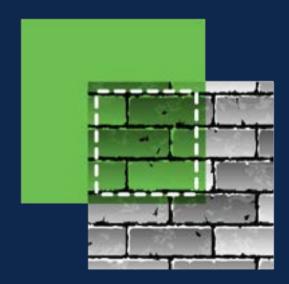
SECURE

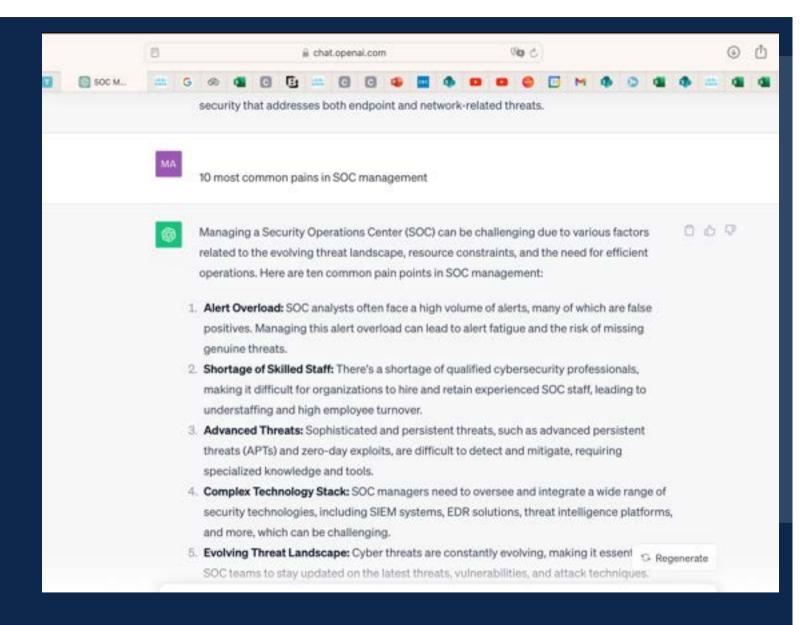


Cisco XDR Tech Club

Jiří Tesař TSA Security, jitesar@cisco.com 6.2.2024



Most common pains



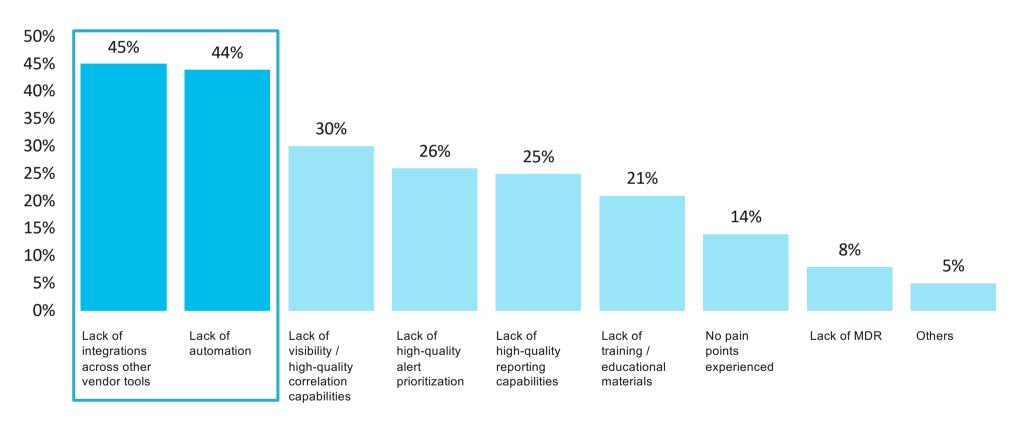
Most common pains

- 1. Alert Overload
- 2. Shortage of Skilled Staff
- 3. Advanced Threats
- 4. Complex Technology Stack
- 5. Evolving Threat Landscape

- **6.** Budget Constraints
- 7. Regulatory Compliance
- 8. Incident Response Coordination
- 9. Retaining Talent
- 10. Legacy Systems



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



11[1:1]1: CISCO

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%



Definition of Extended Detection and Response (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

The Cisco approach to XDR

Detect more, act faster, elevate productivity, build resilience

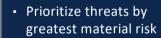


Detect the most sophisticated threats

- 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



- Unified context to streamline investigations
- Evidence-backed recommendations



Elevate productivity

- 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

ANYTHING Detection and Response

EDR	NDR	XDR	MDR
ENDPOINT DETECTION AND RESPONSE	NETWORK DETECTION AND RESPONSE	EXTENDED DETECTION AND RESPONSE	MANAGED DETECTION AND RESPONSE
Endpoint installation agend needed.	Network detection and response for north/south and east/west traffic.	Correlation of different sources.	Monitoring 24x7
	No agend needed Behavioural analysis.	multi-vendor, cloud and on – premise.	Detection and Response Managed by vendor.
		Prioritzation of events based on business impact.	
		Automated response.	

XDR vs SIEM

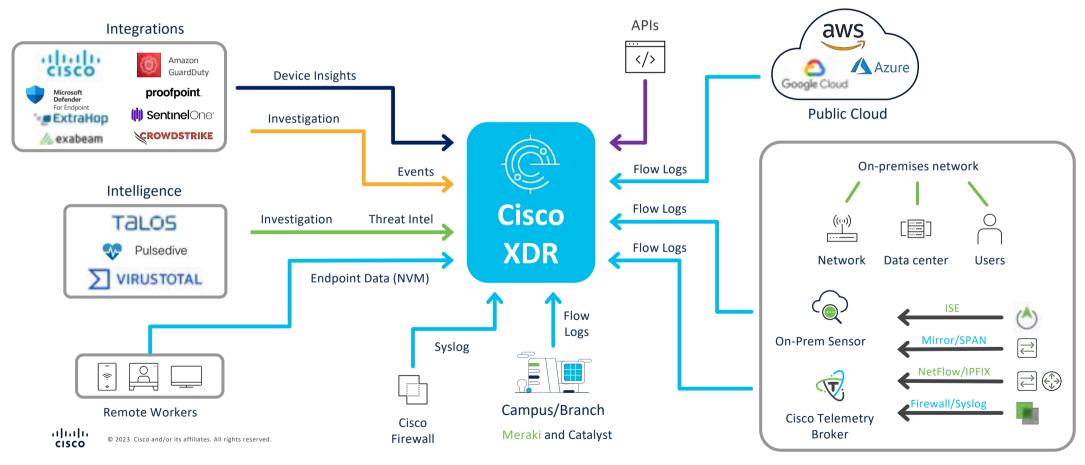
Key differences	SIEM	XDR
SCOPE OF DATA COLLECTION	collecting, analyzing, and correlating log and event data from a wide range of sources, such as firewalls, IDS/IPS, endpoints, and applications	goes beyond log and event data and also collects and analyzes endpoint data, network traffic, and cloud-based data in real time
DETECTION AND RESPONSE CAPABILITIES	Event correlation and reporting to generate alers	advanced threat detection and automated response. Machine learning/AI + behavioral analytics to detect threats in real time.
DATA CORRELATION	Correlation rules and filters	Advanced analytics
ALERT MANAGEMENT	Large number of alerts, manually triaged and prioritize by analysts.	built-in intelligence to reduce alert fatigue and prioritize incidents based on their severity and potential impact
REAL TIME RESPONSE	provides information for incident investigation and reporting but often lacks real-time response capabilities	allows for real-time incident response, enabling automated actions to be taken immediately upon detection of a threat, thereby minimizing the time between detection and response.

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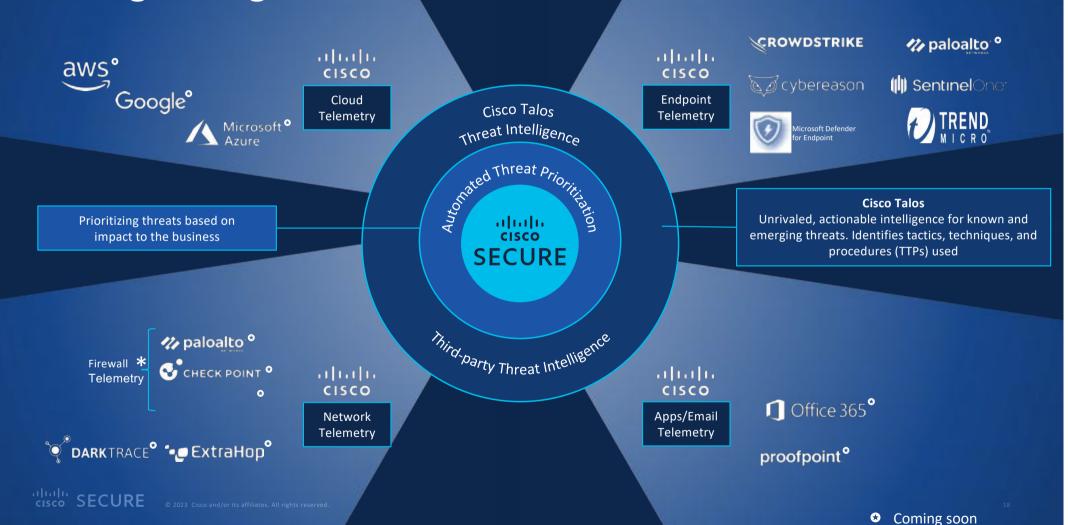
Extended context

Telemetry sources for Cisco XDR

Flexible integration for existing infrastructure



Strategic integrations to deliver customer outcomes



Business Needs

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

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?

