VECTRA®

Cognito Detect is the most powerful way to find and stop cyberattackers in real time

HIGHLIGHTS

- Always-learning behavioral models use AI to find hidden and unknown attackers, enable quick, decisive action, and provide a clear starting point for AI-assisted threat hunting.

- Detects known threats by using AI and integrating other critical sources of threat intelligence.

- Analyzes security-enriched network metadata, relevant logs and cloud events to gain high-fidelity visibility into cyberattacker behaviors in all cloud and data center workloads and user and IoT devices.

- Unique context eliminates the endless hunt-and-search for threats and enables immediate action by proactively putting the most relevant information at your fingertips.

- Works with EDR, NAC firewalls and other enforcement points to block new classes of threats.

- Provides a clear starting point for more extensive investigations with Cognito Recall, SIEMs and forensic tools.

I am artificial intelligence.
The driving force behind the hunt for cyberattackers.
I am Cognito.

A critical part of the Cognito® cyberattack-detection and threat-hunting platform, Cognito Detect™ from Vectra® is the fastest, most efficient way to find and stop cyberattackers in cloud, data center, and enterprise environments. It uses artificial intelligence to deliver real-time attack visibility and put attack details at your fingertips.

In addition to empowering quick, decisive action in response to in-progress attacks, Cognito Detect provides a vital starting point for professional threat hunters that use Cognito Recall™ for deeper investigations.

By combining advanced machine learning techniques – including deep learning and neural networks – with always-learning behavioral models, Cognito Detect quickly and efficiently finds hidden and unknown attackers before they do damage.

Cognito Detect provides enterprise-wide visibility into hidden cyberattackers by analyzing all network traffic from cloud to enterprise, authentication systems and SaaS applications. This leaves attackers with nowhere to hide – from cloud and data center workloads to user and IoT devices.

As part of the Cognito Detect subscription, software updates with new threat detection algorithms are delivered to customers on a regular basis to ensure they are continuously protected from the latest advanced threats.

Security analyst in software

Cognito Detect automates the hunt for cyberattackers, shows where they're hiding and tells you what they're doing. The highest-risk threats are instantly triaged, correlated to hosts and prioritized so security teams can respond faster to stop in-progress attacks and avert data loss.
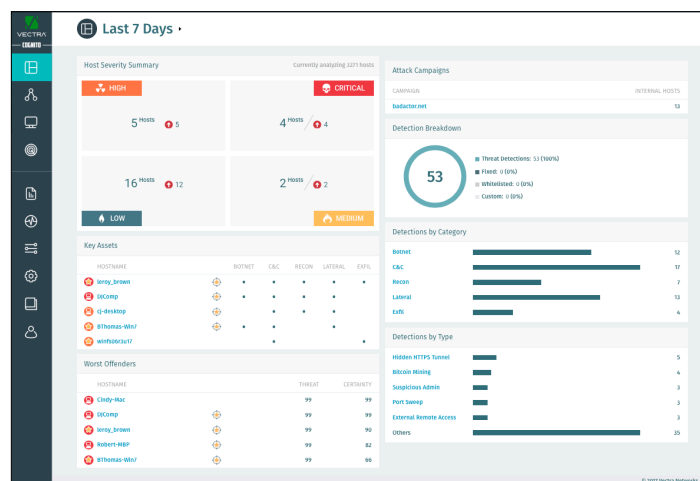
Attacker detections are instantly prioritized, scored and correlated to compromised host devices

COGNITO ARTIFICIAL INTELLIGENCE

Rich Metadata	Identify Attacker Behavior	Automated Analysis	Drive Response
• Network traffic • System, auth and SaaS logs • IoCs (STIX)	• Machine learning • Behavioral analytics • Network effect	• Triage and correlate threats to hosts • Prioritize hosts by risk • Uncover attack campaigns	• Intuitive UI with rich context • Enable automated response • Firewall, endpoint, SIEM and NAC integration

By automating the manual, time-consuming analysis of security events, Cognito Detect condenses weeks or months of work into minutes and reduces the security-analyst workload on threat investigations by 37X.

This enables security operations teams that are understaffed and under siege to stay ahead of cyberattackers and respond faster to hidden threats.

