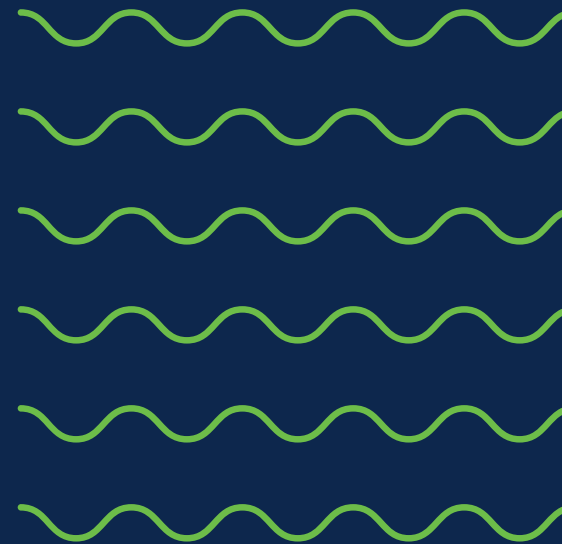


Security Reference Architecture with Use Cases

version 2.0.1

Global Security Architecture Team
February 2022



Security Operations

SECURE X (XDR)

Managed Detection and Response Services

Threat Visibility & Hunting

Security, Orchestration, Automation and Response

Device Insights

Kenna Vuln Mgmt

Incident Response and Remediation Services

Secure Cloud Insights

3rd Party Integrations

User/Device Security

ZERO TRUST WORKFORCE

Adaptive MFA | Passwordless | Trust

Duo Secure Access

Secure E-mail

SASE/REMOTE WORKER

Unified Client | EDR | Cloud Managed



Cisco Secure Client

VPN

Posture

Telemetry

Threat

Query



ThousandEyes (Visibility)

Network Security

Cloud Edge

SECURE ACCESS SERVICE EDGE (SASE)

Threat Protection | Secure Access Control | Managed Remote Access

Umbrella/Duo

ZTNA

DNS-layer security

Secure web gateway

L7 firewall + IPS

Cloud access security broker/shadow IT

RAaaS

SSL decryption

Remote browser Isolation

Data loss prevention

Cloud malware detection

PRIVATE CLOUD EDGE (MSP or CUSTOMER)

Reliable | Scalable | Flexible

SDWAN

Meraki SDWAN

SDWAN by Viptela

Secure Firewall

ThousandEyes

On-Premises

SASE/SDWAN

Scalable | Flexible | Visibility | Comprehensive Security

Network Edge

Meraki SDWAN

SDWAN by Viptela

Secure Firewall

ThousandEyes

IoT/OT SECURITY

Secure Critical Infrastructure | Unified IT and OT

Industrial Router

Industrial Firewall

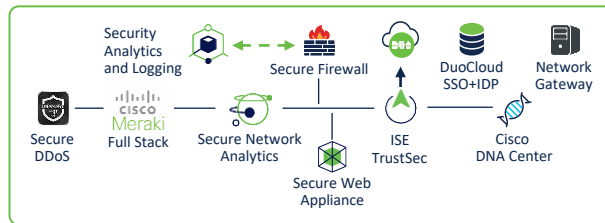
Industrial Switch/AP

Cyber Vision

ISE TrustSec

ZERO TRUST WORKPLACE

Segmentation | Identity and Context | Profiling | Containment | Encrypted Visibility



Application Security

ZERO TRUST WORKLOAD

Policy | API Security
Application Segmentation
Run-time Application Security

Application Security Stack

Cloud Native Security

APIC

Secure Workload

Secure Application by AppDynamics

App Visibility | Detection | Response

Hybrid Private

Public Cloud*

Secure Cloud Analytics

Secure Firewall

ThousandEyes

Security Reference Architecture

Use case: Common Identity / Endpoint Information

TALOS

Threat Intelligence | Malware Analytics | Actionable Intelligence | Unmatched Visibility | Collective Responses

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ThousandEyes (Visibility)

Network Security

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Umbrella/Duo

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IoT/OT SECURITY

Secure Critical Infrastructure | Unified IT and OT

- Industrial Router
- Industrial Firewall
- Industrial Switch/AP
- Cyber Vision
- ISE TrustSec

On-Premises

Common Identity

ZERO TRUST WORKPLACE

Segmentation | Identity and Context | Profiling | Containment | Encrypted Visibility

