

IT.Integrator

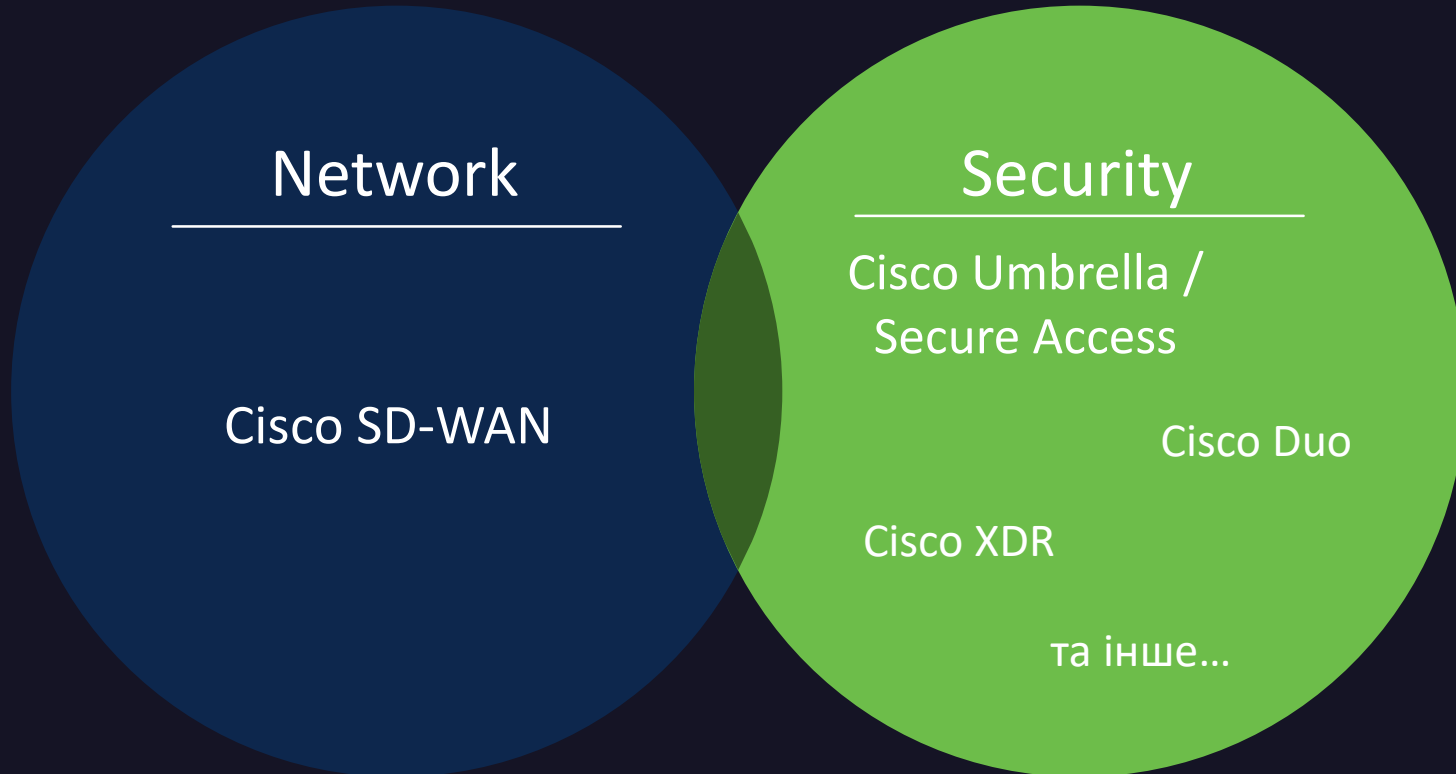


Основні компоненти Cisco SASE в частині кібербезпеки

Олексій Швачка



SSE or SASE ?



- The “Security Services Edge” category was first introduced by Gartner in the “2021 Roadmap for SASE Convergence” report in March of 2021
- SSE is the half of secure access service edge (SASE) focusing on the convergence of security services
- Networking convergence forms the other half of SASE

Agenda

- Cisco DUO
- Cisco Secure Access
- Cisco XDR

Agenda

- **Cisco DUO**
- Cisco Secure Access
- Cisco XDR

Cisco DUO



Adaptive
MFA



Device posture
and health



Least privileged
access



Continuous
verification



Behavior
analytics

Verify the identity of all users and
the trust of the devices
before granting access to
company-approved applications

Every user.
Every device.
Every application.