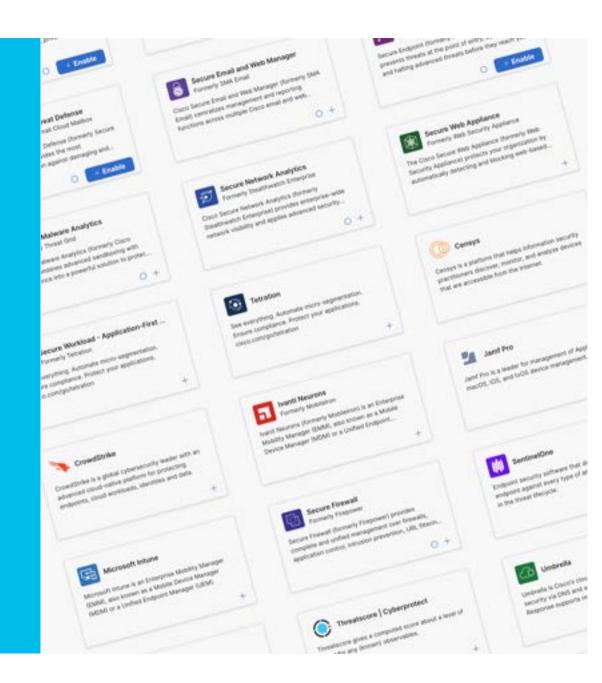
5 Extend Asset Context



1) 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

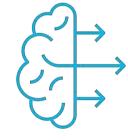


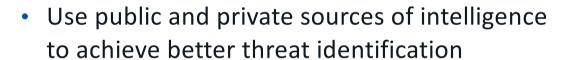


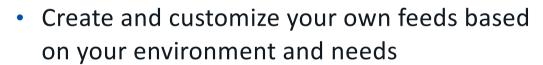
Enhanced detections with diverse intelligence













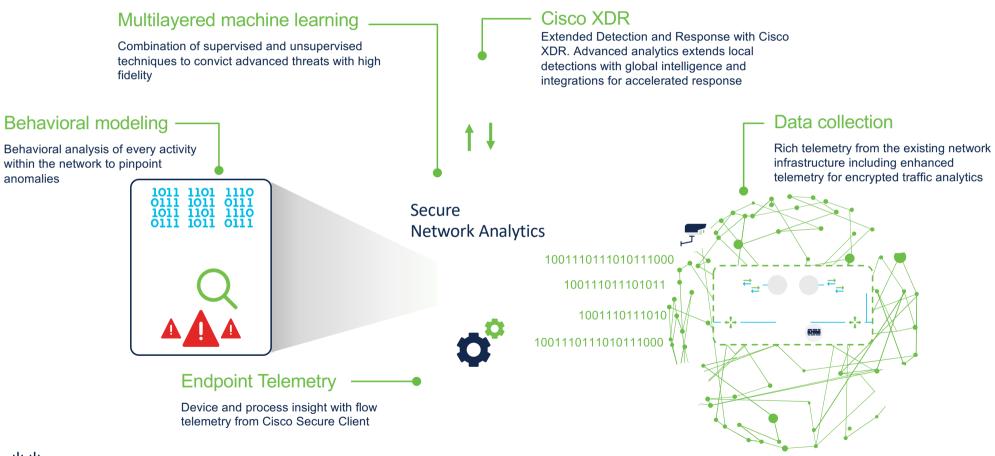
Judgements

Indicators

Feeds

Events

Secure Network Analytics



2) 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 G Search 62 matching results * Filters 0 -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 Formula Test.Mar27.Critical.TTP(58).AssetValue[8] Formul 928 F1.03-08d, Critical, TTP(58), AssetValue[10] Formul 835 Attack Graph Test - 109 Observables Formul 800 F1.03-06a.Critical.TTP(50).AssetValue[NULL] Formul New Internal Device for This is localhost Cisco: Azure Permissive Security Group for TD&R RSA Cisco ! F1.03-08.Critical.TTP(58).AssetValue[8] Formul

Walk through incidents step by step

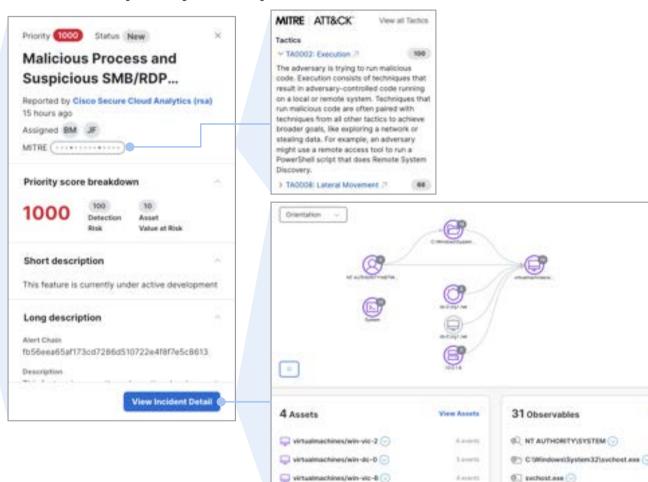
Progressive disclosure

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



6. SYSTEM (-)

Identify the most impactful incidents based on risk



Priority Score = Detection Risk x Asset Value

The Incident total priority score used to prioritize incidents

Detection Risk composed of multiple values:

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

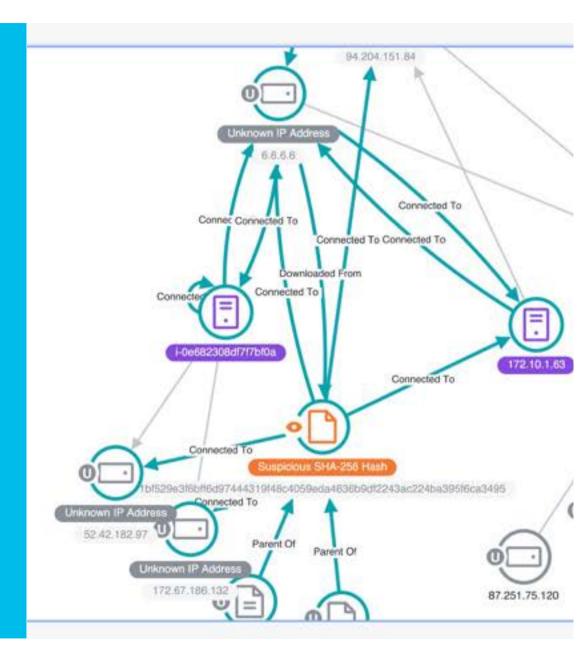
User Defined Asset Value represent the value of the asset involved in the incident



3) 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



Investigate incidents in multiple consoles

Product dashboard 1



Product dashboard 2











Product dashboard 1



Product dashboard 2

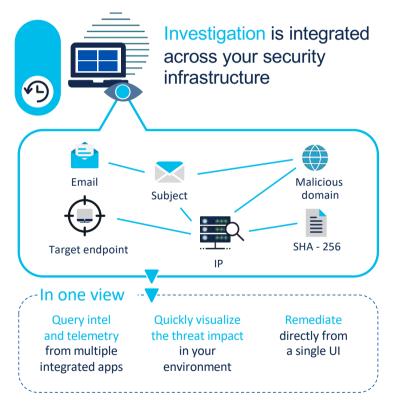


Product

Product dashboard 4



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

4) 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 ->

Orchestration Workflows

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



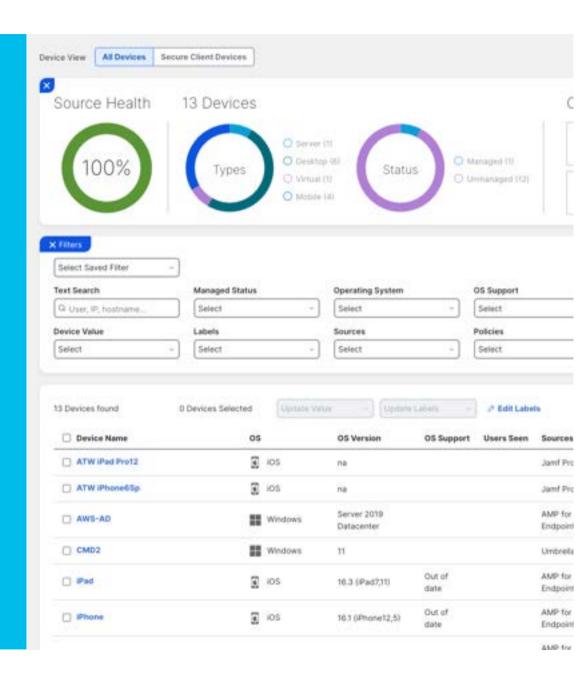
And more...

