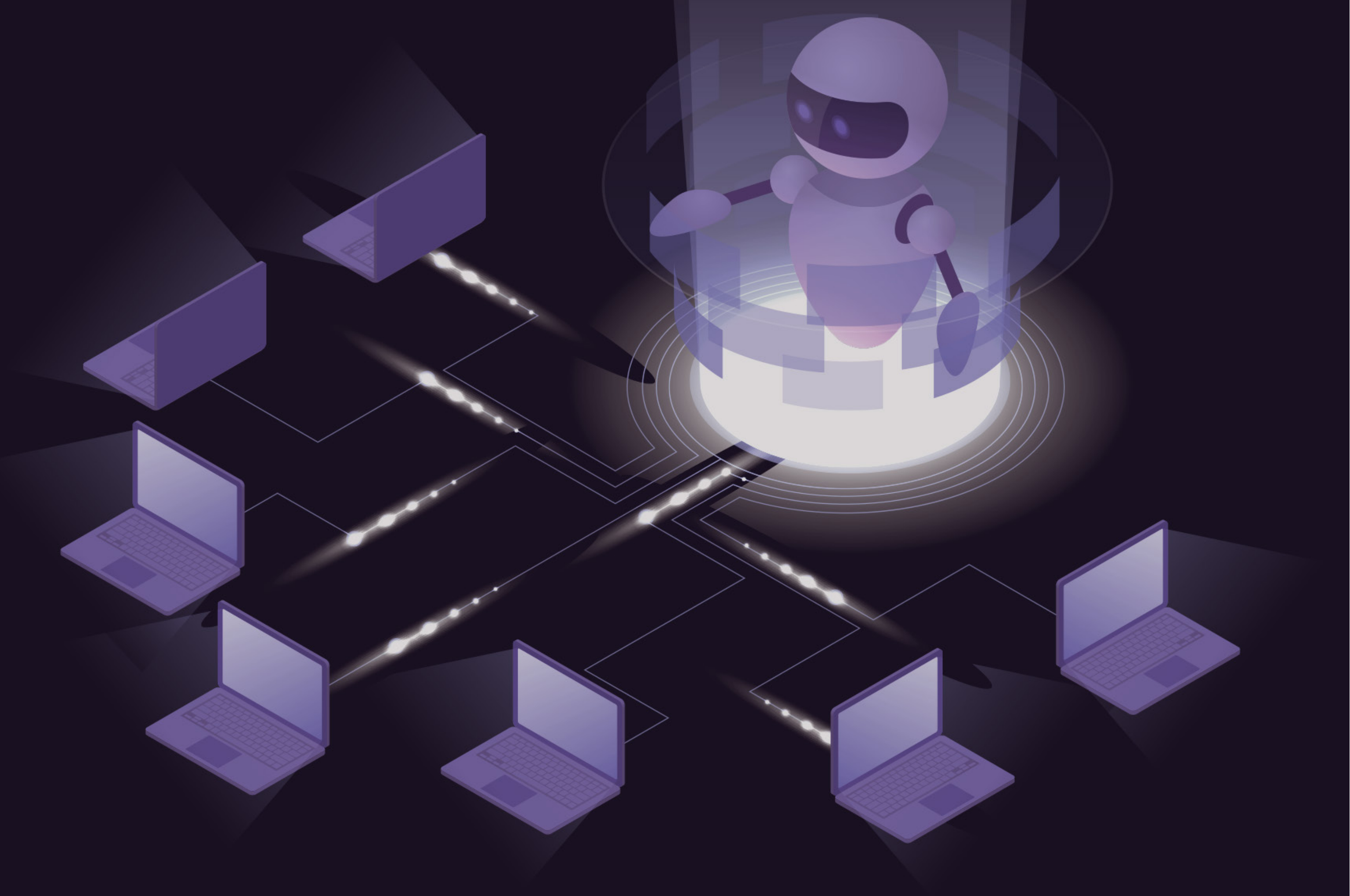
CYBOT™

Automated Investigation & Hunting Platform



Datasheet

Analytics

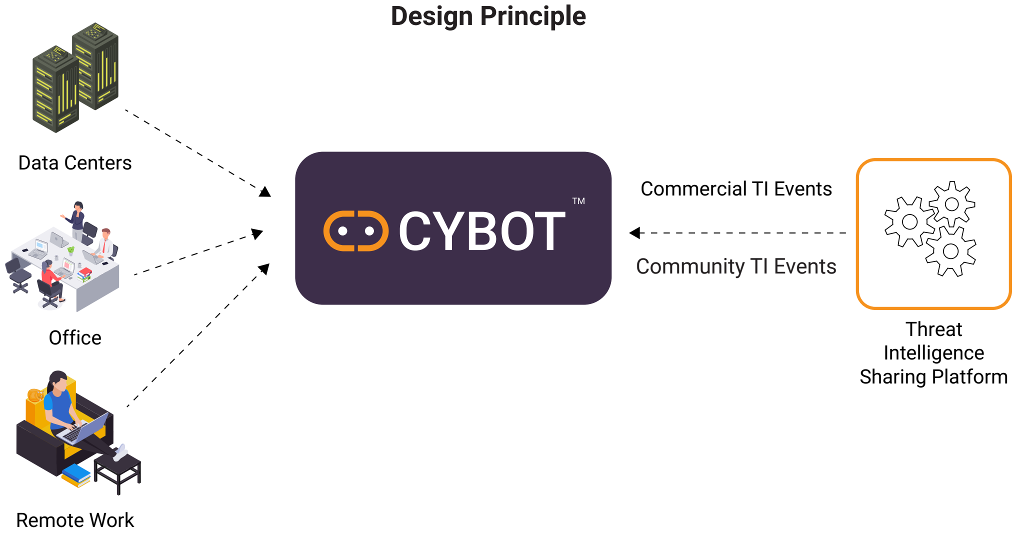
activebytes innovations

www.active-bytes.com

About the CYBOT

- CYBOT collects raw logs from the enterprise's network, remote users, servers and stores to its Analytical engine in a contextualized and secured way. The logs then undergo intelligent automatic analysis, thereby going the extra mile in threat hunting which a human cannot.
- CYBOT is designed to be adaptive to the latest adversary techniques and tactics by keeping in track with the threat intelligence events that it is programmed to receive from our trusted community sources and Activebytes dedicated threat intelligence team.
- CYBOT intelligently and automatically hunts and investigates the threat leveraging Realtime Logs by performing correlation with TI IOCs received from even the dark sources, thereby detecting adversary attack patterns that a human can never pickup.
- Around the clock monitoring of logs and every unusual, suspected event is subjected to drill down the level of investigation. CYBOT is designed to provide automated options to respond along with suggestions and alerts to the security team. This will help analysts to deal with the adversaries that already intruded on the network.

Design Principle



Click here to get an overview of the working of CYBOT

Why CYBOT is Your Intelligent Analytical Threat Hunting Solution?

CYBOT Platform includes a Big Data Analytic Engine that handles huge data which is beyond human ability, with best-in-class analytics and processing capability. We've made hundreds of dashboards and alerts out of the box for both compliance and security analytics purposes. You will have additional access to our content library that we keep updating with new dashboards and alerts to continuously improve the hunting capability of the platform.

