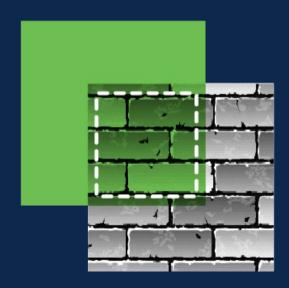
cisco SECURE



Cisco XDR Tech Club

Jiří Tesař TSA Security, jitesar@cisco.com 3.10.2023





What is XDR?



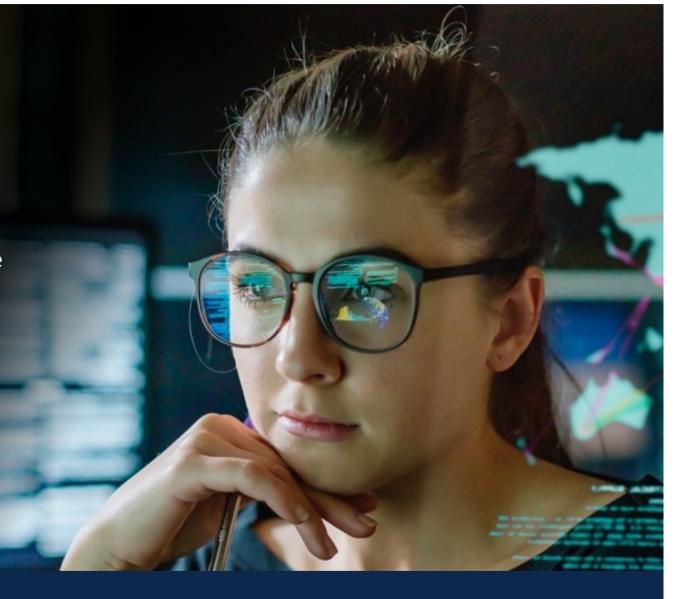
Collection of telemetry from multiple security tools



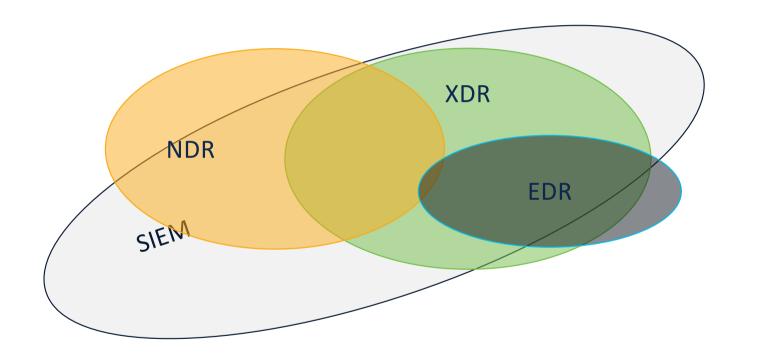
Application of analytics to the collected and homogenized data to arrive at a detection of maliciousness



Response and remediation of that maliciousness



Is XDR different than all the other things?



Shared Use cases:

Threat Detection
Threat Hunting
Forensics
Response

Telemetry data source importance

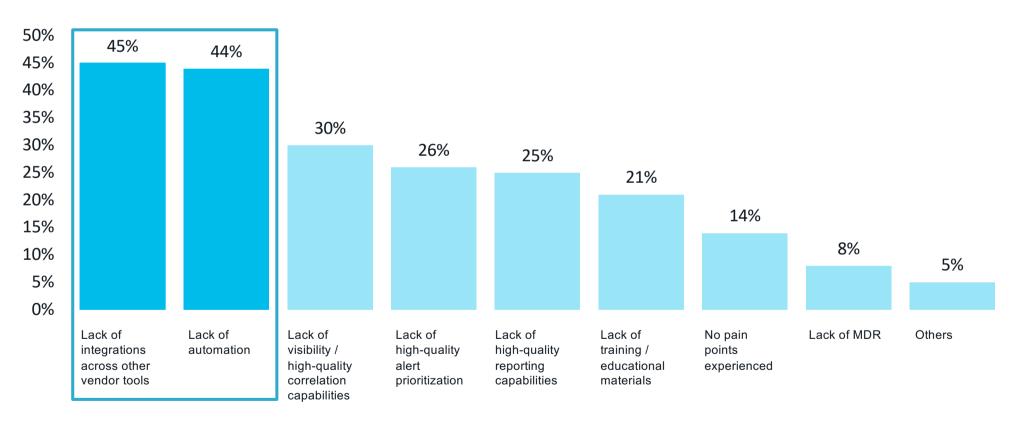
The top six data sources that customers believe are essential for an XDR are

Endpoint, Network, Firewall, Identity, Email, and DNS

	Essential		
	Count	Share	
🅍 Endpoint	255	85.0%	
₩ Network	226	75.3%	
Firewall	207	69.0%	
(A) Identity	191	63.7%	
🛱 Email	179	59.7%	
₩ DNS	140	46.7%	
Public Cloud	137	45.7%	
Non-Security Sources	36	12.0%	



Lack of integration and automation are the most widespread pain points for existing XDR solutions



An XDR solution should confidently tackle the most pressing security operation challenges



Simplicity

Integrate technology together with true turnkey interoperability



Visibility

Accelerate time to detect and investigate threats and maintain contextual awareness



Efficiency

Accelerate time to remediate and automate workflows to lower costs and strengthen security

The Cisco approach to XDR

Detect more, act faster, elevate productivity, build resilience

Detect the most sophisticated threats



Act on what *truly* matters, faster



Build resilience

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

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

Focus on what matters and filter out the noise

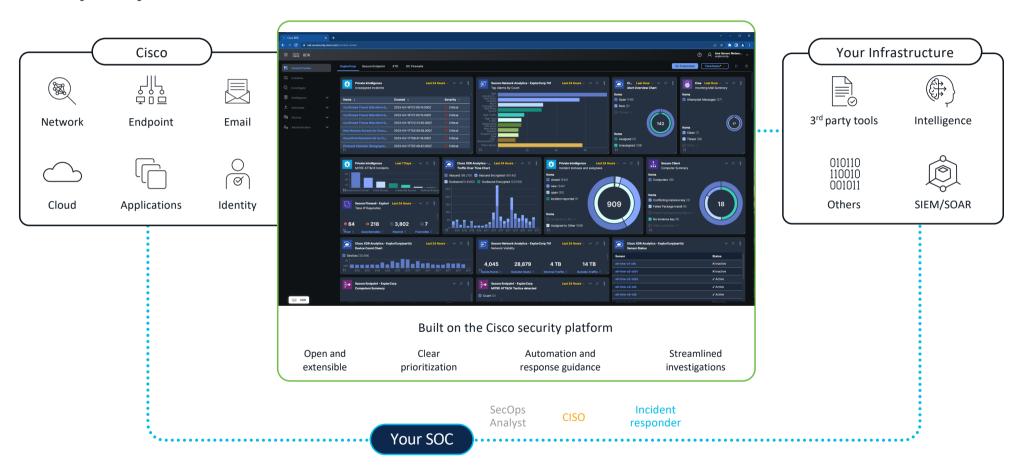
Elevate

productivity

- Boost limited resources for maximum value
- Automate tasks and focus on, strategic tasks

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

Simplify with Cisco XDR



An XDR is an expression of business needs

Where are we most exposed to risk? How good are we at detecting attacks early?

1 Detect Sooner

Prioritize by Impact

2

4

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

business?

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

3 Reduce Investigation Time

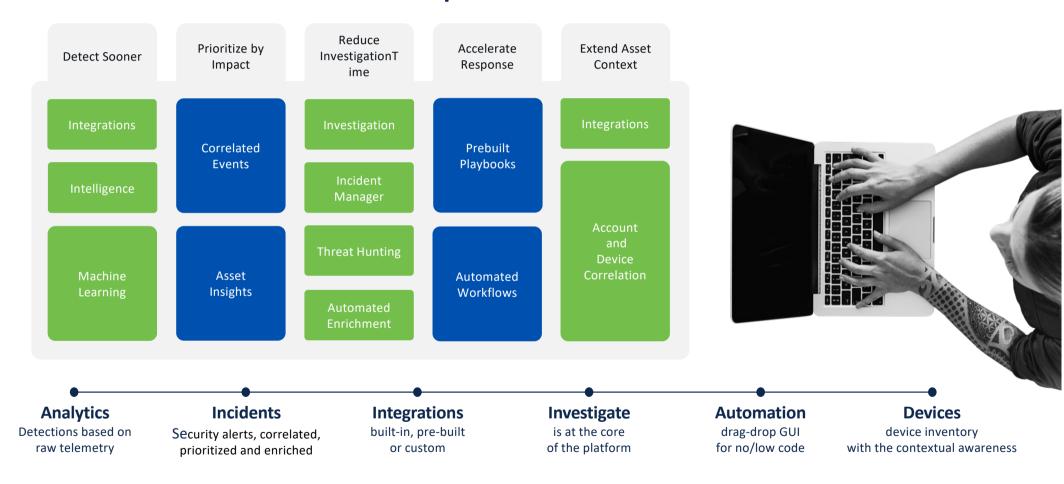
Accelerate Response

How fast can we confidently respond? How much can SecOps automate? Are we improving our time to respond?