Agenda

- Cisco DUO
- **Cisco Secure Access**
- Cisco XDR

Cisco Secure Access



DNS-layer security



Cloud-delivered firewall (w/ IPS)



Secure web gateway



Cloud access security broker



VPN as a Service



threat intelligence



Remote browser isolation



Data loss prevention



malware detection



Zero Trust Network Access (ZTNA)

Combines multiple security capabilities into one simple, effective, cloud-native service

Cloud-Native service with state-of-the-art cybersecurity capabilities delivered out of data centers worldwide, interconnected with private and public peerings to provide the fastest route and lower latency.

DNS-layer security



DNS-layer
security

DNS-layer security

- DNS requests sent to SSE instead of the ISP's DNS server
- Statistical Models and Machine Learning
- The First Cyber Security Check



Cloud-Native to provide Quick Resolution with Unparallel Security

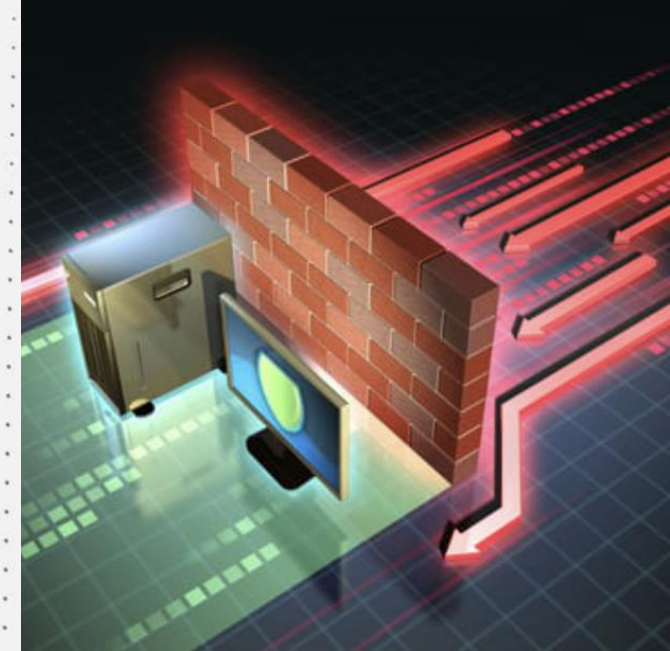
Cloud-delivered firewall with IPS



Cloud-delivered
firewall (w/ IPS)

Cloud-delivered firewall with IPS

- Extends control to non-web, non-HTTP(S) traffic
- Enforces IP, port, and protocol policies
- IPS can do deep packet inspection with minimal latency impact



Cloud-Native to Stay ahead of the curve, secure and protect against advanced threats.

Secure Web Gateway



Secure
web
gateway

SWG for Safe Browsing

- URL Content Control
- Application Visibility and Control
- HTTPS Decryption



Cloud-Native to ensure that web-based applications and services are used in a secure manner.

Cloud Access Security Broker



Cloud access
security broker

CASB to protect SaaS apps

- Users,
- Data, and
- Applications.



Cloud-Native to provide visibility, data protection, compliance and threat protection over SaaS applications

Malware Protection



Malware
Protection

Malware Protection

- Detect and protect against malicious files.
- Unknown files sent to sandbox
- Malware in motion
- Malware at rest



MALWARE

Cloud-Native to provide up to date and enhanced protection against malware infections

Data Loss Prevention



0 1 0 1 Data
1 0 1 0 loss
■ ■ ■ ■ prevention

Data Loss Prevention

- Minimize the risk of sharing confidential information
- Out-of-band DLP for SaaS apps through API
- Inline DLP supports all applications, sanctioned and unsanctioned



Cloud-Native to protect confidential information

Remote Browser Isolation



Remote browser
Isolation

Remote Browser Isolation

- protects against browser-based security threats by running websites on a safe, separate virtual environment.
- RBI moves the most dangerous part of browsing the internet away from the end user's machine and into the cloud.



Cloud-Native to provide a 70% reduction in attacks that compromise end-user systems, according to Gartner.

