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 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 indicators of compromise (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.

KEY BENEFITS

- Real-time device health metrics are used to enforce access policy to private and SaaS apps
- Enforcement of access policy is based on the changing device posture over time
- User, device and network visibility to IOCs and automated workflow are converged as a holistic system, strengthening security posture
- The ability to trigger device quarantining helps prevent malware from propagating after a user accesses malicious files
- Increased visibility enables stronger reporting and remediation and maximizes an organization’s ability to respond to the increasing volume and sophistication of attacks
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 automated 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 security orchestration, automation and response (SOAR) can trigger cross-platform response workflows, enabling Zscaler Zero Trust Exchange to adapt flexible access policies with speed and efficacy.

CrowdStrike Falcon® Insight XDR endpoint detection and response (EDR) 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.

The benefits from the joint solutions are not just limited to IT security. As businesses enable work-from-anywhere strategies, these joint solutions make 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](image)

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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 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 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 data is then automatically added to the Customer Block List in the Zscaler platform. These include high-confidence threat data such as URLs, IP addresses and domains. These shared 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 and 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 integration enables threat intelligence sharing and 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 enables monitoring of device health and compliance via ZTA scores and quick remediation of 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.
CROWDSTRIKE FALCON LOGSCALE LOG MANAGEMENT INCREASES VISIBILITY

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 visibility into network and cloud applications and 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.

Zscaler is a trusted CrowdStrike Technology Partner, offering innovative integrated solutions based on CrowdStrike’s rich open APIs, extending the Falcon platform with Zscaler’s Zero Trust capabilities.

ABOUT ZSCALER

Zscaler (NASDAQ: ZS) accelerates digital transformation so customers can be more agile, efficient, resilient, and secure. The Zscaler Zero Trust Exchange protects thousands of customers from cyberattacks and data loss by securely connecting users, devices, and applications in any location. Distributed across more than 150 data centers globally, the SSE-based Zero Trust Exchange is the world’s largest in-line cloud security platform. Learn more at zscaler.com or follow us on Twitter @zscaler.