

# **Experience Tour Poland 2019**

Arcsight & Interset acquisition (UEBA)

Cfir Homeri Security Presales - East Central Europe & Israel Cfir.homeri@microfocus.com



**UBA** SIEM Search **Analytics** Search based **Detection Rules based Detection** · "What are the unknowns" Data Rarity, anomaly, spikes Investigation Use cases library, vendor Log • "What's happening now" led Set monitors **Management**  Real-time Workflow, • Use cases library, SOC "is anything wrong in SIRT Integration led • "I'll keep everything" my system?" · Real-time Workflow, Audit Investigate into **SIRT Integration** possible issues Compliance reports Respond to events Define dashboards

### **Proactive Hunting**

**EDR** 

NTA

- "What is out there?"
- Analysis in Depth
- Information Fusion
- Integrated Threat Intelligence

**5G** 







## **Our Mission:**

Deliver an open and integrated security analytics platform that simplifies delivery of layered analytics

### **Outcome:**

Reduce exposure by empowering intelligent detection, investigation, and response for enabling the self-defending enterprise

Accessible Monitoring & Platform Management

#### CONTENT

Unified | Actionable | Insight

**ARCSIGHT LOGGER** 

Compliance | Search | Retention

ARCSIGHT ENTERPRISE SECURITY MANAGER

24x7 Real-time Monitoring & Correlation

**ARCSIGHT INVESTIGATE** 

Hunt | Investigation

**UEBA** 

**User Entity Behavior Analytics** 

#### **SECURITY OPEN DATA PLATFORM**

#### **MANAGEMENT CENTER**

Suite Management & Administration

TRANSFORMATION HUB

Information delivery

#### **SMART/FLEX CONNECTORS**

Data Collection, Enrichment, and Normalization





Cloud



App





Network



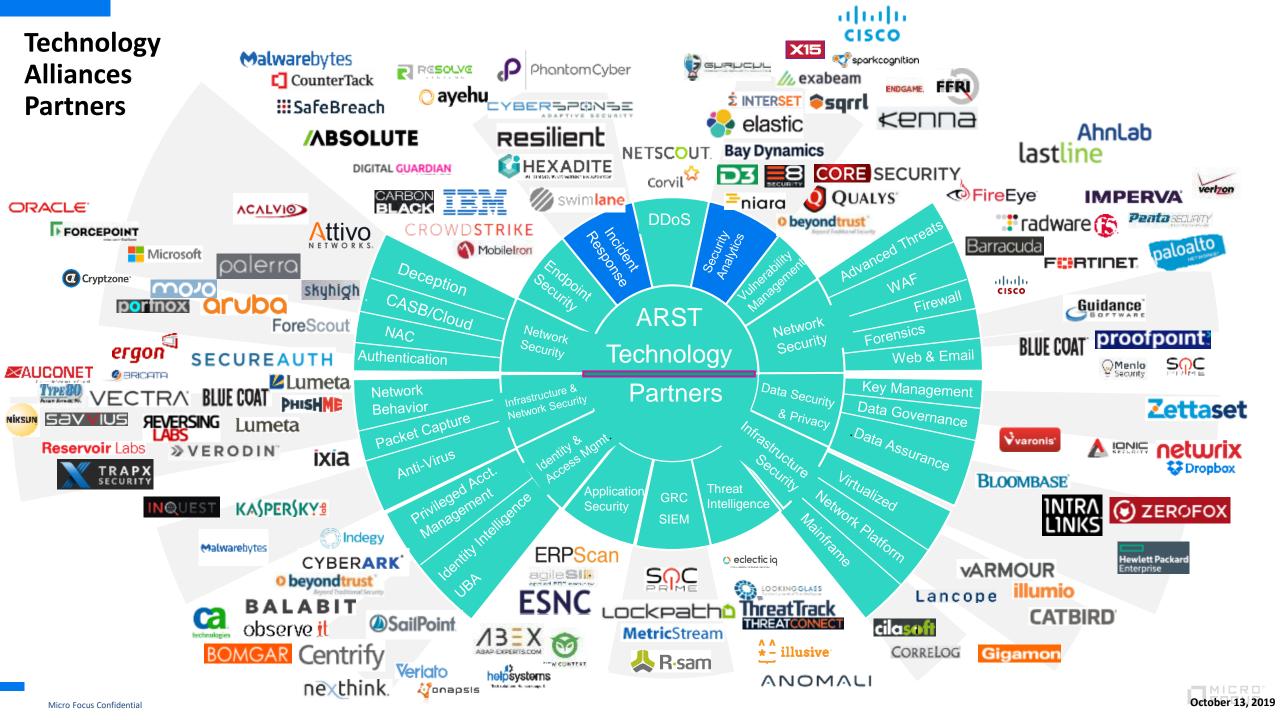
**Endpoints** 



IoT







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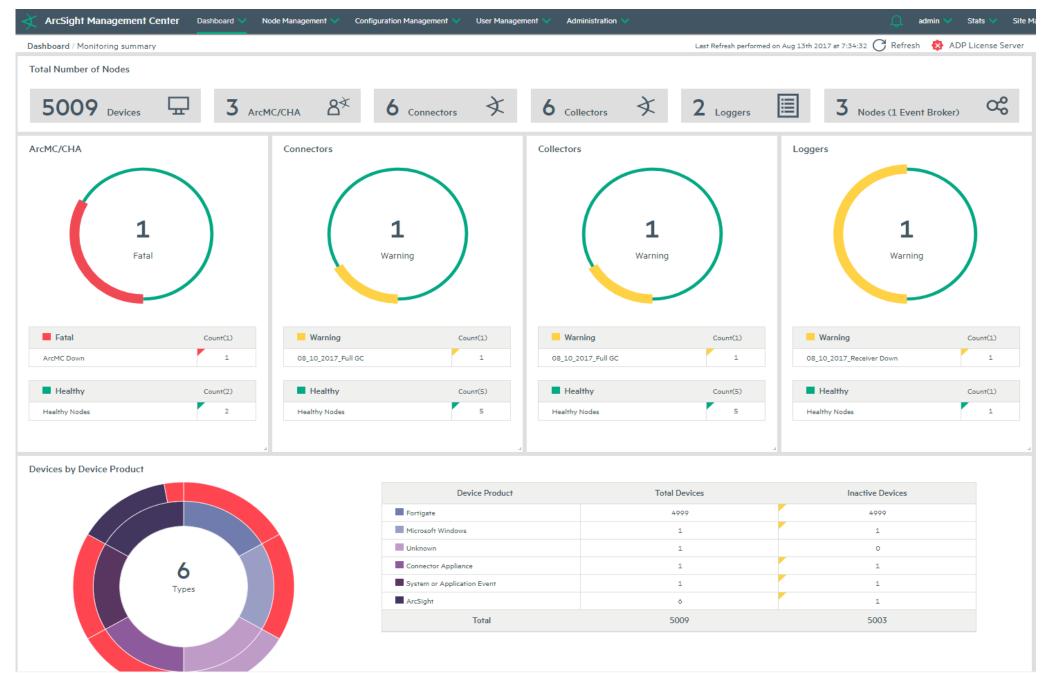
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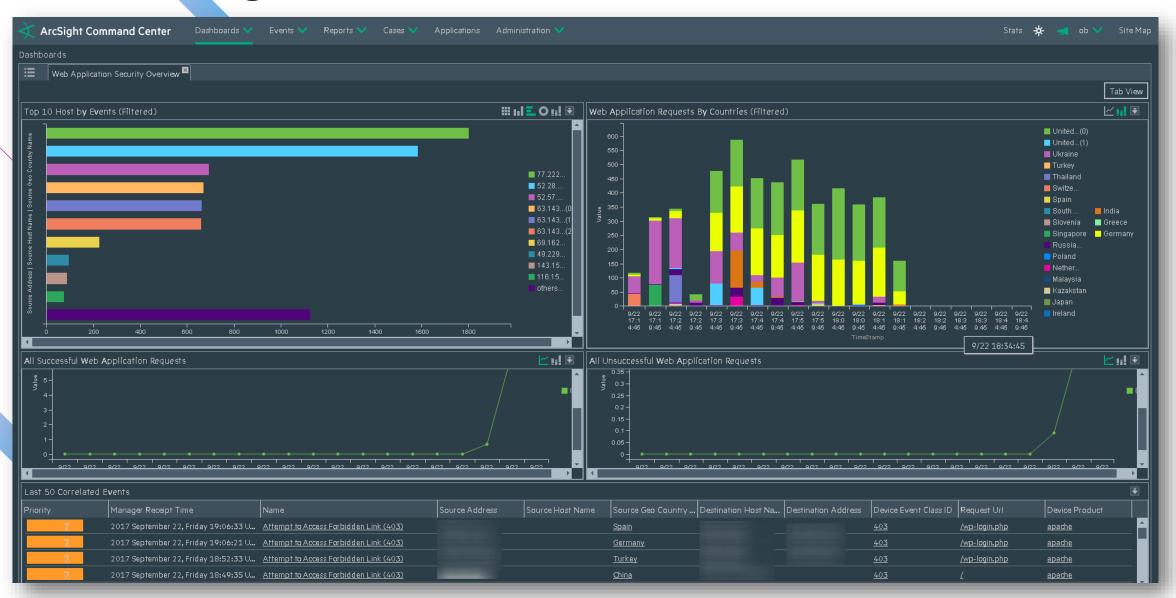