Cisco Secure Access

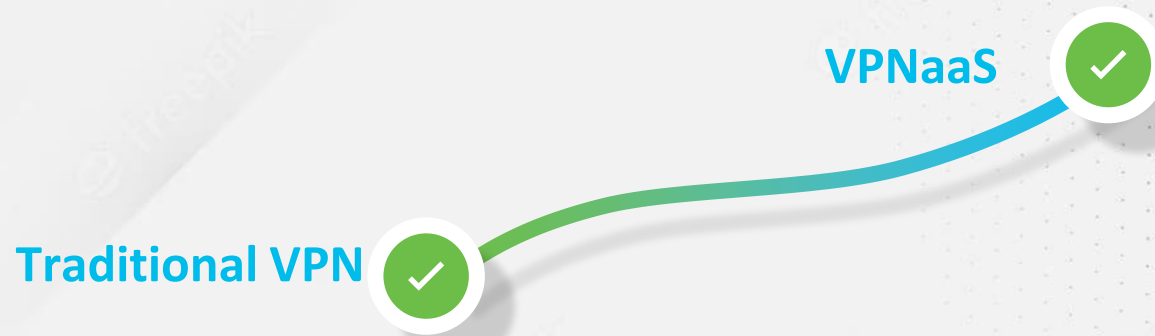
VPN as a Service (VPNaaS)



VPN as a Service

VPNaaS

- Deliver VPN capability as a cloud-based service
- No hardware to install, maintain, or update
- Easily connect users and things to any private app, any port, any protocol



Zero Trust Network Access (ZTNA)



Zero Trust
Network
Access (ZTNA)

ZTNA

- Identity and posture-based access and Least privileged access to private applications
- Client-based ZTNA (managed devices) and Clientless (unmanaged devices)
- No public exposure of applications

Traditional VPN



VPNaaS



Unified ZTNA + VPNaaS



Threat Intelligence



Threat Intelligence

- Hundreds of full-time threat researchers and data scientists
- Artificial intelligence algorithms to detect abnormal behaviors



Agenda

- Cisco DUO
- Cisco Secure Access
- **Cisco XDR**

Control Center

Incidents

Investigate

Intelligence

Automate

Devices

Inventory

Sources

Deployment

Audit Logs

Profiles

Device Events

Administration

Integrations

On-Premises Appliances

API Clients

Users

Third-Party Integrations

APIVoid

Threat Analysis APIs for Threat Detection & Prevention

AbuseIPDB IP Checker

Check IP addresses against AbuseIPDB's abusive IP database.

Akamai

Security Center provides answers to essential questions in the most intuitive and simple way

AlienVault Open Threat Exchange

The AlienVault Open Threat Exchange (OTX) is the world's most authoritative open threat information sharing and analysis network.

Amazon GuardDuty

Amazon GuardDuty - intelligent threat protection for accounts and workloads.

Bastille Networks

RF monitoring for wireless intrusion detection and policy enforcement.

Censys

Censys is a platform that helps information security practitioners discover, monitor, and analyze devices that are accessible from the Internet.

CrowdStrike

CrowdStrike is a global cybersecurity leader with an advanced cloud-native platform for protecting endpoints, cloud workloads, identities and data.

CyberCrime Tracker

Featuring FIFTY message echos covering ALL computer scenes: Art, Warez, Hacking, Phreaking, Technology, BBS Support, Demos, Coding, Sound,...

Cybereason

Cybereason AI-Driven XDR Platform provides predictive prevention, detection and response that is undefeated against modern ransomware and advanced attack...

Devo

Devo is cloud-native logging and security analytics.

Exabeam

Exabeam Fusion combines XDR and SIEM into a single, cloud-delivered platform that enables you to leverage integrated threat detection, investigation, and respon...

Farsight Security DNSDB®

Farsight Security DNSDB® is the world's largest DNS intelligence database that provides a unique, fact-based, multifaceted view of the configuration of the...

Generic Serverless Relay

Generic Serverless Relay module that can be used when developing new integrations

Google Chronicle

Chronicle is a cloud service, built as a specialized layer on top of core Google infrastructure, designed so that enterprises can privately retain, analyze and search t...

Google Safe Browsing

Safe Browsing is a Google service that lets client applications check URLs against Google's constantly updated lists of unsafe web resources. Examples of...

- Control Center
- Incidents
- Investigate
- Intelligence
- Automate
- Devices
- Administration