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

5) Extend asset context

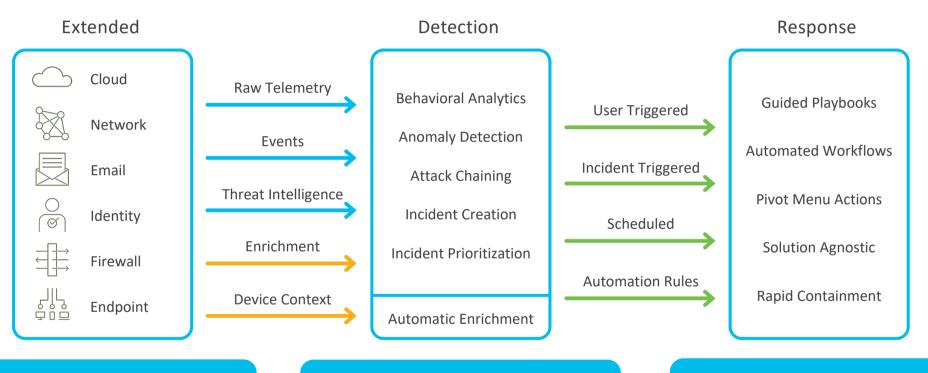
- Detailed asset information aggregated from multiple sources
- Combines asset inventory with security context
- Allows for more accurate incident prioritization based on asset value
- Distinguish between targets and assets







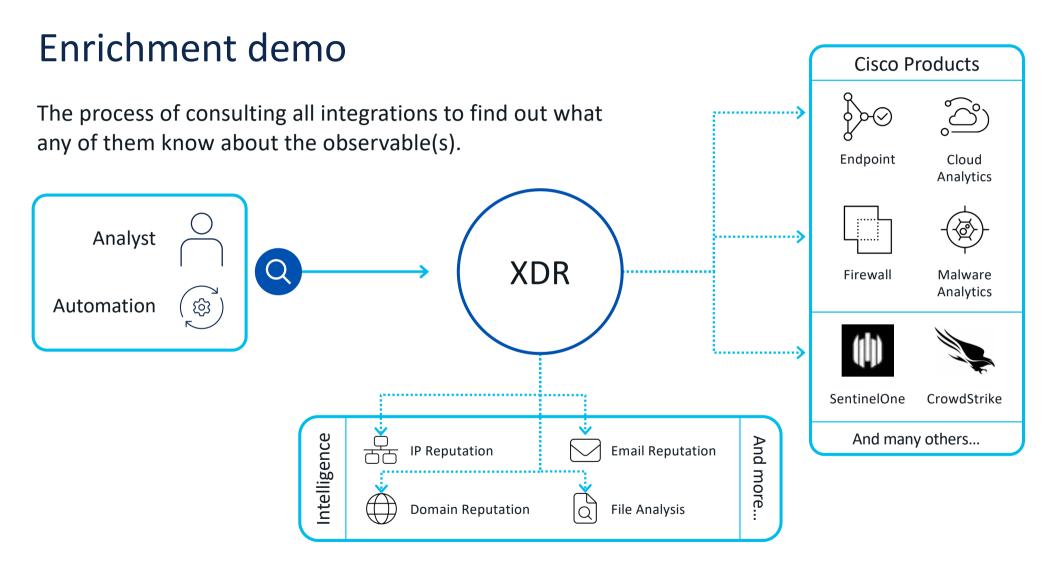
High level architecture

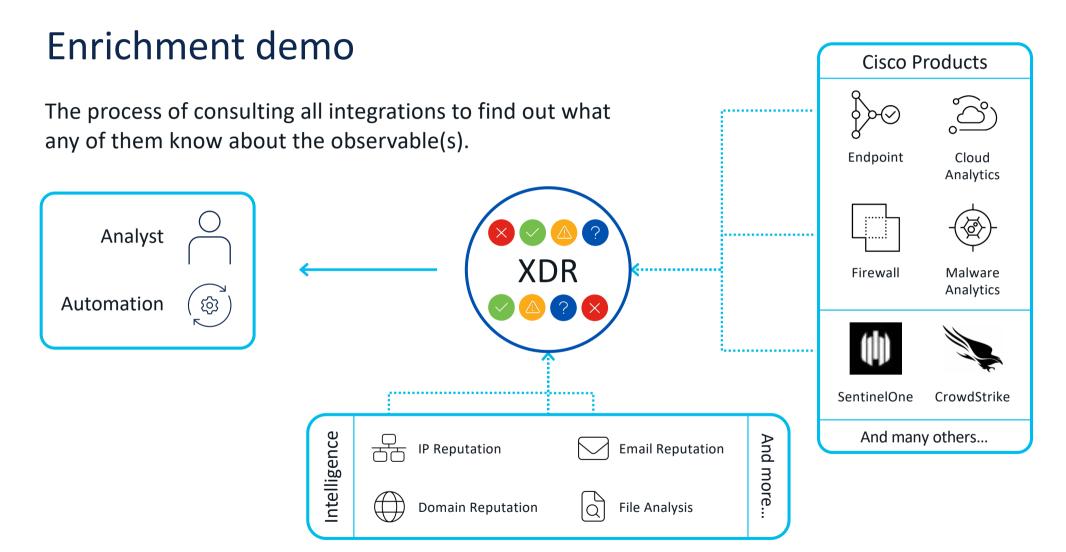


Multi-vector telemetry ingest network, cloud, endpoint, email, and more from Cisco and 3rd party

Cross domain alert detections and attack chaining with automated incident prioritization and enrichment

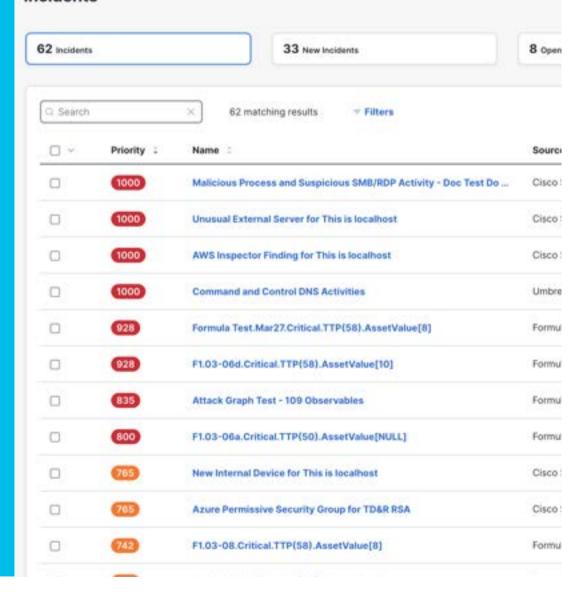
Automated or user triggered responses to block observables using any integrated technology





Incident manager

Incidents



Incident response in four stages

Identify



Review the incident and confirm the findings

Contain



Act against impacted hosts, domains, files, etc.