IoT





## **ArcSight ESM Command Center - Visualizations**





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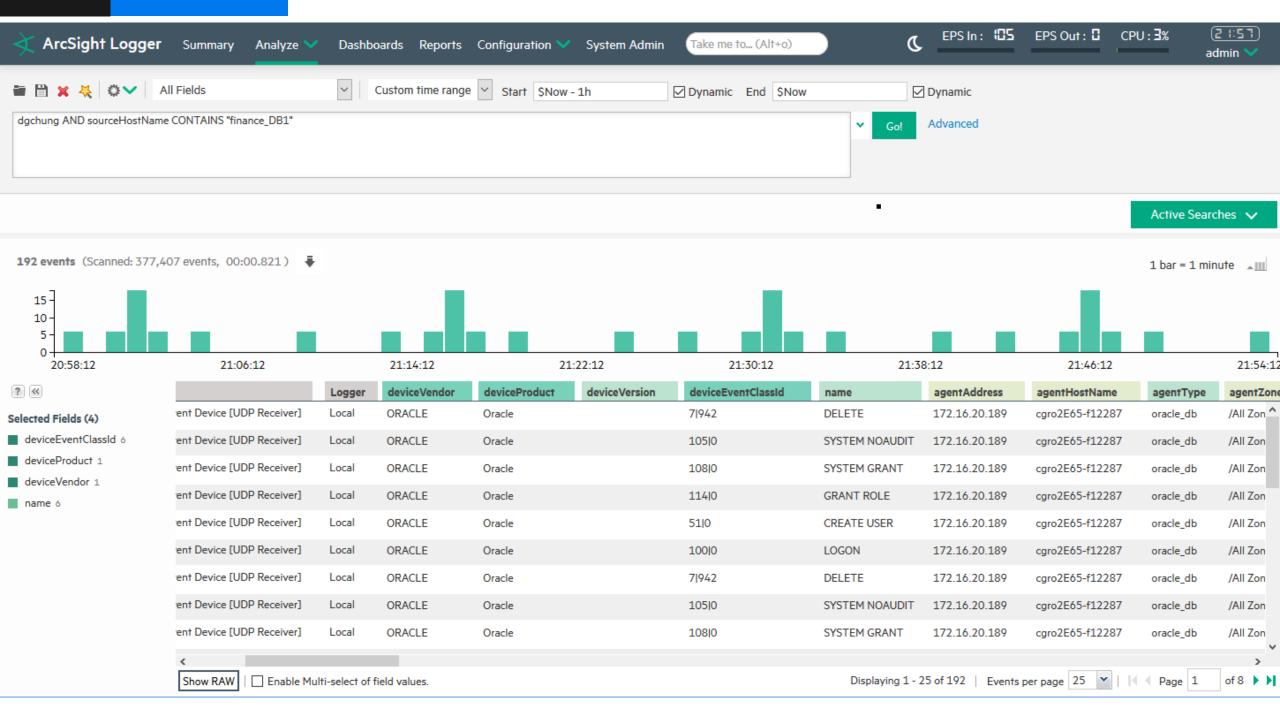
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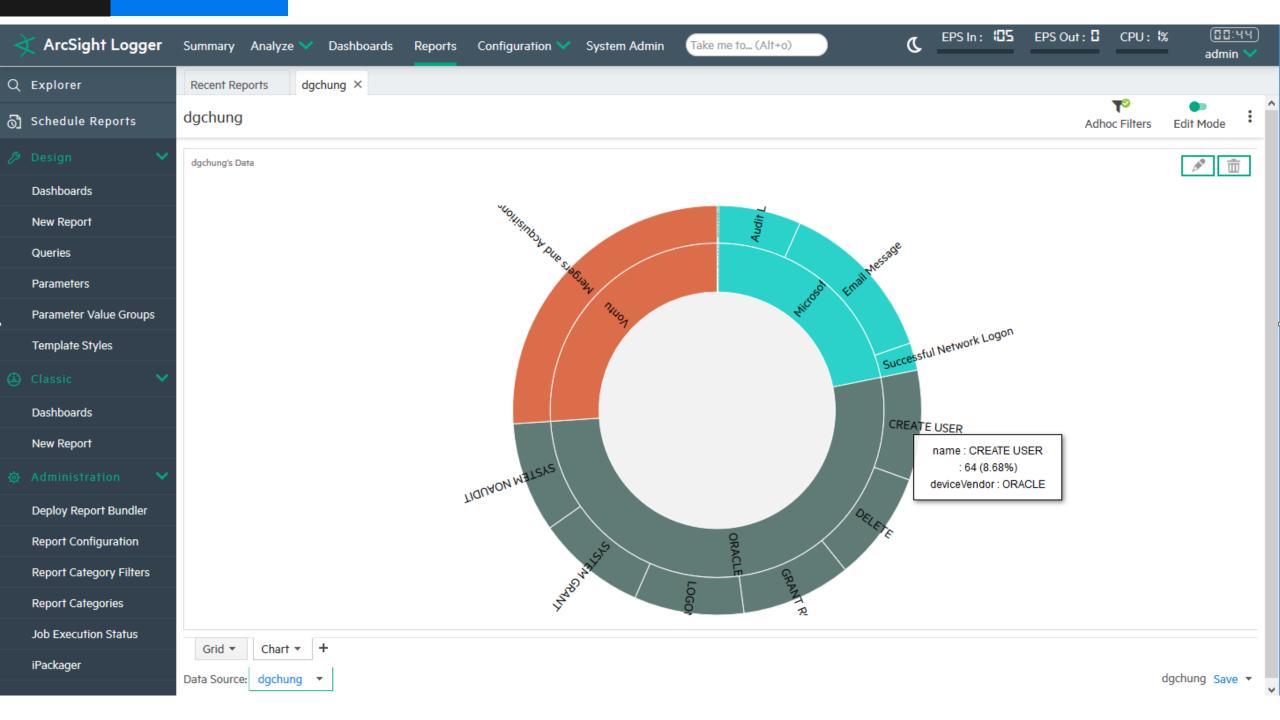


