



Forescout XDR

eXtended Detection and Response



FORESCOUT



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Improve SOC efficiency by 450x with better detection and response of true threats

Security operations center (SOC) teams face a daily barrage of incomplete and inaccurate alerts that lack vital contextual information, many of them false positives. As a result, analysts miss critical threats and take longer to investigate and respond to them, increasing the risk of a breach. In fact, the typical SOC receives an estimated 11,000 alerts per day, or 450 alerts per hour¹ – most of them low fidelity, low confidence alerts, and false positives.

With Forescout[®] XDR, that number is reduced to one SOC-actionable detection an hour – or one probable threat that warrants human investigation.²

Solution overview

Forescout XDR converts telemetry and logs into high fidelity, SOC-actionable probable threats.

It automates the detection, investigation, hunt for and response to advanced threats across all connected assets – IT, OT/ICS, IoT and IoMT – from campus to cloud to data center to edge. Forescout XDR combines essential SOC technologies and functions into a unified, cloud-native platform, viewable and actionable from a single console.



Campus



Remote



Data center/cloud



IT/IoT/OT



Medical devices

Forescout XDR leverages data from across the extended enterprise, including from managed and unmanaged (agentless) devices.

Forescout XDR is 450x more efficient than typical SOC's at converting telemetry and logs into actionable detections.

With Forescout XDR



VS

Typical SOC



* **Detection:** A SOC-actionable probable threat that warrants human investigation

Based on aggregate data averaged over a 1-year period (Dec 2021-2022), across 30 enterprises, representing a range of company sizes and industries.

11,000 alerts per day = 450 alerts per hour.

Source: "The 2020 State of Security Operations," Forrester Consulting

The actual number of alerts a SOC receives depends on many factors including the number, type and location of security controls deployed, the tuning of those controls (which is a function of analyst capacity, risk tolerance and level of expertise), and the number of employees / devices, and industry.



Business value



Reduces business risk

Lessens the risk and magnitude of a successful attack or data breach and eliminating virtually all alert “noise.” This enables SOC teams to more quickly and accurately detect, investigate and respond to the broadest range of advanced threats from across the entire enterprise.

In doing so, Forescout XDR helps enable you to avoid business disruptions and costs resulting from a successful attack or breach.



Optimizes security operations

Automatically enriches and normalizes key data and correlates signals to produce a small number of high-fidelity, high-confidence detections that truly warrant analyst investigation. It simplifies and accelerates complex investigation and threat-hunting processes with more complete, accurate information and contextual data, all from a unified console that integrates with other Forescout solutions and third-party SIEMs, case management systems and response solutions.

Forescout XDR provides enhanced visibility across the entire threat lifecycle via preconfigured, customizable dashboards and reports, with key performance indicators (KPIs) tailored to analysts/IR, engineers, SOC managers, compliance/risk managers and executives. As a result, SOC teams can spend more time on higher-value security activities.



Reduces costs

Lowers SOC spending related to:

- ▶ Licensing and managing multiple SOC point solutions including data lakes; security analytics; security orchestration, automation and response (SOAR); user and entity behavior analytics (UEBA); and threat intel platforms
- ▶ Log storage
- ▶ Analyst burnout, turnover, recruiting and training
- ▶ Supporting new data sources
- ▶ Creating and tuning rules