CYBOT protects your assets

Analytics

CYBOT, with its advanced analytics design, performs quick profiling of raw data into useful information, analysis of this along with events patterns in the enterprise environment and helps in proactive handling of IOCs, thereby saving the enterprise IT infrastructure from a security breach. CYBOT is capable of early detection of even the new generation-based attack attempts with its huge pool of IOCs and pattern recognition capability. The observations that are available as dashboards and the panels with data at granular level allow analysts to quickly neutralize the threat element that breached their defence systems.

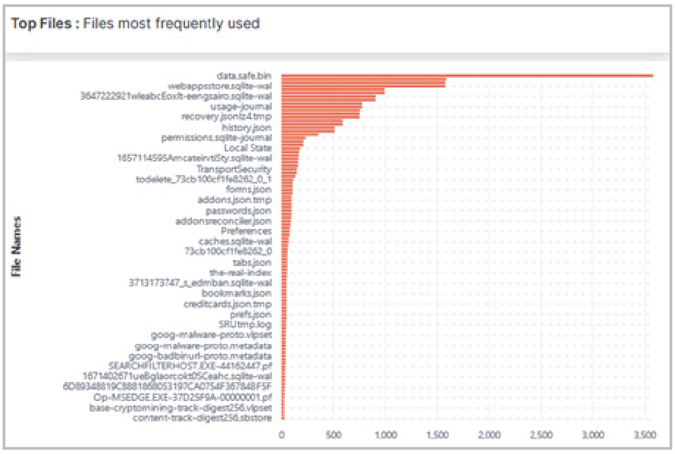
Some other features include

- Huge Data extraction from OS, system behaviour, communication between systems and to external IP addresses, common user behaviour
- Analysis of logs of OS binaries execution and registry changes
- Extraction of data related to file creation, deletion and modification activities, other system/ application logs

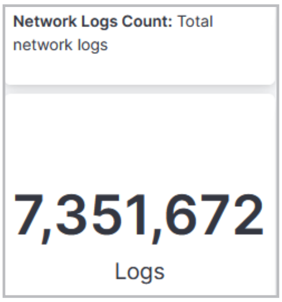
✓

Advanced Analytics handles even the modern technology-based attack techniques

Data from the hosts and servers will be ingested to CYBOT and every manually hard to detect unusual logs, IOCs are subjected to detailed analysis.



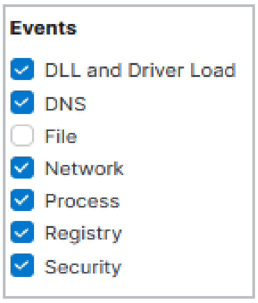
Top Files : Files most frequently used



Network Logs Count: Total network logs

7,351,672

Logs



Events

☑ DLL and Driver Load

☑ DNS

☐ File

☑ Network

☑ Process

☑ Registry

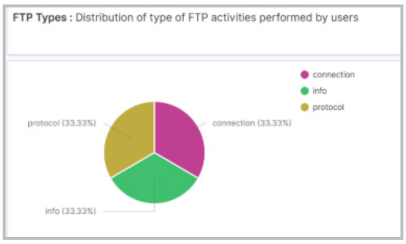
☑ Security

Data from the network is ingested to CYBOT and any malicious attempt to damage or abuse the organization network infrastructure is quickly detected and notified.

