CrowdStrike and Zscaler Integration

Securing work beyond the perimeter with Zero Trust to modernize security across enterprise environments

**CHALLENGES**

Hybrid work is increasingly becoming the normal way of doing business. Employees are working from anywhere, partners and their devices are moving on and off the office network, and many applications once hosted in data centers are now moving to a public cloud or being replaced with software as a service (SaaS). The corporate network is becoming less relevant as more work takes place off of it, and gateway appliances designed to build a hard perimeter around it are now obsolete.

Traditional solutions emphasized network security and often did not consider device posture prior to allowing access to network resources. But the prevalence of cloud adoption means IT can no longer control secure application access when relying on the castle-and-moat architectures of the past. There is a need to protect the user-to-application connectivity from end to end, regardless of where users are connecting from. Security teams have access to more data than ever and need tools that provide the right visibility into data with the right context at the right time. This requires security beyond the perimeter.

**SOLUTION**

To secure work beyond the perimeter, most IT teams have begun adopting a Zero Trust model that has of three key criteria: identity, user device posture and access policies. These criteria are a means for establishing Zero Trust based on context and then adapting access rights as the context changes.

Together CrowdStrike and Zscaler are simplifying the adoption of Zero Trust for IT teams by providing an integrated end-to-end security solution — from endpoint to application — that gives administrators a real-time view of a device’s security posture and bases access to critical applications on granular access policies. By sharing data between the CrowdStrike Falcon® sensor at the endpoint and the Zscaler Zero Trust Exchange™, access policies can automatically be adapted according to user context, device health and newly detected IOCs.

CrowdStrike Falcon Zero Trust Assessment (ZTA) provides continuous, real-time security and compliance checks for endpoints, making sure that authentication and authorization are granted only to devices with security posture as approved by the organization.

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Zscaler Zero Trust Exchange uses policy to securely connect users to the internet, SaaS or private apps. CrowdStrike provides a ZTA score, which is the device posture score, and also provides the ability to use threat intelligence so Zscaler can adaptively enforce policy to access applications or to block malicious URLs, IP addresses or domains inline via a custom blocklist. This enables a security administrator to initiate a quarantine action from Zscaler to the CrowdStrike Falcon platform and stop malware from spreading from the offending device. This bidirectional sharing across platforms of threat intelligence, increased visibility and automatic workflow helps organizations increase the timeliness and effectiveness of threat defense, detection and remediation.

As a part of the CrowdXDR Alliance, Zscaler integrates with CrowdStrike to share relevant Zscaler logs for improved end-to-end visibility with telemetry from endpoints, networks and cloud applications. This sharing of intelligence maximizes cross-platform effectiveness for accelerated investigations. CrowdStrike Falcon Fusion can trigger cross platform response workflow, enabling Zscaler Zero Trust Exchange to adapt flexible access policies with speed and efficacy.

Falcon Insight XDR now integrates with Zscaler Zero Trust Exchange to drive response actions from XDR detections or via automated Falcon Fusion (SOAR) workflows. These automated response actions include limiting or updating user access to applications with adaptive access control policies based on detection criticality, providing full closed-loop remediation across platforms.

In addition, Zscaler Deception deploys decoys on endpoints, networks, cloud, and identity systems to provide high-fidelity alerts and telemetry of targeted attacks. It also enables administrators to initiate both orchestrated and manual containment requests to the CrowdStrike Falcon platform to prevent lateral movement from a compromised host in real time.

The benefits from the joint solution are not just limited to IT security alone. As businesses look to enable work-from-anywhere strategies, this joint solution makes it easier to provide users with safe, seamless and secure access to essential business applications for day-to-day employee activity. All of this can now be achieved on a foundation of Zero Trust.
HOW IT WORKS

Solution Reference Architecture

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ZERO TRUST ACCESS TO ALL APPS

STEP 1: The CrowdStrike Falcon platform evaluates device posture with Zero Trust Assessment (ZTA)
The CrowdStrike Falcon platform collects OS and sensor settings from an endpoint device and calculates its ZTA score. Any changes in settings will automatically trigger a recalculation of the ZTA score. By comparing the ZTA score with the organization’s baseline score, CrowdStrike can measure the health of the user’s device relative to the organization’s baseline and recommended best practices over time.

