



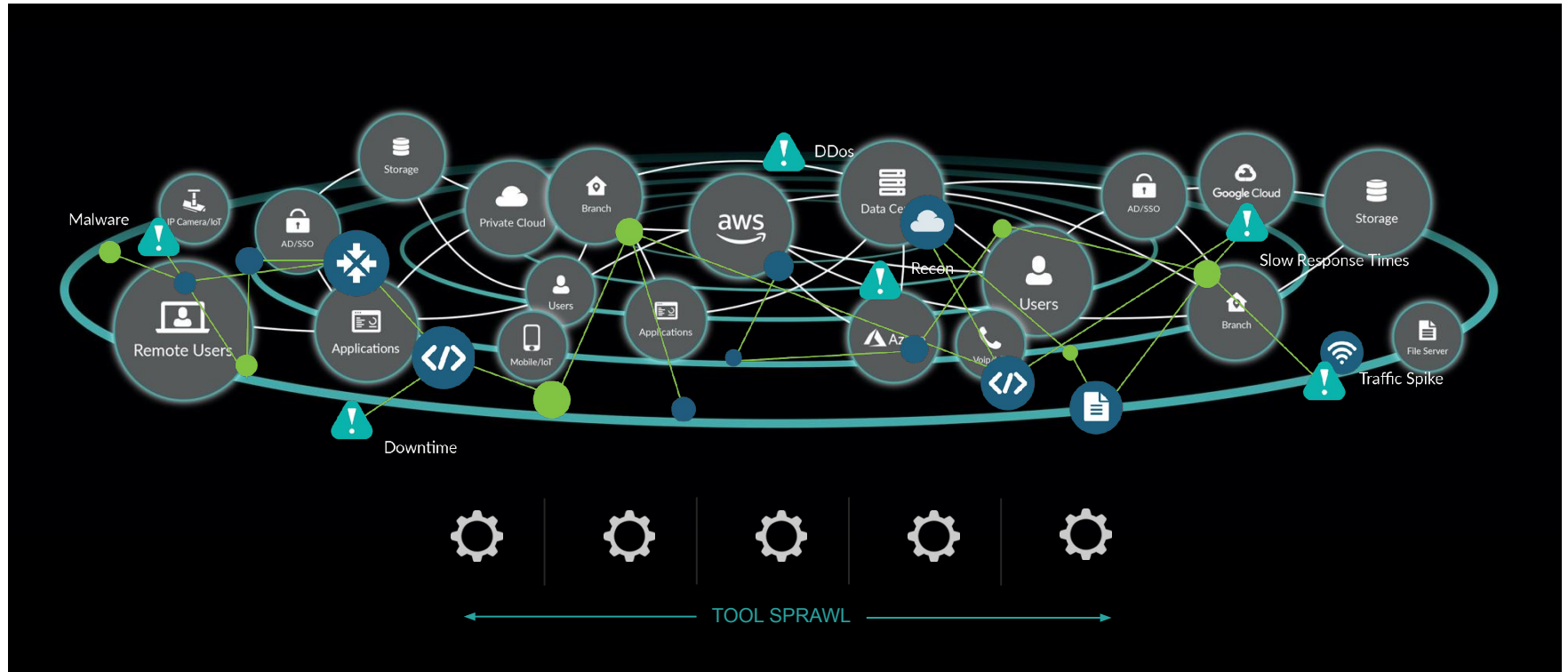
High-Speed Anomalie-Erkennung

mit Network Detection &
Response (NDR)