Control Center

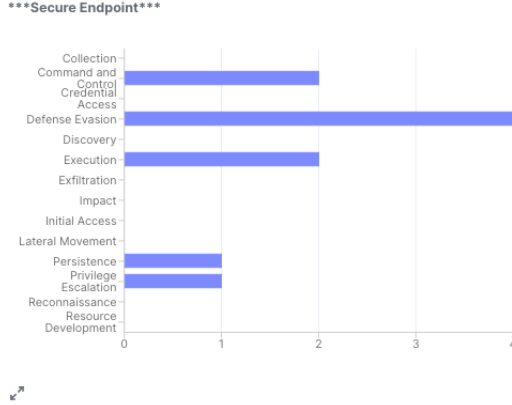
Overview **XDR Visibility**

Full screen

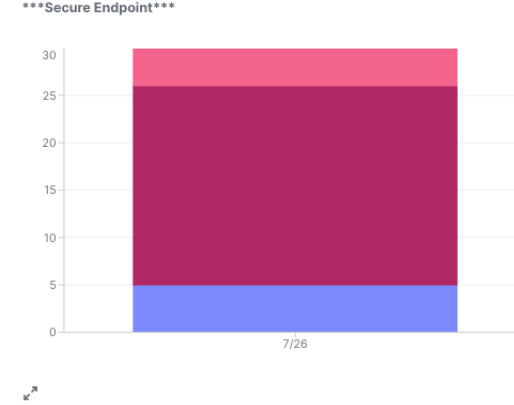
Edit Dashboards

Timeframe*

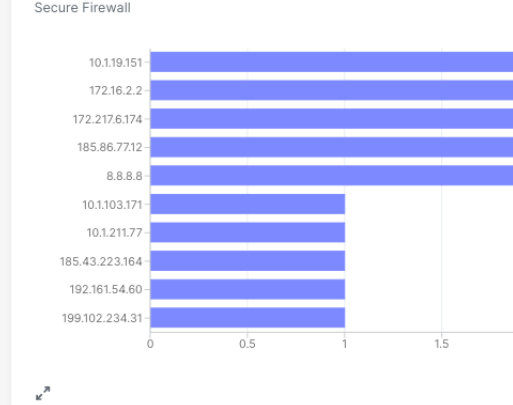
MITRE ATT&CK Tactics detected



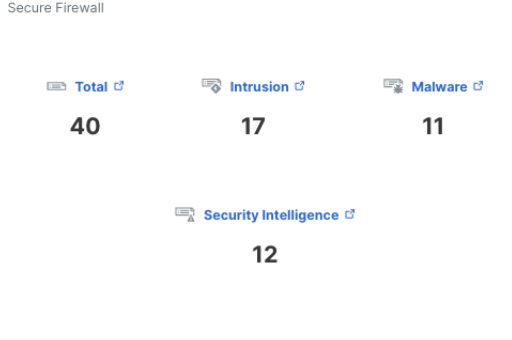
Compromises detected



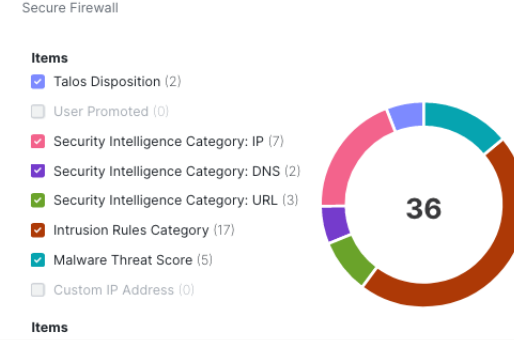
Intrusion Top Targets



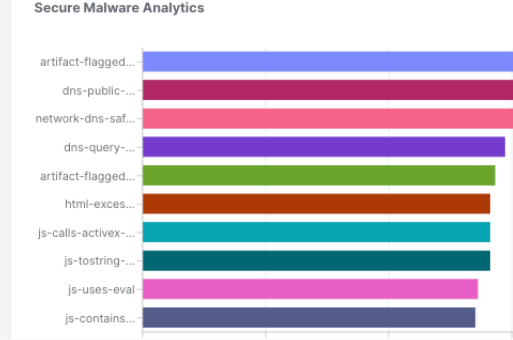
Event Summary



Incident Promotion Reason



Top Behavioral Indicators



- Control Center
- Incidents
- Investigate
- Intelligence
- Automate
- Devices
- Inventory
- Sources**
- Deployment
- Audit Logs
- Profiles
- Device Events
- Administration

Secure Endpoint

Webhook Registration (Red X)

Last Sync: 1s, 42 records

The Sync Data chart shows a constant 100% sync rate. The Performance chart shows periodic spikes in activity, reaching up to 2.5s.

Umbrella

Last Sync: 1s, 1 record

The Sync Data chart shows a constant 100% sync rate. The Performance chart shows periodic spikes in activity, reaching up to 2.5s.

CrowdStrike

Last Sync: 4s, 39 records

The Sync Data chart shows a constant 100% sync rate. The Performance chart shows periodic spikes in activity, reaching up to 5s.

Secure Access by Duo

Last Sync: 2s, 1 record

The Sync Data chart shows periodic sync pulses reaching 100%. The Performance chart shows very low activity levels.

Secure Client

Webhook Registration (Green Check)

Last Sync: 1s, 3 records

The Sync Data chart shows a sync rate that increases from ~30% to 100% over time. The Performance chart shows a single spike reaching 40s.