Supports compliance

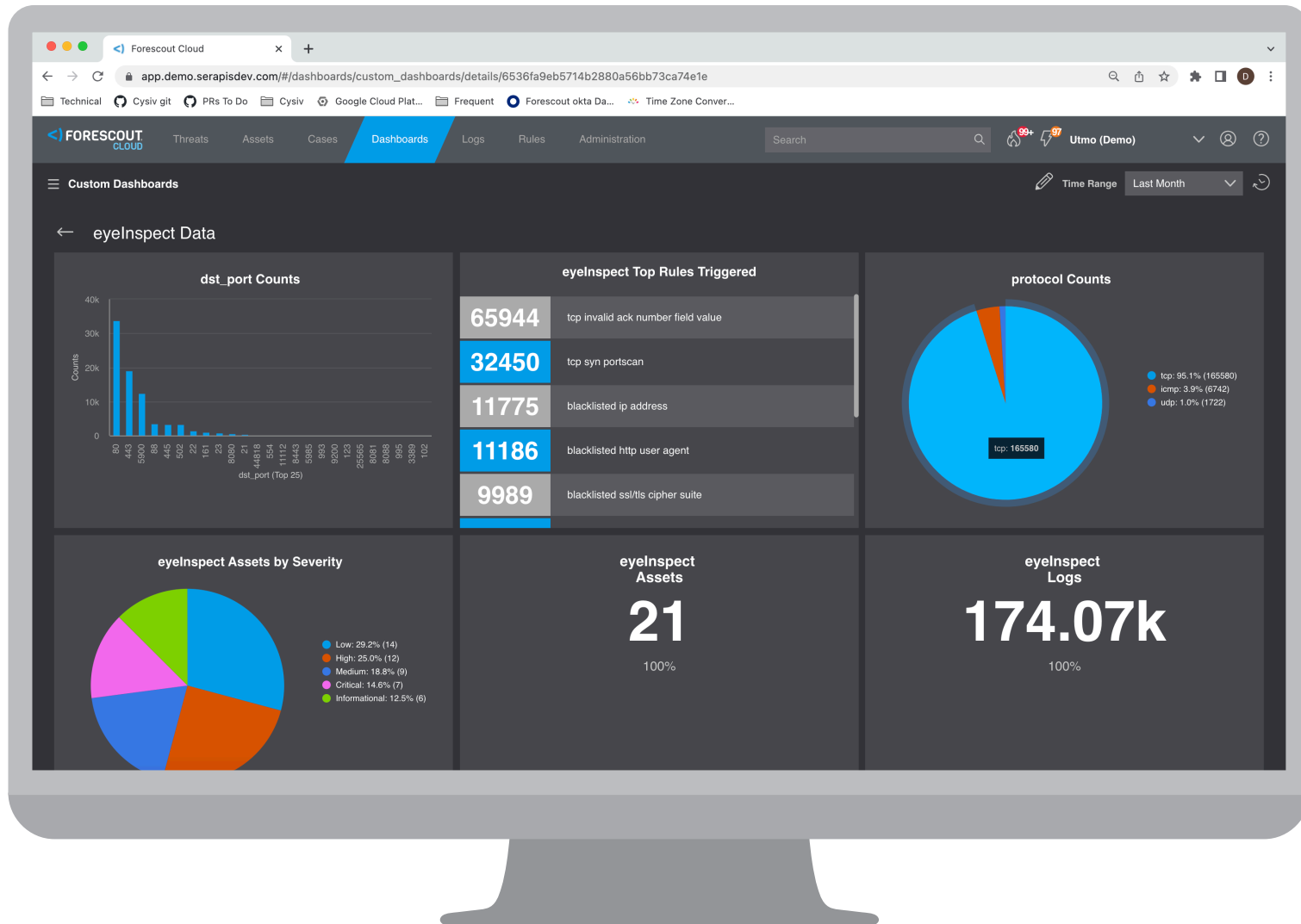
Provides several hot and cold storage options, automated threat detection and threat intelligence to support compliance with key regulations and standards. This helps close the potential gap between when a breach or disruption is noticed and when a response action is taken.