Do we have full visibility into all our assets? Can we reliably identify a device and who uses it?

5 Extend Asset Context

XDR outcomes and components

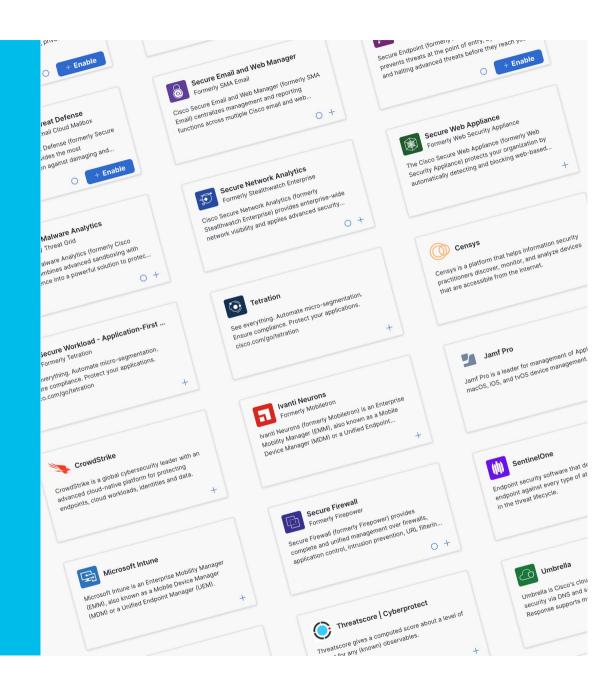


Outcomes

Detect sooner

- Leverage integrations for faster detection and response
 - Now including CrowdStrike and SentinelOne
- Use intelligence from multiple integrated products
- Correlate alerts to detect slow or hidden attacks





Enhanced detections with diverse intelligence

59.93.19.92	Malicious	IP Addr	2023-03-31T09:10:13.6 2023-04-30T09:10:13.6	TALOS IP B	High
59.97.169.111	Malicious	IP Addr	2023-03-31T09:10:13.6 2023-04-30T09:10:13.6	TALOS IP B	High
b0c57.binan	Malicious	Domain	2023-03-31T08:46:51.4 2023-04-07T08:46:51	ZeroDot1 C	Medium





Pulsedive



- Use public and private sources of intelligence to achieve better threat identification
- Create and customize your own feeds based on your environment and needs

Others...

Judgements

Indicators

Feeds

Events

Prioritize by impact

- Single view for incidents from multiple sources
- Enhanced incident view focused on the most critical incidents
- Incidents prioritized by business impact and asset value



Incidents 8 Open 62 Incidents 33 New Incidents Q Search 62 matching results **▼ Filters** Priority ‡ Name : Source 1000 Malicious Process and Suspicious SMB/RDP Activity - Doc Test Do ... Cisco ! 1000 **Unusual External Server for This is localhost** Cisco ! 1000 **AWS Inspector Finding for This is localhost** Cisco ! 1000 **Command and Control DNS Activities** Umbre 928 Formula Test.Mar27.Critical.TTP(58).AssetValue[8] Formul 928 F1.03-06d.Critical.TTP(58).AssetValue[10] Formul 835 **Attack Graph Test - 109 Observables** Formul 800 F1.03-06a.Critical.TTP(50).AssetValue[NULL] Formul 765 New Internal Device for This is localhost Cisco !

Azure Permissive Security Group for TD&R RSA

F1.03-08.Critical.TTP(58).AssetValue[8]

Cisco !

Formul

765

742

Walk through incidents step by step

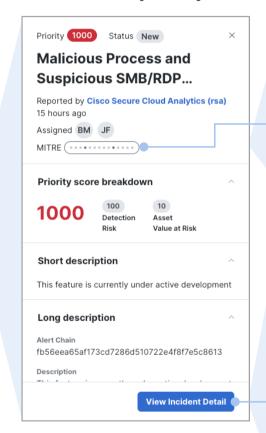
Progressive disclosure

Looking into an incident is a progressive experience where the relevant data is revealed as needed without overwhelming the SOC analyst

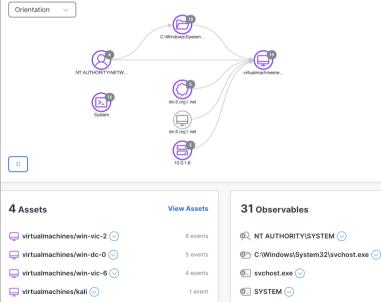


Rich incident details

Incidents are enriched with data gathered from multiple sources including assets, indicators, observables and others. Associated MITRE ATT&CK tactics and techniques detailed with risk scoring



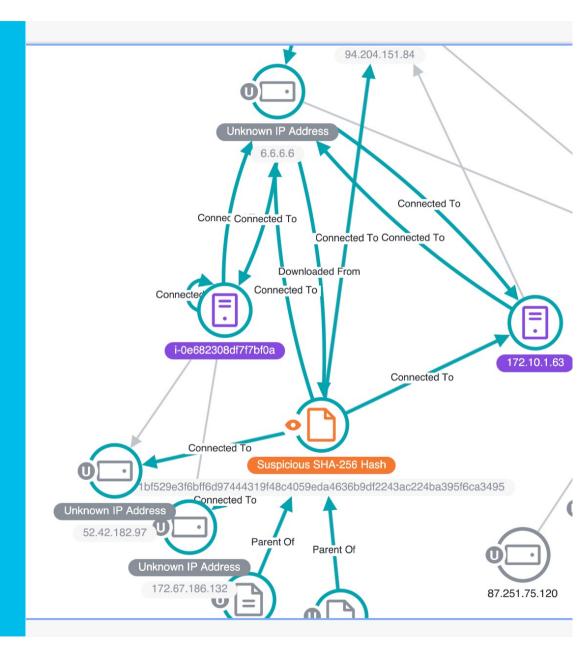




Reduce investigation time

- Interactive, visual representations of incidents
- Event correlation and attack chaining to group related intelligence
- Automated enrichment for the most critical incidents, ensuring intelligence is gathered immediately





How true simplicity is experienced

Without XDR: 32 minutes

1. IOC/alert



2. Investigate incidents in multiple consoles

Product dashboard 1



Product dashboard 2









Product

Remediate by coordinating multiple teams

Product dashboard 1



Product dashboard 2

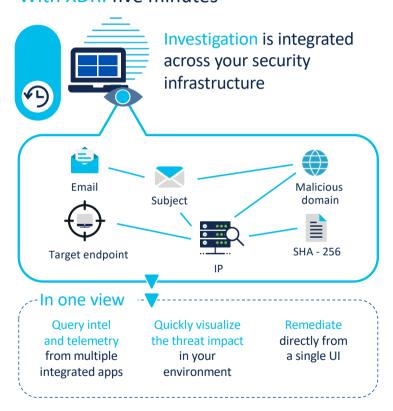


Product dashboard 4



Product

With XDR: five minutes





Confirm attacks sooner with alert correlation





Correlate alerts through time

Automatically create new incidents from correlated alerts over time, reveal the bigger picture of a multi-stage attack

Mapping the Attack Chain

Using MITRE Tactics and Techniques to connect and revealing the attack chain

Accelerate response

- Ability to respond throughout the interface
- Simplified response workflows available from within incidents
- Broad set of workflows to achieve a variety of outcomes



Identify Affected Hosts

Add Note

Add note with summary of findings on the investigations of hosts found with ...

Contain Incident: Overview

Add Note

Overview of how to contain Indicators of Compromise to stop the spread of ...

Contain Incident: Assets

Select

Use asset-based containment to stop the spread of malicious activity.

This automation worklow will network isolate/quarantine all selected assets on your integrated Endpoint Detection & Response solutions. After clicking Execute, you will be able to choose all or a subset of assets associated with this incident. Please make sure you have done proper identification before executing the workflow.

Contain Incident: IPs

Add Note

Contain IP indicators of compromise to stop the spread of malicious activity

Contain Incident: Domains

Select

Contain domain indicators of compromise to stop the spread of malicious act...

This automation worklow blocks the selected domain names on your integrated network policy enforcement solutions. After clicking Execute, you will be able to choose all or a subset of domains associated with this incident. Make sure you have done proper identification before executing the workflow.