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User



Cloud



App



Workloads



Network



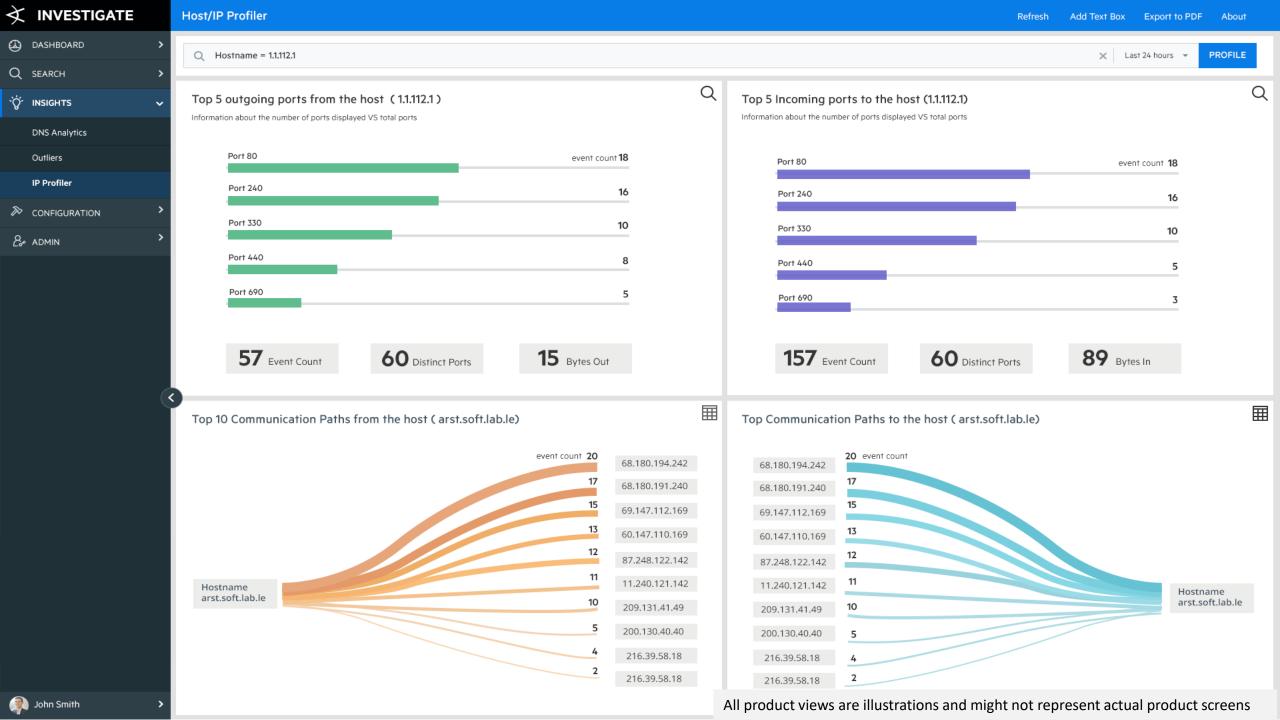
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