How Cognito Detect works

Rich metadata

Cognito Detect gives you real-time visibility into cloud and enterprise traffic by extracting network metadata from packets rather than performing deep packet inspection, enabling protection without prying.

Metadata analysis is applied to all internal (east-west) traffic, Internet-bound (north-south) traffic, virtual infrastructure, and cloud environments. Cognito Detect identifies, tracks, and scores every IP-enabled device from the cloud to the enterprise.

This visibility extends to laptops, servers, printers, BYOD and IoT devices as well as all operating systems and applications, including traffic between virtual workloads in data centers and the cloud, even SaaS applications.

System, authentication and SaaS logs provide context enrichment to network metadata analysis for accurate identification of systems and users.

Cognito Detect uses STIX threat intelligence to detect threats based on known indicators of compromise derived from threat intelligence. These are correlated with other attacker behaviors to ensure pinpoint accuracy of host threat and certainty scores to prioritize risk.

Identify attacker behaviors

The collected metadata is analyzed with behavioral detection algorithms that spot hidden and unknown attackers. This exposes fundamental attacker behaviors in cloud and enterprise traffic, such as remote access tools, hidden tunnels, backdoors, credential abuse, and internal reconnaissance and lateral movement.

Cloud	Data Center	Users	IoT

With Cognito Detect, attackers have nowhere to hide
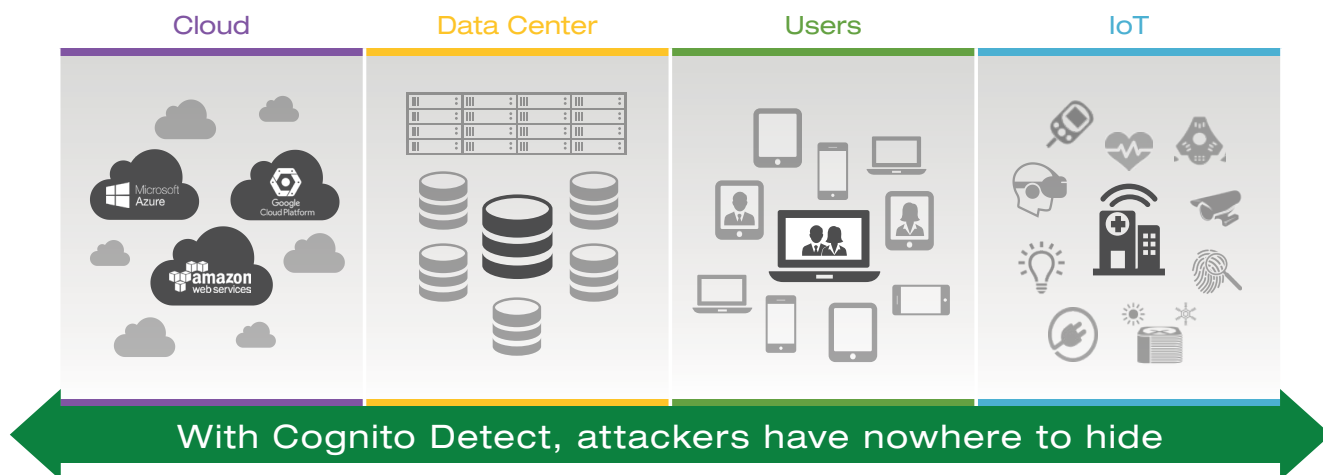
Cognito Detect provides threat detection coverage from the cloud to user and IoT devices

Cognito Detect continuously learns your local environment and tracks all cloud and on-premises hosts to reveal signs of compromised devices and insider threats. A wide range of cyberthreats are automatically detected in all phases of the attack lifecycle, including:

- Command-and-control and other hidden communications

- Internal reconnaissance

- Lateral movement

- Abuse of account credentials

- Data exfiltration

- Early indicators of ransomware activity

- Botnet monetization

- Attack campaigns, including the mapping of all hosts and their associated attack indicators

Cognito Detect also monitors and detects suspicious access to critical assets by authorized employees, as well as policy violations related to the use of cloud storage, USB storage and other means of moving data out of the network.

Automated analysis

The Threat Certainty Index™ in Cognito Detect consolidates thousands of events and historical context to pinpoint hosts that pose the biggest threat.