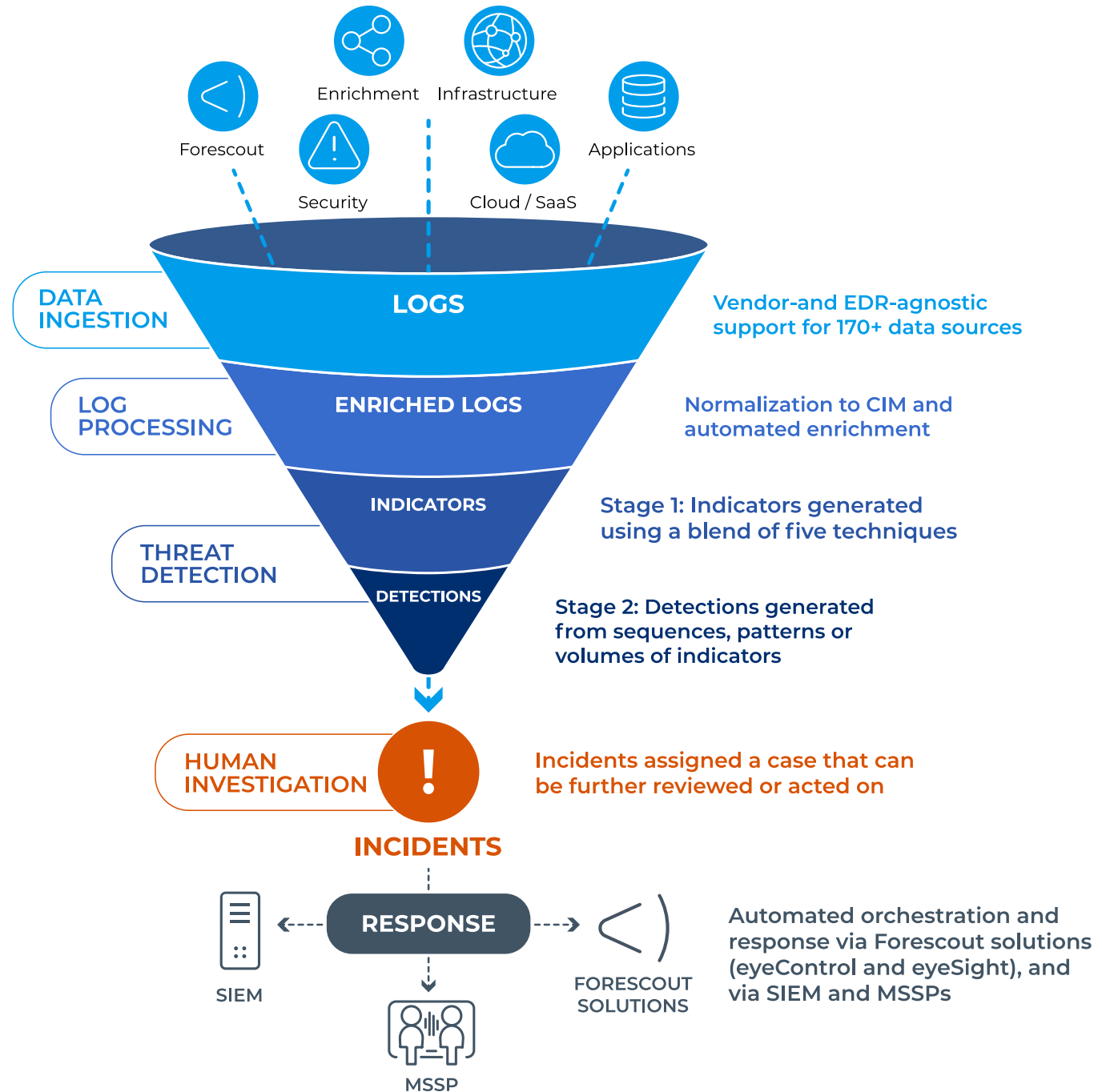
Leverages existing security investments

Increases the value of your Forescout solutions as well as your network, endpoint and cloud security sensors; and enforcement points, regardless of vendor. With Forescout XDR, there's no need to deploy new, vendor-specific software or hardware.

Key metrics and trends support better management of SOC performance.



Preconfigured and customizable persona-based dashboards and reports provide KPIs relevant to a variety of roles, including analysts/IR, engineers, SOC manager, compliance and risk managers, and executives.





Why Forescout

Forescout XDR, together with other Forescout solutions, uniquely delivers vendor- and EDR-agnostic data ingestion and 450x better detection, with full-spectrum response and upfront risk reduction, all with predictable and accessible pricing.



Vendor- and EDR-agnostic data ingestion

- ▶ Supports the products and vendors you've already invested in
- ▶ Can ingest data from any managed and unmanaged device (IT, OT/ICS, IoT, IoMT)
- ▶ Ensures more comprehensive, powerful, flexible, and effective threat detection



450x better detection

- ▶ Advanced data pipeline enforces a common information model (CIM) to normalize ingested data and auto enrich with user info, IP attribution, geolocation, critical asset information
- ▶ 2-stage threat detection engine uses a blend of 5 techniques to reduce noise & improve fidelity



Full-spectrum response

- ▶ Powerful investigation tools
- ▶ Native integrations with case management solutions
- ▶ Automate responses via Forescout solutions to touch all managed & un-managed devices



Upfront risk reduction

- ▶ Integration with other Forescout solutions reduces the attack surface, and the risk of a compromised or non-compliant device connecting to your network in the first place
- ▶ Continuously monitors all connected assets with dynamic access policies



Simple, predictable and accessible pricing

- ▶ No penalties for sending more logs to Forescout XDR, to support better detection
- ▶ License fee is based on the total number of endpoints (IP/MAC address) in your organization
- ▶ Pricing includes several hot and cold storage options to meet your business needs



Key features

Forescout XDR combines essential SOC technologies and functions into a single, unified, cloud-native console.



Data ingestion

Natively supports Forescout eyeSight, eyeInspect and Medical Device Security data – and more than 170 vendor- and EDR-agnostic sources including:

- ▶ **Security:** Firewall, network IDS/IPS, EDR, endpoint protection platform (EPP), server/workload/container security, web proxy and email security
- ▶ **Infrastructure:** Windows security, AD authentication, IAM, DHCP, DNS, cloud audit trail and network metadata
- ▶ **Enrichment:** Identity (LDAP), asset inventory and classification, configuration management, vulnerability scan results, and threat intelligence (indicators of compromise, or IOCs)
- ▶ **Applications:** Database, ERP, CRM and APIs
- ▶ **Cloud/SaaS:** AWS, Microsoft Azure, Google Cloud, Microsoft 365, Google Workspace and any other SaaS application



Data onboarding

Helps ensure that you extract maximum detection value to support your most important use cases. Forescout data engineers work alongside your team to plan and prioritize the data sources to be onboarded, then help configure the data pipeline and ensure your data is being properly parsed, cleansed, normalized and enriched.



Advanced data pipeline

Applies a rigorous data science-centric approach to how it manages data flowing from enterprise-wide sources into its advanced threat detection engine. First, Forescout XDR enforces a common information model (CIM) to normalize ingested data. Next, it automatically enriches that data with IP address, geolocation, ADOject properties, configuration and other contextual data for security context. This maximizes security detection value and facilitates faster correlations and threat hunting across multiple data sources. Finally, it uses an ETL (extract-transform-load) process that allows for faster, stabler, more efficient data analysis than more common ELT (extract-load-transform) processes.



MITRE ATT&CK® framework integration

The MITRE ATT&CK framework tracks cyber adversary tactics and techniques across the entire attack lifecycle. Forescout's XDR integrates into this framework, to allow you to instantly see how different data sources that should be ingested for broad or specific TTP coverage, to identify potential blind spots that adversaries can exploit and to determine which additional data sources would further elevate your coverage.

MITRE ATT&CK framework integration identifies potential blind spots and opportunities to improve threat detection through the addition of other data sources.

The screenshot displays the ForeScout MITRE ATT&CK Matrix interface. The main view shows a grid of technique categories with their respective counts. A detailed view of the 'Privilege Escalation' category is shown in the foreground, listing 13 techniques. Some techniques are highlighted in red, indicating they are not fully covered by the current data sources.