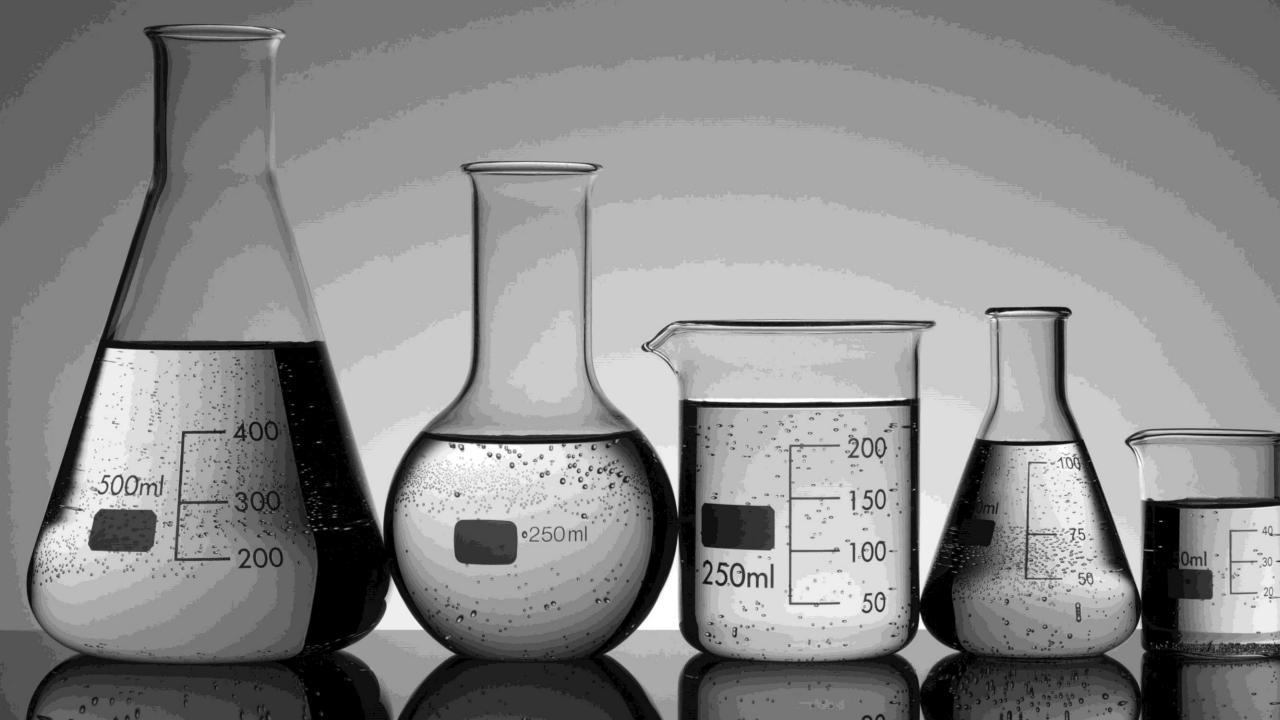
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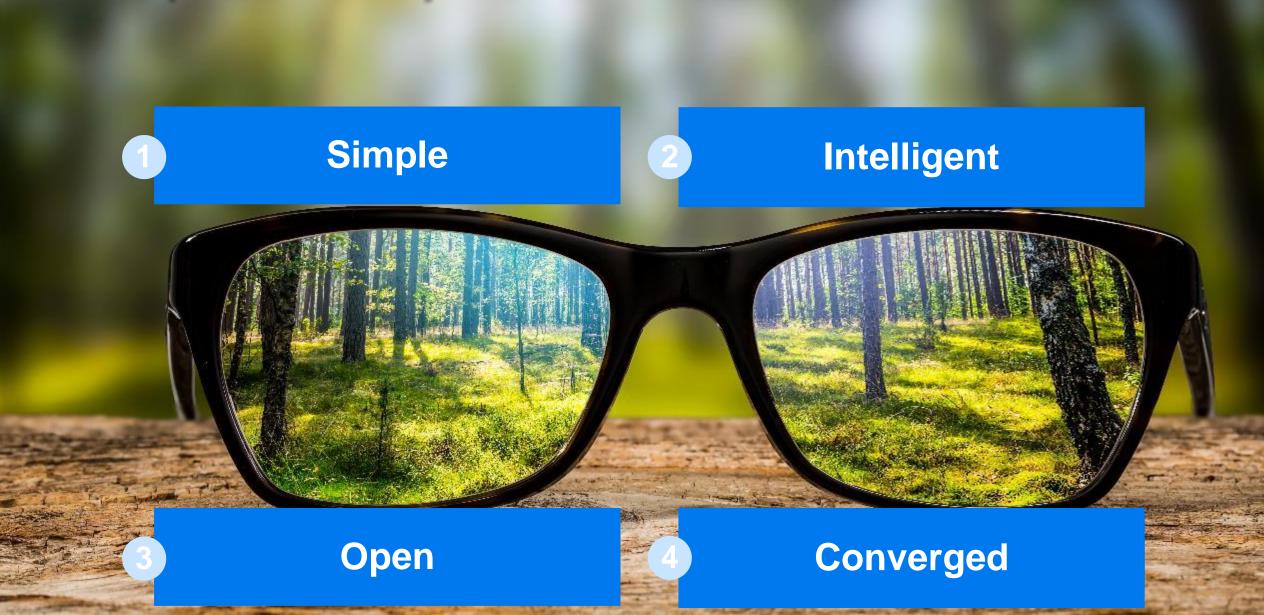
IoT







