Integrating Cognito with Splunk

Faster, context-driven investigations into active cyber attackers

**CHALLENGE**

Today’s cyber attackers easily circumvent network perimeter security to spy, spread, and steal critical assets inside networks. As a result, cybersecurity teams are saddled with manual, time-consuming threat investigations and costly forensic analysis after a theft has occurred.

**SOLUTION**

The Vectra App for Splunk brings real-time, precorrelated attack detections to the operational intelligence of the Splunk platform. Integrating the Cognito platform’s AI-based detection algorithms with Splunk enriches the context of threat investigations and speeds-up incident response.

**BENEFITS**

With faster response and improved operational efficiency, the Vectra App for Splunk enables security teams to quickly mitigate and stop cyber attacks before damage is done. Cognito prioritizes infected hosts that pose the highest risk and correlates threats with logs from devices in Splunk to provide greater context for every attack.

The Cognito™ threat detection and response platform from Vectra® seamlessly integrates AI-based automated threat hunting and incident response with the operational intelligence of the Splunk platform.

Together, Vectra and Splunk deliver a practical solution to the most persistent problems facing today’s enterprise cybersecurity teams – finding and stopping active cyber attacks while getting the most out of limited time and resources.

The need for a new cybersecurity approach

Modern cyber attackers with sophisticated hacking tools at their disposal can easily evade network perimeter security to spy, spread, and steal inside the network, largely undetected and hidden from view.

Unable to rely entirely on perimeter defenses, security teams are left to manually chase-down security alerts and events, unable to determine with any speed or precision which ones are most dangerous and pose the highest risk to an organization.

In practice, this often means that breaches are discovered and reported by an external third-party after theft or damage has occurred. This can result in a debilitating post-breach forensic investigation that can cost upwards of $1 million.

A new threat detection model

Cognito detects in-progress cyber attacks across all phases of the attack kill-chain, ranging from command-and-control traffic, internal reconnaissance, lateral movement, and data exfiltration without depending on signatures or reputation lists.

Cognito detects these threats by analyzing the underlying behavior of attackers viewed from the objective viewpoint of the network. All threat detections are correlated with the hosts that are under attack while threat and certainty scores prioritize the hosts that pose the highest risk.

This ensures that security teams detect new, customized and unknown threats, as well as attacks that do not rely on malware such as malicious insiders or compromised users.

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The cyber attack kill-chain

The cyber attack kill-chain includes:
- **Command & Control**
- **Targeted Attack**
- **Internal Recon**
- **Lateral Movement**
- **Data Exfiltration**
- **Opportunistic Attack**
- **Botnet Monetization**
The Vectra App for Splunk brings all Cognito detections directly into the Splunk ES dashboards, incorporates Cognito high-value detections into existing workflows, and automates their correlation with logs from devices in the Splunk database, providing greater context of a threat.

For example, the Vectra App for Splunk enables security teams to easily correlate the information in Cognito Hosts and Detections with intelligence from other systems, such as URL filtering solutions and firewalls. A link back into the Cognito user interface allows a seamless transition to drive prioritization and workflow.

Visibility into threats across the kill chain – The Vectra App for Splunk provides an extraordinary range of threat intelligence to the Splunk machine-data repository, including detections of unknown malware and attack tools, threats that hide in common apps and encrypted traffic, and in-progress threats in every phase of the attack kill chain.

This visibility enables security teams to instantly distinguish opportunistic botnet behaviors from more serious targeted threats and take quick action before key assets are stolen or damaged.

For example, the Detections view in the dashboard shows individual events and their scores, while the Campaigns view shows individual campaigns that have been identified and the number of events associated with that campaign.

Correlation with other solutions – The Cognito approach to detection enables security teams to detect threats that were missed by other security solutions. The Vectra App for Splunk makes it easy to connect and correlate Vectra’s findings with other solutions, with correlation rules pulling in additional context from other systems that integrate with the Splunk platform.

Splunk captures, indexes and correlates Cognito threat detections in real-time, making it available in a searchable repository from which security teams can generate graphs, reports, alerts, dashboards and visualizations.

For example, the Correlations page provides valuable information about active threats and speeds-up deeper investigations into events by enabling security teams to correlate source and destination IP addresses from Cognito events with other events in Splunk.

Key features

- **Hosts ranked by risk** – To enable faster investigations and responses, Cognito automatically associates all malicious behaviors to the physical network host – even if the IP address changes – and scores the host in terms of its overall risk.

  The Vectra App for Splunk provides an interactive dashboard to quickly show the number of hosts classified as critical, high, medium, and low risk. These scores eliminate the need for security teams to manually investigate events and vastly improve the time to respond.

  Drill-downs into each category in the Vectra App for Splunk redirect security analysts to the host page and filter on that particular detection’s severity to help speed-up the investigation.

About Vectra

Vectra® is an artificial intelligence company that is transforming cybersecurity. Its Cognito™ platform is the fastest, most efficient way to detect and respond to cyberattacks, reducing security operations workload by 168X. Cognito performs real-time attack hunting by analyzing rich metadata from network traffic, relevant logs and cloud events to detect attacker behaviors within all cloud and data center workloads, and user and IoT devices. Cognito correlates threats, prioritizes hosts based on risk and provides rich context to empower response. Cognito integrates with endpoint, NAC, firewall security to automate containment, and provides a clear starting point for searches within SIEM and forensic tools.