Category	Count
Initial Access	7 of 9
Execution	8 of 13
Persistence	13 of 19
Privilege Escalation	12 of 13
Discovery	20 of 30
Lateral Movement	7 of 9
Collection	12 of 17
Command and Control	9 of 16
Exfiltration	9 of 16

Technique	Coverage Status
Drive-by Compromise	Covered
Exploit Public-Facing Application	Covered
External Remote Services	Covered
Hardware Additions	Covered
Phishing	Covered
Replication Through Removable Media	Covered
Supply Chain Compromise	Covered
Trusted Relationship	Covered
Valid Accounts	Covered
Command and Scripting Interpreter	Covered
Container Administration Command	Covered
Deploy Container	Covered
Exploitation for Client Execution	Covered
Inter-Process Communication	Covered
Native API	Covered
Scheduled Task/Job	Covered
Serverless Execution	Covered
Shared Modules	Covered
Software Deployment Tools	Not Covered
System Services	Covered
User Execution	Covered
Windows Management Instrumentation	Covered
Account Manipulation	Covered
BITS Jobs	Covered
Boot or Logon Autostart Execution	Covered
Boot or Logon Initialization Scripts	Covered
Browser Extensions	Covered
Compromise Client Software Binary	Covered
Create Account	Covered
Create or Modify System Process	Covered
Event Triggered Execution	Covered
External Remote Services	Covered
Hijack Execution Flow	Not Covered
Implant Internal Image	Covered
Modify Authentication Process	Covered
Office Application Startup	Covered
Abuse Elevation Control Mechanism	Covered
Access Token Manipulation	Covered
Boot or Logon Autostart Execution	Covered
Boot or Logon Initialization Scripts	Covered
Create or Modify System Process	Covered
Domain Policy Modification	Covered
Escape to Host	Covered
Event Triggered Execution	Covered
Exploitation for Privilege Escalation	Covered
Hijack Execution Flow	Not Covered
Process Injection	Covered
Scheduled Task/Job	Covered
Valid Accounts	Covered

Advanced Threat Detection

Sample list of threats that can be detected with Forescout XDR

- ▶ Application abuse
- ▶ Brute-force attacks
- ▶ Buffer overflow attacks
- ▶ Cloud resources scanning
- ▶ Cloud service misconfigurations
- ▶ Cloud: Unauthorized access
- ▶ Cloud: Unsecure storage detection
- ▶ Command & Control connection
- ▶ Compliance violations
- ▶ Cross site scripting
- ▶ Cryptojacking
- ▶ Data exfiltration
- ▶ File access failures
- ▶ Illegal resource access
- ▶ Insider threats
- ▶ Lateral movement
- ▶ Malware/outbreaks
- ▶ Network scanning
- ▶ Password cracking
- ▶ Phishing attacks
- ▶ Port and vulnerability scans
- ▶ Ransomware
- ▶ SQL injection
- ▶ Suspicious behavior
- ▶ Unauthorized access to systems
- ▶ Unauthorized changes to firewall rules
- ▶ Unauthorized service restarts
- ▶ Unauthorized service/process creation
- ▶ Vulnerability exploitation
- ▶ Web application misconfiguration
- ▶ Web-application attacks (All Layer-7 web attacks)
- ▶ Worm / virus outbreak



Cloud-based data lake

Massively scalable, purpose-built, indexed data lake with tiered data storage (hot, warm, cold) and rapid, full-text search. This provides cost-effective short-term and optional longer-term (7 days to 1 year+) log retention and management of either raw telemetry or enriched data, in support of security and compliance requirements.