# Requires Clarity Of Focus

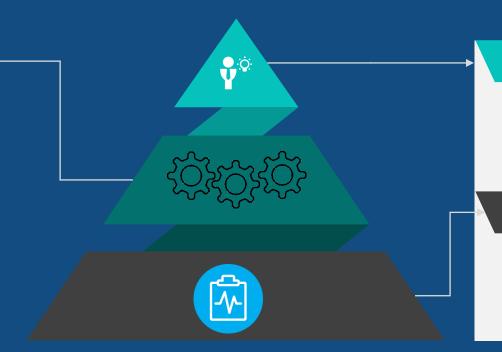




# **Detection layers**

#### **Business process**

Unique detections rules build for protect internal business process



#### **Unknow**

Expect the unexpected Looking at the abnormal activity to identify the risk we can't expect

#### **Know risk**

More then 100 rules for detect cyber attacks based on know vulnerabilities

# MITRE ATT&CK – Blueprint for Attack Tactic & Techniques

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control
Hardware Additions		Scheduled Task	Į.	Binary Padding	Credentials in Registry	Browser Bookmark	Exploitation of Remote	Data from Information	Exfiltration Over	Remote Access Tools
Trusted Relationship	LSASS D	LSASS Driver Extra Windo		Memory Injection	Exploitation for	Discovery	Services	Repositories	Physical Medium	Port Knocking
Supply Chain	Local Job Scheduling Trap		Access Token Manipulation		Credential Access	Network Share	Distributed Component	Video Capture	Exfiltration Over	Multi-hop Proxy
Compromise			Bypass User Account Control		Forced Authentication	Discovery	Object Model	Audio Capture	Command and	Domain Fronting
Spearphishing	Launchco		Process Injection		Hooking	Peripheral Device	Remote File Copy	Automated Collection	Control Channel	Data Encoding
Attachment	Speed Binary	Image File Execution Options Inj		njection	Password Filter DLL	Discovery	Pass the Ticket	Clipboard Data	Dat Encrypted	Remote File Copy
Exploit Public-Facing	Prox Execution		Plist Modification		LLMNR/NBT-NS Poisoning	File and Directory Discovery	Replication Through Removable Madia	Email Collection	Automated Exfiltration	Multi-Stage Channels
Application	User Execution	Valid Accounts						Screen Capture Exfiltration Over Othe	Exfiltration Over Other	Web Service
Replication Through	Exploitation for	DLL Search Order Wijdoking		ng	Private Veys	Permission Groups	Windows Admin Shares	Data Staged	Network Medium	Standard
Removable Media	Client Execution	Appe	ert DLLs	Signed Script	Keychain	Discovery	Pass the Hath	Input Capture	Exfiltration Over	Non-Apolication
Spearphishing via	CMSTP	Hoo	oking	Prox. Execution	Input Prompt	rocess Discovery	Third-party Sof ware	Data from Network	Alternative Protocol	Layer Protocol
Service	Dynamic Data Exchange	Startup Items		DCShadov	Bash History	System Network	Shared Web oot	Shared Drive	Data Transfer	Connection roxy