Enterprise Complexity is the New Reality

Noise Doesn't Have To Be





There is Real Cost to this Complexity

LACK OF
VISIBILITY

70%

of the attack surface is opaque
and not covered by agents or
logging

COSTLY
MISCONFIGURATIONS

\$5T

estimated cost of cloud
misconfigurations in 2018-2019

UNACCEPTABLE
DETECTION

78 days

average threat dwell time in
the enterprise

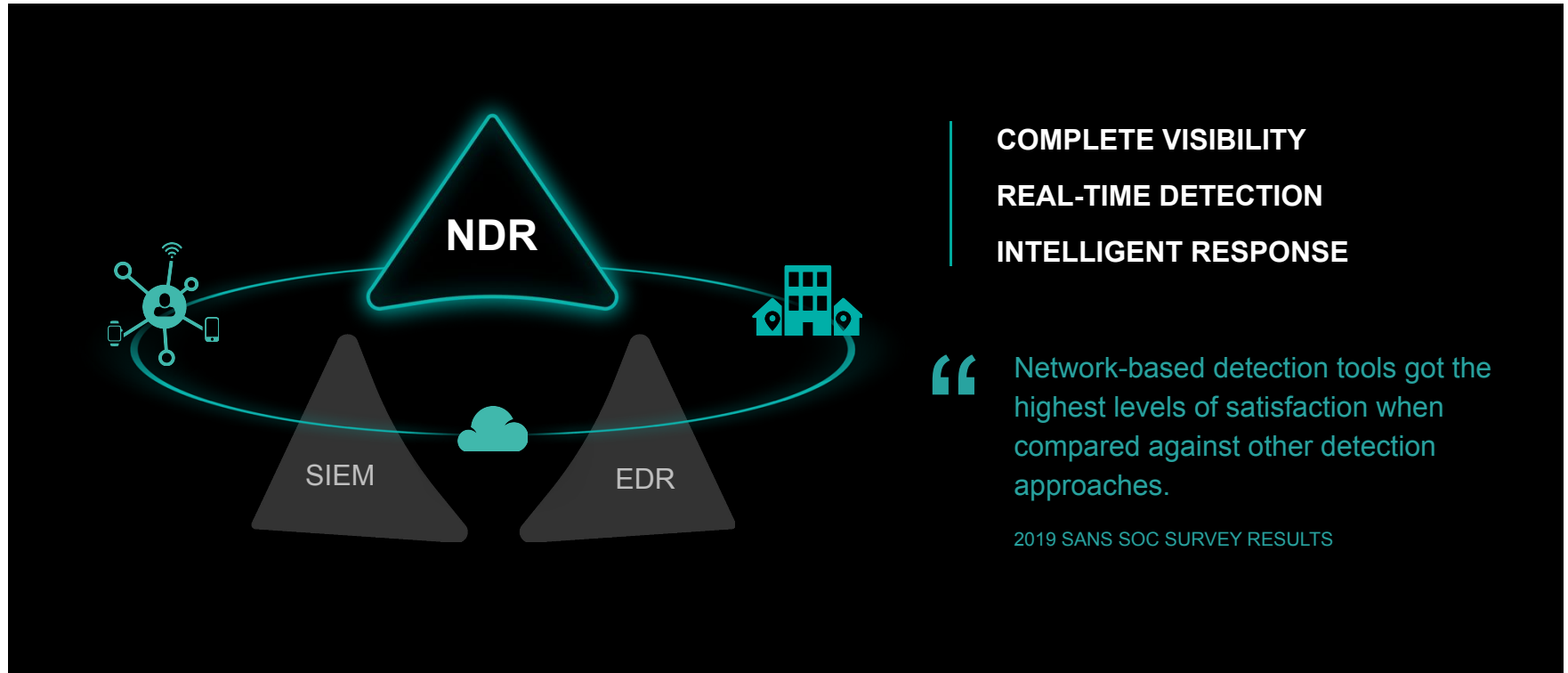
LACK OF
COLLABORATION

70%

don't share
knowledge/resources

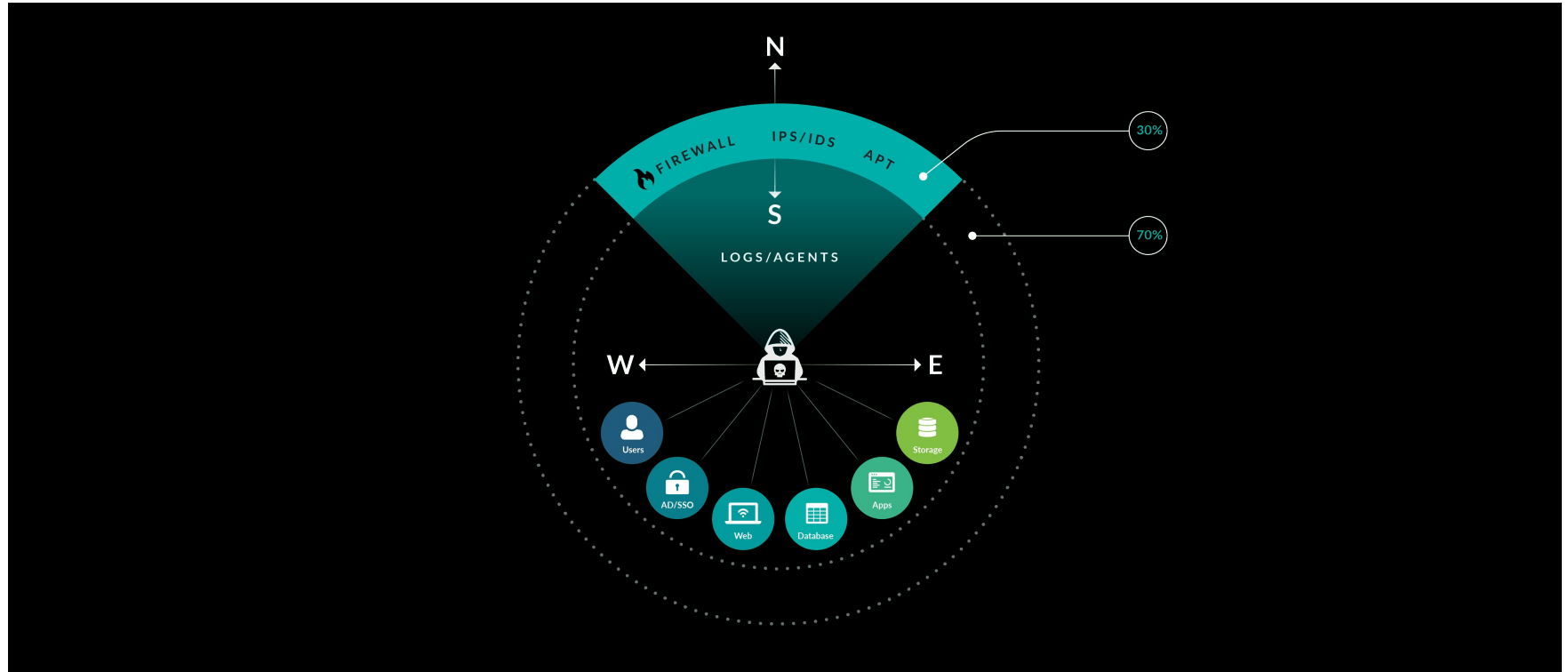
NDR is the Signal in the Noise

Complete Visibility Across East-West and North-South