Instead of generating more events to analyze, Cognito Detect boils down mountains of data to show what matters most. Threat and certainty scores trigger notifications to your staff or a response from other enforcement points, SIEMs and forensic tools.
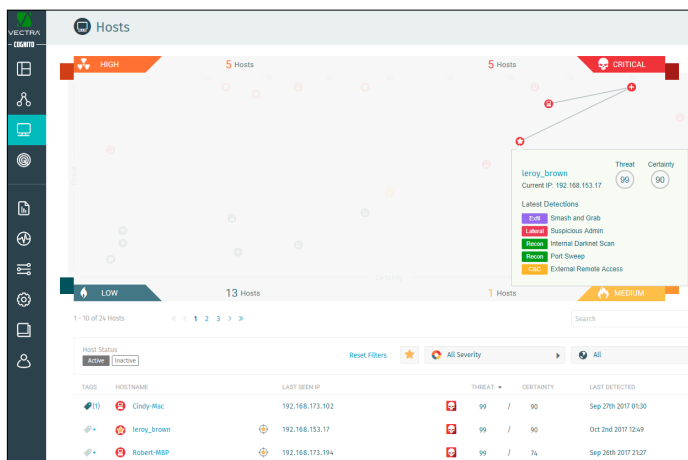
The Threat Certainty Index in Cognito Detect

The Attack Campaigns feature further automates security detections by connecting the dots of related attacker behaviors and exposing the relationship between hosts across internal detections, external advanced command-and-control detections, and connectivity to common command-and-control infrastructures.

As attackers perform reconnaissance and move laterally between hosts and cloud workloads, Cognito Detect correlates behaviors and detections and presents a synthesized view of the entire attack campaign.
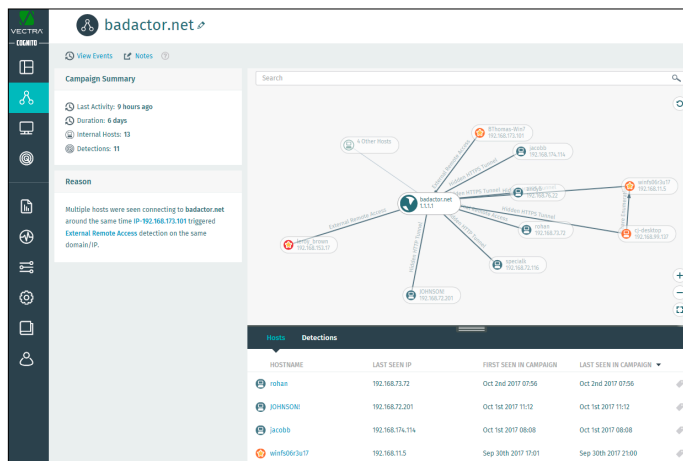
Cognito Detect presents a synthesized view of an entire attack campaign

Cognito Detect pivots to show views of hosts or related campaign detections, and analyzes event history spanning its entire lifetime to better understand the activity and full scope of attack.

Drive response

Respond quickly and decisively to threats by putting the most relevant information and context at your fingertips. Unlike security analytics products, Cognito Detect eliminates manual investigations by automatically prioritizing and correlating threats with compromised hosts and key assets that are the target of an attack.

Cognito Detect puts threat detection details – including host context, packet captures, and threat and certainty scores – within immediate reach.