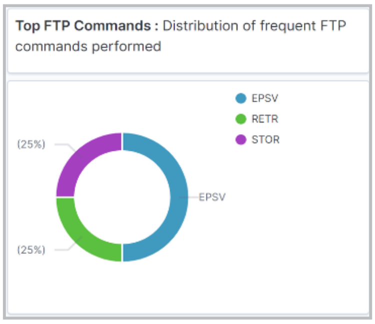
Some other features include

- Can extracts rich logs from the network and feed them to the data-lake.
- Capable of extracting domain lookups, communication logs irrespective of TCP/IP Protocols.
- Capture high fidelity transaction logs in the network and traffic across the network
- Capable of capturing file-content metadata, to and fro traffic from both internal and external critical systems.
- More capable to handle east-west traffic to detect and investigate new generation attacks.
- Capable of extracting and processing major Microsoft protocols used by active directories.
- Analytics engine supports industry-standard encryption for communication and necessary access controls, thereby keeping enterprise logs safeguarded.

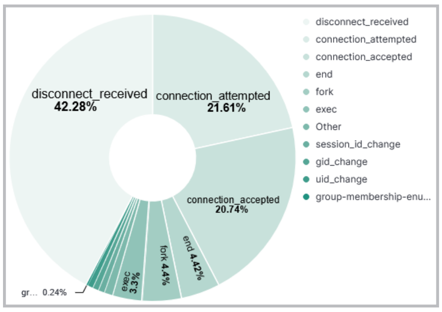
The Analytics engine can analyze not only the known IOCs but also patterns from events. Thereby detects adversary acts like a user id or password abuse by correlating the user's typical behavioural pattern with the newly detected pattern.

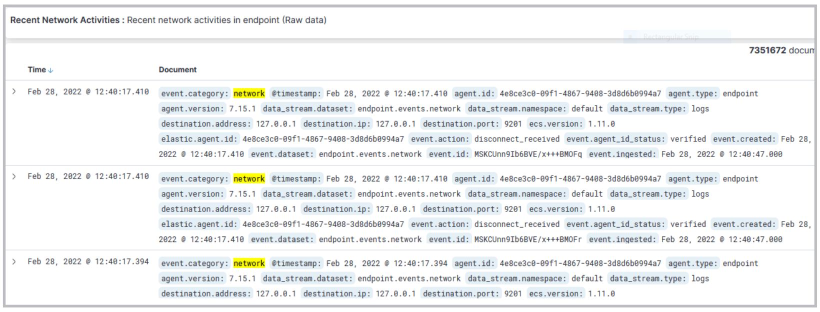


FTP Types : Distribution of type of FTP activities performed by users



Top FTP Commands : Distribution of frequent FTP commands performed



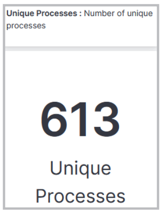


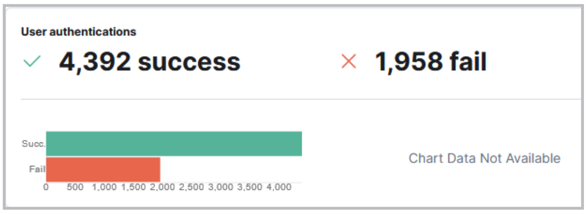
Recent Network Activities : Recent network activities in endpoint (Raw data)

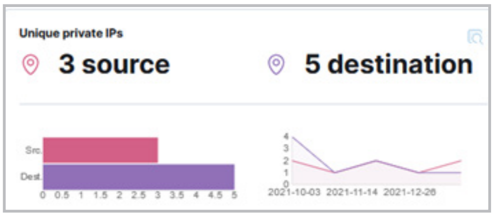
```
                                                                                                  7351672 docum
Time ↓                  Document
> Feb 28, 2022 @ 12:40:17.410   event.category: network @timestamp: Feb 28, 2022 @ 12:40:17.410 agent.id: 4e8ce3c0-09f1-4867-9408-3d8d6b0994a7 agent.type: endpoint
                                agent.version: 7.15.1 data_stream.dataset: endpoint.events.network data_stream.namespace: default data_stream.type: logs
                                destination.address: 127.0.0.1 destination.ip: 127.0.0.1 destination.port: 9201 ecs.version: 1.11.0
                                elastic.agent.id: 4e8ce3c0-09f1-4867-9408-3d8d6b0994a7 event.action: disconnect_received event.agent_id_status: verified event.created: Feb 28,
                                2022 @ 12:40:17.410 event.dataset: endpoint.events.network event.id: MSKCUnn9Ib6BVE/x+++BMOFq event.ingested: Feb 28, 2022 @ 12:40:47.000
> Feb 28, 2022 @ 12:40:17.410   event.category: network @timestamp: Feb 28, 2022 @ 12:40:17.410 agent.id: 4e8ce3c0-09f1-4867-9408-3d8d6b0994a7 agent.type: endpoint
                                agent.version: 7.15.1 data_stream.dataset: endpoint.events.network data_stream.namespace: default data_stream.type: logs
                                destination.address: 127.0.0.1 destination.ip: 127.0.0.1 destination.port: 9201 ecs.version: 1.11.0
                                elastic.agent.id: 4e8ce3c0-09f1-4867-9408-3d8d6b0994a7 event.action: disconnect_received event.agent_id_status: verified event.created: Feb 28,
                                2022 @ 12:40:17.410 event.dataset: endpoint.events.network event.id: MSKCUnn9Ib6BVE/x+++BMOFr event.ingested: Feb 28, 2022 @ 12:40:47.000
> Feb 28, 2022 @ 12:40:17.394   event.category: network @timestamp: Feb 28, 2022 @ 12:40:17.394 agent.id: 4e8ce3c0-09f1-4867-9408-3d8d6b0994a7 agent.type: endpoint
                                agent.version: 7.15.1 data_stream.dataset: endpoint.events.network data_stream.namespace: default data_stream.type: logs
                                destination.address: 127.0.0.1 destination.ip: 127.0.0.1 destination.port: 9201 ecs.version: 1.11.0
```