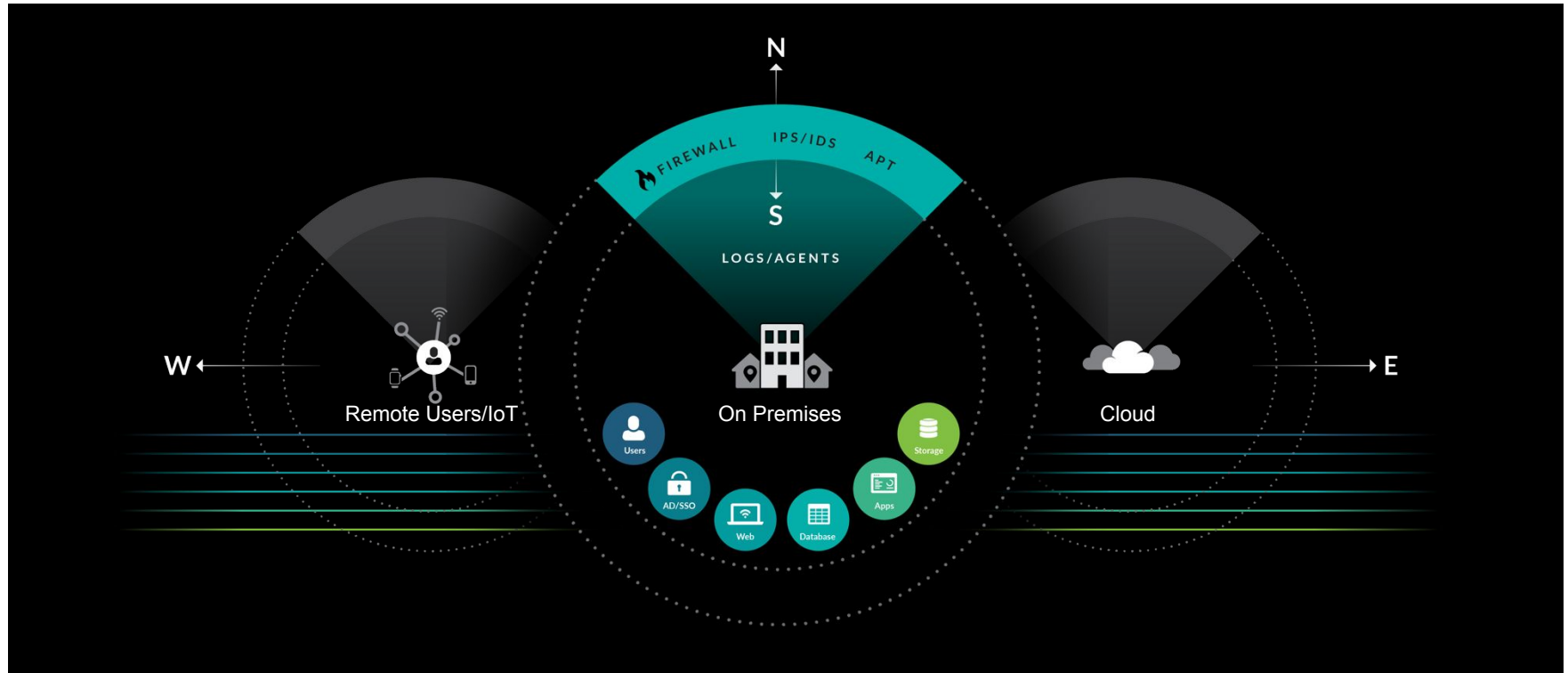
Security in a Post-Compromise World

Covering the Four Corners of the Attack Surface: North, South, East, West



Security in a Post-Compromise World

Covering the Four Corners of the Attack Surface: North, South, East, West



But Can't My

“

”

Do That?