Back

Go to Eradication →

Powerful, flexible automation



Response

Analyst triggers a workflow from within the incident manager or a pivot menu



Automation rules

An incident matches a predefined rule and a workflow is triggered



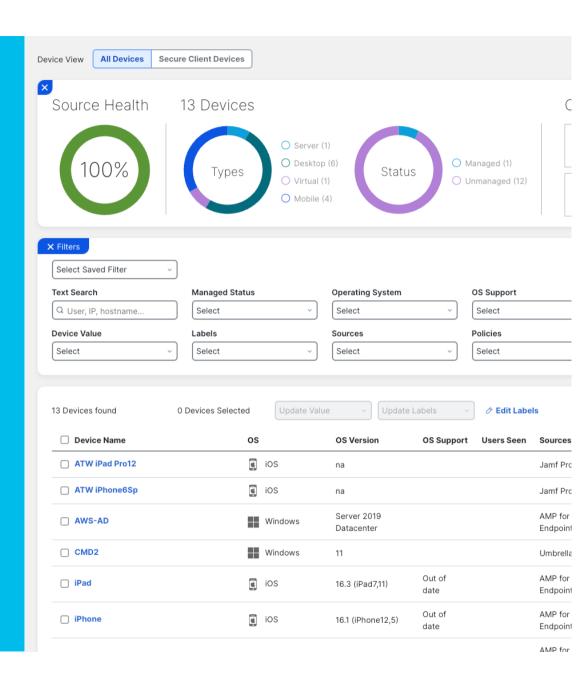
And more...

Workflows triggered by users, APIs, webhooks, schedules, and more

Extend asset context

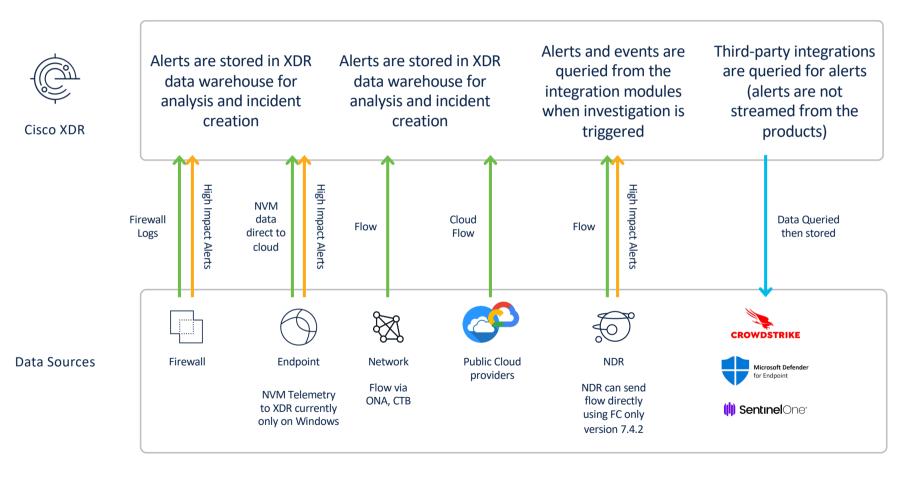
- Detailed asset information aggregated from multiple sources
- Combines asset inventory with security context
- Allows for more accurate incident prioritization based on asset value
- Distinguish between targets and assets

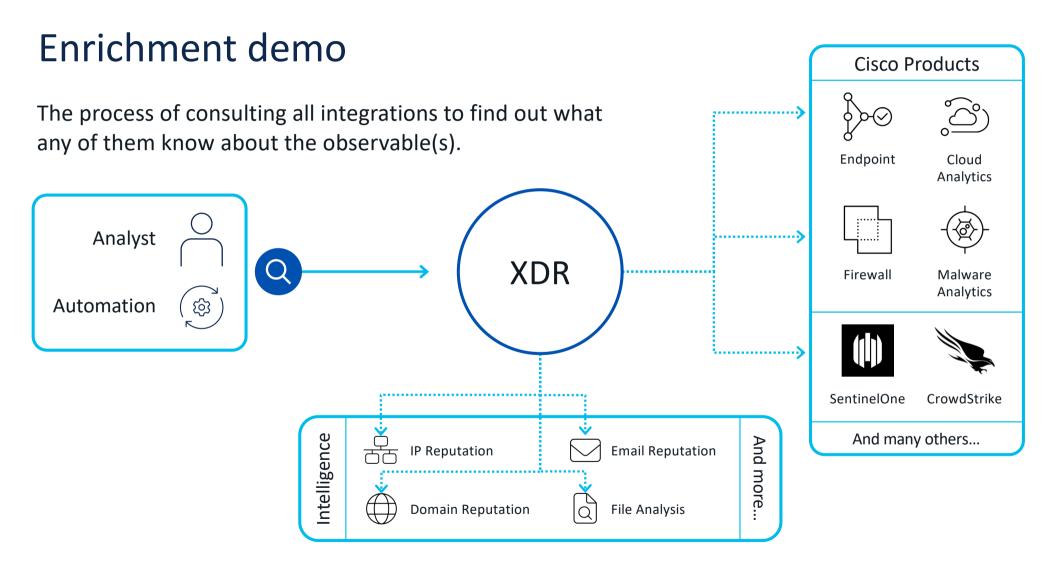


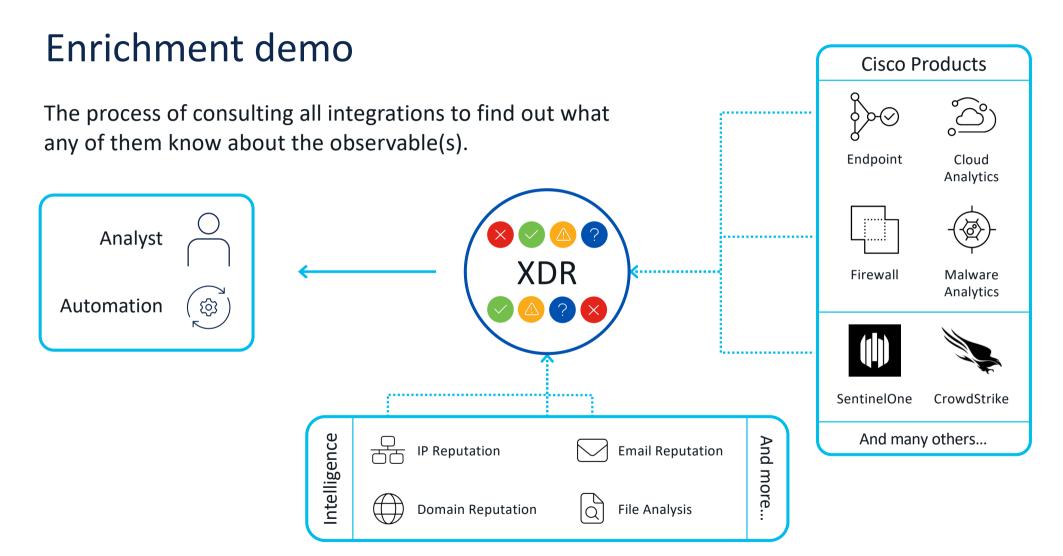


Features

Telemetry with Cisco XDR







Incident manager

Incidents

62 Incidents 33 New Incidents 8 Open Q Search \times 62 matching results **▼ Filters** \[
 \] Priority ‡ Name ‡ Source 1000 Malicious Process and Suspicious SMB/RDP Activity - Doc Test Do ... Cisco : 1000 **Unusual External Server for This is localhost** Cisco : 1000 **AWS Inspector Finding for This is localhost** Cisco : 1000 **Command and Control DNS Activities** Umbre 928 Formula Test.Mar27.Critical.TTP(58).AssetValue[8] Formu 928 F1.03-06d.Critical.TTP(58).AssetValue[10] Formu 835 **Attack Graph Test - 109 Observables** Formu 800 F1.03-06a.Critical.TTP(50).AssetValue[NULL] Formu 765 **New Internal Device for This is localhost** Cisco : 765 **Azure Permissive Security Group for TD&R RSA** Cisco : 742 F1.03-08.Critical.TTP(58).AssetValue[8] Formu