Detection rules

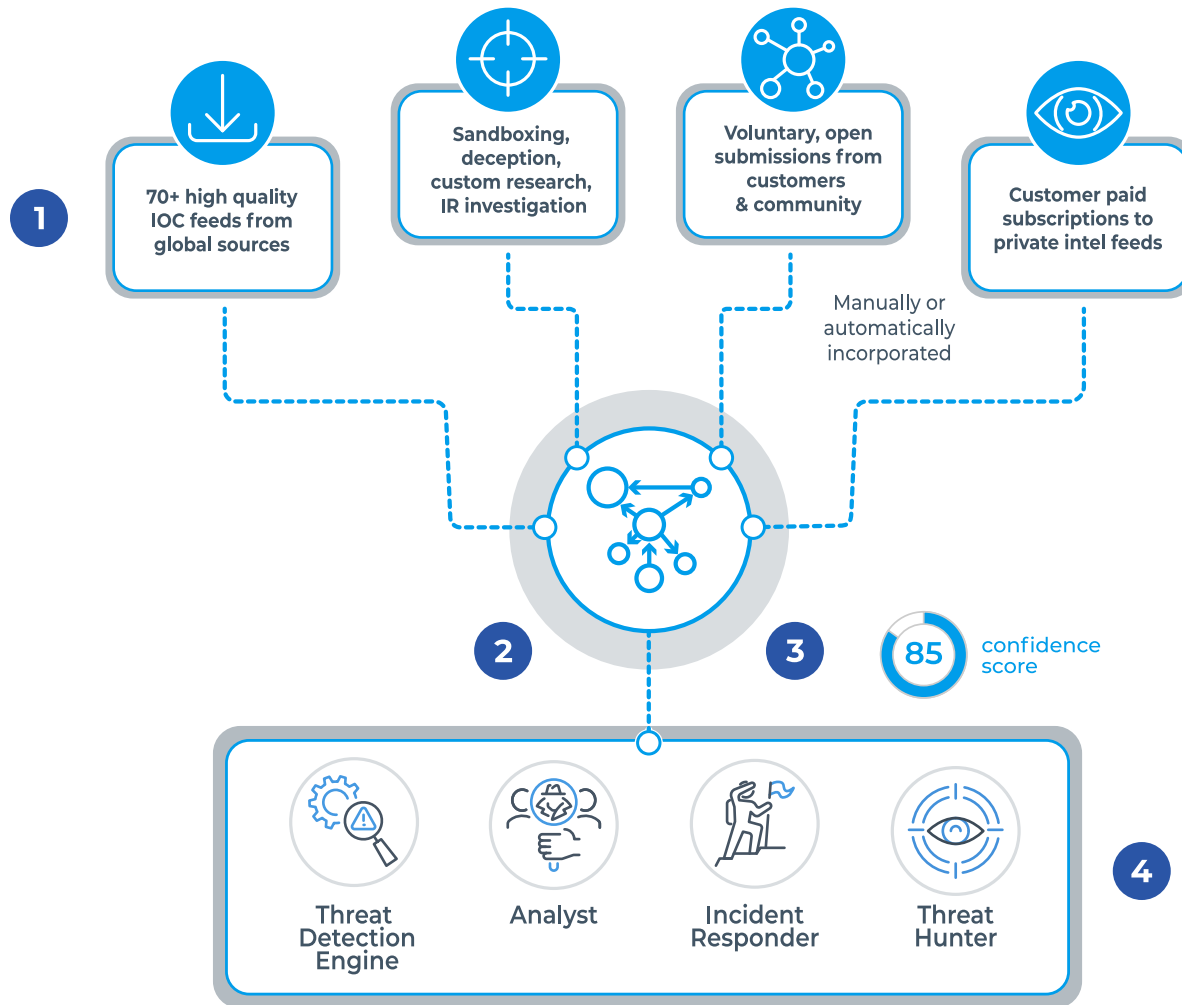
Includes more than 1,500 verified, out-of-the box detection rules and models for your data sources. These rules have been tested on production data to ensure they operate effectively and deliver value on Day One. Custom detection rules give you the power and flexibility to quickly create indicator, detection and health rules that address your unique requirements, with a guided user experience.



Threat detection engine

Two-stage threat detection engine applies five detection techniques to automatically generate high-fidelity, high-confidence true threats that warrant investigation, while weeding out false positives ("noise"):

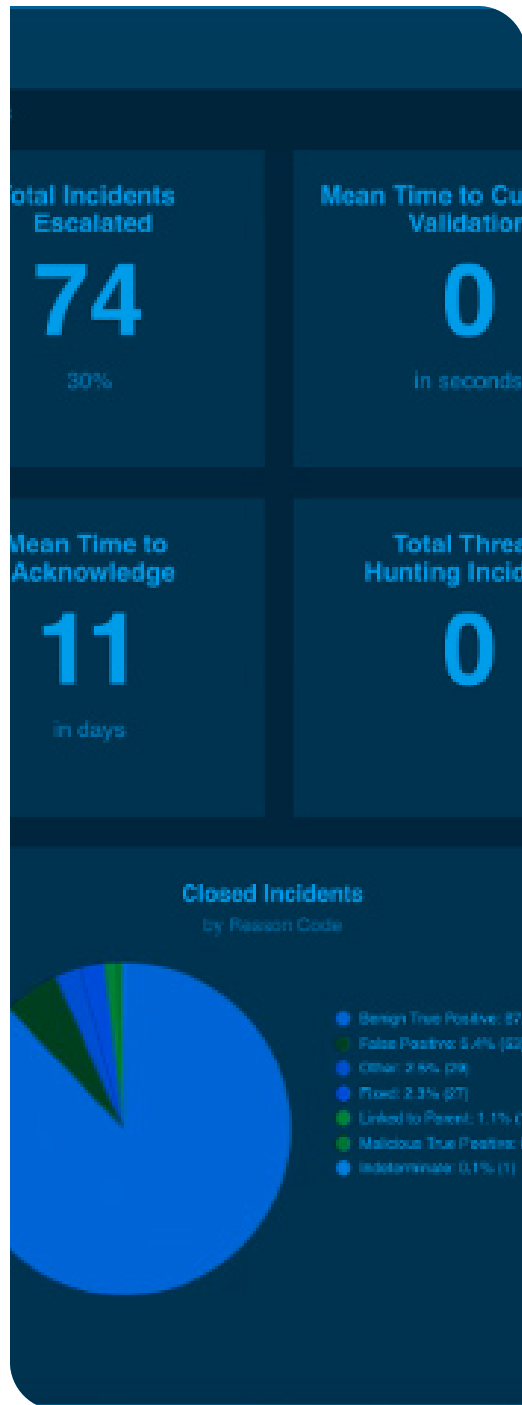
- ▶ **Signatures:** Match object attributes to a known bad object to identify threats inside raw telemetry, uncleanable malware or ransomware, for example.
- ▶ **UEBA:** Looks for abnormal behaviors that match a digital pattern, footprint, human activity or network behavior with known bad behavior. Ex: a sales rep downloading thousands of records from your CRM, unusual activity outside of normal office hours, beaconing, improbable distance traveled.
- ▶ **Statistics and outliers:** Uses clustering, grouping, stack counting, baseline and variation, outlier detection, logistic regression and other methods to detect anomalous activity. Ex: log sources going down, denial of service attacks.
- ▶ **Algorithms:** Uses context-aware AI and ML techniques such as supervised/unsupervised learning or deep learning to detect malicious or anomalous activity or to predict attacks. Ex: identifying process paths or domain generation algorithms (DGAs).
- ▶ **Threat intelligence:** More than 70 sources of cyber intelligence leveraged to look for things like backdoors and command-and-control traffic, or people reaching out to malicious phishing sites.



