

Arming Your SOC to Defeat Advanced Identity Attacks

SOLUTION BRIEF

The security landscape has fundamentally shifted, and the perimeter, once defined by firewalls and network boundaries, has become vulnerable. Today, identity stands as the new perimeter, yet visibility into this critical domain often lags behind.

The harsh reality is that identity-based attacks, once limited to advanced threat groups, are now common practice. These attacks exploit compromised credentials and Identity Access Management (IAM) systems to escalate privileges and move laterally, often evading detection and gaining access to your organization's most sensitive data, and posing a significant risk to your organization.

The Evolving Threat Landscape: Why Identity Is Your Toughest Challenge

Despite identity being at the center of modern attacks, security teams consistently report struggling to investigate identity-based threats. This isn't surprising when you consider that over 80% of breaches involve compromised identities.*

Threat actors understand this shift better than anyone. They exploit compromised credentials, conceal their actions by encrypting them within legitimate tools, leverage lateral movement techniques to evade detection, and escalate privileges to achieve their objectives. If you can't see into your encrypted east-west traffic and trace these patterns back to a specific user or account, it becomes exponentially harder to understand the full scope of an incident and what actions to take next.

Your current tools, often siloed and lacking deep identity context, force your analysts into a "swivel chair" investigation process, constantly switching between multiple security tools to piece together a complete picture of events. This inefficiency slows down investigations and can lead to missed threats.

Bringing Identity Into Focus for Faster Investigations

ExtraHop is designed to bring identity context directly into every step of your investigation workflows, providing you with a clear, real-time picture of account activity across your network without relying on endpoint agents.

Identity-aware NDR enables precise investigation of suspicious user behavior by providing you with a holistic view of associated devices, protocols, and detections, eliminating the need for multiple tools.

CUSTOMER BENEFITS

Faster Investigations and Response

ExtraHop brings identity context directly into investigation workflows, providing a clear, real-time picture of account activity and automatically connecting users with devices, allowing you to trace the "blast radius" of a compromised account.

Confident Lateral Movement Detection

SOC teams can confidently confirm lateral movement by identifying users accessing multiple hosts via common encrypted east-west protocols.

Prioritize Privileged and High-Risk Users

Detections can be filtered and tuned based on specific usernames, allowing security teams to prioritize high-risk accounts and reduce noise from less critical service accounts. This ensures critical identity-driven threats involving privileged users are triaged and investigated promptly.

Centralized Visibility and Threat Hunting

Users and their metadata are visible and searchable in one place, enabling identity-based threat hunting and a deeper understanding of user activity across the network.

The ExtraHop RevealX™ platform empowers you to confidently confirm lateral movement by identifying users accessing multiple hosts via common encrypted east-west protocols. In the event of a compromise, you can quickly understand the blast radius by identifying all devices accessed by a user during an attack, allowing for accurate scoping of potential system impact.

You can easily prioritize investigations and reduce noise by filtering detections for strategic users and allowlist known noisy accounts. This includes automating detections involving privileged users by surfacing them at a higher priority, ensuring critical identity-driven threats are triaged and investigated promptly.

The screenshot shows a detection alert in a dark-themed interface. At the top, a yellow banner reads "Recommended for Triage: Involves a high privilege user." The alert title is "Unusual Source IP Address" with a risk level of "88 RISK" and a category of "EXPLOITATION". The site is identified as "Site: banana-stand-1100V" and the detection occurred on "Oct 29 14:05" lasting "30 minutes". The description states: "ExtraHop has identified an anomaly related to **alice** accessing the network from an unusual source IP address. This detection occurs when a user, who typically connects from a known or expected location, suddenly initiates access from an unfamiliar or geographically distant IP." Below this, the "OFFENDER / CLIENT" section shows a laptop icon for "workstation-it-admin-01" with details: "IP Address: 10.4.1.51", "Hostname: workstation-it-admin-01.internal.example.com", and "User: 👑 alice". At the bottom, there are "Actions" and a "View Detection Details" link.

Designate privileged and influential users within ExtraHop RevealX to prioritize identity-based detections for triage.

Deepening Your Defenses: ExtraHop's Expansive Detection Coverage

ExtraHop's strength in identity-based attack detection is rooted in its robust understanding and coverage of Active Directory tools and techniques. Attackers employ a range of sophisticated tools and techniques to compromise identity systems. They utilize legitimate tools such as BloodHound, SharpHound, and Mimikatz to evade detection and identify vulnerabilities within these systems.

