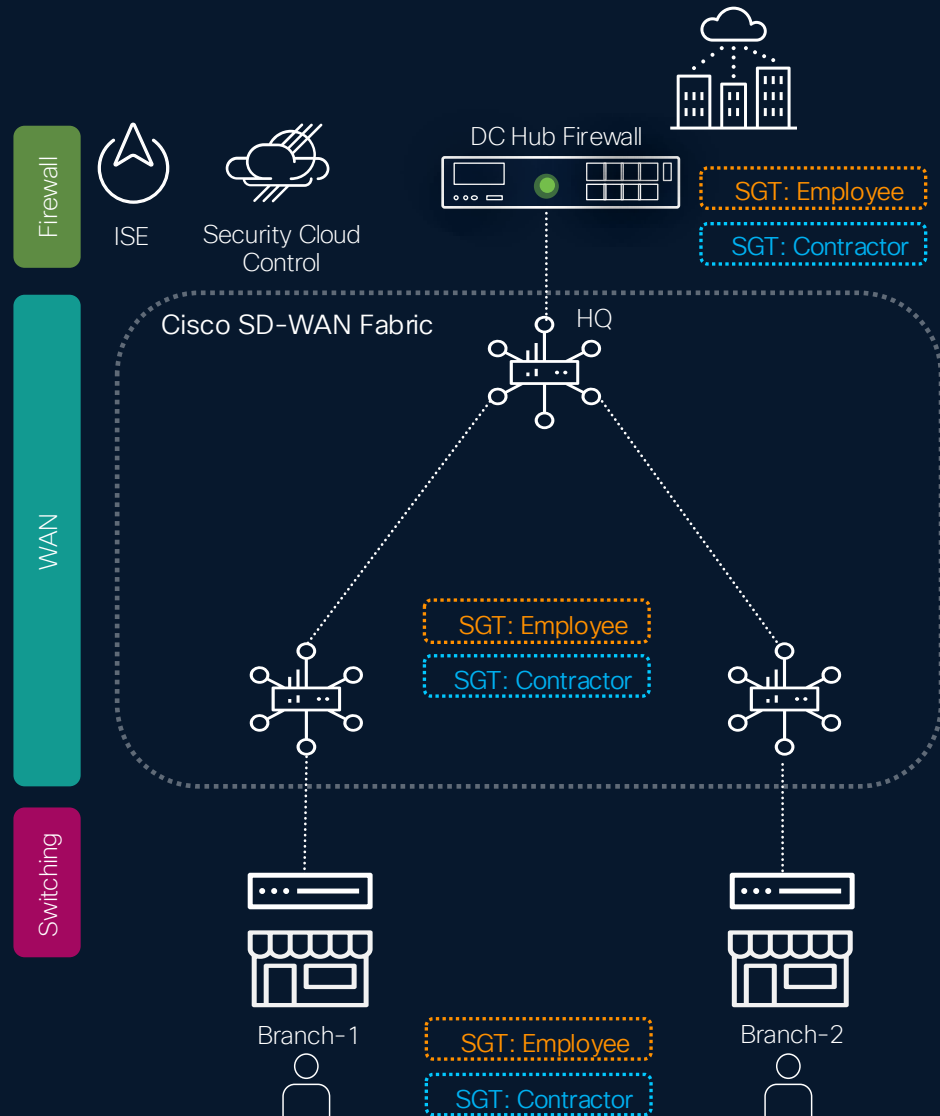
End-to-End Segmentation

End-to-End Segmentation

Network Segmentation in Branch using Firewall and ISE

Network (L4 /L7) Zone based

Branch Segmentation Reference Architecture



Objective

This architecture simulates a real-world Enterprise WAN environment designed to showcase the capabilities of Cisco Secure Firewall with Cisco SD-WAN in providing a zero-trust segmentation architecture.

It demonstrates how the Identity based segmentation propagates from the User Onboarding through SD-WAN network to the DC Hub Firewall where role-based policy is enforced.