Analytics Dashboards and Use-case Alerts

- CYBOT is capable of drilling down to the granular level of events which the security team can easily access and analyze, thereby prevent further damage from the adversary.
- Effective co-relation capabilities on specific data from the network and host data extractors and hence the advanced threats that go undetected by a human threat hunter are not missed.
- Faster reports and Dashboard generation for historical data helping in faster decision making.
- Enhanced visibility of user management activities across the infrastructure at Directory and Host level, thereby preventing abuse by insiders.
- 100+ Pre-built dashboards to review logs against compliance standards such as ISO27K, PCI-DSS, NIST
- Reports can be generated, and is available in technical and non-technical formats.
- Early detection of emerging threats gives sufficient time for analysts to defend the enterprise network.
- Major functions supported by APIs.
- Integrates with thecompany’s baseline without affecting the network or IT architecture.
- Collects, analyze, and generate alerts on every quality IOCs, including Malicious files, URLs, Domains, IPs, Filenames/hashes, Malware families.

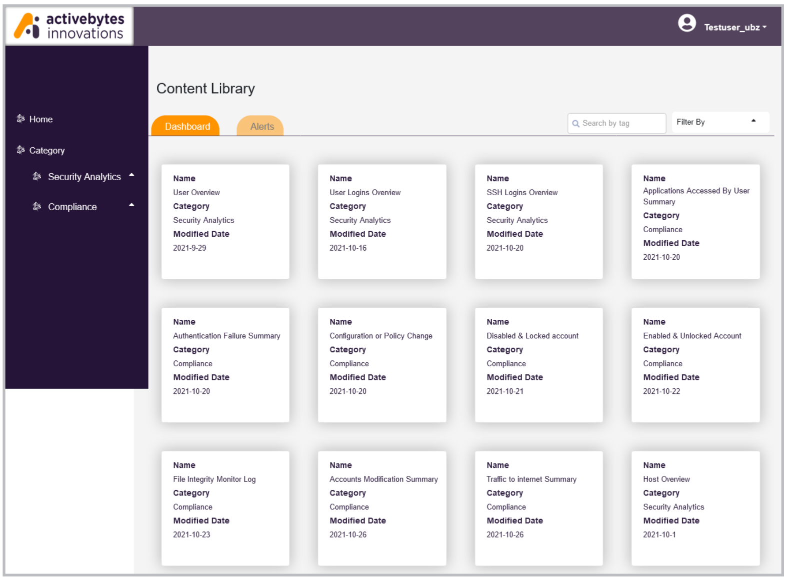






Additional access to our content-library portal where new Dashboards & Alerts are added

- Hundreds of Dashboards and Alerts for both compliance and security analytics. Hence covering a wide range of use cases with huge data, in a user-friendly manner.
- Faster understanding of huge data for analysts as automated analysis is performed on logs to the granular level. This saves time for analysts to focus on other critical tasks.
- Host and Network data visualization in a user-friendly manner. This makes understanding easier for non-technical personnel.
- Easy understanding of group management activities and enumerations on every data related to it.
- Co-relation Alert use-cases for new vulnerabilities and threats, make the platform gets updated with the latest adversary techniques.