Attackers use methods like Kerberoasting or AS-REP Roasting to acquire user credentials. They also engage in ticket forgery, including Golden, Silver, and Diamond Tickets, to establish persistence and escalate privileges. These actions facilitate their objectives, which include credential theft, privilege escalation, evasion of defenses, lateral movement across networks, data exfiltration, and maintaining persistent access. Ultimately, their goal is to achieve complete control over the identity infrastructure.

IDENTITY-BASED USE CASES

- Defending Privileged Users
- Catching Ransomware Attacks
- Understanding "Blast Radius"
- Investigating Phishing-Driven Compromises
- Monitoring Watchlists
- User Containment and Quarantine
- Investigating Credential Abuse
- Detecting Privilege Escalation
- Stopping Identity-Based Lateral Movement
- Preventing Data Exfiltration

KEY CAPABILITIES

Real-Time Identity Insights

ExtraHop automatically discovers and attributes user identities to network activities by analyzing traffic from sources like Active Directory.

Cloud-Scale Machine Learning

Leverage advanced ML to continuously monitor petabytes of telemetry and identify suspicious behavior related to identity-based attacks that can bypass traditional security tools.

High-Fidelity Detections

ExtraHop uses a combination of anomaly, behavioral, statistical, and rules-based logic to trigger high-fidelity detections around the most pervasive tools and techniques like Impacket, Mimikatz, and BloodHound, as well as advanced techniques like Kerberoasting, token theft-driven session hijacking, remote command execution, SMB named pipe abuse, golden and silver ticket forging, DCSync attacks, and more.

Suspicious Behavior Tracking

Track user behavior across the network, viewing device interactions and encrypted protocol usage (SMB, RDP, NTLM, Kerberos, etc.) within a single interface to spot anomalies.

Automated Recommended Triage

Detections are automatically prioritized involving privileged or influential users to a higher priority level, so SOC analysts can quickly triage the most critical identity-driven threats.

Enhanced Alert Efficacy

Detections can be filtered and tuned based on specific usernames or tags, including watchlists, allowing your security teams to prioritize high-risk accounts and reduce noise from less critical service accounts.

Visibility Into ZScaler Connections

Integrates with ZScaler ZPA to provide continuous visibility on suspicious identities and device behavior across the SSE environment.

MITRE ATT&CK Mapping

Detected activities are mapped to the MITRE ATT&CK framework, providing context on how a user's behavior fits into known attack patterns and kill chain stages.

Integrated Response Actions

ExtraHop integrates response actions directly into the investigation workflow, allowing analysts to take immediate containment actions against compromised accounts through integrations with Entra ID, Okta, or Active Directory without having to pivot to multiple tools.

Your Command Center for Identity Investigation

ExtraHop makes identity a seamless and powerful part of every investigation, giving analysts richer context, sharper pivots, and faster insights. We provide your security teams with easy-to-understand, structured information about user activity derived directly from network traffic in a simple-to-use table format that you can pivot from to investigate suspicious activity. From this central location, you can:

- **Gain Top-Level Insights:** Quickly gather insights into user activity, including the number of detections associated with a user, their last seen time, and a list of devices and their associated users.
- **Identify Suspicious Patterns:** This information helps you correlate how users are active on the network and understand their behavior patterns, enabling you to identify suspicious activity, whether it's a single event or a broader trend.

User Enrichment for Faster Investigations and Response

Without built-in context, just identifying a username is not enough. Analysts still have to pivot out into another system and figure out who that person actually is. With integrations into Microsoft Entra ID, Active Directory (AD), and Okta, ExtraHop now brings context from these leading identity providers directly into the investigation workflow. The goal is to give analysts a deeper understanding of who a user actually is by enriching their profile with information from their preferred identity provider(s).

Your analysts now have vital information like job title, department, group memberships, and account status to make informed decisions — all in RevealX. New dashboards for unusual user logins and admin activity impacting user accounts, alongside integrated risky user detections from Entra ID, give analysts a high-level view of identity-driven risk and the ability to drill into the alerts that matter. By pairing cloud-based identity signals with the deep network visibility we already provide, we're giving you a more complete view of how users behave across their environment and where that behavior might be a risk to your organization.

The screenshot displays the ExtraHop RevealX 360 interface. The top navigation bar includes 'Overview', 'Dashboards', 'Detections', 'Alerts', 'Assets', 'Records', and 'Packets'. The 'Assets / Users' section is active, showing a search for 'ajohnston' with 149 active users. A table lists search results with columns for Username, Recent Devices, Protocol, and Detections. The user 'ajohnston' is highlighted, showing recent devices like 'DESKTOP-W37WFDJ' and a detection count of 1. A detailed profile for 'ajohnston' is shown on the right, including properties such as 'High Privilege User', 'Display Name: Alice Johnston', 'SAM Account Name: ajohnston', 'User Principal Name: alice.johnston@PATCHTUESDAYS.COM', 'Job Title: Security Researcher', 'Company: PatchTuesdays Inc.', and various group memberships like 'AdversaryEmulationLab' and 'BinaryForensics'.