SentinelOne Endpoint

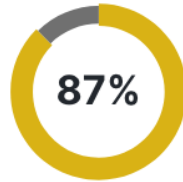
Last Sync: 1s, 21 records

The Sync Data chart shows a sync rate that increases from ~80% to 100% over time. The Performance chart shows periodic spikes in activity, reaching up to 10s.

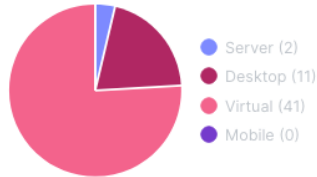
- Control Center
- Incidents
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Devices All Devices Secure Client Devices

Source health
Asset Inventory Sources



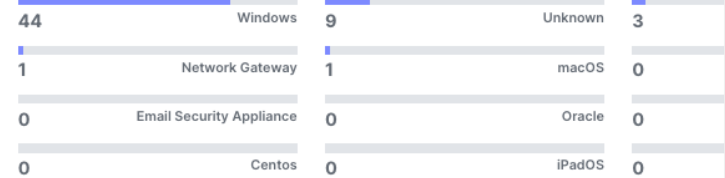
58 Devices
Types



Status



Operating Systems



Text Search: Saved Filters: Managed Status: [Filters](#) 58 matching results

[Rules](#)

[Export to CSV](#) [Edit Columns](#)

Device Name	OS	OS Version	OS Support	Users Seen	Sources	Managed	Compromised	Labels	Value
192.168.242.57	Network Gateway	na			***Secure Endpoint***	No			1 R
AIQ-CROWDSTRIKE	Unknown	Windows 10			CrowdStrike	No			10 D
alex-test-dupe-nvm	Windows	19045		qa	SentinelOne Endpoint	No	!		9 R
ANYCNCT-WIN10-C	Windows	10			CrowdStrike	No			10 D
ANYCNCT-WIN11-C	Windows	11			CrowdStrike	No			10 D
AnyConnect-linux-1	Ubuntu	na			CrowdStrike	No			10 D
AnyConnect-linux-2	Ubuntu	na			CrowdStrike	No			10 D

Control Center

Incidents

Investigate

Intelligence

Automate

Devices

Administration

Incidents

1000

Incident Reported

Insider Threat Attack Chain

View Investigation

Reported by Cisco XDR Analytics (cisco-dcloud-rtb) on 2023-05-23T14:27:57.000Z - 18 Linked Incidents

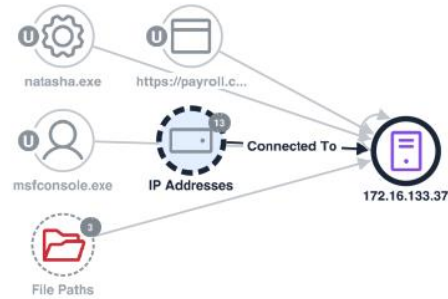
AS HJ UD

Internal Port Scanner: Device has started a port scan on a device internal to your network. This alert uses the Port Scanner observation and may indicate that an attacker is scanning for vulnerabilities. Potential Da... [View Long Description](#)

Overview Detection Response Worklog

Expand

- +
-
- ✖
- ↺
- 👤
- 🔗



1 Asset

View all

TOP ACTIVE

Endpoint

ip-172-16-133-37.us-east-2.compute.internal 25 events

31 Observables

View all

TOP ACTIVE

Malicious SHA-256

fdfdfc8878f39424920d469bcd05060a6f7c95794aa... 5 events

Unknown IP Address

75.75.75.75 5 events

Malicious SHA-1

...