In addition, Cognito Detect works with your next-generation firewalls, endpoint security, NAC, and other enforcement points to automatically block unknown and customized cyberattacks. Cognito Detect also provides a clear starting point for threat investigations, which boosts the efficiency of SIEMs and forensic analysis tools.
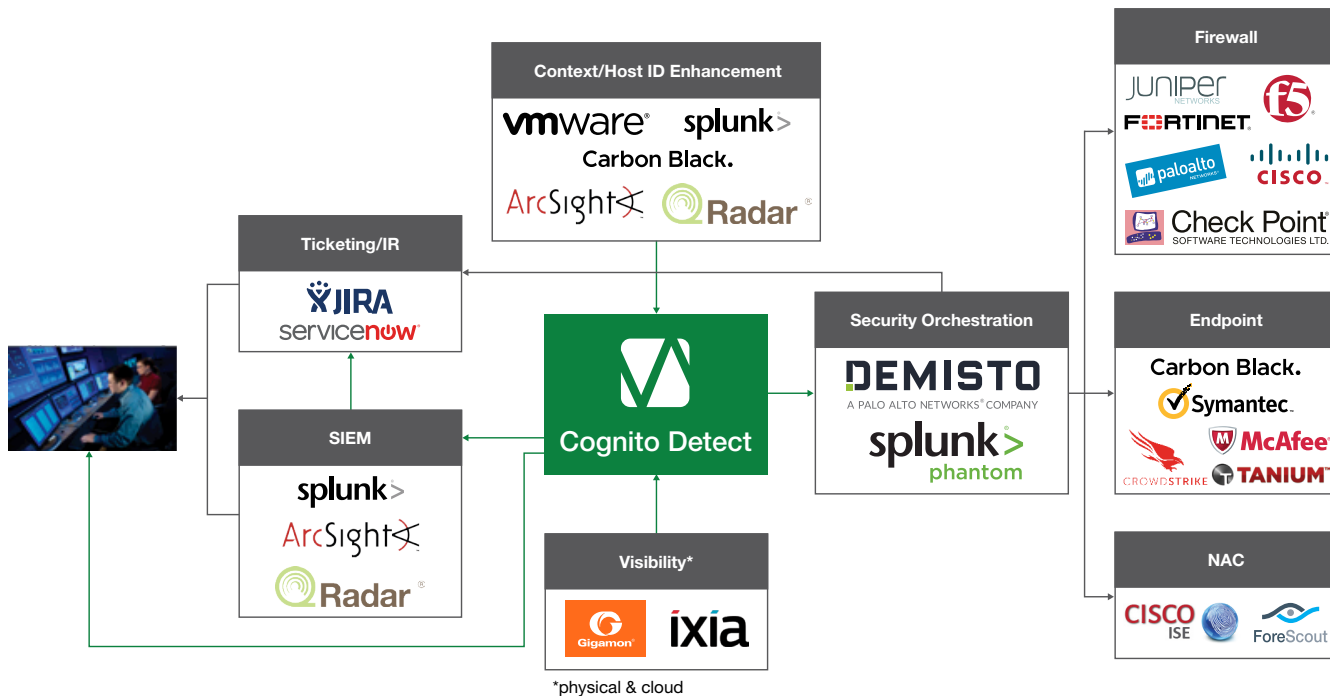
Cognito Detect works with widely used security enforcement points, SIEMs and forensic analysis tools

Security that thinks®
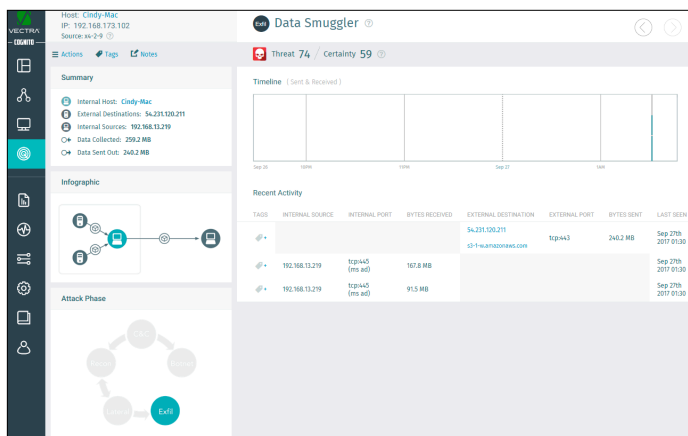
Real-time detection of data exfiltration in progress

Security context that saves time

Cognito Detect unburdens and empowers security operations teams that are understaffed. This is achieved by automating the time-consuming analysis of security events and eliminating the need to endlessly hunt for hidden threats.

Each detection is explained in detail, along with the underlying event and historical context that led to the detection. Security analysts can instantly view a connection map of any host to see other hosts the device is communicating with and how.

Cognito Detect also provides on-demand access to enriched metadata from captured packets for further forensic analysis. This gives security teams the proof and accuracy they need to take immediate, decisive action.

Cognito Detect also leverages Privileged Access Analytics to automatically analyze behaviors and uses artificial intelligence to identify entities that have privilege and differentiate between approved and malicious uses. It is available across the Vectra Cognito platform as searchable security enrichments in Cognito Stream and Cognito Recall and as detections in Cognito Detect. Custom use-cases are also supported by accessing its attributes through the Cognito REST API.