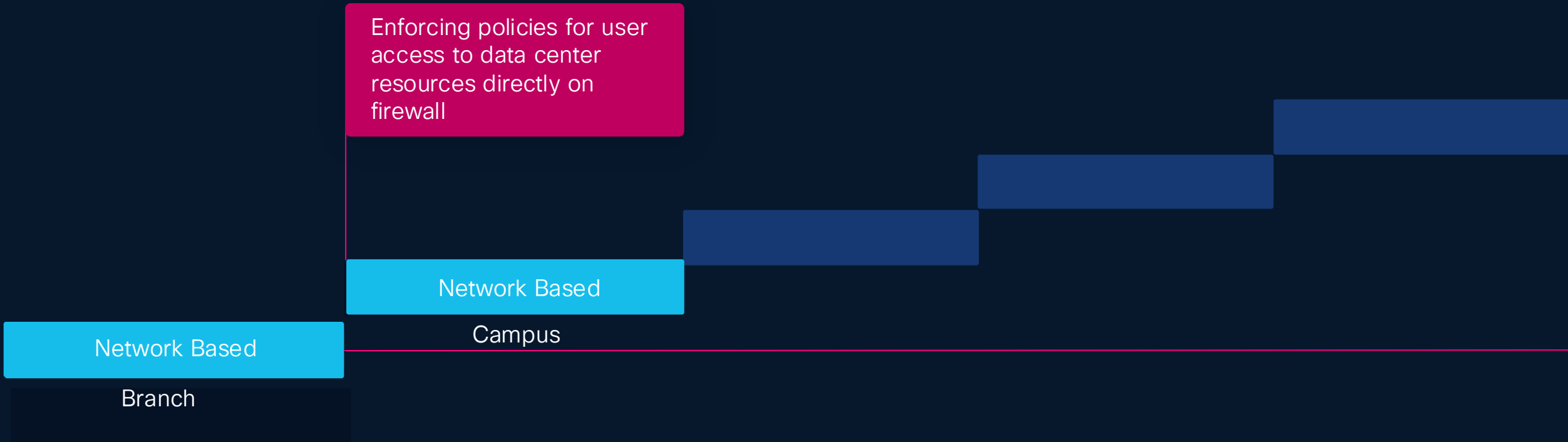
Architecture Layout

- **Security Cloud Control** – Unified plane for firewall policy control and visibility management
- **User** – Emulate Malware threat that can be detected and user can be quarantined
- **Internet** – The boundary of Internet (untrusted zone) and the data center (protected zone)
- **Firewall** – The security defense for the campus
- **SD-WAN** – WAN connectivity offering improved application aware policies and enhanced security
- **Switching** – Enforce VLAN segregation and form part of the trustsec architecture
- **ISE** – The network access control and Security Group Tag policy implementation

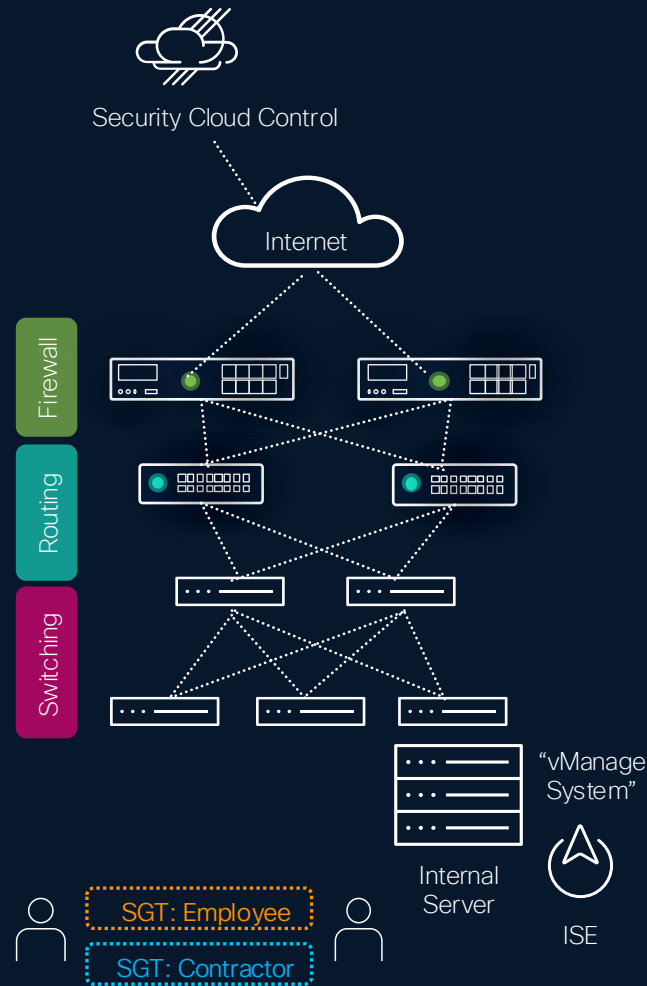
Scenarios

- **SGT Propagation Focus**– An employee gets onboarded on the network upon getting authenticated , an IP and an SGT tag gets assigned based on the role of the employee. Also a contractor comes in to fix the IoT devices at multiple branches and connects to LAN network, ISE assigns a Contractor SGT for the connection, ISE policy only allows the contractor to only access IoT device and internet access. Administrator restricted the contractor access at the DC Hub Firewall enforces policy to only allow internet access and will block access if they try to access Intranet server.

End-to-End Segmentation



Campus Segmentation Reference Architecture



Objective

This architecture simulates a real-world enterprise campus environment designed to showcase the capabilities of Cisco Secure Firewall with Cisco ISE in providing a zero-trust segmentation architecture.

It demonstrates how the firewall inspects and controls both inbound threats from external sources and outbound data flows, ensuring secure communication within the enterprise and to external networks while preventing unauthorized access and data exfiltration.