Username	Recent Devices	Protocol	Detections
<input checked="" type="checkbox"/> ajohnston	DESKTOP-W37WFDJ (+1)	KRB, NTLM, SMB	1
<input type="checkbox"/> jadeo	adcs-00.patchtuesdays.com (+3)	KRB	3
<input type="checkbox"/> jodoe	WINDOW-XP-1(+1)	LDAP, SMB	2
<input type="checkbox"/> lsmith	Barnysdale	SMB	0
<input type="checkbox"/> lroberts	WINDOWS-8-1	RADIUS	1
<input type="checkbox"/> lwhite	WINDOWS-10-1	RADIUS	0
<input type="checkbox"/> mjones	DESKTOP-WV2YBJKL	KRB	1
<input type="checkbox"/> mjohanson	workstation-it-admin-01 (+7)	KRB, LDAP, NTLM, SMB	1
<input type="checkbox"/> mthompson	LJME	NTLM, SMB	0
<input type="checkbox"/> nclark	DESKTOP-QJKQJPK	KRB, LDAP	0
<input type="checkbox"/> nlee	DESKTOP-2V7DK9H	KRB	1
<input type="checkbox"/> nsmith	WINDOWS-10-1	KRB	1
<input type="checkbox"/> obrown	DESKTOP-V33G23Y	RADIUS	0
<input type="checkbox"/> owilson	b-wks-22.ad.v2.int.eh	RADIUS	0
<input type="checkbox"/> pwhite	Dell 9F19A6	RADIUS	1
<input type="checkbox"/> pjohanson	DESKTOP-BWC4PJB	RADIUS	0
<input type="checkbox"/> pgreen	DESKTOP-YPRWMYY	RADIUS	0
<input type="checkbox"/> rjones	DESKTOP-TT94TFV (+3)	RADIUS	0
<input type="checkbox"/> rroberts	DESKTOP-R49PYQJ	RADIUS	0
<input type="checkbox"/> swhite	DESKTOP-GGY4W78	NTLM, SMB	0

Customizing Your Defenses

ExtraHop understands that while its platform provides objective insights into network activity, your analysts possess the subjective understanding to determine what truly constitutes suspicious behavior. This is why the platform makes it easy to tune detections based on username. This functionality allows you to:

- **Refine Your Detection List:** Streamline your detection list by adjusting for low-value detections.
- **Cut Through Noise:** Reduce the noise created by usernames tied to frequently triggered detections and notifications.
- **Quickly Manage Tuning Rules:** Easily add or edit usernames for tuning rules or detection notifications, and hide specific username participants in detections without hiding the entire detection.

Evolving Identity Context for the Agentic SOC: A Future-Forward Approach

To power AI agents within the agentic SOC, enterprises need more than just visibility; they need strong network telemetry that tracks what is happening across the network and who is behind those actions. Without this layer of context, autonomous agents will lack the necessary information to operate securely and effectively, leaving them paralyzed by ambiguity or prone to disrupting critical workflows.

ExtraHop has added integrations that fuse robust identity attributes and network telemetry into a single dataset. By adding enriched user data into dashboards, detections, and response actions, agents are empowered to investigate complex incidents with richer context and reduced mean time to response (MTTR).

Stop Credential Abuse in Its Tracks. Lead with Confidence.

By connecting users to threats, devices, and impact, ExtraHop provides you with the visibility and response actions you need to investigate faster, hunt smarter, and ultimately stop credential abuse in its tracks. Our goal is to help you facilitate identity-aware investigations, allowing users to start with a specific user or account and trace their activities, behavioral shifts, and presence across the network. In a world where identity is the new perimeter, ExtraHop empowers you to lead with confidence.

To see ExtraHop RevealX in action, schedule a demo at extrahop.com/demo.

ABOUT EXTRAHOP

ExtraHop transforms network data—one of the enterprise's most reliable sources of truth—into high-fidelity, actionable context. ExtraHop gives security and IT operations teams real-time, behavioral context across the enterprise—from legacy systems to cloud and AI environments, from privileged identities to critical systems.

For the SOC and NOC, ExtraHop delivers ground truth using deep network visibility, real-time asset inventory, application dependency mapping, and strategic decryption to detect performance issues and advanced threats.

Whether organizations are modernizing their operations or delivering more autonomous workflows, ExtraHop enables organizations to detect issues earlier, respond with confidence, and maintain resilience and security at uncompromised scale.

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info@extrahop.com
extrahop.com