Eradicate

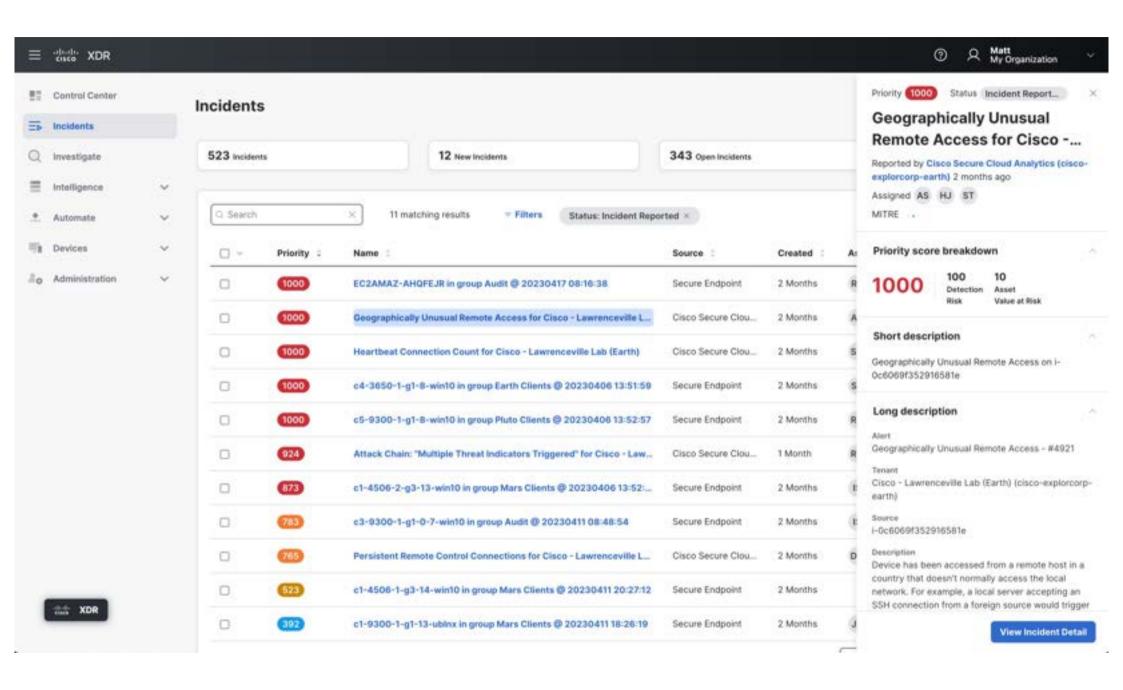


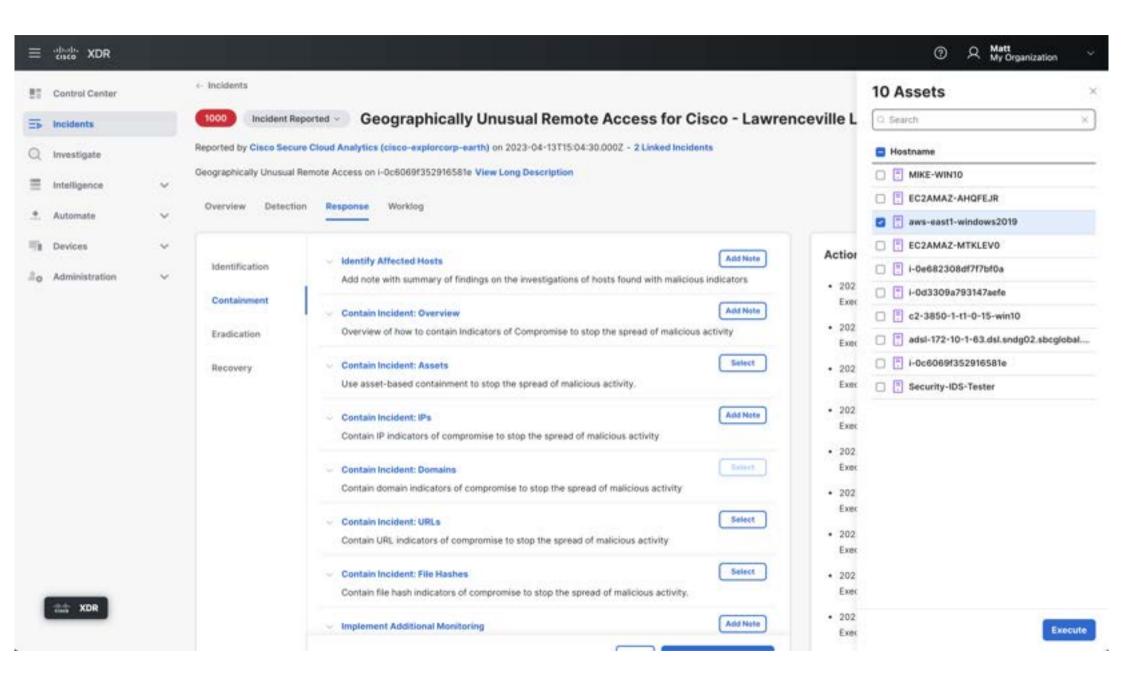
Remediate
vulnerabilities and
remove malicious
content

Recover

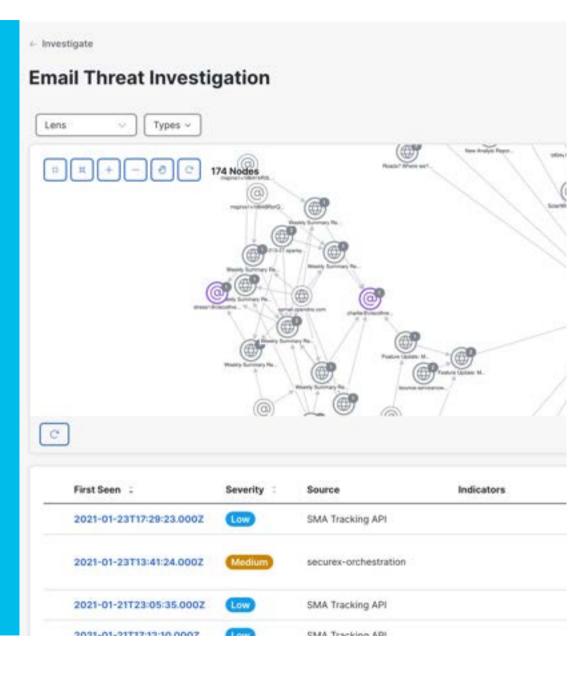


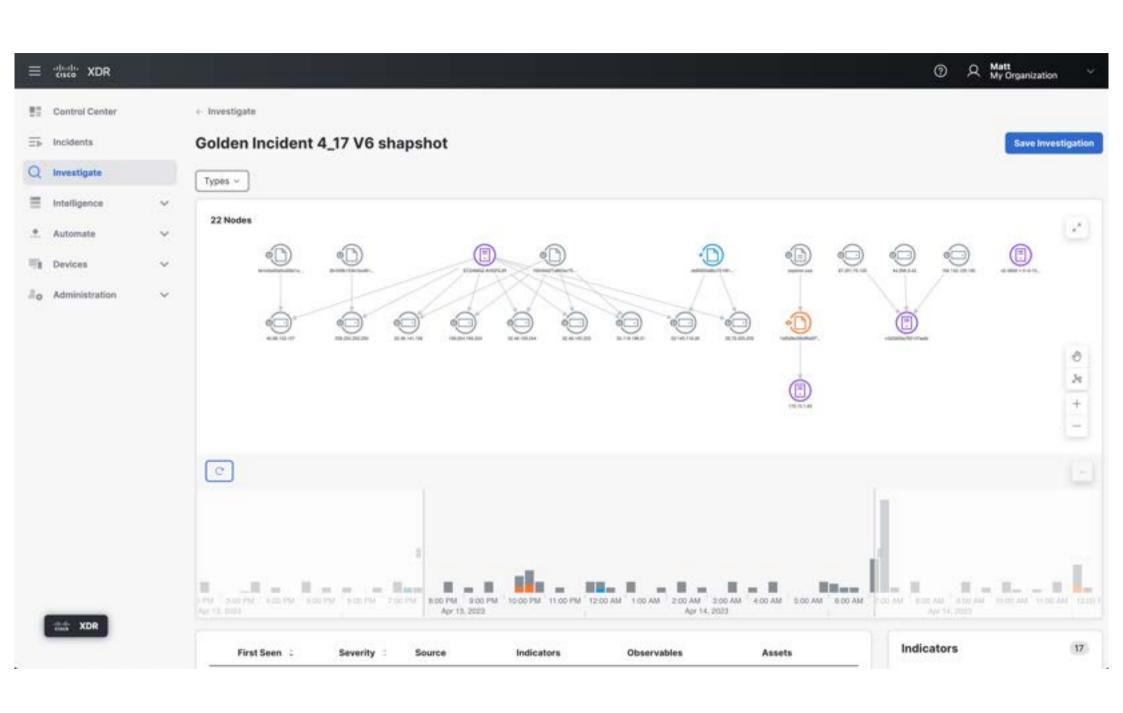
Validate remediation and restore impacted services