EDR

Not everywhere
Deep expertise
Management Complexity

SIEM

Expensive
Incomplete data
Lack of Context

IDPS

Compliant ≠ Secure
False Pos & Neg
Limited Visibility

FORENSICS

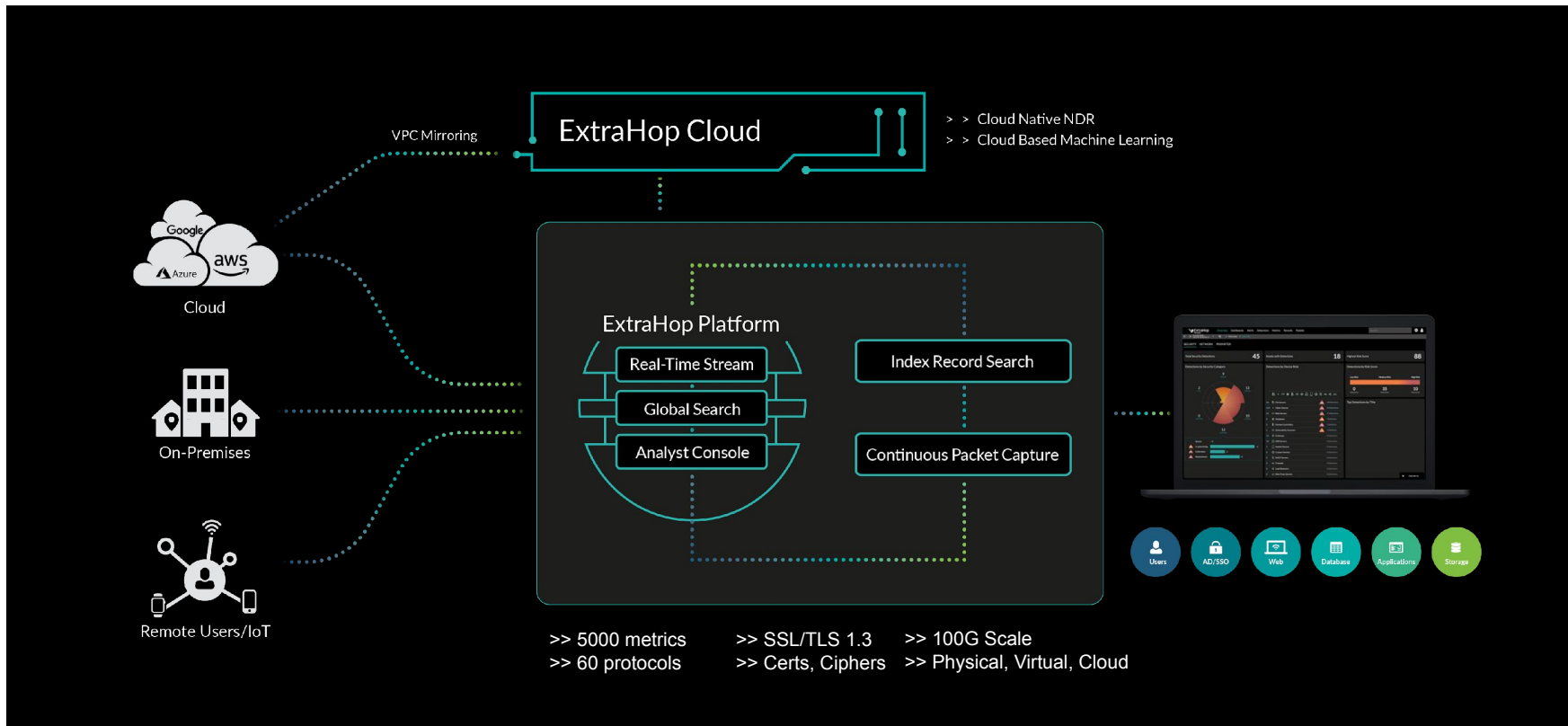
Packet-First Approach
Scalability Issues
Limited Detection

“

Nine times out of ten, we know about a problem before any of our users can call to tell us about it.

CURO FINANCIAL

Cloud-Native NDR for the Hybrid Enterprise



ExtraHop: Depth of Data

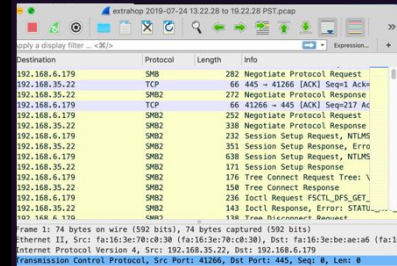
Time-Series Metadata

Retention: Months and Years



Raw Original Packets

Retention: Hours and Days



Transactional Metadata Retention: Days and Weeks

Time ↓	Record Type	Client IPv4 Address	Server IP...	Server	Status Code	Method	URI
2019-09-10 07:24:59.994	HTTP	196.228.169.122	172.23.1.8	web1.londmz.exar	200	GET	demo.example.com:8080/ecomapp/actions/Catalog.action
2019-09-10 07:24:59.667	HTTP	205.79.181.188	172.22.1.9	VMware B84943	200	POST	orbital.example.com:443/AUTHORIZE
2019-09-10 07:24:59.581	HTTP	209.227.237.14	172.22.1.8	web1.nycdmz.exan	200	GET	demo.example.com:8080/ecomapp/actions/Car.action
2019-09-10 07:24:59.491	HTTP	163.217.145.62	172.24.1.8	web1.syddmz.exan	200	GET	demo.example.com:8080/ecomapp/admin/

Less Granular

Very Granular

ML and AI is hard



Chihuahua or
Muffin?