30 Indicators

View all

TOP ACTIVE

CINS Army List

CINS Army List 4 events

Secure Malware Analytics Indicators

malware-known-trojan-av 3 events

trojan RAT

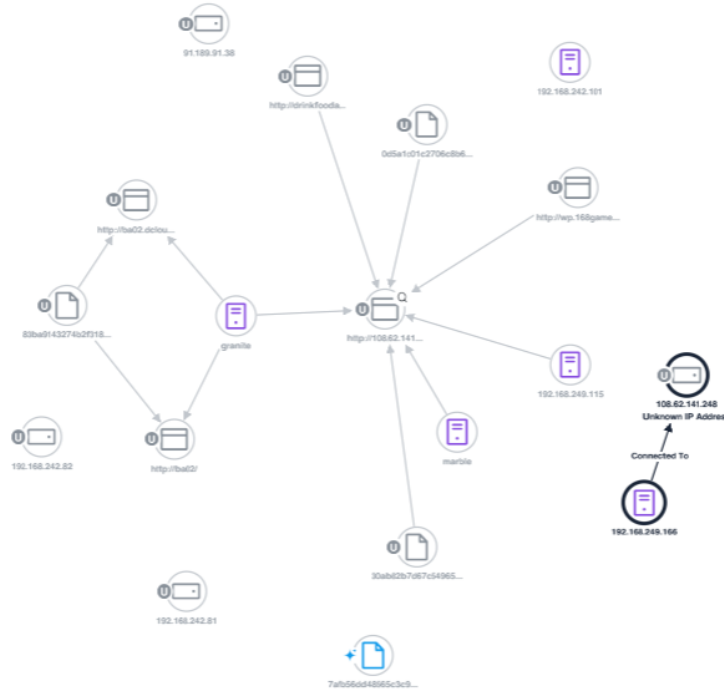
Secure Malware Analytics Indicators

Snapshot @ 20230725 21:25:47

Save Investigation

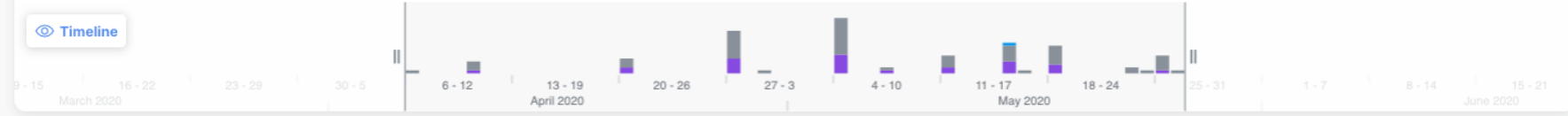
Full screen

18 Nodes



■ Malicious
 ■ Suspicious
 ■ Common
 ■ Unknown
 ■ Clean
 ■ Asset

Timeline



Control Center

Incidents

Investigate

Intelligence

Automate

Exchange

Workflows

Runs

Targets

Account Keys

Variables

Triggers

Tasks

Options

Devices

Administration

Workflows

Workflows allow you to investigate security events, automate responses, and eliminate repetitive tasks by using activities, logic, and even other workflows to communicate with other systems and resources. From here you can access, create, and import workflows.

All Workflows 221 Recents Favorites 0

Workflows

Search

Search

Ready State

Select

Category

Select

Reset All

Card View List View

Clean API Clients

Updated

mavander@cisco.com

★ Last Modified: Jul 26, 2023

Refresh Incidents

Updated

mavander@cisco.com

★ Last Modified: Jul 26, 2023

Take Orbital Forensic Snapshot

Updated

dcloud_sxv2_admin@cisco.com

[Executes an Orbital forensic snapshot] [Supported observables: IP address, hostname, AMP GUID] Workflow Description: When triggered, this workflow...

★ Last Modified: Jul 26, 2023

SecureX +1

Automation Rule Placeholder

Validated

mavander@cisco.com

★ Last Modified: Jul 26, 2023

dCloud Orchestration Sandbox 232

Updated

dcloud_sxv2_admin@cisco.com

dCloud Orchestration Sandbox 232

★ Last Modified: Jul 25, 2023

0015B - Secure Firewall - Block...

Updated

adisanka@cisco.com

This workflow blocks an observable on Cisco Secure Firewall by creating a judgement for it in SecureX Threat Response. Once a judgement is created,...

★ Last Modified: Jul 25, 2023

0018 - ServiceNow - Request Fire...

Validated

dcloud_sxv2_admin@cisco.com

Submit URL to Threat Grid and po...

Updated

dcloud_sxv2_admin@cisco.com

0001 - Talos - Blog Post to Se...