Threat intelligence

IOCs from over 70 high-quality sources worldwide, including from Vedere Labs, Forescout’s team of global research experts. These IOCs are classified, corroborated and scored to provide finished intelligence that is automatically leveraged across the threat detection, hunting and investigation process. You have access to detailed threat reports from Forescout researchers that profile key threat actors and threats. Anonymized IOC data can also be shared among opt-in community members, including industry-specific ISACs, via a built-in community threat exchange.

1. Forescout leverages IOC data from a broad range of reliable sources
2. IOC intel is correlated into a searchable graph model database of “known bad” domains, URLs and IPv4 & IPv6 addresses
3. Each IOC is dynamically assigned a confidence score based on an assessment of the quality of the source
4. This confidence-scored IOC intel is then leveraged by the threat detection engine, and by customer SOC teams, to accelerate and improve the threat detection and investigation process



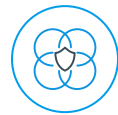
UEBA

Behavior-based analytics are used to detect significant changes to behavior or anomalous activity for an entity. Standard profiles and behaviors are built for users and hosts across time, and any activity that is anomalous to these standard baselines is triggered as suspicious.



Dashboards and reports

Preconfigured and customizable persona-based dashboards provide KPIs relevant to a variety of roles, including analysts/IR, engineers, SOC manager, compliance and risk managers, and executives. Proactive dissemination and sharing of reports and/or metric delivers insight into the hands of those responsible for managing SOC operations as well as executive team members.



SOAR

Orchestrates the SOC process from detection through investigation and response with built-in case management and notifications. Forescout XDR automates security through enrichment sources such as IP geolocation, user and asset information, and correlation to multiple intelligence sources. It leverages Forescout eyeSight and eyeControl for automated orchestration and response workflows that can touch every managed and unmanaged (un-agentable) device across your enterprise. You can also continue to leverage your existing SOAR through integration with Palo Alto Cortex XSOAR and other SOARs.



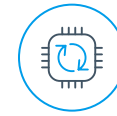
Cloud-native

Nothing to deploy, with new features, fixes and rules delivered seamlessly, bi-weekly.



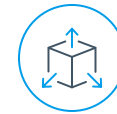
SIEM integration

True threats identified by Forescout XDR can be fed to an existing SIEM for centralized orchestration and incident response.



Continuous software and content updates

New features, functionality and fixes, along with new detection rules and models, are seamlessly delivered every few weeks, without requiring any operational support or causing disruption.