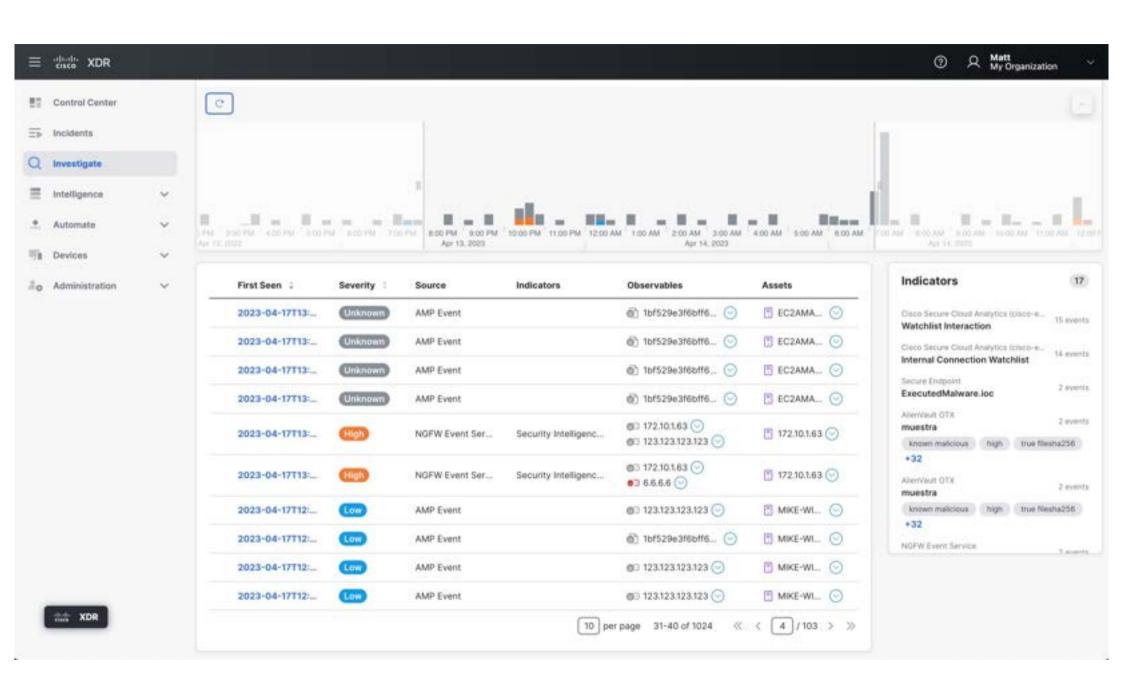




Investigate





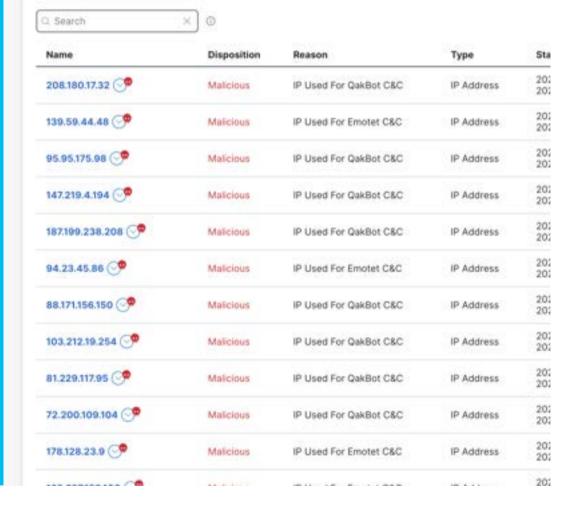


Intelligence

Judgments

Judgements associate a disposition with an observable. Learn More [5]

Public Private



Malicious

IP Used For QakBot C&C

XDR

174.118.68.176



Severity

Source

Abuse ch Feede Tra...

Abuse ch Feodo Tra...

Abuse.ch Feodo Tra...

Abuse.ch Feodo Tra...

Abuse.ch Feodo Tra...

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2023-06-05T14:12:09.327Z

2023-07-05T14:12:09.327Z 2023-06-05T14:12:09.327Z

IP Address

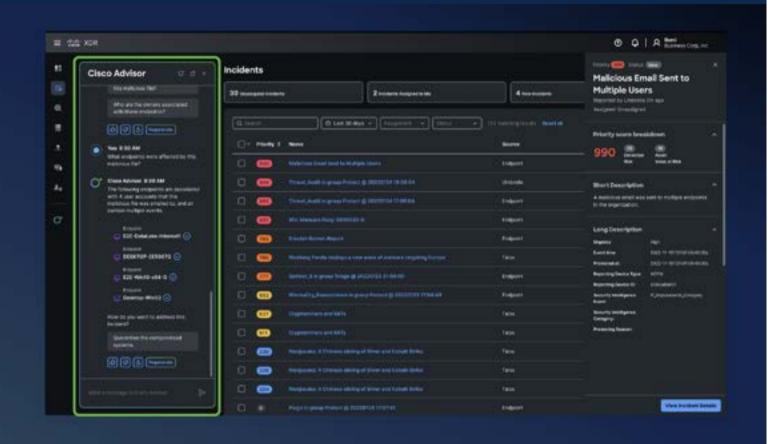
TLP

Green

SOC- Al Assistance

Cisco Advisor

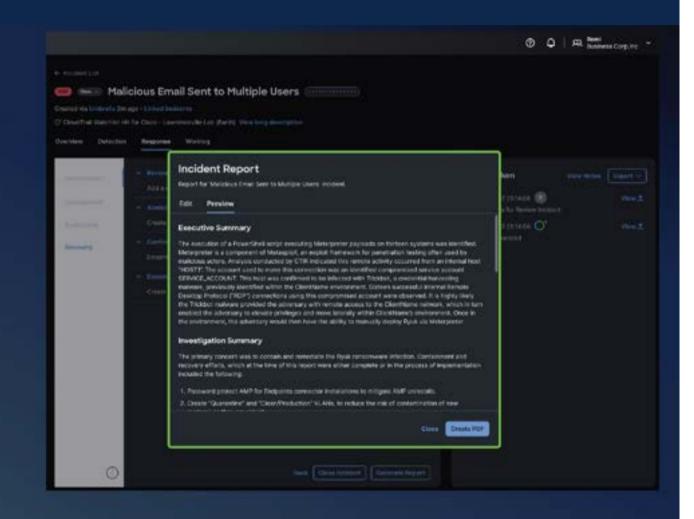
- Al Chatbot that uses natural language processing to provide insightful answers, practical advice and actionable steps
- Optimizes and recommends next steps and remediation tactics