Incident manager



Centralized incident management

Incidents from a wide portfolio of products, all in one place



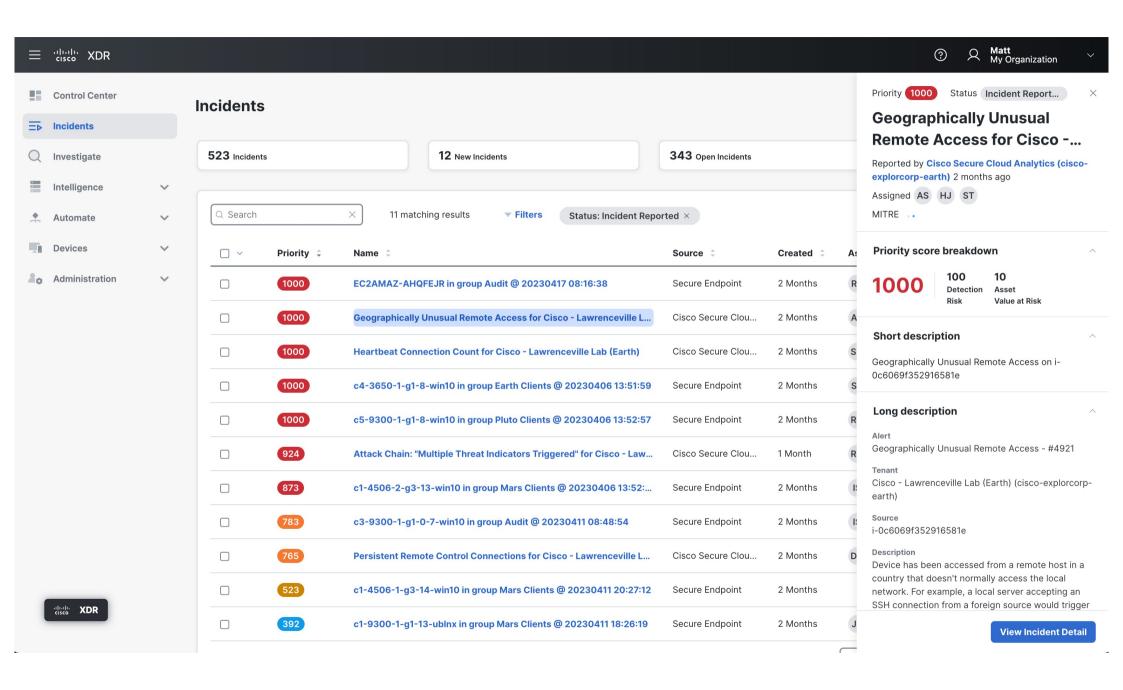
Automated prioritization

Risk- and asset-based prioritization, so you know what to investigate first



Built-in response workflows

Automated actions that make resolving an incident simpler and faster



Identify the most impactful incidents based on risk



Priority Score = Detection Risk x Asset Value

The total priority score used to prioritize incidents

Detection risk composed of multiple values:

- MITRE TTP Financial Risk
- Number of MITRE TTPs
- Source Severity

User-defined asset value represents the value of the assets involved in the incident

Incident response in four stages

Identify



Review the incident and confirm the findings

Contain



Act against impacted hosts, domains, files, etc.

Eradicate

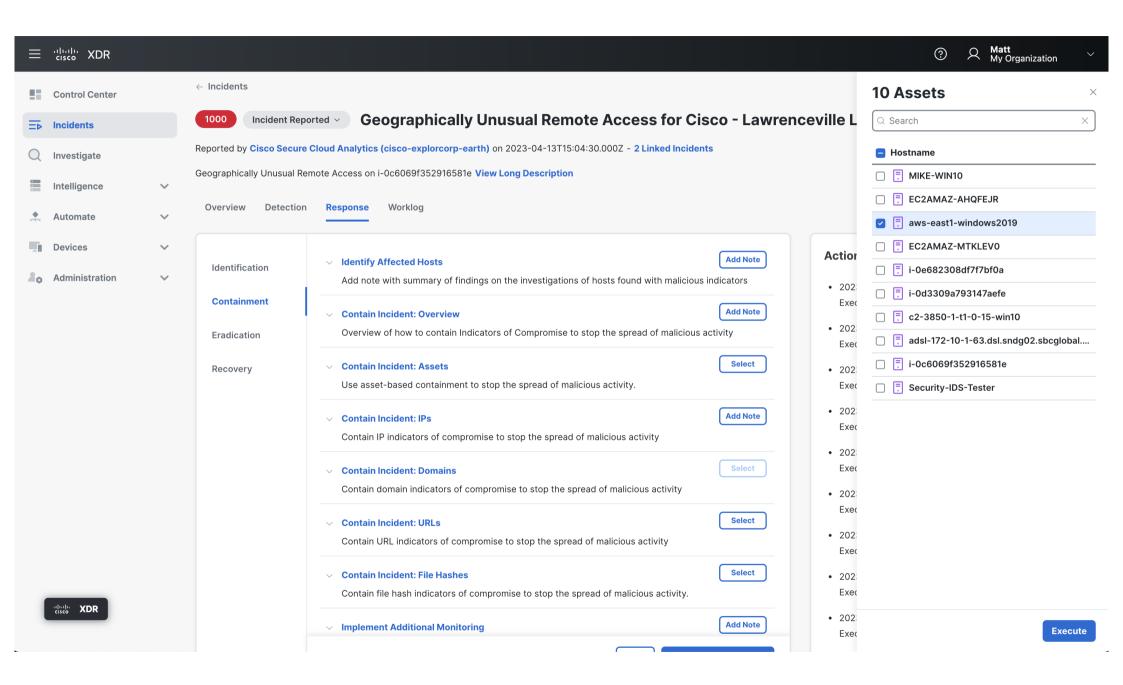


Remediate
vulnerabilities and
remove malicious
content

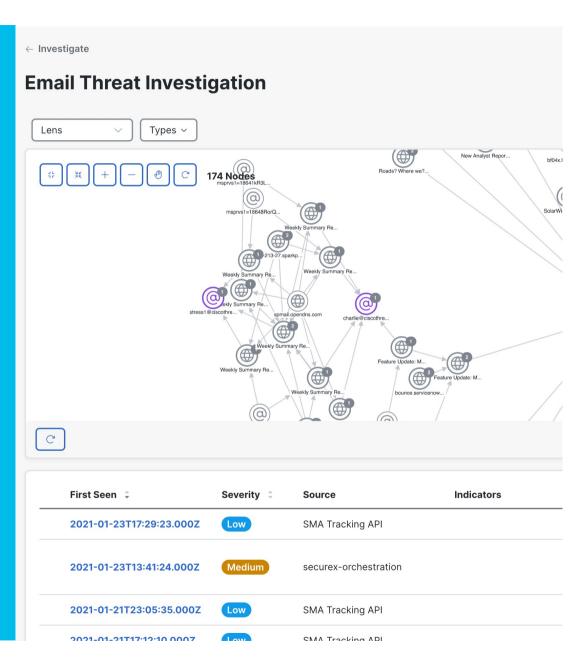
Recover



Validate remediation and restore impacted services



Investigate



Investigate



One place to investigate across products

Aggregated intelligence from all your integrated products



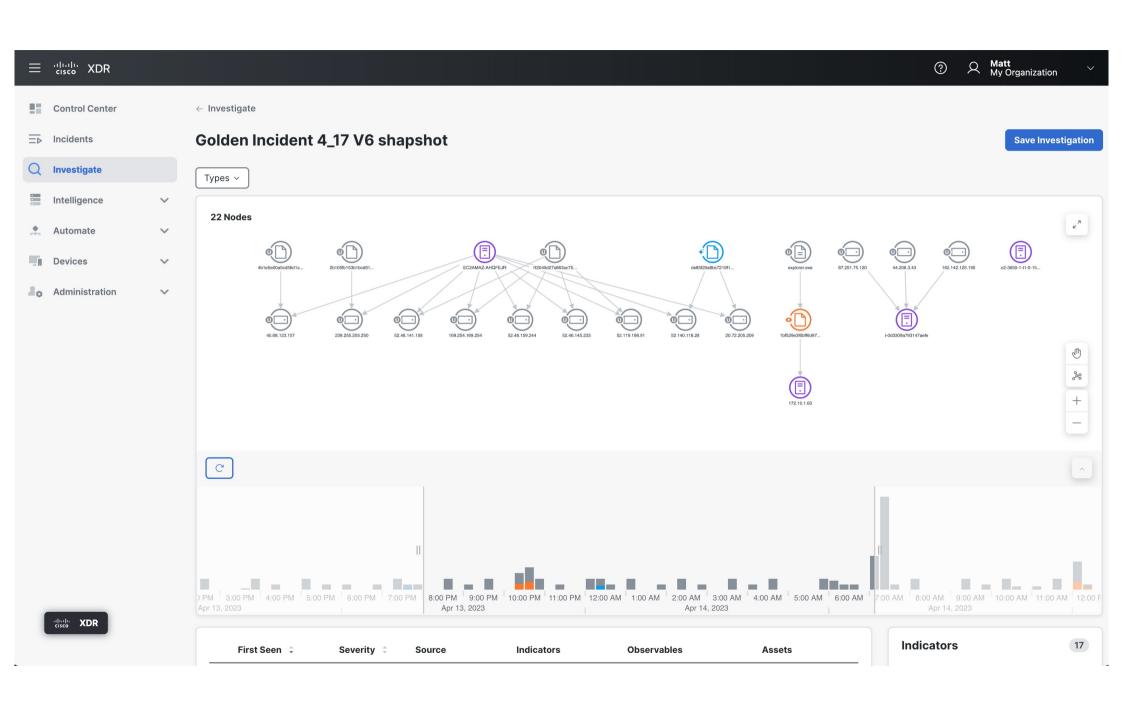
Interactive visualization of investigation elements