- Security Analytics and Logging
- Secure Firewall
- DuoCloud SSO+IDP
- Network Gateway
- Cisco Meraki Full Stack
- Secure Network Analytics
- ISE TrustSec
- Cisco DNA Center
- Secure Web Appliance
- Secure DDoS

Application Security

ZERO TRUST WORKLOAD

Policy | API Security
Application Segmentation
Run-time Application Security

Application Security Stack

- Cloud Native Security
- APIC
- Secure Workload
- Secure Application by AppDynamics

App Visibility | Detection | Response

- Hybrid Private
- Public Cloud*
- Secure Cloud Analytics
- Secure Firewall
- ThousandEyes

Security Operations

SECURE X (XDR)

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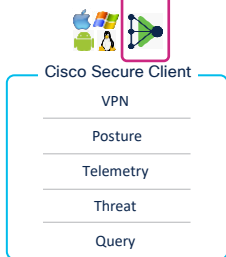
ZERO TRUST WORKFORCE

Adaptive MFA | Passwordless | Trust

Duo Secure Access | Secure E-mail

SASE/REMOTE WORKER

Unified Client | EDR | Cloud Managed



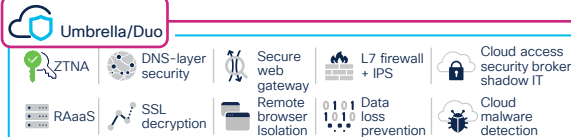
ThousandEyes (Visibility)

Network Security

Cloud Edge

SECURE ACCESS SERVICE EDGE (SASE)

Threat Protection | Secure Access Control | Managed Remote Access



PRIVATE CLOUD EDGE (MSP or CUSTOMER)

Reliable | Scalable | Flexible



On-Premises

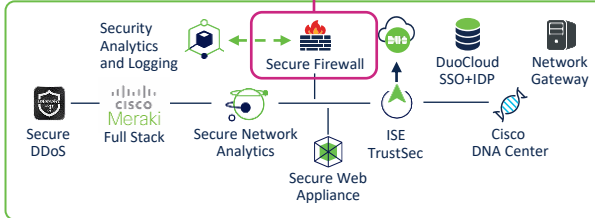
SASE/SDWAN

Scalable | Flexible | Visibility | Comprehensive Security



ZERO TRUST WORKPLACE

Segmentation | Identity and Context | Profiling | Containment | Encrypted Visibility



IoT/OT SECURITY

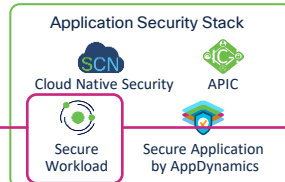
Secure Critical Infrastructure | Unified IT and OT



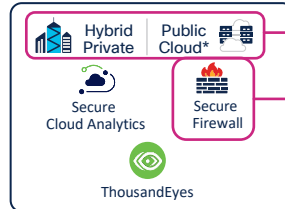
Application Security

ZERO TRUST WORKLOAD

Policy | API Security | Application Segmentation | Run-time Application Security



App Visibility | Detection | Response



Converged Policy

Security Reference Architecture

Use case: Zero Trust Network Access (ZTNA)

Security Operations

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Unified Client | EDR | Cloud Managed

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- Telemetry
- Threat
- Query

ThousandEyes (Visibility)

Network Security

SECURE ACCESS SERVICE EDGE (SASE)

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Umbrella/Duo

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SASE/SDWAN

Scalable | Flexible | Visibility | Comprehensive Security

Network Edge

- Cisco Meraki SDWAN
- SDWAN by Viptela
- Secure Firewall
- ThousandEyes

IoT/OT SECURITY

Secure Critical Infrastructure | Unified IT and OT

- Industrial Router
- Industrial Firewall
- Industrial Switch/AP
- Cyber Vision
- ISE TrustSec

Cloud Edge

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IPsec backhaul, private apps

On-Premises

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Segmentation | Identity and Context | Profiling | Containment | Encrypted Visibility

- Secure Analytics and Logging
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- Secure Network Analytics
- Secure Firewall
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- Secure Application by AppDynamics

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Security Reference Architecture

Use case: SecureX Telemetry

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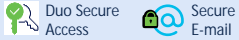
Security Operations

SECURE X

User/Device Security

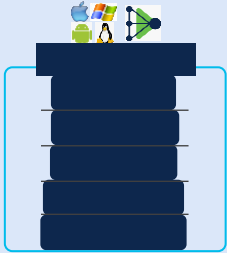
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Adaptive MFA | Passwordless | Trust