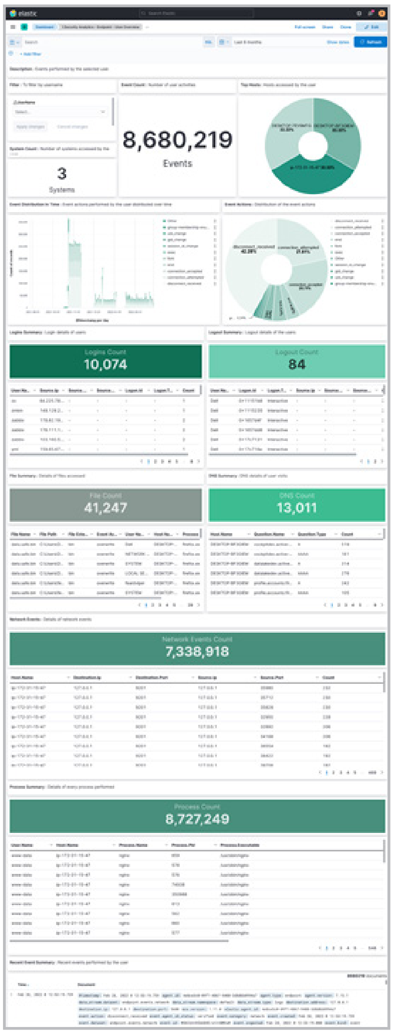


Content Library

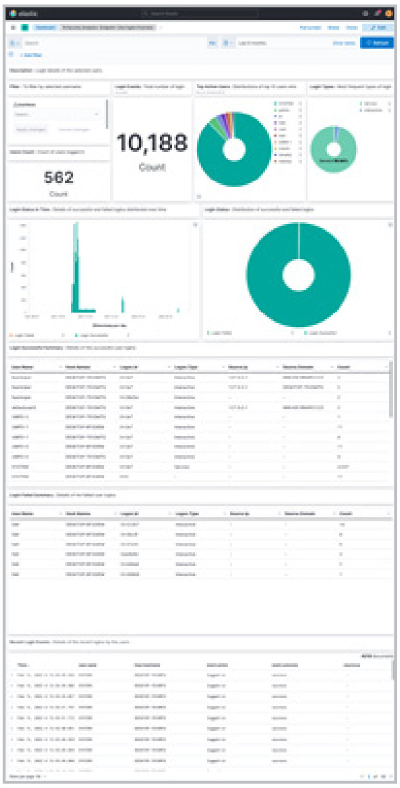
Name	Category	Modified Date
User Overview	Security Analytics	2021-9-29
User Logins Overview	Security Analytics	2021-10-16
SSH Logins Overview	Security Analytics	2021-10-20
Applications Accessed By User Summary	Compliance	2021-10-20
Authentication Failure Summary	Compliance	2021-10-20
Configuration or Policy Change	Compliance	2021-10-20
Disabled & Locked account	Compliance	2021-10-21
Enabled & Unlocked Account	Compliance	2021-10-22
File Integrity Monitor Log	Compliance	2021-10-23
Accounts Modification Summary	Compliance	2021-10-26
Traffic to Internet Summary	Compliance	2021-10-26
Host Overview	Security Analytics	2021-10-1

✓ **User friendly guides explaining the steps to access the platform, installation, content library, etc.**

SAMPLE DASHBOARDS (Security & Compliance)



This security analytics dashboard displays logon events performed by users in the organization, the events displayed are collected by the endpoint sensor.



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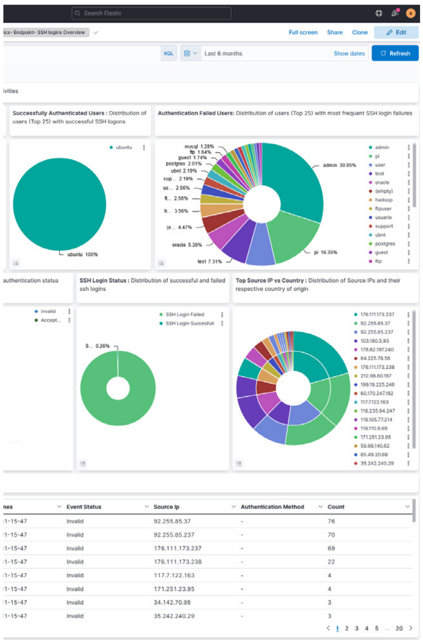
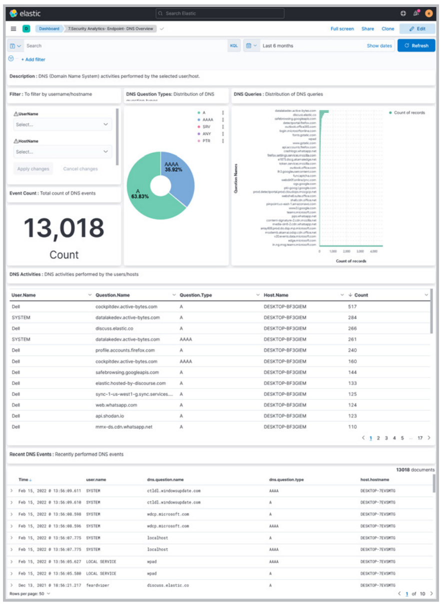
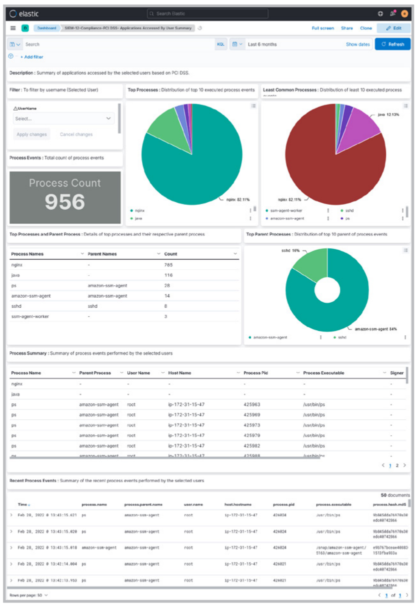


Successfully Authenticated Users : Distribution of users (Top 25) with successful SSH logins
Authentication Failed Users: Distribution of users (Top 25) with most frequent SSH login failures
SSH Login Status : Distribution of successful and failed ssh logins
Top Source IP vs Country : Distribution of Source IPs and their respective country of origin
Last 6 months
Refresh
Event Status
Source Ip
Authentication Method
Count