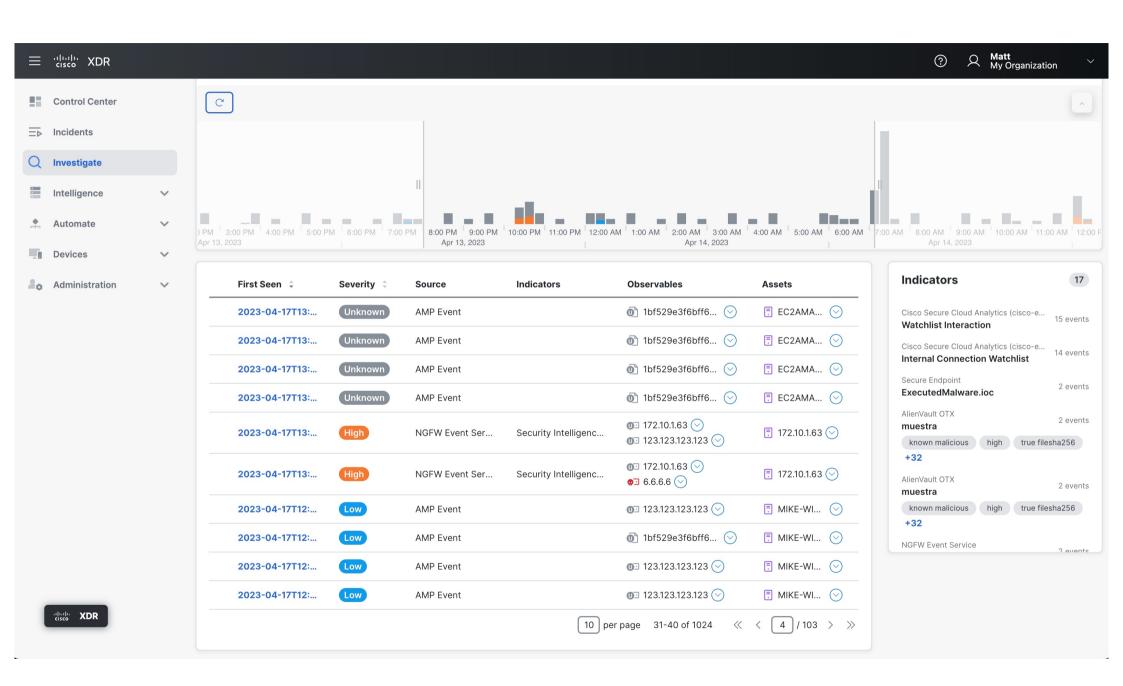
Drag, drop, and inspect the results of your investigation



Built-in response actions

Take action right from an investigation, no cross-launching into other products required



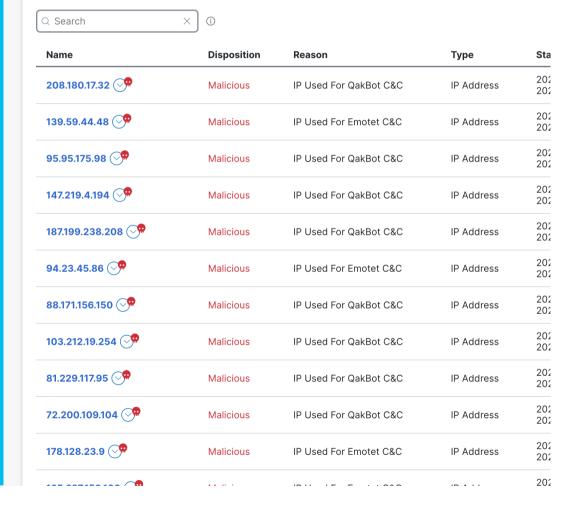


Intelligence

Judgments

Judgements associate a disposition with an observable. Learn More []

Public Private



Intelligence



Centralized repository of threat intelligence

Customizable database of intelligence that powers your investigations



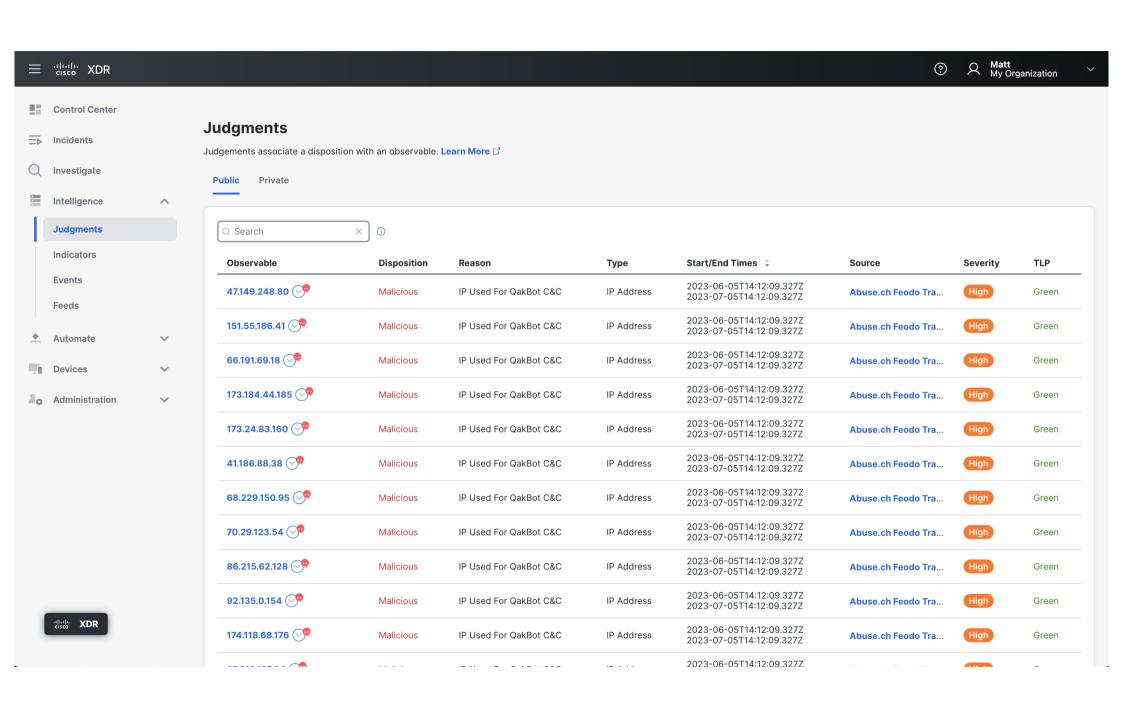
Customizable intelligence feeds

Publish feeds for other products to consume, keeping all your control points up to date

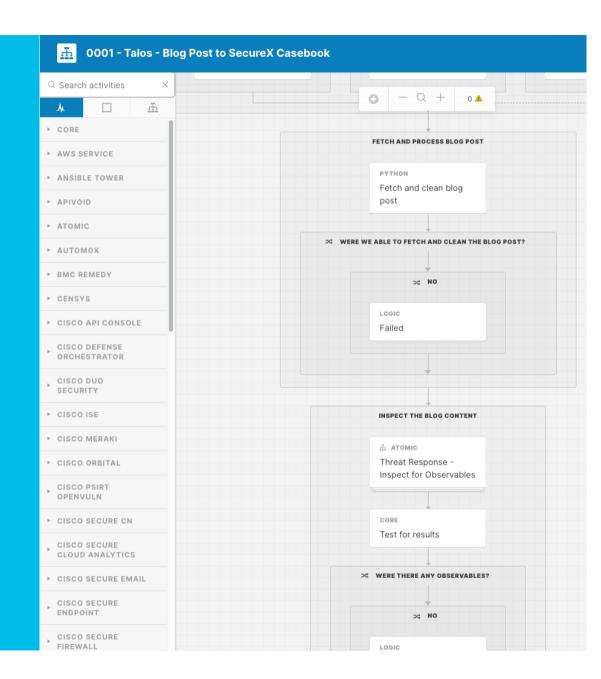


Talos intelligence, out of the box

Advanced threat research and intelligence, built into Cisco XDR



Automation



Automation



Drag and drop, "no-to-low code" workflow builder
Simple workflow editor that works without writing a single line of code