Validated

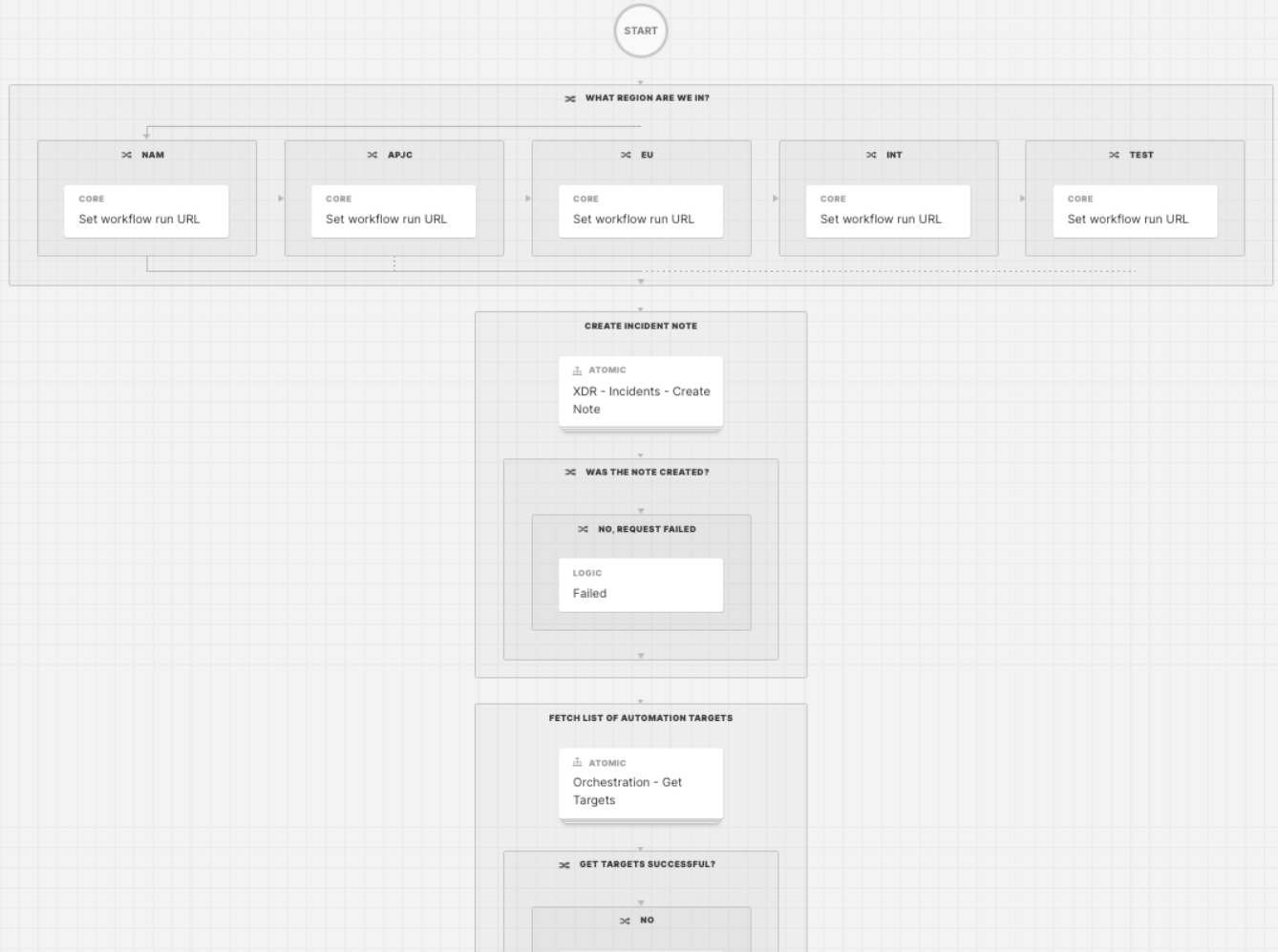
dcloud_sxv2_admin@cisco.com

← Back to all Workflows

XDR - Identify Vulnerabilities

Last Modified: July 20, 2023 at 7:08:54 PM

[Validated](#) [Commit](#) [View Runs](#) [Run](#)



Workflow Properties

XDR - Identify Vulnerabilities

Display Name* 30 / 64

XDR - Identify Vulnerabilities

Owner 6 / 128

system

Description 873 / 1024

This workflow consumes one or more hostnames and attempts to fetch vulnerability information from all supported EDR modules. Currently supported EDRs include: Cisco Secure Endpoint, CrowdStrike, and SentinelOne.

Clean up after successful execution

If checked, the workflow run and any underlying task(s) will be deleted when the run succeeds. Failed runs will not be deleted.

Is atomic workflow ⓘ

An atomic workflow will be listed under the Activity Group header you select or create in the list to the left.