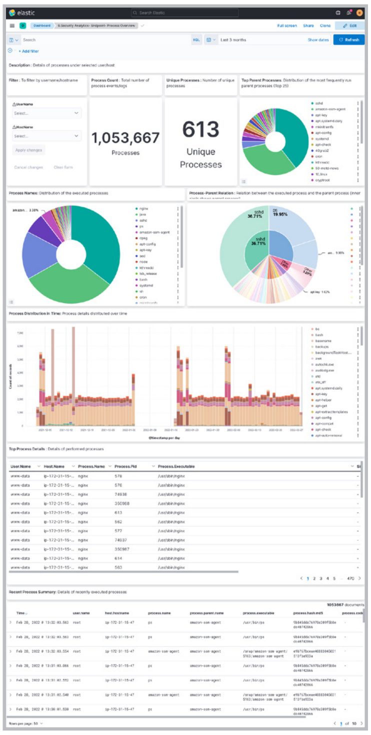
This security analytics dashboard displays information related to events SSH login events performed by users/hosts in the organization, the events displayed are collected by the endpoint sensor.


elastic
Description : DNS (Domain Name System) activities performed by the selected user/host.
DNS Question Types: Distribution of DNS
DNS Queries : Distribution of DNS queries
Event Count : Total count of DNS events
13,018
Count
DNS Activities : DNS activities performed by the users/hosts
Recent DNS Events : Recently performed DNS events

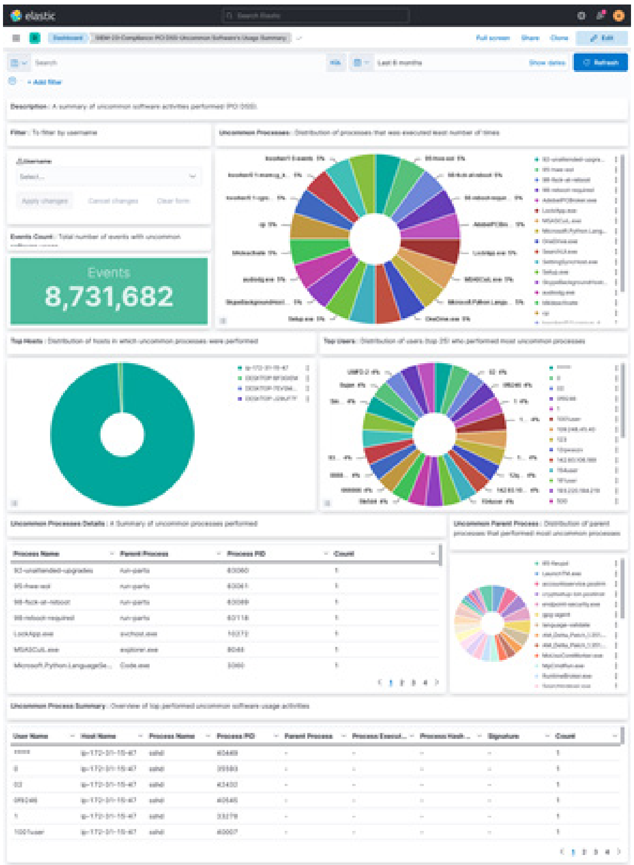
This security analytics dashboard shows the DNS (Domain Name System) activities performed by the selected user/host.


elastic
Description : Summary of applications accessed by the selected users based on PCI DSS
Top Processes : Distribution of top 10 executed process events
Least Common Processes : Distribution of least 10 executed process
Process Events : Total count of process events
Process Count
956
Process Summary : Summary of process events performed by the selected users
Recent Process Events : Summary of the recent process events performed by the selected users

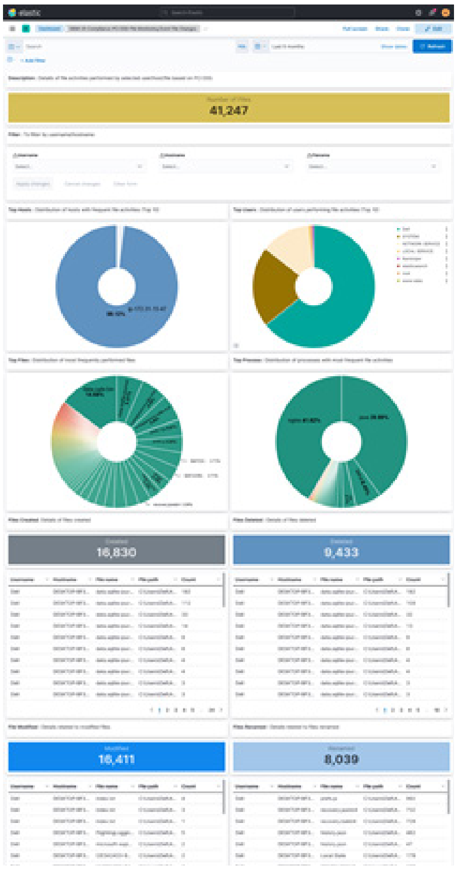
Summary of applications accessed by the selected users for PCI-DSS compliance.