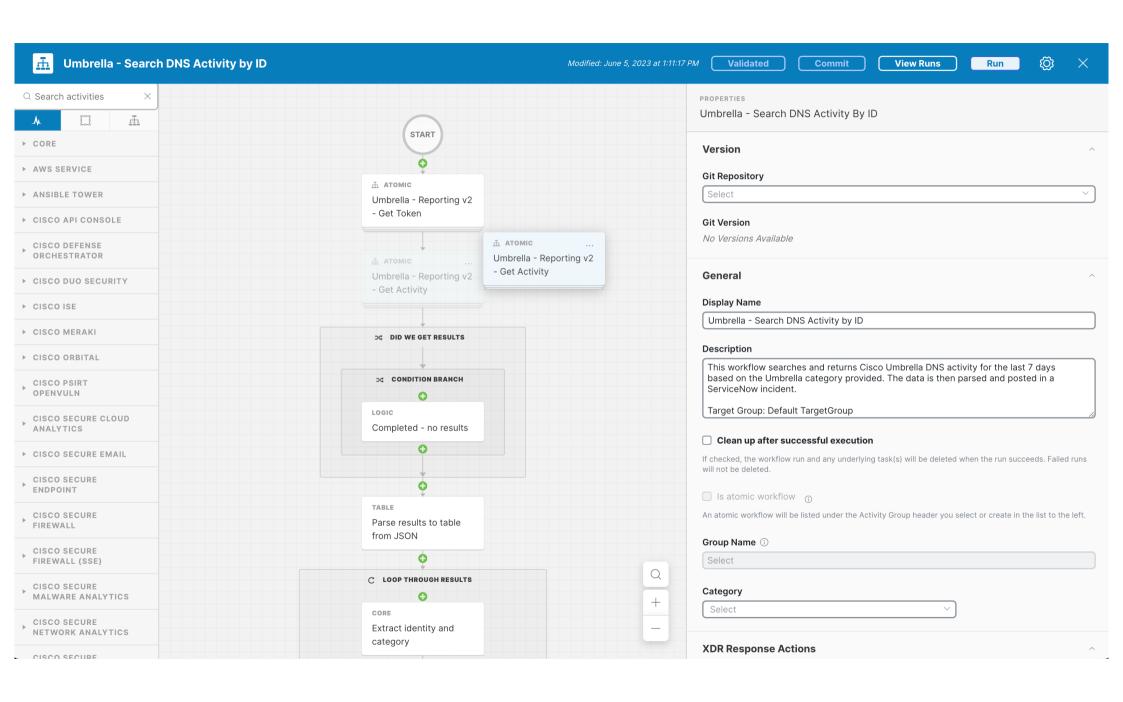
Accelerates how you investigate and respond

Automate how your analysts investigate and respond



Out of the box workflows from Cisco

Popular use cases built in, more available for import from Cisco







Investigate

Compress the time between detection and response by gathering information and presenting it to an analyst at machine speed

Respond

Accelerate how analysts respond to threats using response playbooks, the pivot menu, and other types of automated workflows

Investigate







Fetch IOCs

IOCs can be gathered from any number of sources including threat research websites, blogs/RSS feeds, and so on

Investigate

Once we have IOCs, we can use XDR via workflows or APIs to investigate using integrated products

Notify

If sightings are found in the environment, we can let analysts know the threat has been seen and remediation is required





Identify

Determine which observables to act against and which action to take

Act

Take the specified action leveraging products integrated with XDR as control points

Investigate and Respond





∇

Fetch IOCs

IOCs can be gathered from any number of sources including threat research websites, blogs/RSS feeds, and so on

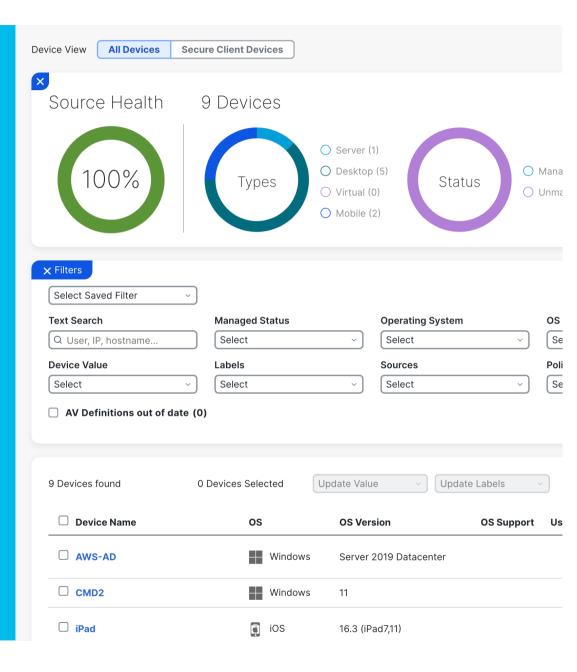
Investigate

Once we have IOCs, we can use XDR via workflows or APIs to investigate using integrated products

Respond

Take the specified action leveraging products integrated with XDR as control points

Devices



Devices



Extensive visibility into your devices

Combined inventory from both security and device management products



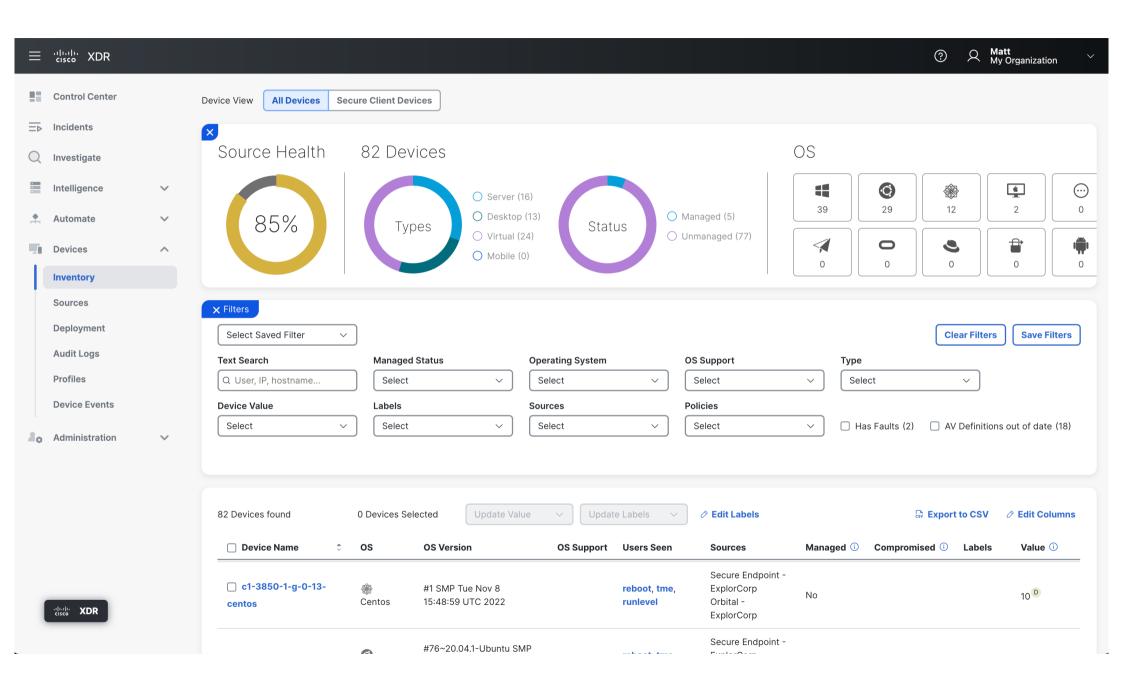
Provides asset context to investigations

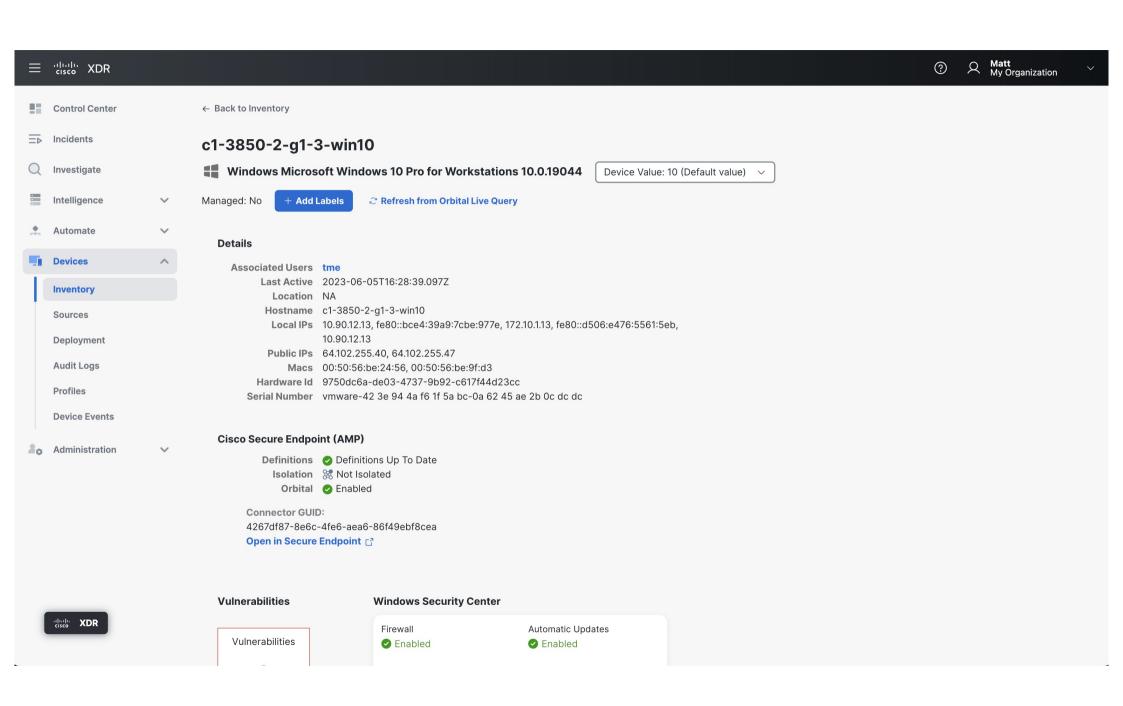
Differentiate between a generic target and an asset that belongs to you