Multi-tenant architecture

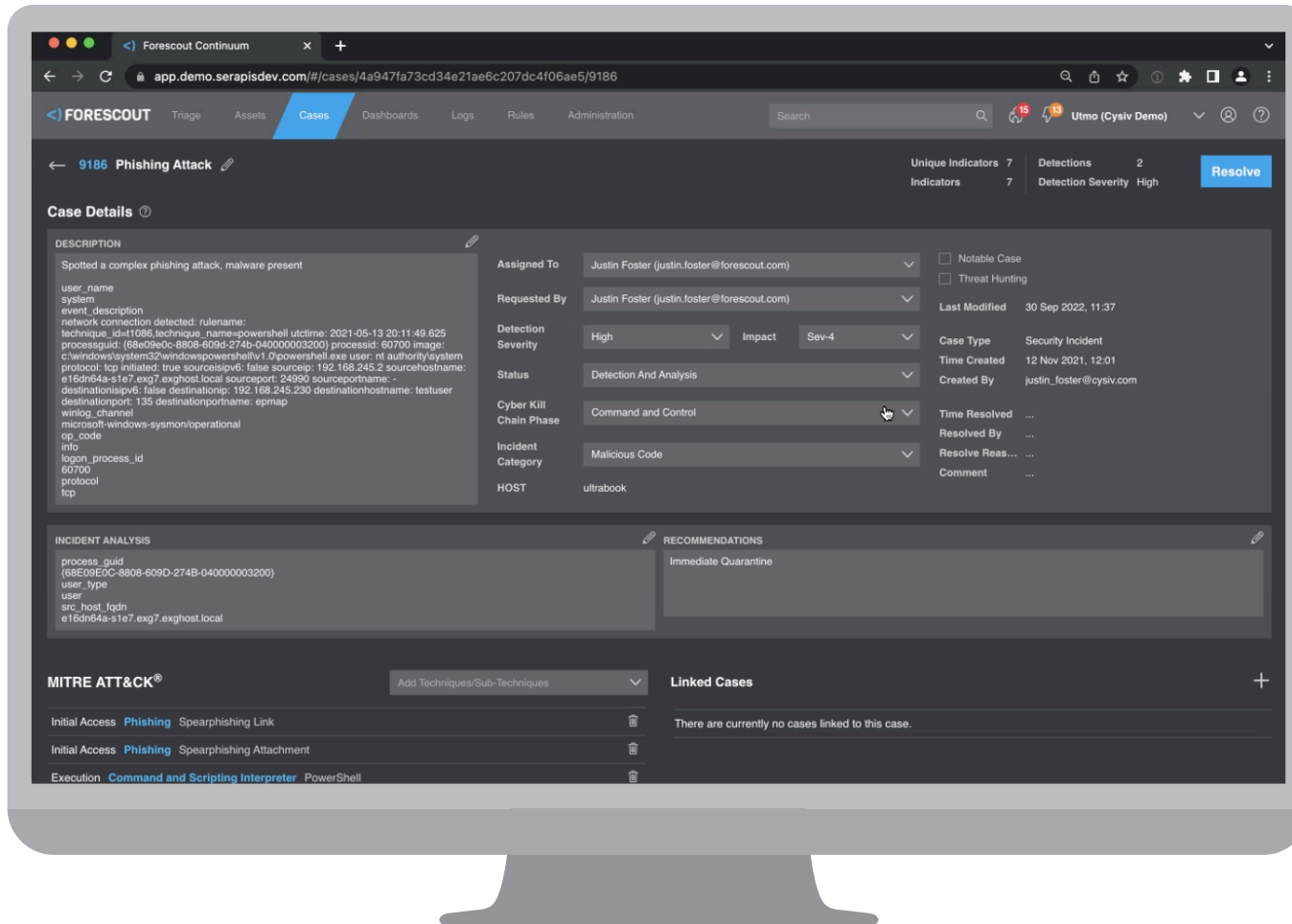
Logical separations (or tenants) easily created based on country, office location or business unit, for example. You can also generate aggregate views and perform queries and analyses across tenants and business units, right up to the global level. This is particularly beneficial for large enterprises, multinationals, MSSPs and organizations with regional SOCs.



Unified global architecture

Data residency and compliance requirements readily met, with cost-effective support for regional security operations. Specify where you want your logs to be stored among 25 regions across the Americas, Europe and Asia-Pacific – while still being able to view and query your data globally.

Case management provides comprehensive details and facilitates more rapid and effective investigations and response.