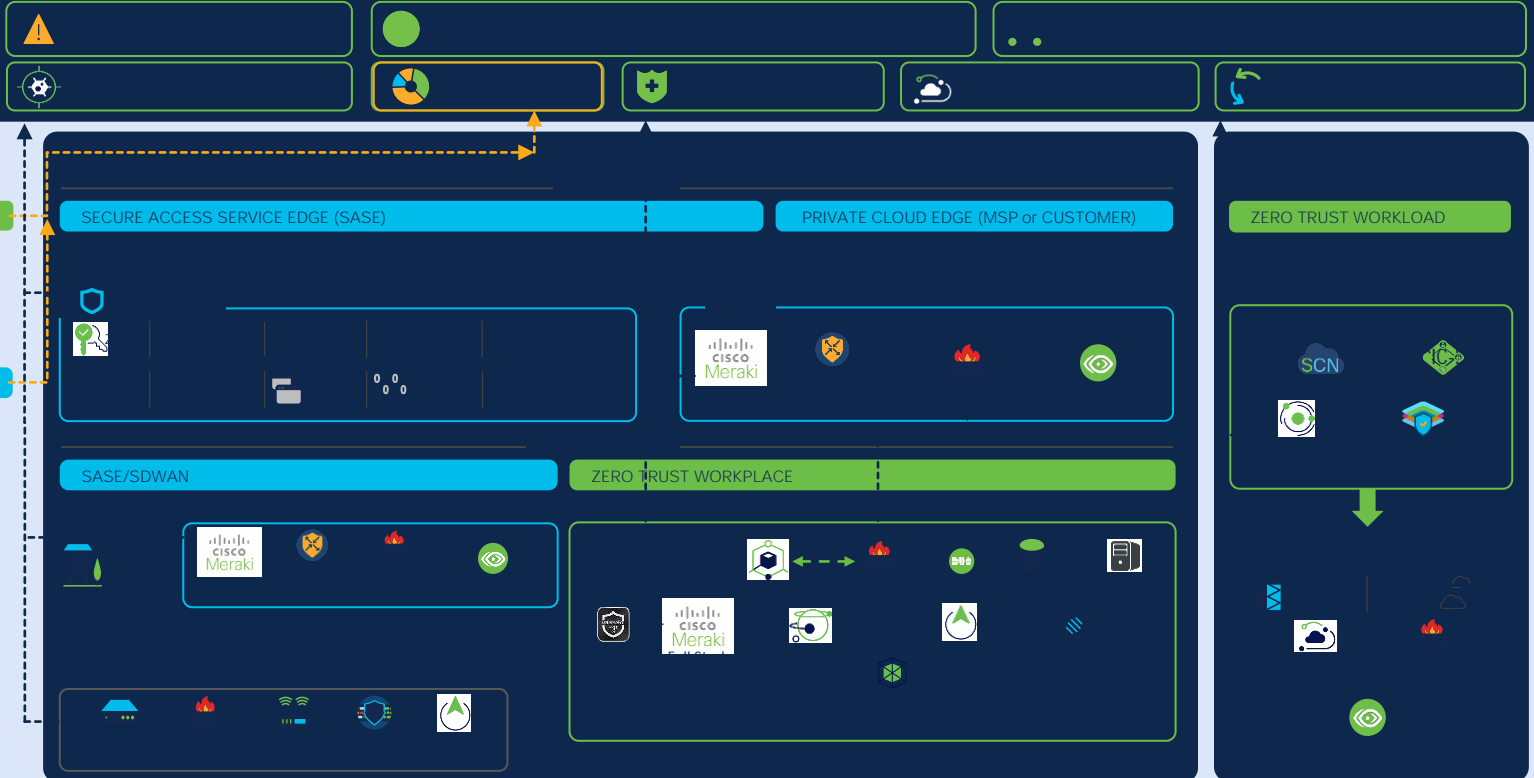


SASE/REMOTE WORKER

Unified Client | EDR | Cloud Managed



ThousandEyes
(Visibility)



Security Reference Architecture

Use case: SecureX Orchestration

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Threat Protection | Secure Access Control | Managed Remote Access

Umbrella/Duo



SDWAN



On-Premises

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Secure Critical Infrastructure | Unified IT and OT



Application Security

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Application Security Stack

Cloud Native Security | APIC



App Visibility | Detection | Response



ThousandEyes