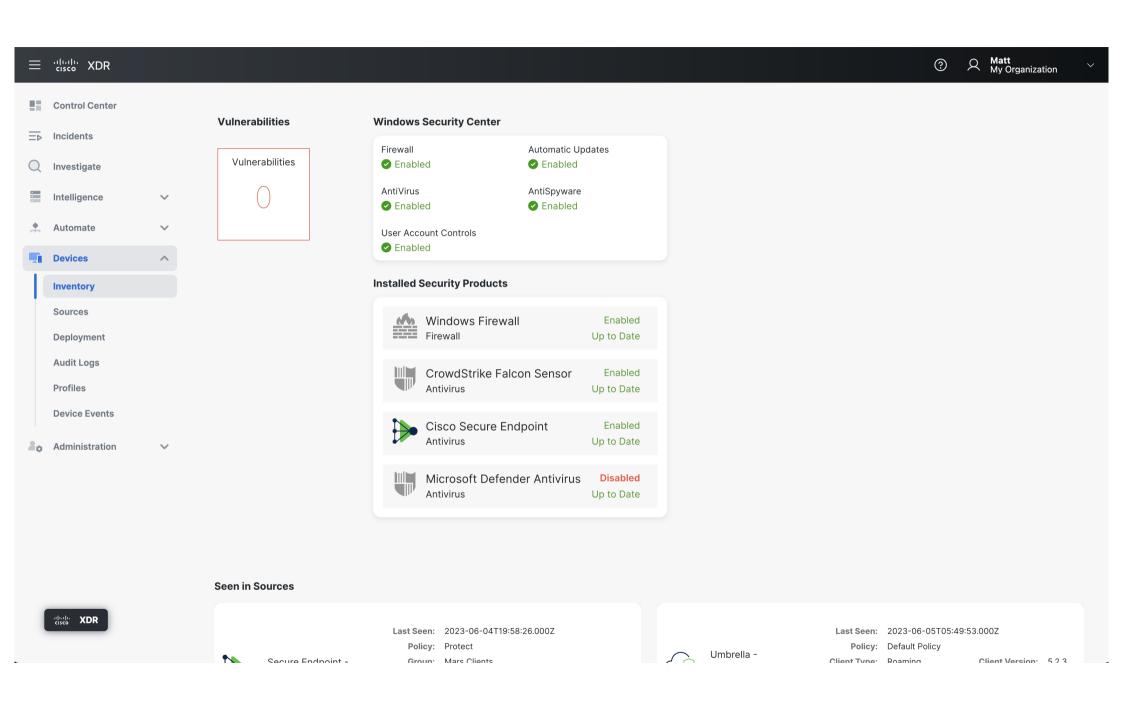


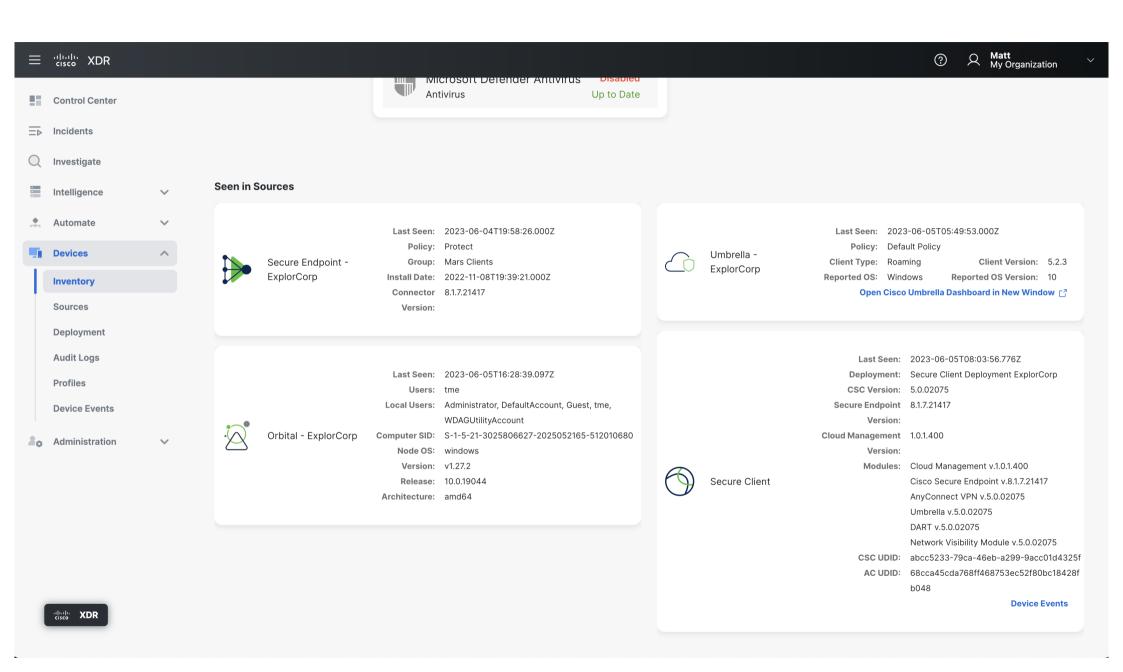
Configuration and management of Cisco Secure Client

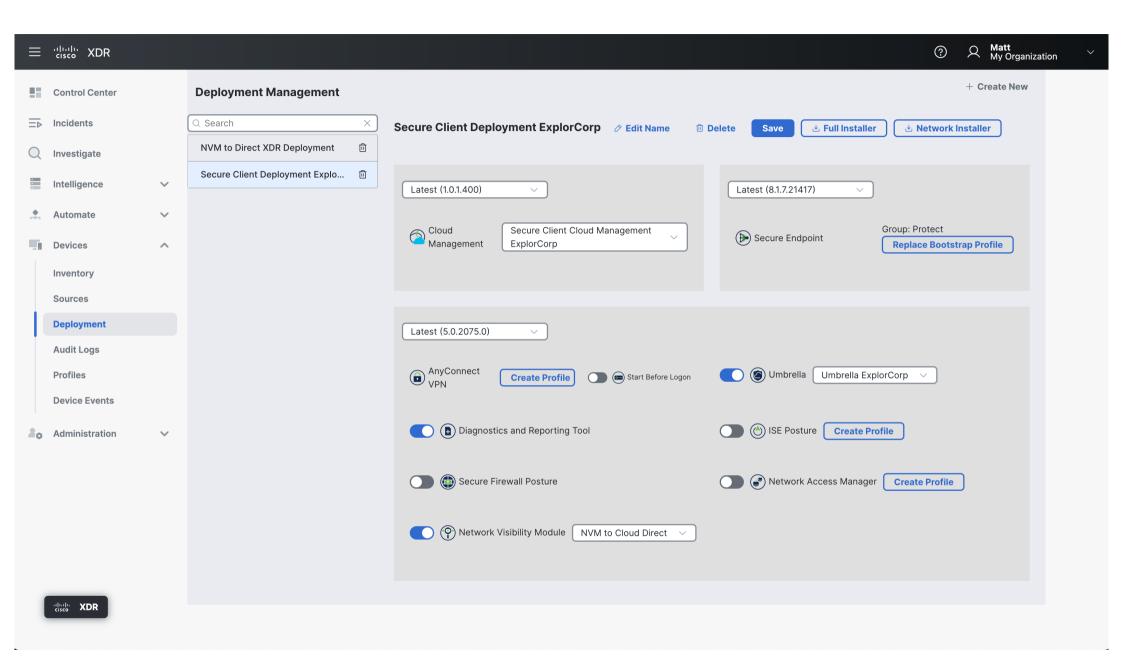
Cloud-based management of Secure Client profiles and deployments