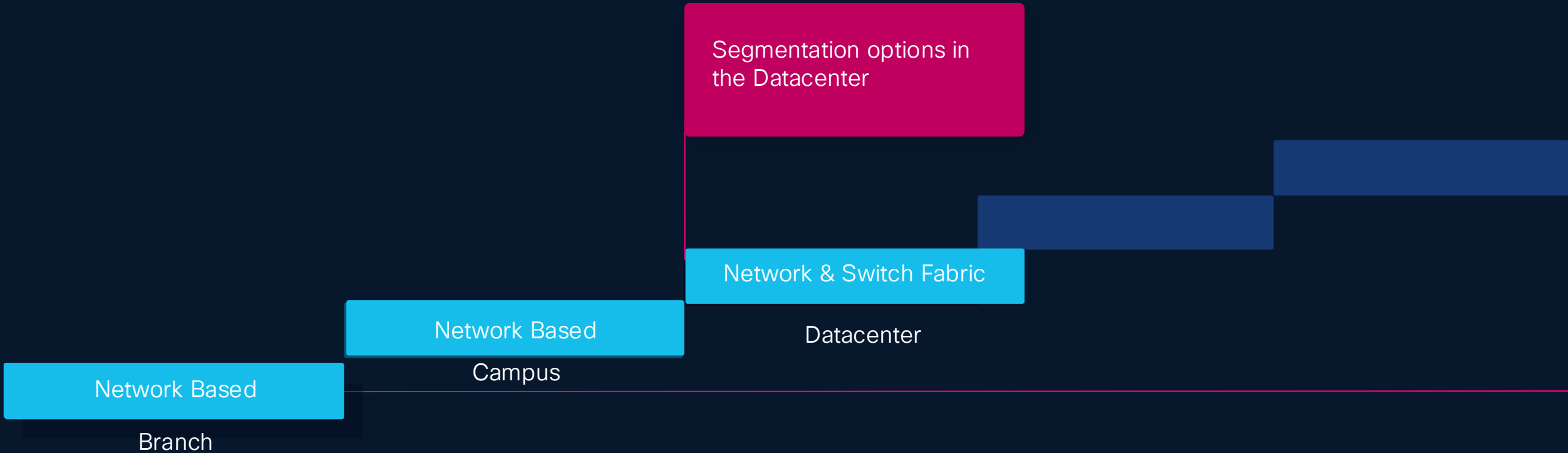
Architecture Layout

- **Security Cloud Control** – Unified plane for firewall policy control and visibility management
- **User** – Emulate Malware threat that can be detected and user can be quarantined
- **Internet** – The boundary of Internet (untrusted zone) and the data center (protected zone)
- **Firewall** – The security defense for the campus
- **Routing** – Support traffic redirection between firewall and internal enterprise environment
- **Switching** – Enforce VLAN segregation and form part of the trustsec architecture
- **ISE** – The network access control and Security Group Tag policy implementation

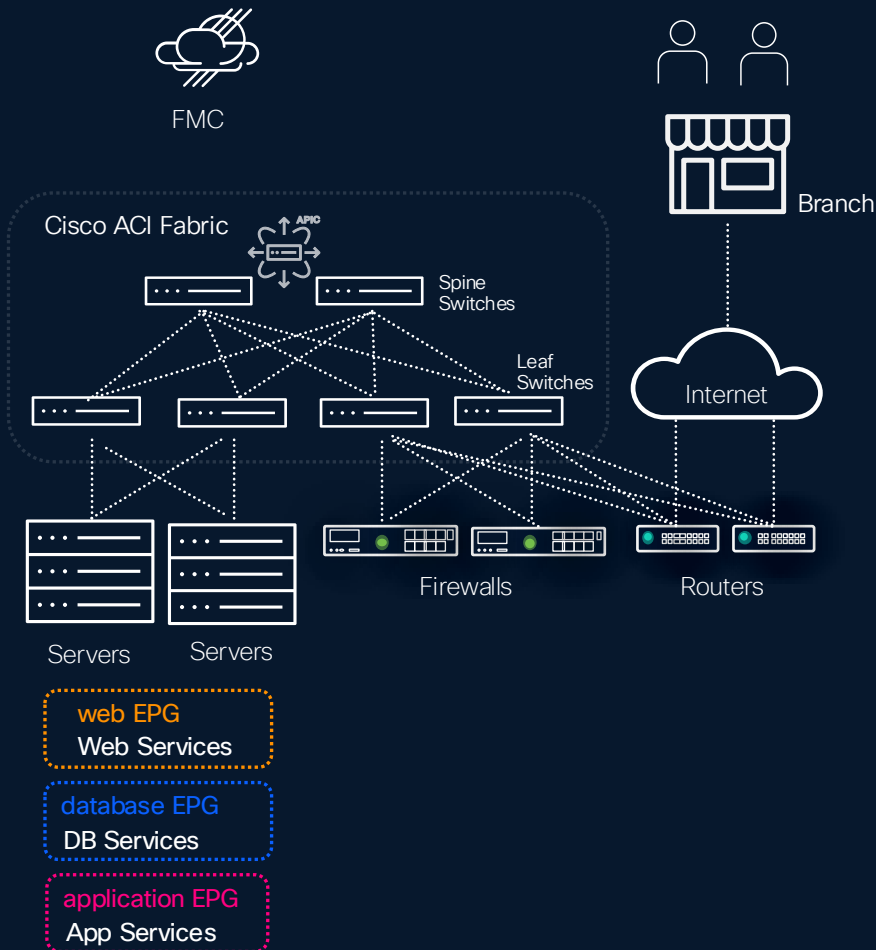
Scenarios

- **Rapid Threat Containment** – This demo uses the firewall to trigger an IPS rule on malicious traffic from sales user to the intranet server. The firewall send notification to ISE of this event. ISE assigns the “Quarantines System” SGT. Subsequent traffic is blocked at the firewall on the TAG.
- **Context Aware Access** – Contractor connects to LAN network, they get redirected to a guest portal hosted by ISE, ISE authenticates the guest. contractor user is assigned “Contractor” SGT, policy only allows internet access. Firewall enforces policy to only allow internet access and will block access if they try to access vManage system.