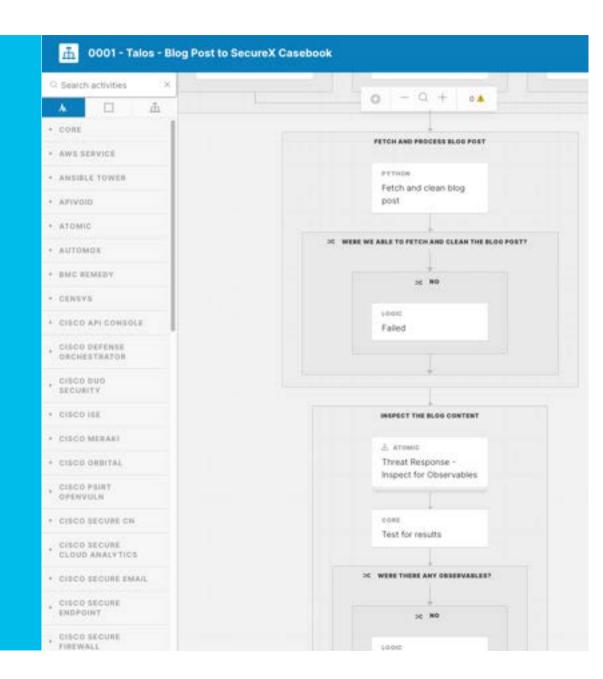
SOC- Al Assistance

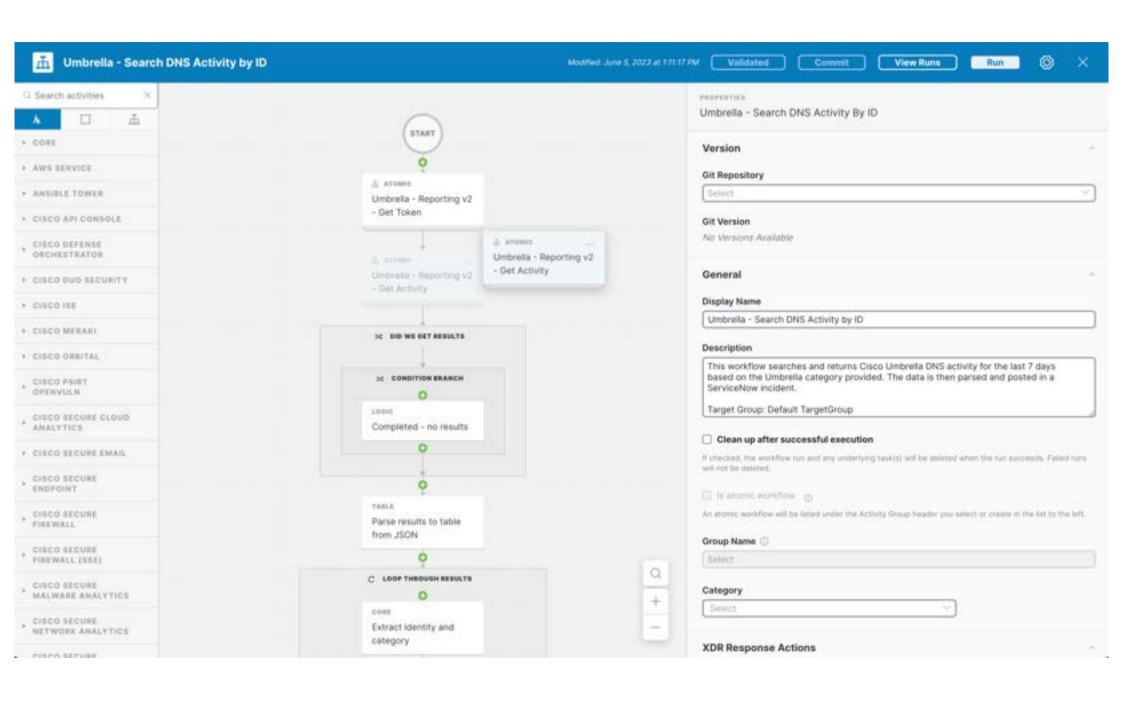
Incident Summary Reporting

- As the incident is resolved, save time by allowing generative AI to draft the post-mortem incident summary report
- Export to .pdf to share with external stakeholders



Automation

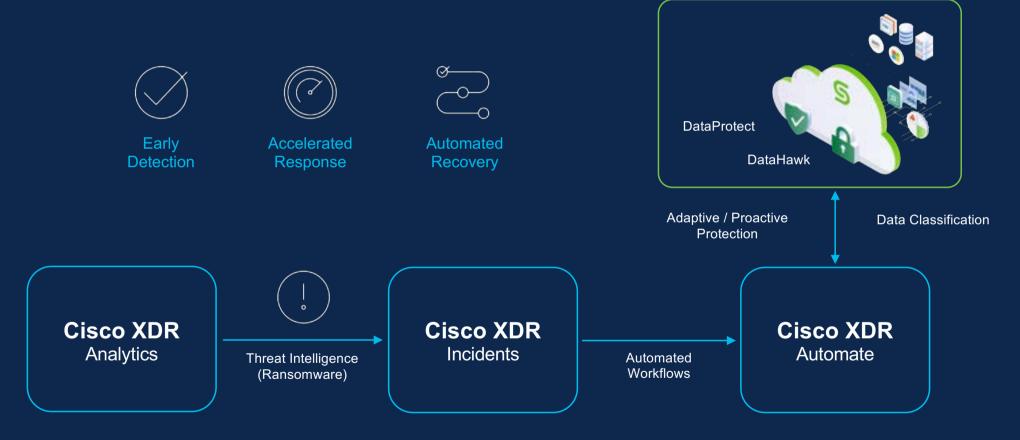




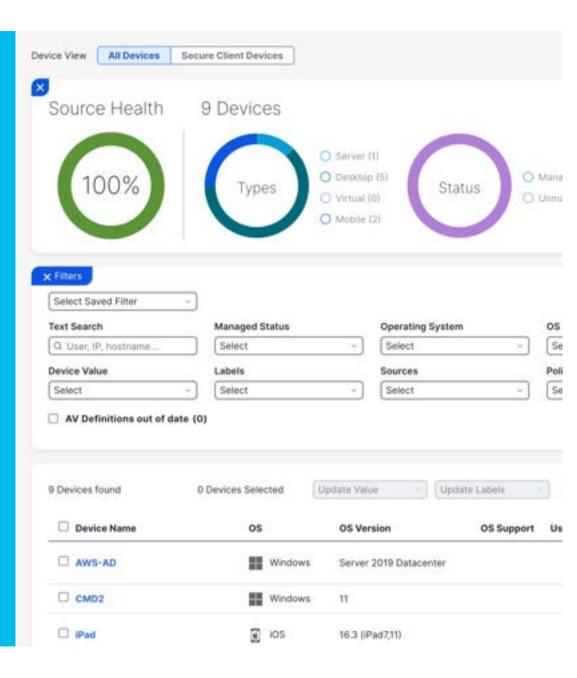
Recovery XDR+R

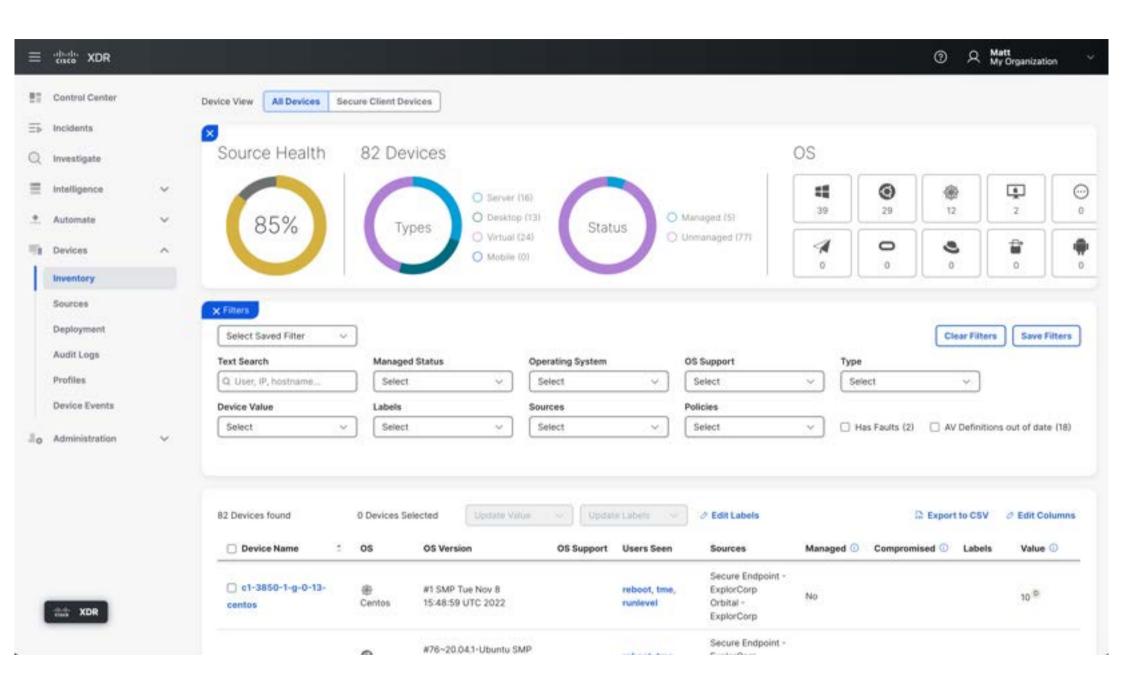


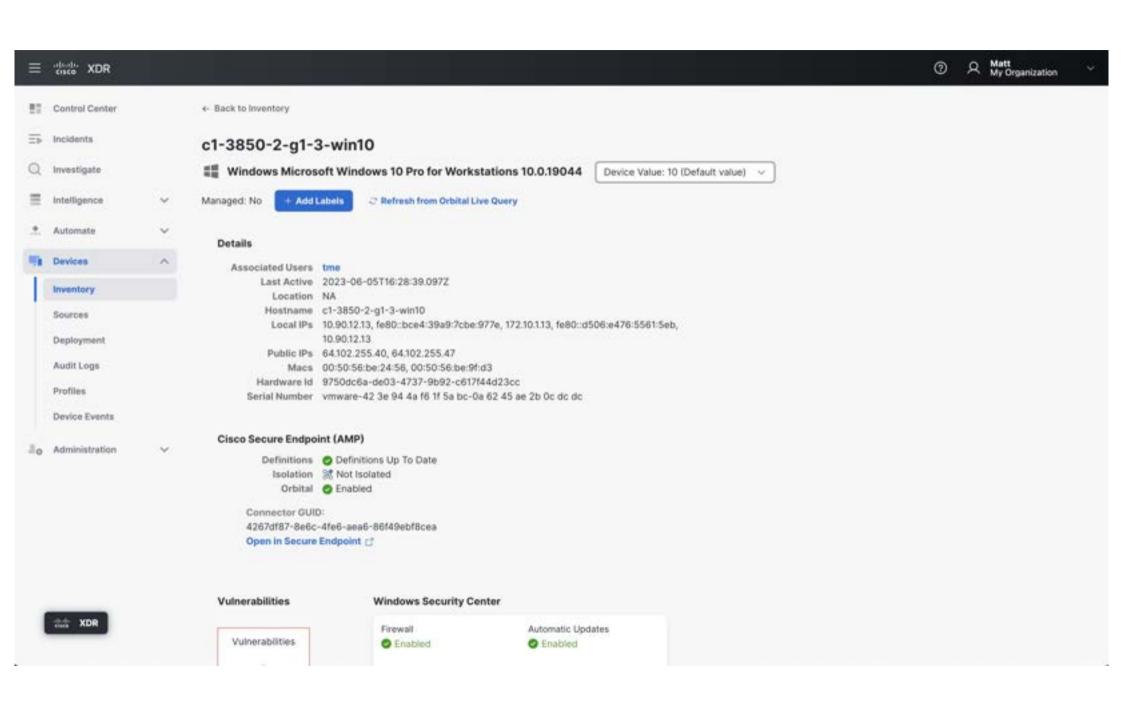
Full Cycle Automated Threat Response and Recovery* Cohesity and Cisco XDR Integration