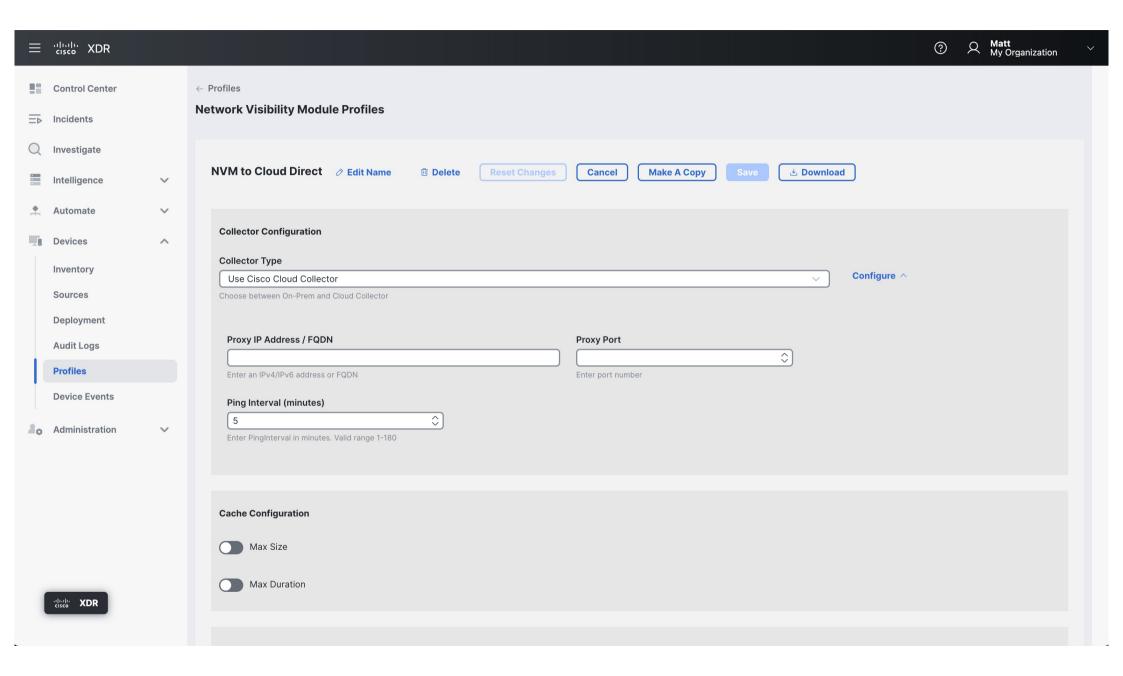


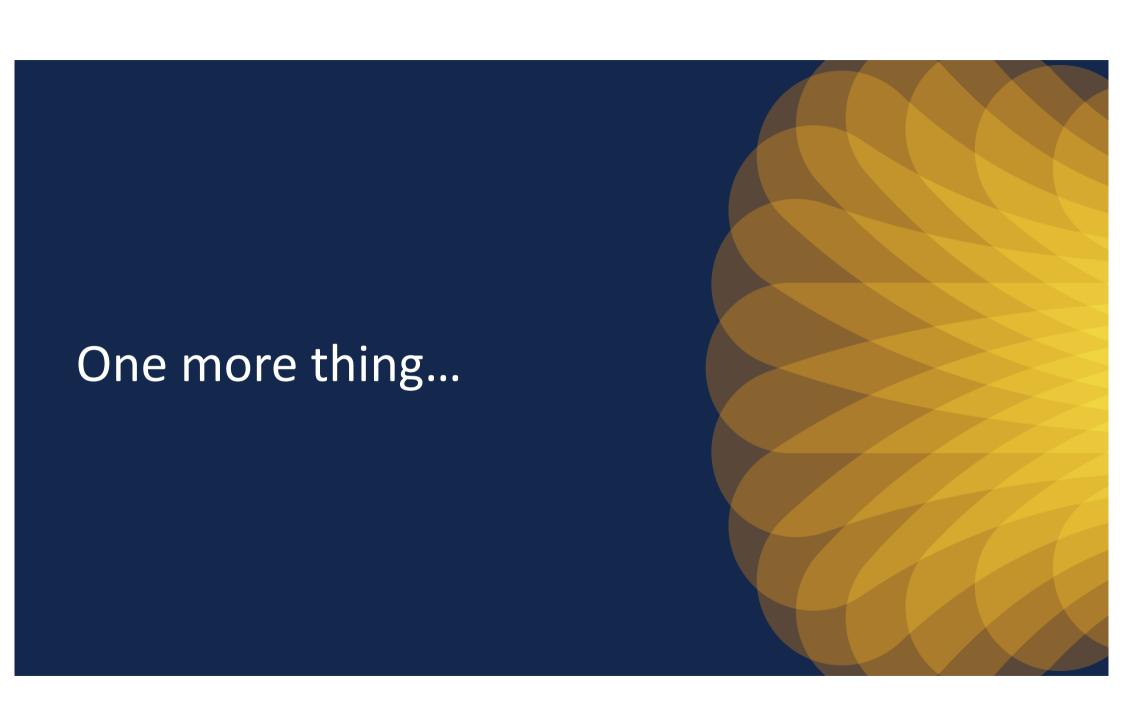










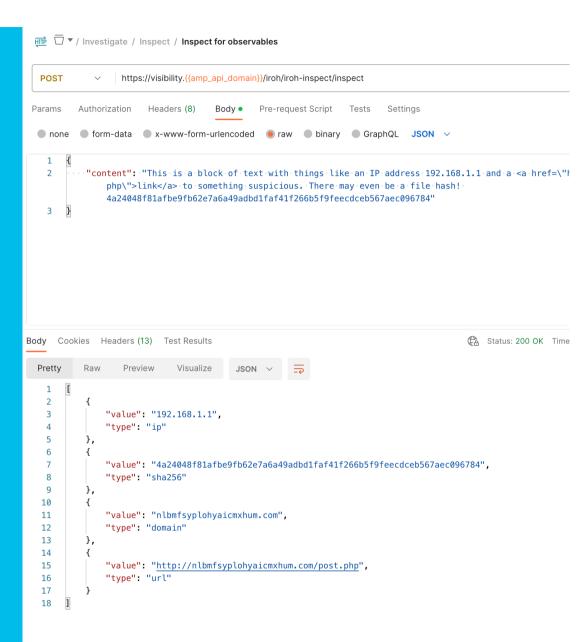


XDR has a robust set of APIs!

- We have APIs for:
 - Threat intelligence
 - Private and public databases of threat intel
 - Investigation
 - Inspect content for observables
 - Enrich data using your integrated products
 - Response
 - Act on observables you know to be dangerous
 - Automation
 - Trigger workflows in XDR to do just about anything you want

XDR Inspect API

- Takes an arbitrary block of text and extracts observables from it
- Simple and easy way to extract things to investigate from content like emails, blog posts, threat intel websites, and more...



Resources



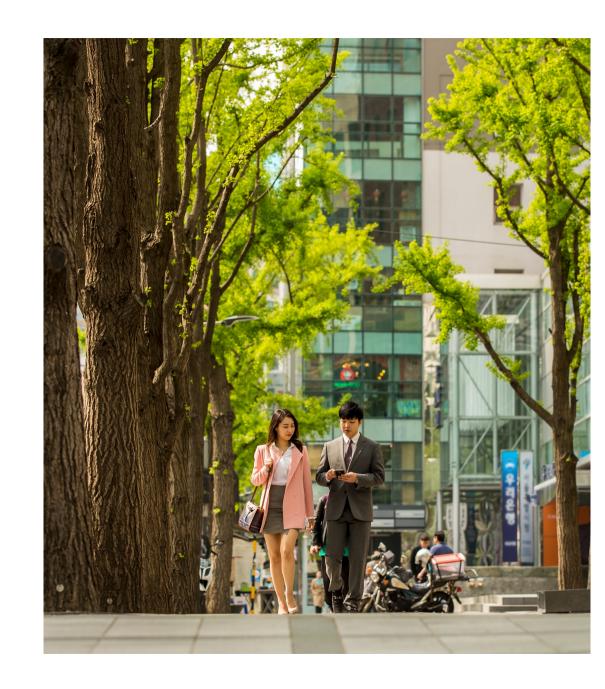
https://cisco.com/go/xdr

Getting started

Where can you learn more about Cisco XDR?

- Cisco XDR At a Glance
- An XDR Primer: The Promise of Simplifying Security Operations Position Paper
- <u>Cisco XDR: Security Operations Simplified eBook</u>
- Five Ways to Experience XDR eBook
- <u>Cisco XDR Overview Video</u>
- XDR Buyer's Guide

Cisco XDR on Cisco.com





Děkuji za pozornost

Q & A