elastic
Description : Details of processes under selected user/host
Process Count
1,053,667
Processes
Unique Processes
613
Unique
Processes
Top Parent Processes
Process Names : Distribution of the executed processes
Process Distribution in Time : Process details distributed over time
Top Process Details : Details of performed processes
Recent Process Summary : Details of recently executed process

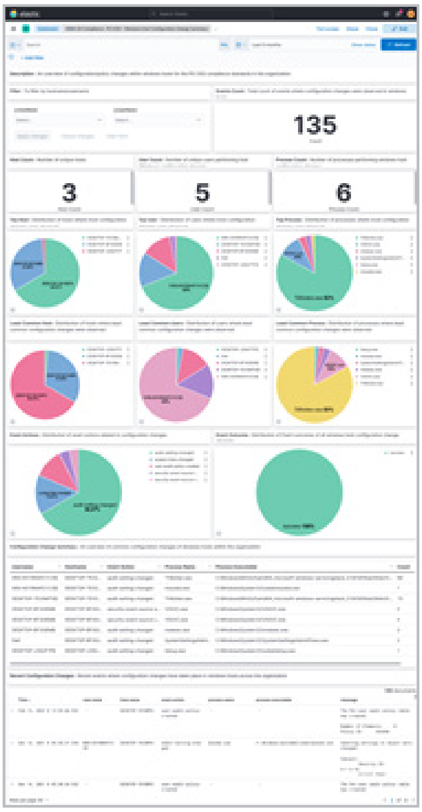
This security analytics dashboard gives details of processes under selected user/host.


elastic
Description : A summary of uncommon software activities performed (PCI DSS).
Filter : To filter by username
Uncommon Processes : Distribution of processes that was executed least number of times
Events Count : Total number of events with uncommon
Events
8,731,682
Top Hosts : Distribution of hosts in which uncommon processes were performed
Top Users : Distribution of users (top 25) who performed most uncommon processes
Uncommon Processes Details : A Summary of uncommon processes performed
Uncommon Parent Process : Distribution of parent processes that performed most uncommon processes
Uncommon Process Summary : Overview of top performed uncommon software usage activities

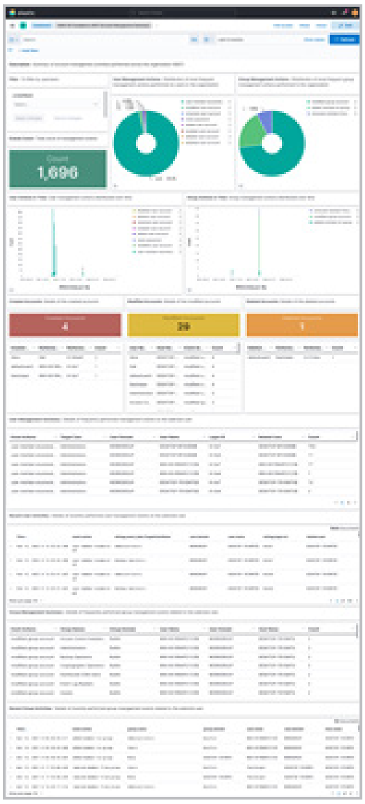
Summary of uncommon software activities performed for PCI-DSS compliance.



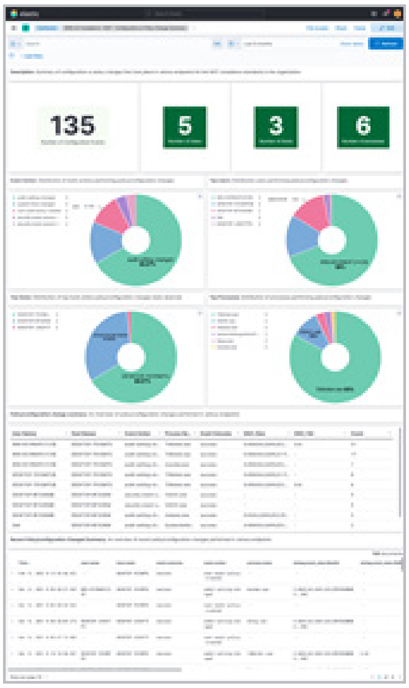
An overview of file modification events for the PCI DSS compliance standards in the organization.



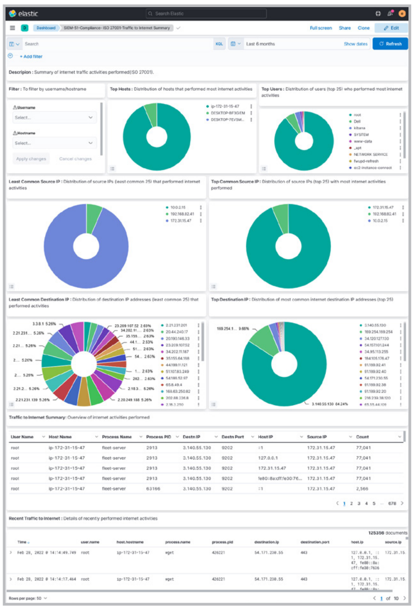
An overview of configuration/policy changes within windows hosts for the PCI DSS compliance standards in the organization.