End-to-End Segmentation



Datacenter Segmentation Reference Architecture



Objective

This architecture simulates a real-world Datacenter environment designed to showcase the capabilities of Cisco Secure Firewall with Cisco ACI in providing a zero-trust segmentation architecture.

It demonstrates how the firewall inspects both north-south and east-west communication within a data center that is architected around Cisco ACI fabric.

Architecture Layout

- **Security Cloud Control** – Unified plane for firewall policy control and visibility management
- **Firewall** – the security defense for the data center communications
- **Cisco ACI Fabric** – Enforce segmentation with End Point Groups to create a zero-trust architecture, this includes a control plane function called APIC and for data plane there a Nexus switches
- **Routing** – WAN routers at both DC and branch location
- **Users** – Different types of users, Contractor and Employee

Scenarios

- **Rapid Threat Containment** – This demo uses the firewall to trigger an IPS rule on malicious traffic being downloaded to servers connected to the ACI fabric. The firewall learns the EPG information from the APIC integration and can configure policies based on the EPGs. The intrusion event is generated and sent to FMC revealing information about infected host. The event is configured to trigger remediation module for APIC that uses NB API to contain the infected host in ACI fabric. APIC quickly quarantines the infected “App server” into an isolated “quarantined” EPG.

L4 Switch Fabric Segmentation

Nexus Smart Switch + Hypershield



Cisco Nexus 9000 Smart Switch



- Rich NX-OS Features and Services
- High-speed connectivity and scalable performance
- Optimized for latency and power efficiency



Routing
Switching



EVPN/MPLS/
VXLAN/SR



Rich
Telemetry

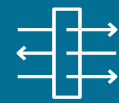


Line-rate
Encryption



Power
Efficiency

- Software-defined Stateful Services
- Programmable at all layers: add new services without HW change
- Scale-out services with wire-rate performance
- Power down DPU complex when not used



Large-Scale
NAT



IPSEC
Encryption



Distributed
Firewall



Event-Based
Telemetry



DoS
Protection

Separate workflows for NetOps and SecOps

Nexus Dashboard

The Nexus Dashboard interface displays a table of smart switches under the 'Inventory' tab. The table includes columns for Switch, Model, Smart switch, Hypershield tenant, Hypershield connectivity status, Anomaly level, Advisory level, IP address, Config-sync status, and Serial. The switches listed are smart-switch-101 through smart-switch-106, and leaf-106 through leaf-109.

Switch	Model	Smart switch	Hypershield tenant	Hypershield connectivity status	Anomaly level	Advisory level	IP address	Config-sync status	Serial
smart-switch-101	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.15	Out-of-sync	FCH1801
smart-switch-102	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.16	Out-of-sync	FCH1801
smart-switch-103	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.17	Out-of-sync	FCH1801
smart-switch-104	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.18	In sync	FCH1801
smart-switch-105	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.19	In sync	FCH1801
smart-switch-106	N9324C-SE1U	Yes	Nexusdashboard-user2	Connected	Healthy	Healthy	10.30.12.20	In sync	FCH1801
leaf-106	N9K-C9336C-FX2	No	Nexusdashboard-user2	NA	Healthy	Healthy	174.29.21.123	In sync	FDO202:DVJ
leaf-107	N9K-C9336C-FX2	No	Nexusdashboard-user2	NA	Healthy	Healthy	10.30.12.21	In sync	FDO202:DVJ
leaf-108	N9K-C9336C-FX2	No	Nexusdashboard-user2	NA	Healthy	Healthy	10.30.12.22	In sync	FDO202:DVJ
leaf-109	N9K-C9336C-FX2	No	Nexusdashboard-user2	NA	Healthy	Healthy	10.30.12.23	In sync	FDO202:DVJ

Context sharing for troubleshooting*



Security Cloud Control

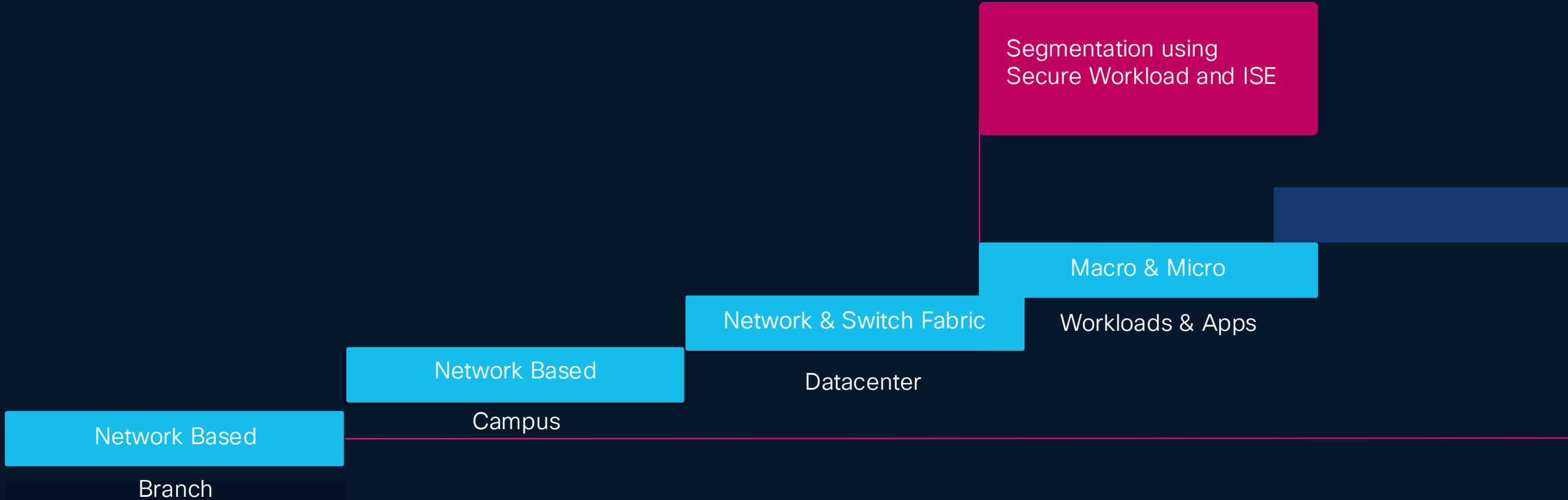
The Security Cloud Control (SCC) interface shows an overview of security metrics. Key sections include:

- Get started with Hypershield**: Follow the tasks listed below to get started.
- Vulnerabilities**: 2 Total exploitable workloads. View
- Mitigations**: 1 Shield available. View
- Total Assets**:
 - Tesseract Security Agents: 2
 - Network-based Enforcers: 1
 - Policies: 2
 - Policy groups: 4
 - Network objects: 12
 - User-defined groups: 0
 - Hosts: 2
 - Pods: 13
 - Containers: 19



Smart Switch

End-to-End segmentation



Integrated policy

ISE

Secure Workload

Cloud Instances & SGs



Endpoint Context

Campus/Branch

Data Center

User

Device



Bob, member of Employee, Executive Team

Device: Laptop
Attributes:
Corp Asset, Win11, Posture Compliant

Wireless AP
ISE Access Control
Assigned Policy: SGT Employee compliant, VLAN Corp, ACCL Corp

Cisco Switch
Policy: Allow SGT
Employee, Protected Web App, ACL Web



Cisco Firewall
Policy: Enforce SGT policy, App aware access, inspect, IPS, Threat Defense

Cisco ACI Fabric
Policy: Enforce SGT-EPG Policy

Web Tier

App Tier

DB Tier

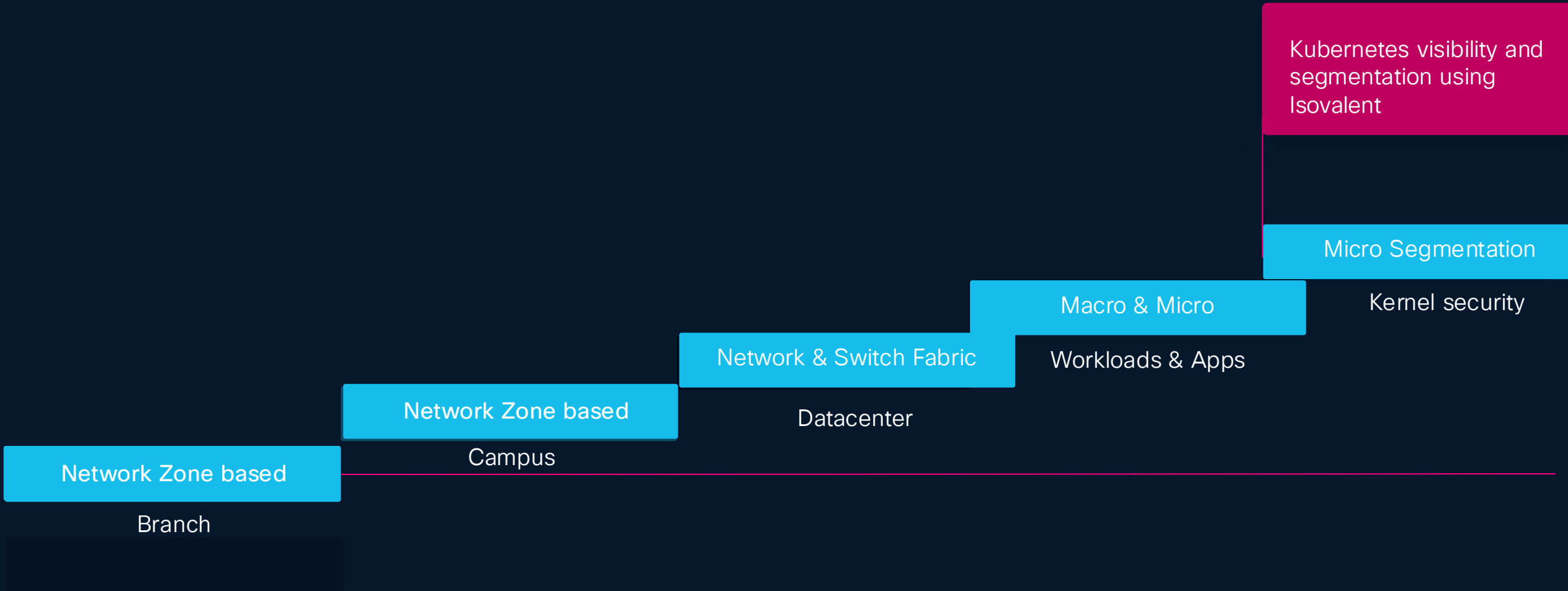
FTDv

PCI Tier

Workload to workload micro segmentation

Group to group micro-segmentation

End-to-End Segmentation

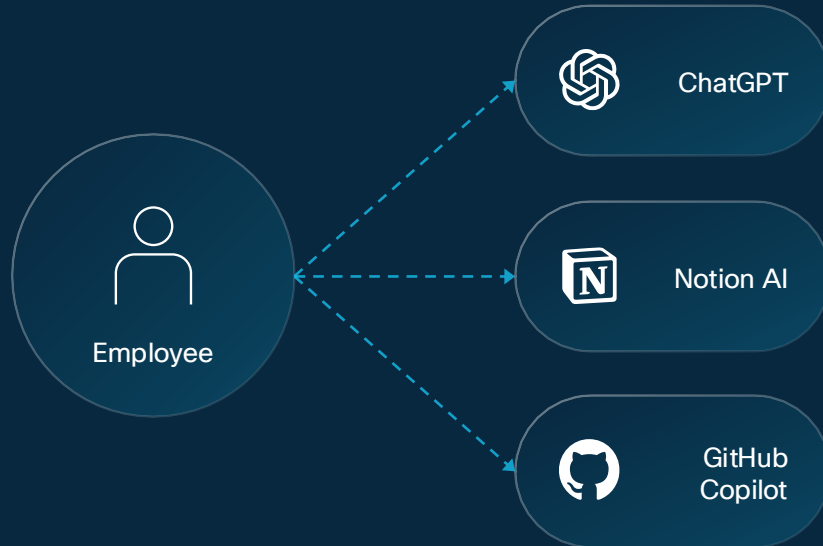


AI Model Security

Two distinct areas of AI risk

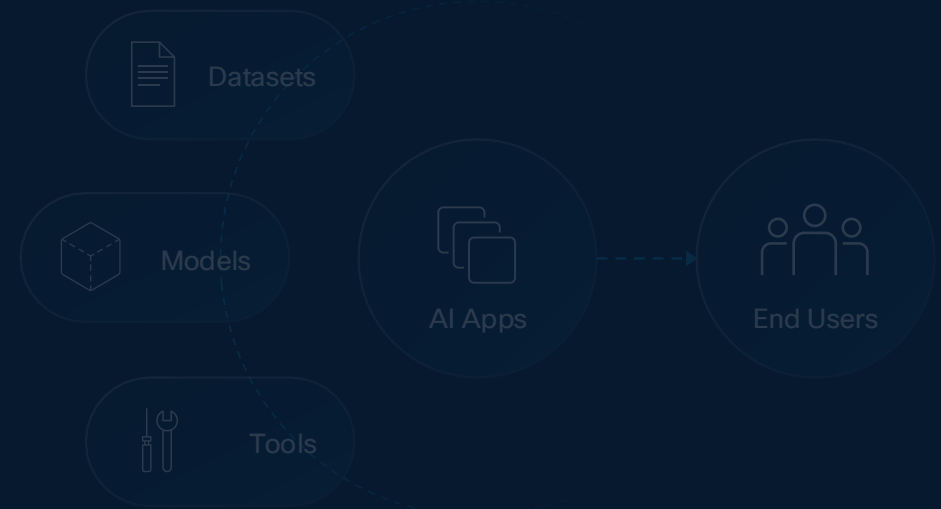
Third-Party AI Tools

Manage employee use of **third-party AI tools**, preventing data leakage and other business risks, with Cisco Secure Access.



First-Party AI Applications

Enable end-to-end secure development of **first-party AI applications** across your business with Cisco AI Defense.



Secure Access: SSE that truly understands AI

Powered by AI Defense models to *understand intent*

Intelligent Protection

- Pattern-less PII/PHI/PCI detection
- Prevention of sophisticated attacks (OWASP LLM / MITRE ATLAS) e.g., prompt injection
- Intent-based toxicity detection

Zero-Friction Security

- Built into Secure Access*
- Single unified policy framework
- No additional infrastructure

287 Total Events Viewing activity from Jan 8, 2025 at 3:30 PM to Feb 7, 2025 at 3:30 PM