Group Name ⓘ

Select

Category

Incident Response X

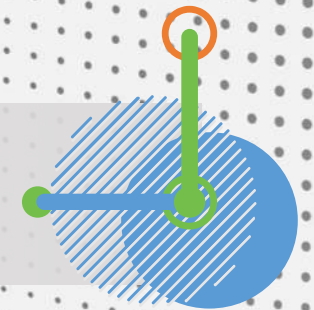
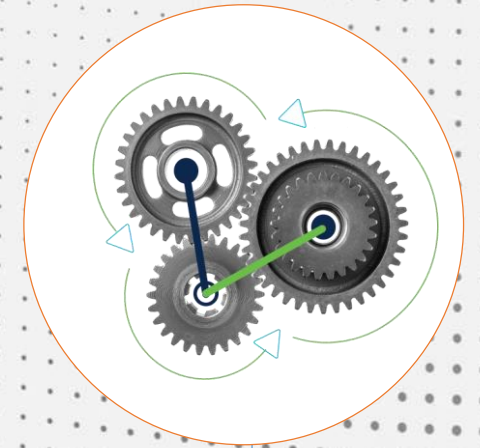
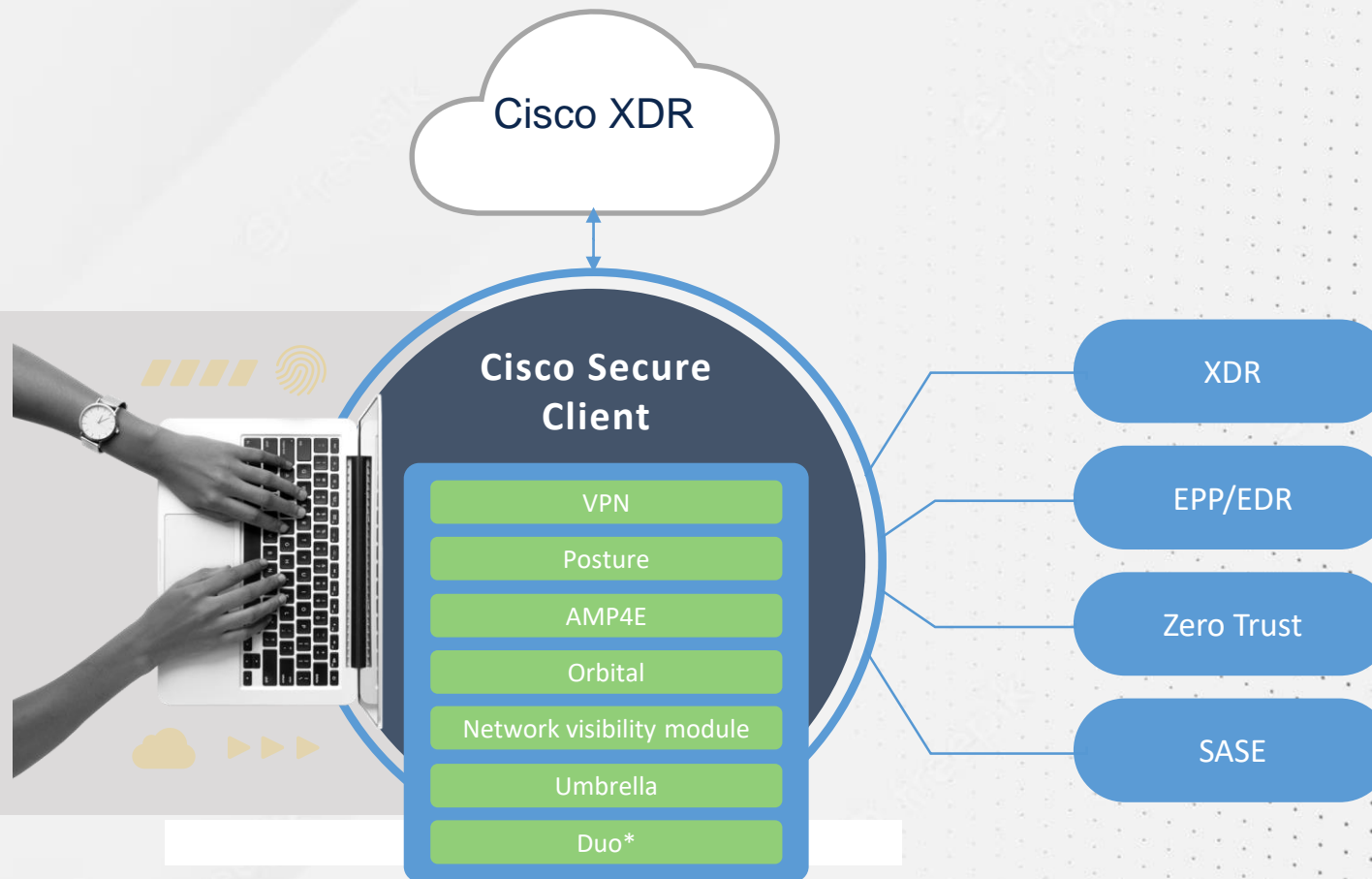
Response Actions

Observable Type(s) ⓘ

Select



Cisco Secure Client



*Інтеграція DUO до Cisco Secure Client планується в майбутніх версіях

IT.Integrator



DEMONSTRATION