Puppy or
Bagel?



Labradoodle or
Fried Chicken?



Parrot or
Guacamole?



Sheepdog or
Mop?



Sloth or Pain Au
Chocolat?

ExtraHop Full-Spectrum Detection

HYGIENE

Activity that represents risk: ports, protocols, cryptographic compliance, and vulnerable or non-compliant services.

KNOWN ATTACKS

IP addresses, domains, file names, payload strings, or protocol behavior observed in past attacks (including intelligence feeds).

UNKNOWN ATTACKS

Attacks that do not have a previously known identifier, but exhibit anomalous behavior that can be linked to part of the attack lifecycle.

SPECTRUM OF DETECTION

Rule-Based Detection

88 DCSync Attacker Detected
EXPLOITATION
Today 08:00
Waiting an hour

OFFENDER: workstation-it-admin-01 (192.168.221.101)
VICTIM: domain-controller-01 (192.168.221.101)

Acknowledge Investigate This Detection →

Robust Anomaly Detection

83 Drupal Vulnerability Exploited
EXPLOITATION
Today 06:44
Waiting a minute

OFFENDER: 194.105.192.99
VICTIM: web-drupal-01 (192.168.221.22)

Acknowledge Investigate This Detection →

Sophisticated Behavioral Detection

83 Potential Ransomware Activity Detection
RANSOMWARE, ACTIONS ON OBJECTIVE
Today 08:33
Waiting 35 minutes

OFFENDER: workstation-physician-01 (192.168.221.102)

Acknowledge Investigate This Detection →

Peer Group Detections

62 Unconventional Protocol Communication
LATERAL MOVEMENT
Today 10:22
Waiting an hour

OFFENDER: Cisco 65.155.239.27 (65.155.239.27)

Acknowledge Investigate This Detection →





SOC + NOC

Delivering Cross-Functional Value

Better Data, Better Security & IT Operations

Operational Value



Visibility



Detections
Investigation



Hygiene



Mitigation

Business Value



Tool Consolidation



Talent



Data Storage



Productivity

Arming Security and IT Ops Teams to Answer the Tough Questions

In Real time and in Context

SEC OPS

Are login credentials compromised?

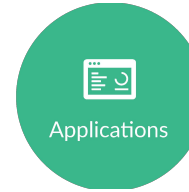
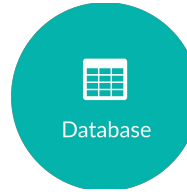
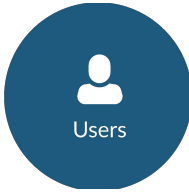
Is an attacker enumerating my systems?

Is that encrypted traffic malicious?

Does unusual activity indicate recon?

Is an attacker accessing company data?

Is there unusual access to sensitive files?



IT OPS

What is the user experience?

Can users and servers authenticate?