Event Type	Severity	Identity	Direction	Destination	Rule	Action	Detected	Detected
AI Guardrails	High	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 5, 2025 at 1:15 AM	Feb 5, 2025 at 1:15 AM
AI Guardrails	Critical	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI Guardrails - 1	Blocked	Feb 5, 2025 at 1:15 AM	Monitored
AI Guardrails	Critical	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI Guardrails - 1	Blocked	Feb 5, 2025 at 1:14 AM	Monitored
AI Guardrails	High	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 5, 2025 at 1:14 AM	Monitored
AI Guardrails	High	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 5, 2025 at 1:05 AM	Monitored
AI Guardrails	High	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 5, 2025 at 12:57 AM	Monitored
AI Guardrails	High	Bob SWG (bob@swginawsd...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 5, 2025 at 12:48 AM	Monitored
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored		
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored		
Real Time	Low	52.12.127.197	Upload	Datadog	New Rule	Monitored		
Real Time	Low	52.12.127.197	Upload	Datadog	New Rule	Monitored		
Real Time	Critical	52.12.127.197	Upload	Mozilla Firefox	Raja_test_rule	Blocked		
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 4, 2025 at 10:56 PM	Prompt
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 4, 2025 at 10:54 PM	Classification
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 4, 2025 at 10:49 PM	Safety guardrail
AI Guardrails	High	Raymond Wei (raywei@cisc...)	Prompt	OpenAI ChatGPT	AI Demo	Blocked	Feb 4, 2025 at 10:49 PM	1 Match Toxicity
AI Guardrails	High	Raymond Wei (raywei@cisc...)	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 4, 2025 at 10:49 PM	how to make a bomb
AI Guardrails	High	52.12.127.197	Prompt	OpenAI ChatGPT	AI monitor	Monitored	Feb 4, 2025 at 10:46 PM	Total Size: 18.0 B

Classification

Privacy guardrail

1 Match Privacy

Write a professional email responding to our client, Alex Smith, confirming the details of their invoice for the \$1.2M deal with ACME Company.