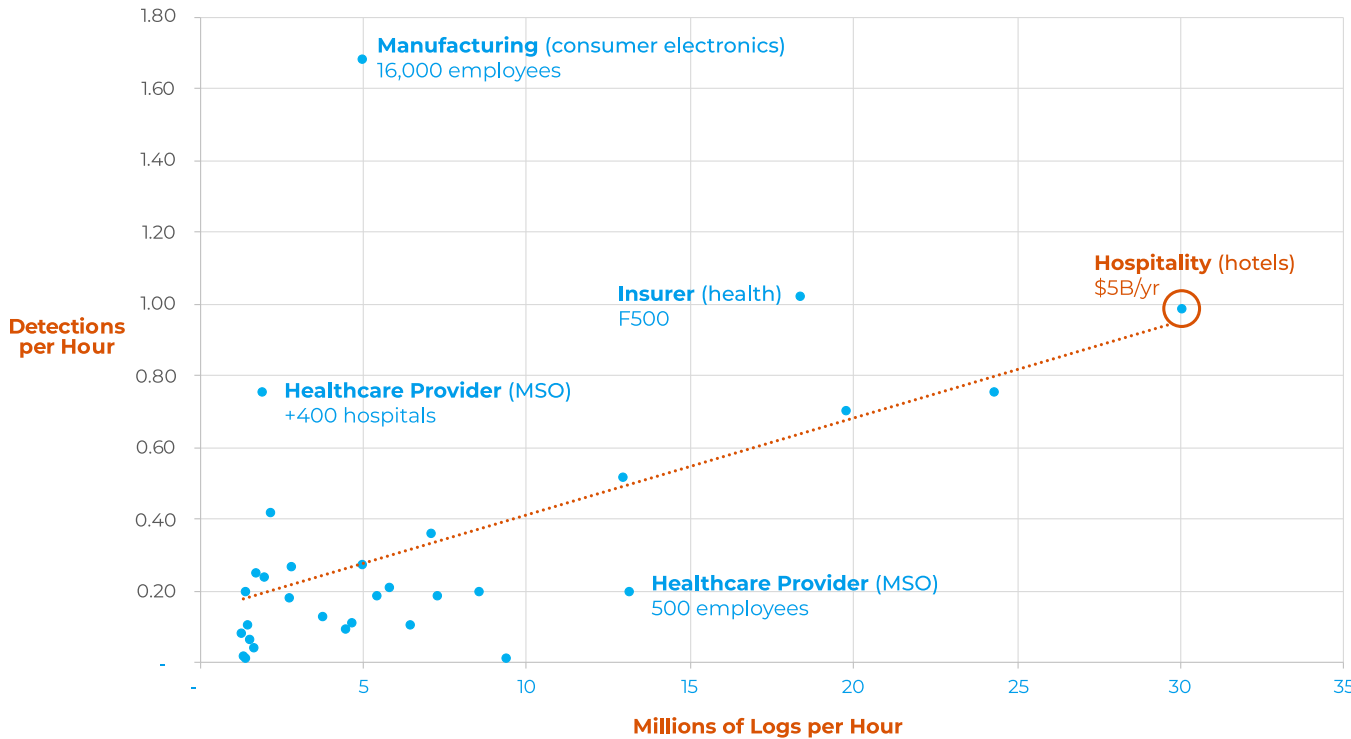


Provides workflows, tight integration, transparency and seamless communication and collaboration during detection handling and incident management. Based on the NIST Incident Response Life Cycle, Forescout XDR supports integrations with ServiceNow, RSA Archer, Jira Software, ManageEngine ServiceDesk Plus, Palo Alto Cortex XSOAR, TheHive and ConnectWise.

Results

Whether you have millions, tens of millions or hundreds of millions of logs, Forescout XDR can quickly and automatically cut through the noise to generate a very small number of high-fidelity, high-confidence detections that need analyst (human) intervention.

The graph below plots the data from 31 customers covering the 1-year period beginning Dec. 15, 2021. For example, a \$5B/yr hospitality company was able to distill an average of 30 million logs/hr down to .98 SOC-actionable detections/hr.



Notes:

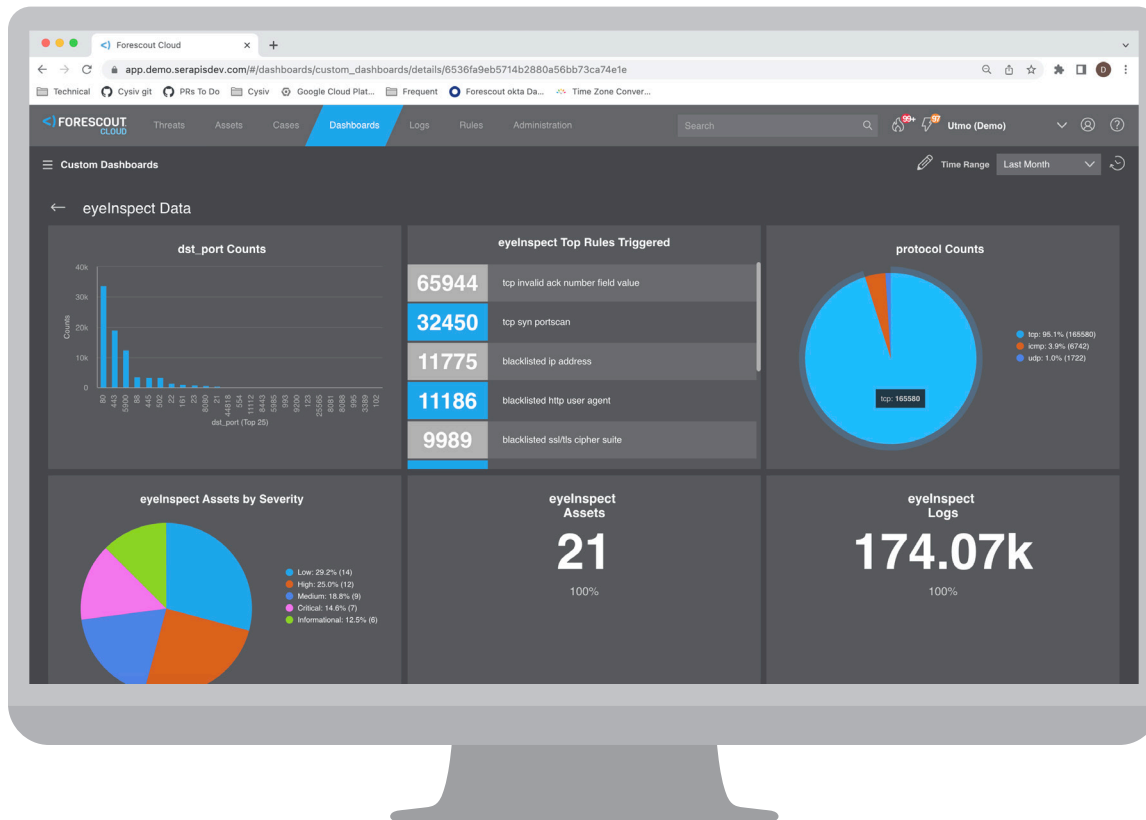
- ▶ Companies encompass a range of sizes and industries, including:
 - Construction
 - Consumer
 - Energy / Utilities
 - FinTech
 - Healthcare
 - Insurance
 - Manufacturing
 - Mining
 - Publishing
 - Technology
 - Transportation / Logistics

- ▶ Individual results will vary, and are dependent on several variables, including use cases, log selections, total number of logs, and the on-going tuning of rules.

1 The State of Security Operations, Forrester, 2020
 2 Endpoint refers to each of the MAC and IP addresses located on a user device, network infrastructure device, non-user device or cloud infrastructure components.

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SEE IT IN ACTION

forescout.com/xdr-demo-request



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