STEP 2: Zscaler Zero Trust Exchange implements access policies
Zscaler Zero Trust Exchange implements Zero Trust access policies in two layers. First, Zscaler Client Connector checks if the CrowdStrike Falcon sensor is running on the endpoint device. Next, Client Connector reads the device’s ZTA score and compares it against the policy threshold defined for selected business-critical applications. If these conditions are met, access to applications is granted. If not, then access is denied. Access policies on the Zscaler dashboard can be adjusted to change the threshold of the score based on the organization’s requirements and changing conditions over time.
ZERO-DAY DETECTION AND REMEDIATION

STEP 1: Zscaler Cloud Sandbox correlates zero-day malware detection with CrowdStrike Falcon telemetry
The Zscaler Cloud Sandbox sits inline at the cloud edge to detect zero-day threats. Malicious files are detonated in the sandbox, creating a report that is correlated with endpoint data from the Falcon platform. This ties the threat detected at the network edge with endpoint data.

STEP 2: Administrators quarantine and remediate threats with a cross-platform workflow
The correlation automatically identifies impacted endpoints within the entire environment and facilitates a one-click trigger to the Falcon platform for rapid quarantine action. Alternatively, administrators can pivot from the Zscaler console to the Falcon console with automatically populated data for further in-depth investigation.

AUGMENTING ZSCALER INLINE BLOCKING WITH CROWDSTRIKE THREAT INTELLIGENCE

STEP 1: CrowdStrike adds indicators of compromise (IOCs) into Zscaler’s custom blocklist
When CrowdStrike intelligence identifies a threat within a specific customer environment, the threat is compared with Zscaler’s threat database, and the resulting delta is then automatically added to the customer’s Customer Block List in the Zscaler platform. These include high-confidence threat data such as URLs, IP addresses and domains. These shared indicators of compromise (IOCs) in the custom blocklist are in addition to the Zscaler global threat feeds and are specific to a customer’s environment.

STEP 2: Zscaler uses new intel to block threat
Attempts to access such URLs/IPs/domains are proactively blocked inline by Zscaler as a result of the sharing of IOCs. Zscaler Internet Access (ZIA) and CrowdStrike Falcon ensure the same threat vector is blocked inline by Zscaler before it can infect other endpoints.

Key Capabilities
- The CrowdStrike integration with Zscaler shares threat intelligence and enables automatic workflows to help organizations reduce the number of security incidents — and, if an incident does occur, delivers quick time-to-detection and remediation.
- The integration provides the ability to monitor device health and compliance via ZTA scores and quickly remediate gaps with Zero Trust access policy control and inline blocking based on CrowdStrike-detected IOCs. Together, CrowdStrike and Zscaler enable access to applications and the internet with maximally adaptive access control, without hindering user productivity.
STEP 1: CrowdStrike Falcon® LogScale consumes Zscaler logs
CrowdStrike Falcon LogScale ingests various Zscaler logs into the Falcon platform, gaining network visibility.

STEP 2: CrowdStrike Falcon LogScale performs data correlation and analytics
The CrowdStrike Falcon LogScale platform takes the telemetry from Zscaler to perform data correlation and analytics. This opens up a rich potential for threat hunting and investigation, as well as potential cross-platform triage and remediation.

EXTENDED DETECTION AND RESPONSE WITH CROWDSTRIKE FALCON INSIGHT XDR™

STEP 1: Get comprehensive visibility across applications and endpoints
Falcon Insight XDR offers purpose-built XDR integration with Zscaler logs to funnel relevant security data at scale, achieving network and cloud applications visibility maximizing cross-platform sharing for accelerated investigations and responses.

STEP 2: Detect advanced threats and respond effectively
Falcon Insight XDR leverages security events identified from Zscaler logs to generate meaningful and actionable insights, speed up proactive threat hunting, and respond decisively to stop cyberattacks. Based on a new detection, CrowdStrike Falcon can trigger Zscaler Zero Trust Exchange to move a user to a restrictive group, whereby adaptive access control policies can be applied, for example, access to an app by browser isolation or network quarantine.