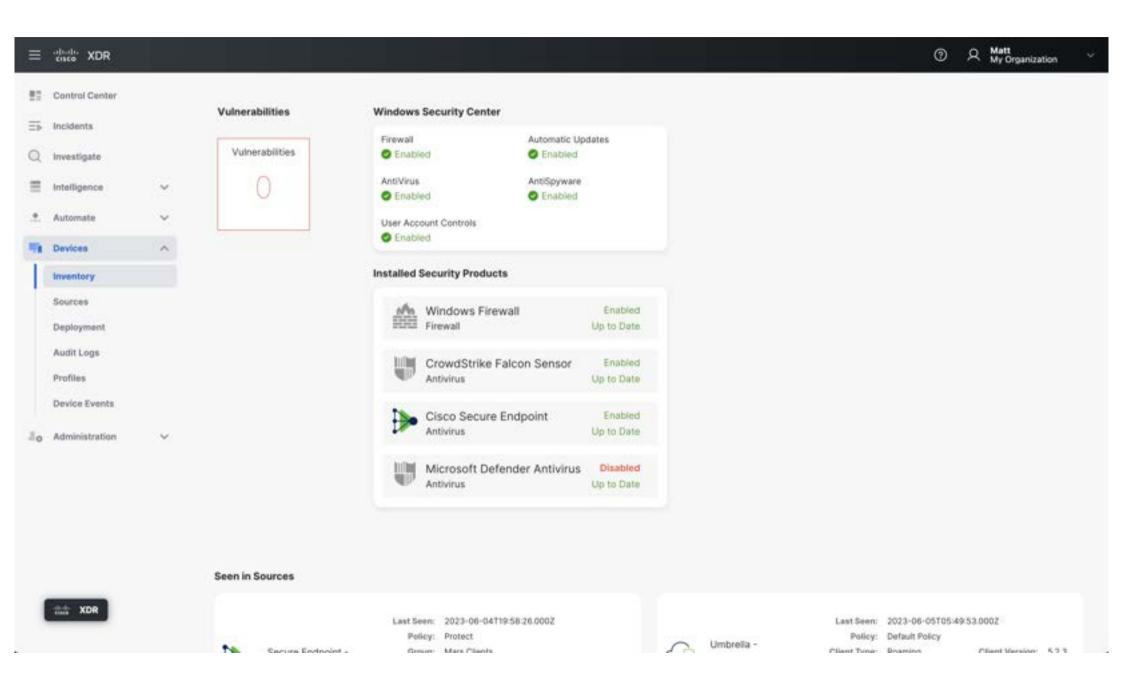


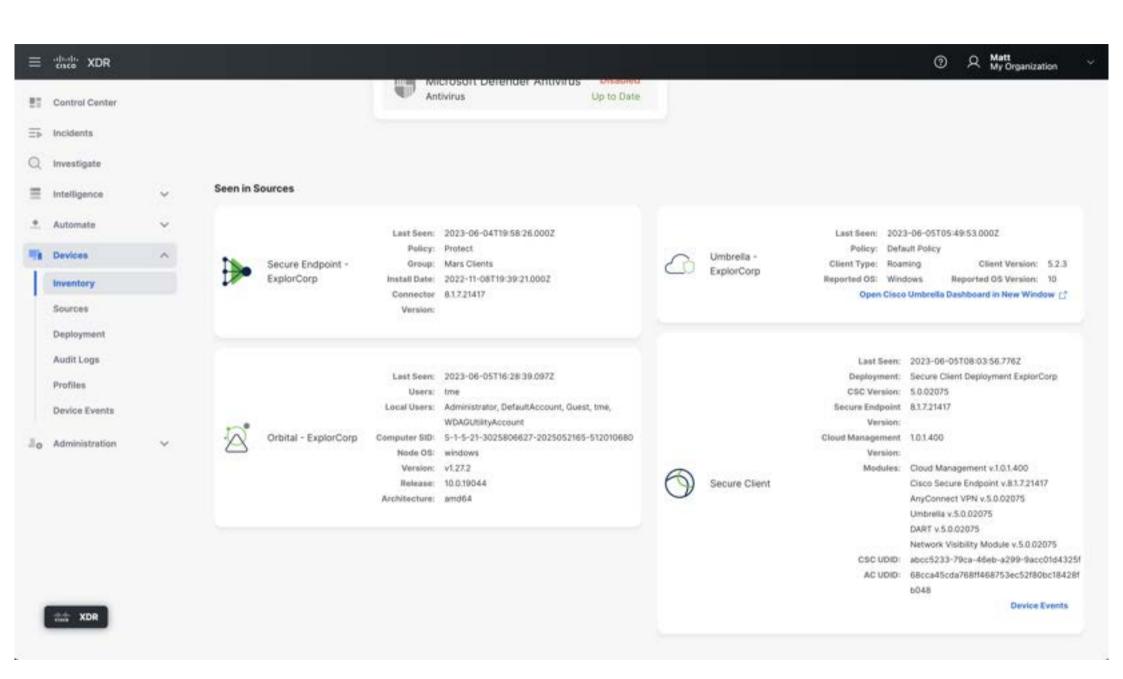
Devices

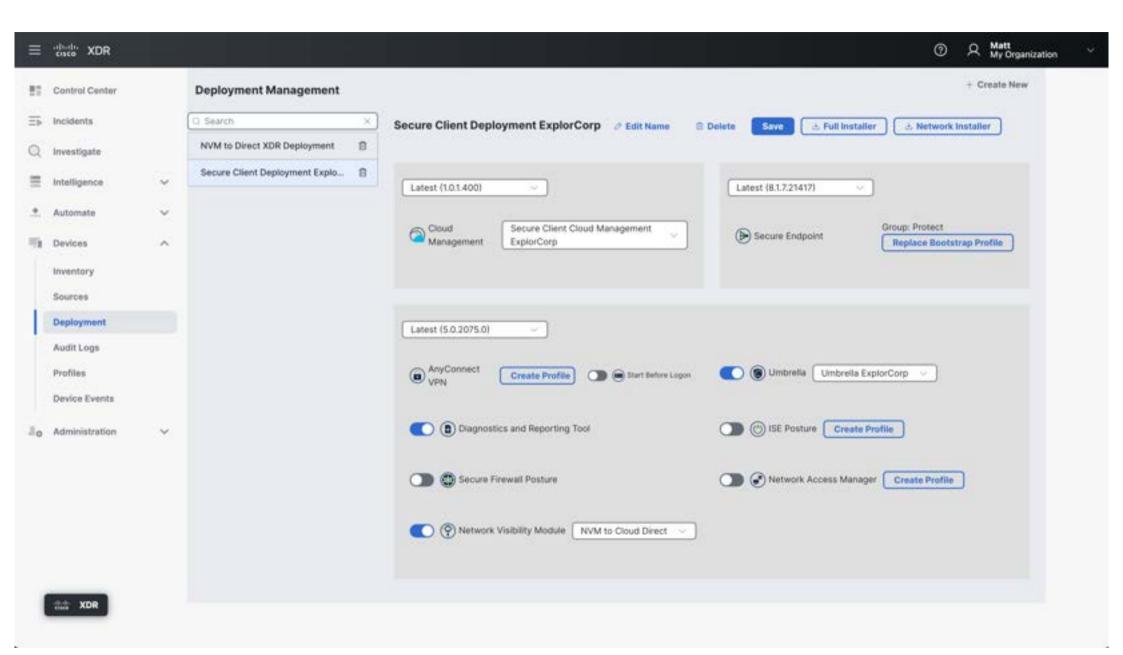


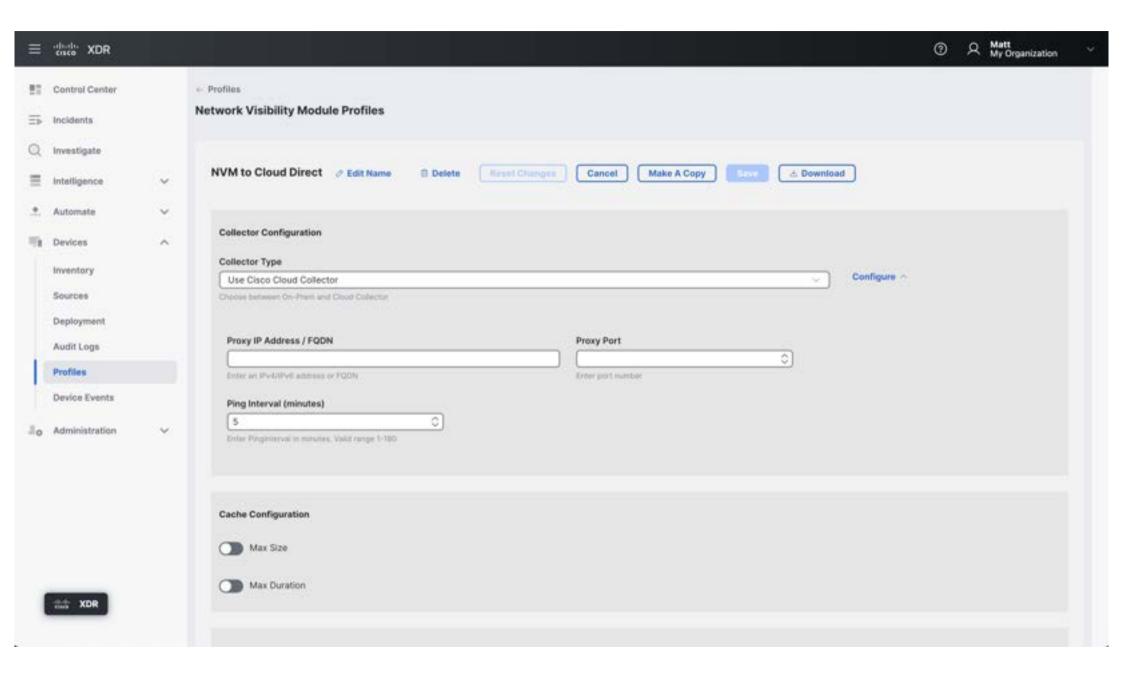


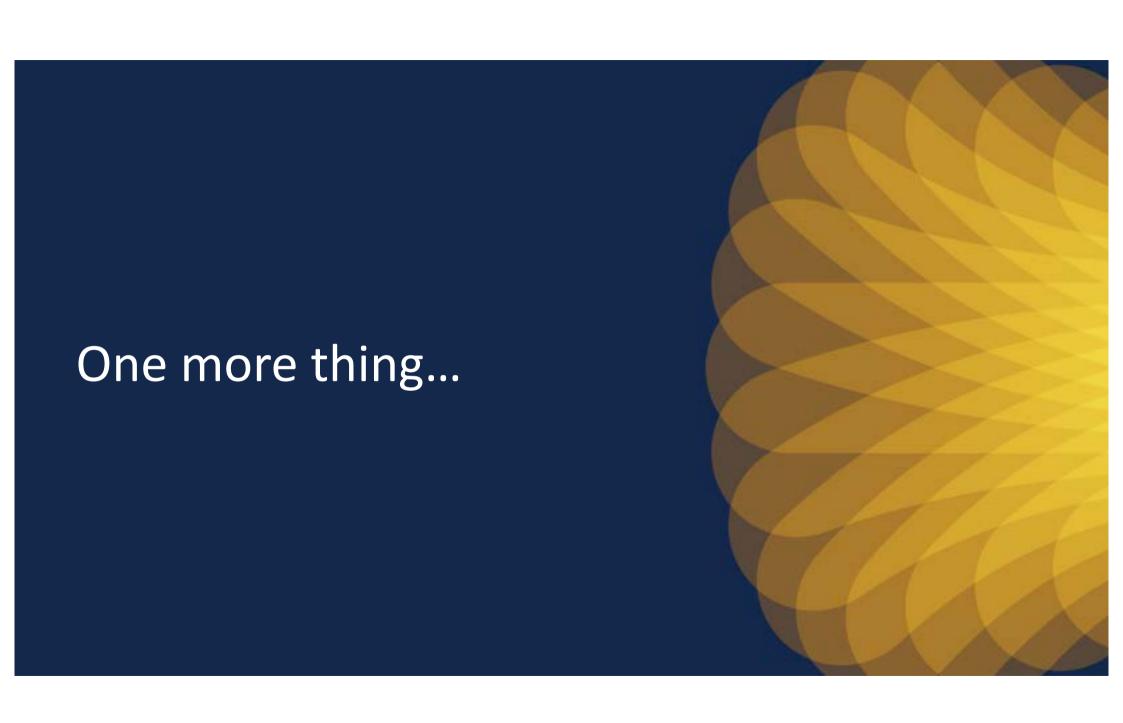










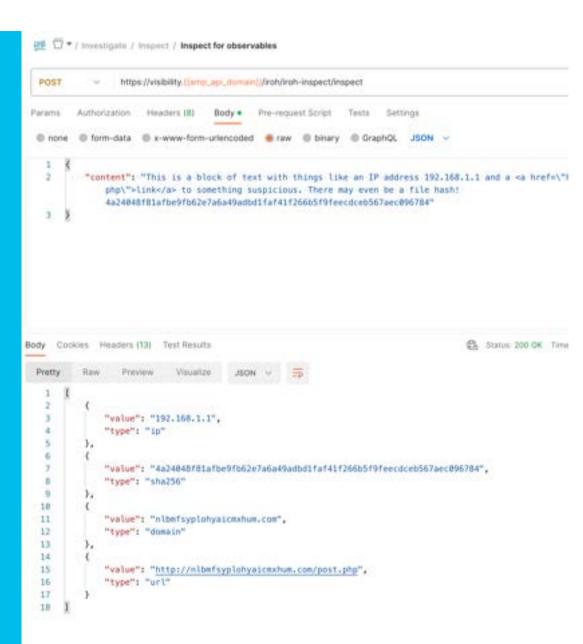


XDR has a robust set of APIs!

- 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...



Commercial

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

Cisco XDR ESS

+

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

Cisco XDR

Premier

Cisco XDR Adv

+

Cisco Secure Managed Detection and Response MDR

+

Cisco Talos Incident Response

+

Cisco Technical
Security Assessment



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XDR Premier

Number of users licensed	# of Hours	Available Services
100 - 499	Up to 20 Hours	 Intel on demand: 5+ hrs Breach Susceptibility Workshop: 5+ hrs Organization Digital Footprint Assessment: 10+ hrs
500 - 2.999	20-80 Hours	All the above, plus: • Emergency Incident Response: 40+ hrs • Security Design Thinking Workshop: 20+ hrs • Pen testing: 40+ hrs • Threat Modelling: 40+ hrs • Configuration and Build Review: 40+ hrs • IR Plan: 50+ hrs • IR Playbooks: 50+ hrs • Tabletop Exercise: 50+ hrs
3,000 - 9,999	80-160 Hours	All the above, plus: • Security Architecture Assessment: 80+ hrs • IR Readiness Assessment: 80+ hrs • Compromise Assessment: 80+ hrs • Cyber Range: 80+ hrs • Proactive Threat Hunting: 100+ hrs
10,000 +	>160 Hours	All the above, plus: • Red Teaming: 160+ hrs • Purple Teaming: 160+ hrs • Security Operations Assessment: 160+ hrs

'Ili'Ili' SECURE

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Resources

Resources

Where can you learn more about Cisco XDR?

- Cisco XDR At a Glance
- An XDR Primer: The Promise of Simplifying Security **Operations Position Paper**
- Cisco XDR: Security Operations Simplified eBook
- Five Ways to Experience XDR eBook
- Cisco XDR Overview Video
- **XDR Instant Demo**
- **Threat Hunting Workshop**
- https://docs.xdr.security.cisco.com/Content/Administra tion/cisco-third-party-integrations-and-capabilities.htm

Cisco XDR on Cisco.com







https://cisco.com/go/xdr



Děkuji za pozornost

Q & A