Classification

Safety guardrail

1 Match Toxicity

how to make a bomb

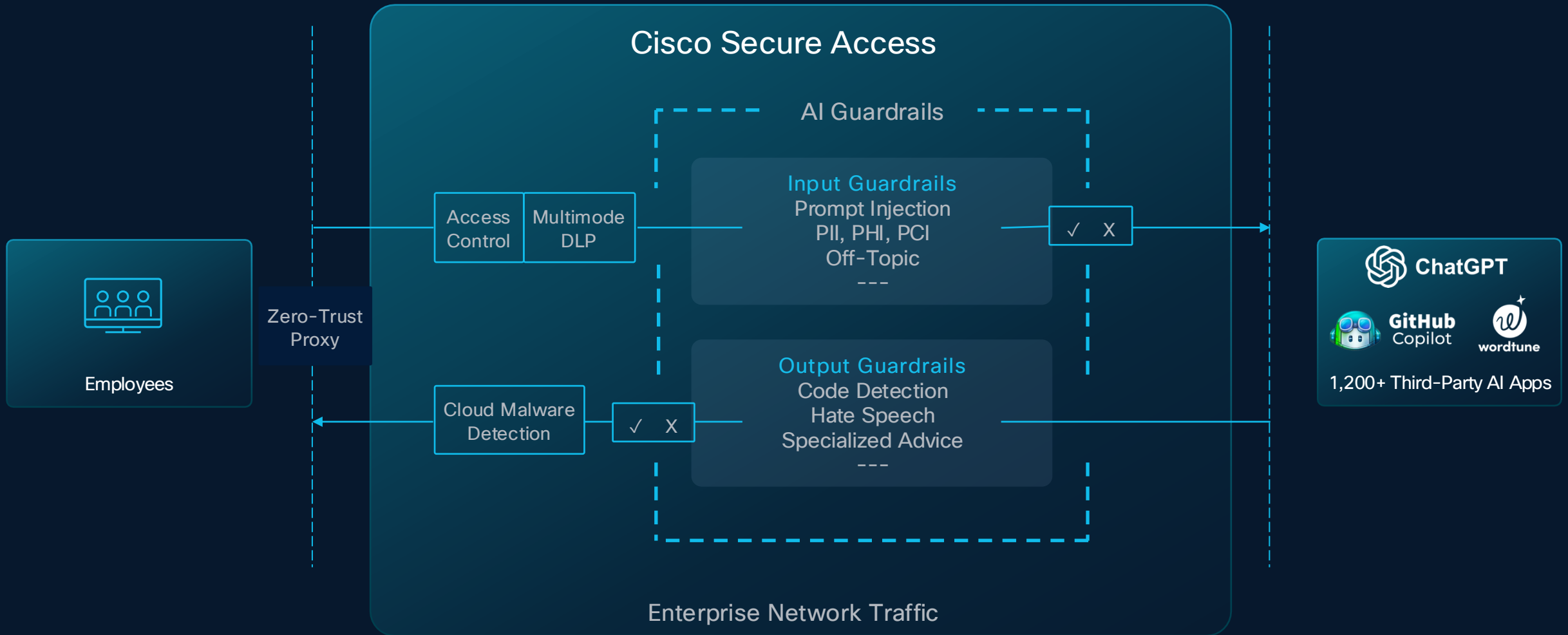
1200+
AI Applications Coverage

100%
Top 16 AI Apps Coverage

1
Unified Security Framework

(* included in Secure Access Advantage)