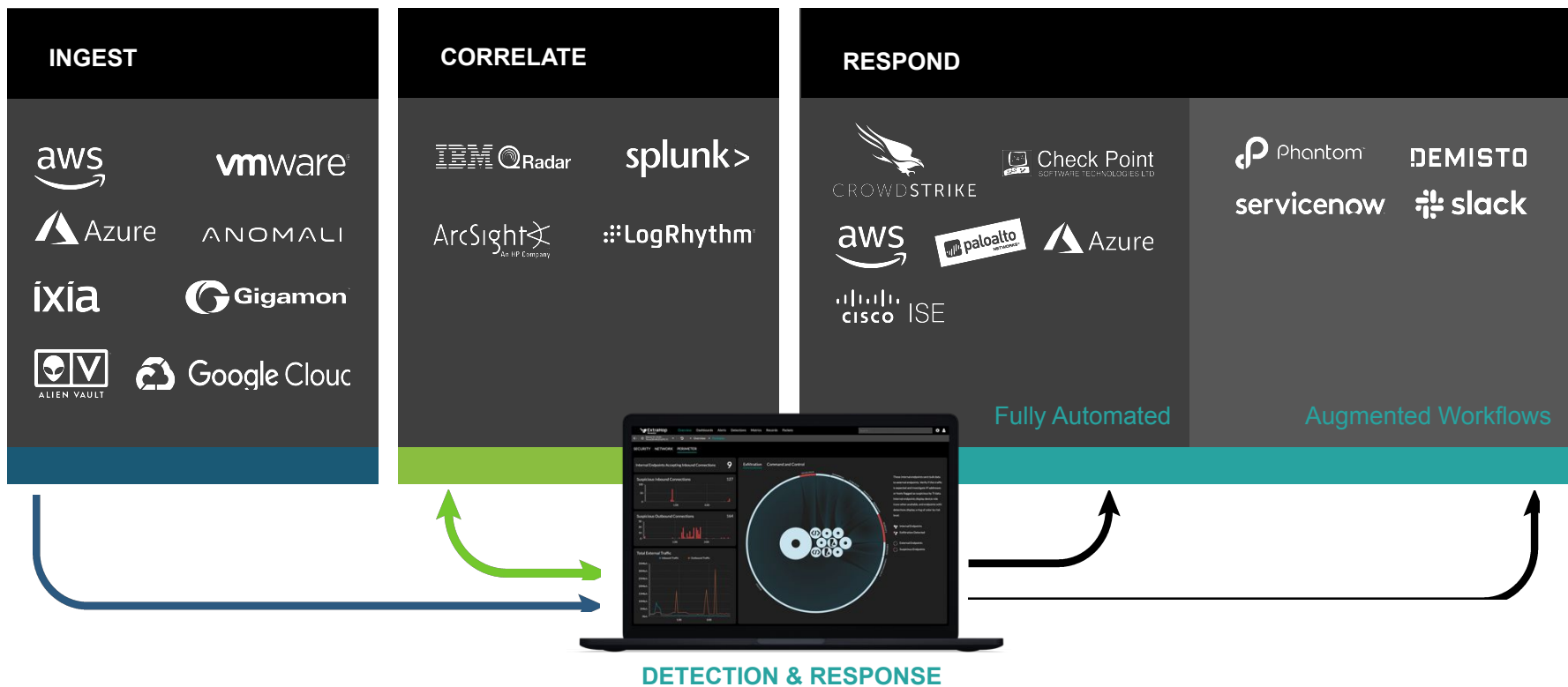
Which servers are responding slowly?

Which queries need to be optimized?

What is the app's performance?

How much capacity do we need?

Amplify the Power of Your Enterprise Tools



Use Case: Visibility & Hygiene

Why Reveal(x)?

Cloud-native NDR provides faster time to value, eliminates blind spots, supports on-prem, hybrid and multi-cloud deployment scenarios

- Automated, continuous device discovery and identification
- Unmatched 100 Gbps of full payload analysis
- Line-rate decryption of SSL/TLS 1.3 encrypted traffic
- Complete, observed visibility of all E-W and N-S traffic
- Built in visibility for CIS controls 1 & 2, MITRE, NIST CSF
- Full spectrum detection and response for security and performance

Case Study

1Tb

of unauthorized data exfiltration
("Phoned Home" Security Advisory)



Nine times out of ten, we know about a problem before any of our users can call to tell us about it.

MITCH ROBERSON – CURO FINANCIAL

Use Case: Incident Response

Why Reveal(x)?

Cloud-native NDR delivers best-in-class incident response with behavioral analysis, data correlation, and detection-record-packet workflows

- Faster forensic investigation with continuous packet capture capabilities
- High-level visualizations, intuitive drill-downs, global search (threat hunting)
- Multi-cloud innovations (AWS, GCP) to support forensics use cases
- Automatic investigation workflows, deep visibility into critical asset activity
- Native remediation capabilities, robust API and integrations with orchestration platforms



59%

Reduction in staff time to resolve

77%

Improvement in time to resolve