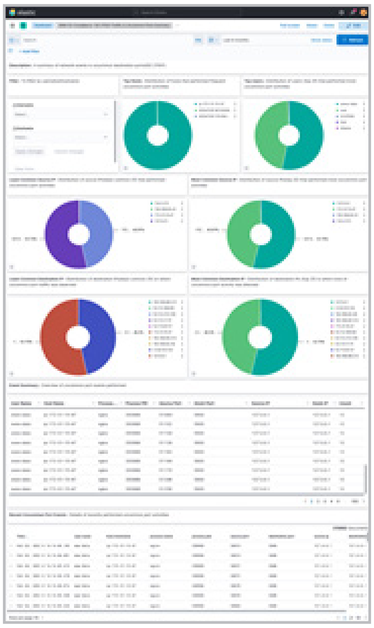
Summary of account management activities performed across the organization for NIST compliance.



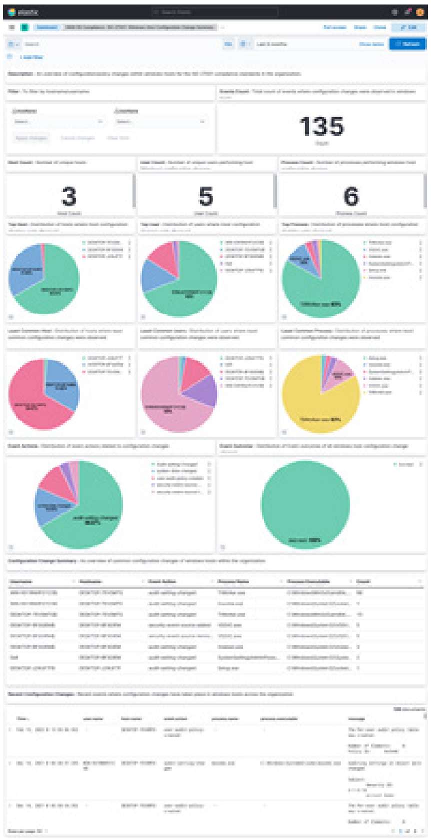
Summary of configuration or policy changes that took place in various endpoints for the NIST compliance standards in the organization.



Summary of Internet traffic activities performed, ISO 27001 compliance



A summary of network events to uncommon destination ports, ISO 27001



An overview of configuration/policy changes within windows hosts for the ISO 27001 compliance standards in the organization.

List of few Dashboards from the hundreds of available use-cases
Dashboard and report to analyse Account Management Summary
Dashboard and report to analyse Authentication Failure Summary
Dashboard and report to analyse Default Act Auth/Access Failure Summary
Dashboard and report to analyse Default Act Auth/Access Success Summary
Dashboard and report to analyse Default Act Management Summary
Dashboard and report to analyse Disabled & Locked Account Summary
Dashboard and report to analyse Enabled & Unlocked Account Summary
Dashboard and report to analyse Priv Act Auth/Accs Failure Summary
Dashboard and report to analyse Priv Act Auth/Accs Success Summary
Dashboard and report to analyse Priv Act Management Summary
PCI DSS Compliance
Dashboard and report to analyse Host Configuration Change Summary
Dashboard and report to analyse Applications Accessed By User Summary
Dashboard and report to analyse Authentication Failure Summary
Dashboard and report to analyse Configuration or Policy Change Summary
Dashboard and report to analyse Data Transfer Summary
Dashboard and report to analyse Disabled & Locked Account Summary
Dashboard and report to analyse Enabled & Unlocked Account Summary
Dashboard and report to analyse File Integrity Monitor Log Summary
Dashboard and report to analyse Accounts Modification Summary
Dashboard and report to analyse Traffic to internet Summary
Dashboard and report to analyse Traffic to uncommon ports Summary
Dashboard and report to analyse Windows Firewall Change Summary
Dashboard and report to analyse User Privilege Escalation (SU & SUDO)
Dashboard and report to analyse Rejected Connection to Network
Dashboard and report to analyse Uncommon softwares usage summary
Dashboard and report to analyse Use of Non-Encrypted Protocols
Dashboard and report to analyse File Monitoring Event-File Changes
Dashboard and report to analyse Software Installed Summary
Dashboard and report to analyse Windows Host Configuration Change Summary
Dashboard and report to analyse User Privilege Escalation (Windows) Summary
Dashboard and report to analyse Account Management Summary

NIST Compliance
Dashboard and report to analyse Host Configuration Change Summary
Dashboard and report to analyse User Privilege Escalation (SU & SUDO)
Dashboard and report to analyse Applications Accessed By User Summary
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Dashboard and report to analyse User Privilege Escalation (Windows) Summary
Dashboard and report to analyse User Privilege Escalation (SU & SUDO)

List of few Aerts from the hundreds of available use-cases
Account Access Revoked
Account Disabled Rule
Account Locked Rule
Configuration or Policy Change
Data Destruction Rule
Non-Admin Linux Rule
Non-Admin Windows Rule
Windows Firewall Change
Privilege account Access Failure Rule
Privileged Account Authentication Failure Rule
Priv Group Access Granted Rule
Recent Disable Acct + Acs Fail
Recent Disable Acct + Acs Success
System Time Change
Time Sync Error
Default Account Access Failure Rule
Default Account Auth Failure Rule
Data Loss Prevention Rule

activebytes
innovations

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