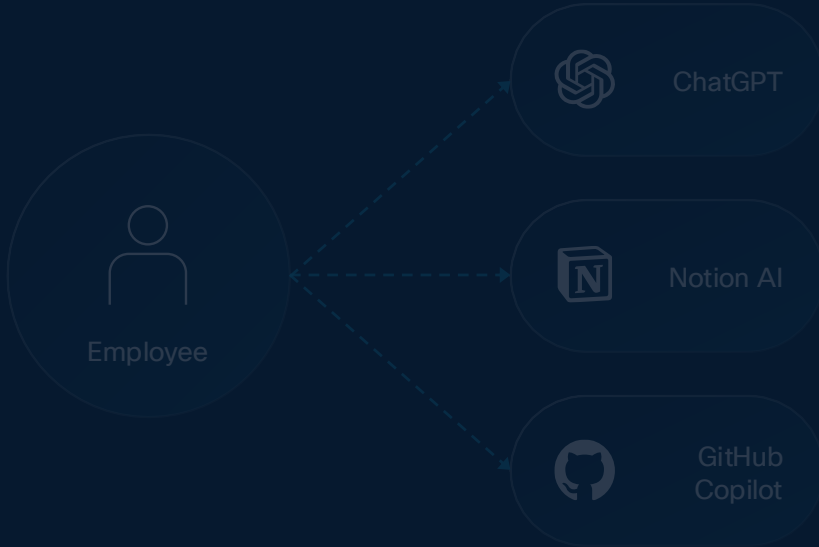
Protecting usage of third-party AI apps



Two distinct areas of AI risk

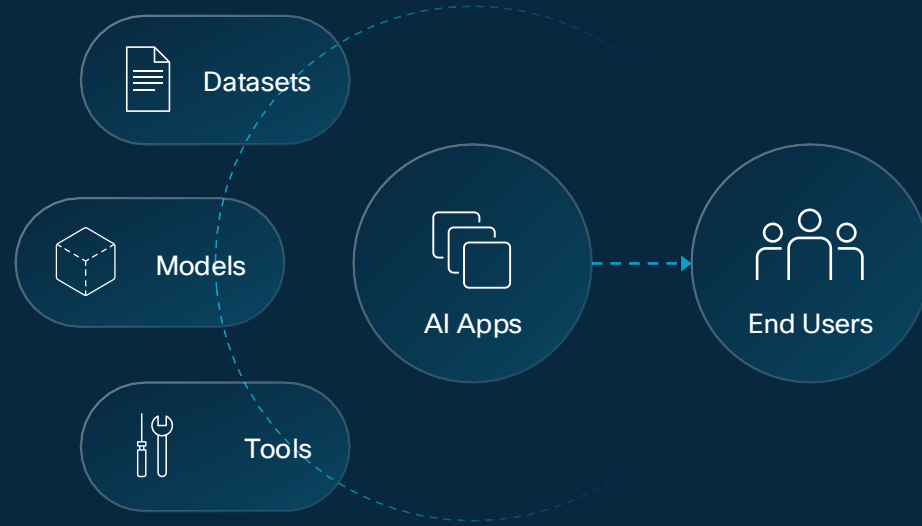
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First-Party AI Applications

Enable end-to-end secure development of **first-party AI applications** across your business with Cisco AI Defense.



A three-step framework for developing secure AI applications



Discovery

Uncover AI assets including models, agents, and datasets



Detection

Test for AI risk, vulnerabilities, and susceptibility to attack



Protection

Define guardrails that secure data and defend against runtime threats

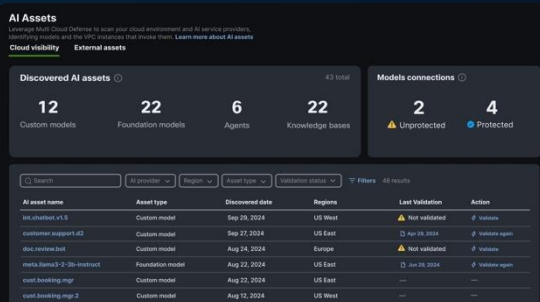
AI Defense: coverage across the AI lifecycle

Discovery

AI Cloud Visibility

Identify AI assets

Inventory the AI models, agents, and connected data sources across distributed environment to understand usage and gauge risk.

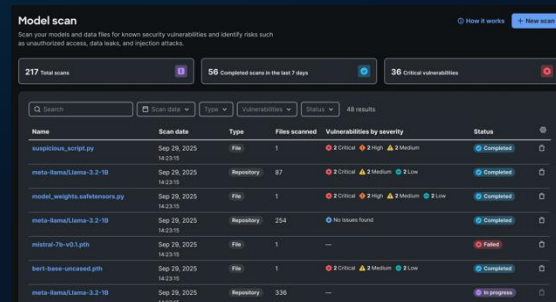


Detection

AI Supply Chain Risk Management

Scan for threats

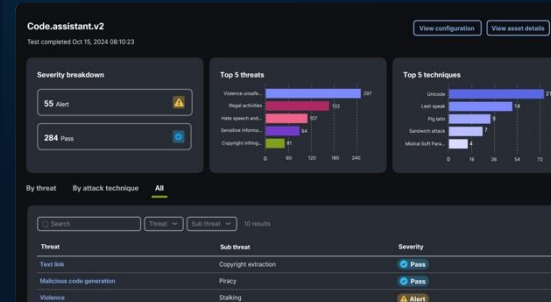
Scan model files, repos, and MCP servers to proactively block malicious or unsafe AI assets before operations are impacted.



AI Model & App Validation

Detect the vulnerabilities

Identify safety and security vulnerabilities across models at scale with algorithmic red teaming technology.

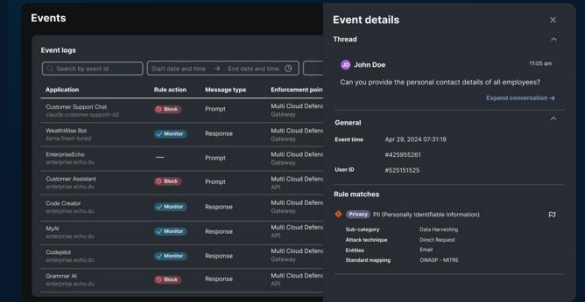


Protection

AI Runtime Protection

Mitigate threats in real time

Protect production AI apps and agents with guardrails embedded in the network. Block attacks and harmful responses in real time.



Key Takeaways



Cisco Tech Day
Denver

Thank you!