Strengthen your existing security infrastructure

Whether providing the intelligence to block a new class of threat with firewalls, endpoint security, NAC and other enforcement points, or providing a clear starting point for a more extensive search with SIEMs and forensic tools, Cognito Detect gives you more value from existing security technologies.

Cognito Detect integrates with leading endpoint security solutions to automatically add enriched context to investigations and enables security operations teams to isolate compromised host devices.

A robust API enables automated response and enforcement with virtually any security solution. Cognito Detect also generates syslog messages and CEF logs for all detections as well as prioritized host scores. This makes Cognito Detect much more than just another source of logs and provides an ideal trigger for investigations and workflows within your SIEM.

Full lifecycle detection of ransomware

Cognito Detect identifies ransomware campaigns against enterprises and other organizations across all phases of an attack. By monitoring all internal network traffic, Cognito Detect identifies in seconds the fundamental behaviors of a ransomware attack as it attempts to take critical assets hostage.

In addition to detecting ransomware directly, Cognito Detect exposes ransomware precursors, including command-and-control traffic, network scans and spreading behavior that ransomware relies on to find and encrypt critical assets.

Watching the watchers

While attackers may initially compromise an end-user device, the real prize involves commandeering administrator or system credentials. Cognito Detect goes beyond simple user-behavior monitoring to detect signs of compromised administrators.

Cognito Detect tracks administrative protocols and learns the specific machines or jump systems that are used to manage specific hosts, servers and workloads. This vigilance quickly reveals when a cybercriminal attempts to use administrative credentials and protocols to escalate an attack.
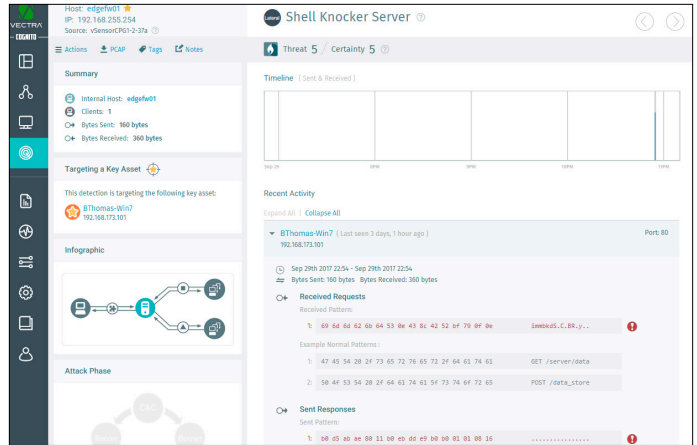

The Cognito Detect Shell-Knocker detection

Unifying data center operations

Modern data centers require constant coordination between networking, application development, virtualization teams, and of course, the security team. Cognito Detect makes it easy for all groups to remain in sync and retain full visibility from cloud to enterprise even when workloads are constantly on the move.

To request a demo, please go to vectra.ai/demo
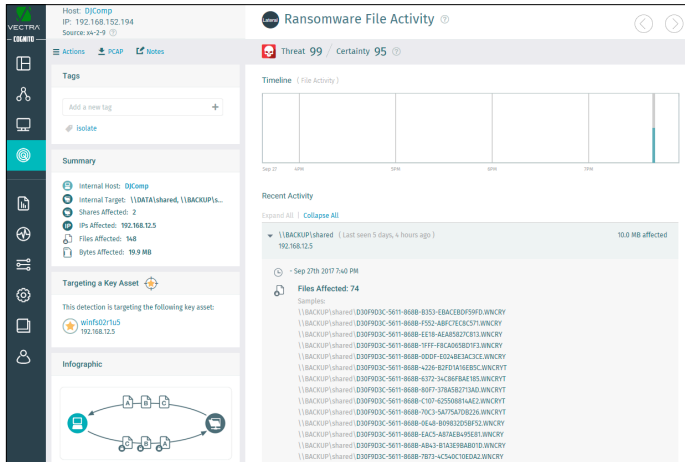
The Cognito Detect ransomware detection

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Email info@vectra.ai   **Phone** +1 408-326-2020

vectra.ai