Spearphishing Link	Mshta	Launch Daemon		Port Knocking	Two-Factor	Connections Discovery	Logon Scripts	Data from Local System	Size Limits	Multilaver Encryption
Drive-by Compromise	AppleScript	Dylib Hijacking		Indirect Command	Authentication Interception	System Owner/User Discovery	Windows Remote Management Application Deployment Software	Man in the Browser	Data Compressed	Standard Application Layer Protocol
Valid Accounts	Source	Application Shimming		Execution				Data from Removable	Scheduled Transfer	
	Space after Filename	Applnit DLLs		BITS Jobs	Replication Through Removable Media	System Network Configuration Discovery		Media		Commonly Used Port
	Execution through		Web Shell							Standard Cryptographic
	Module Load	Service Registry Permissions Weakness		Control Panel Items CMSTP	Inpu Capture  Network Sniffing  Credential Dumping	Application Window Discovery Password Policy Discovery System time Discovery	SSH Hijacking			Protocol
	Regsvcs/Regasm	New Service		Process Doppelgänging			AppleScript			Custom Cryptographic
	InstallUtil	File System Permissions Weakness		Mshta			Taint Shared Content			Protocol
	Regsvr32	Path Interception		Hidden Files	Kerberoasung Securityd Memory		Remote Desktop Protocol	AAI		Data Obfuscation
	Execution through API	Accessibility Features		and Directories				IVI	<b>TRE</b>	Custom Command
	PowerShell	Port Monitors		Space after Filename	Brute Force	Account Discovery	Remote Services			and Control Protocol
	Rundli32	Kernel Modules	Sudo Caching		Account Manipulation	System information		11 44		Communication
		TOTAL MONEY	200000000000000000000000000000000000000						-	Committee of the
		-	- market	-						







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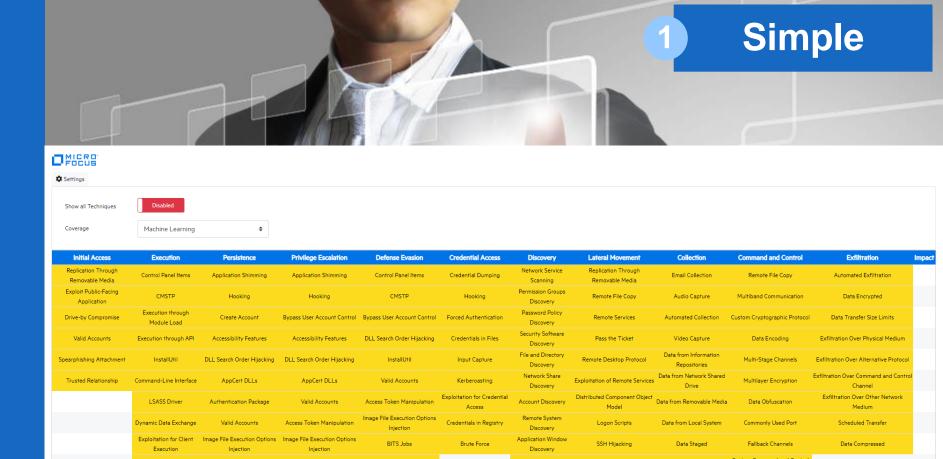
# How we get there

Reduce deployment time

Reduce knowledge burden

Align deployment options between onpremise, hybrid, and SaaS

Improve UI and overall user experience



Applnit DLLs

Exploitation for Priviled

Escalation

File System Permission

Change Default File

BITS Jobs

LSASS Driver

DLL Side-Loading

Component Object Mode

Binary Padding

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Pass the Hash

Man in the Brows

Input Capture

Connection Proxy

Query Registry

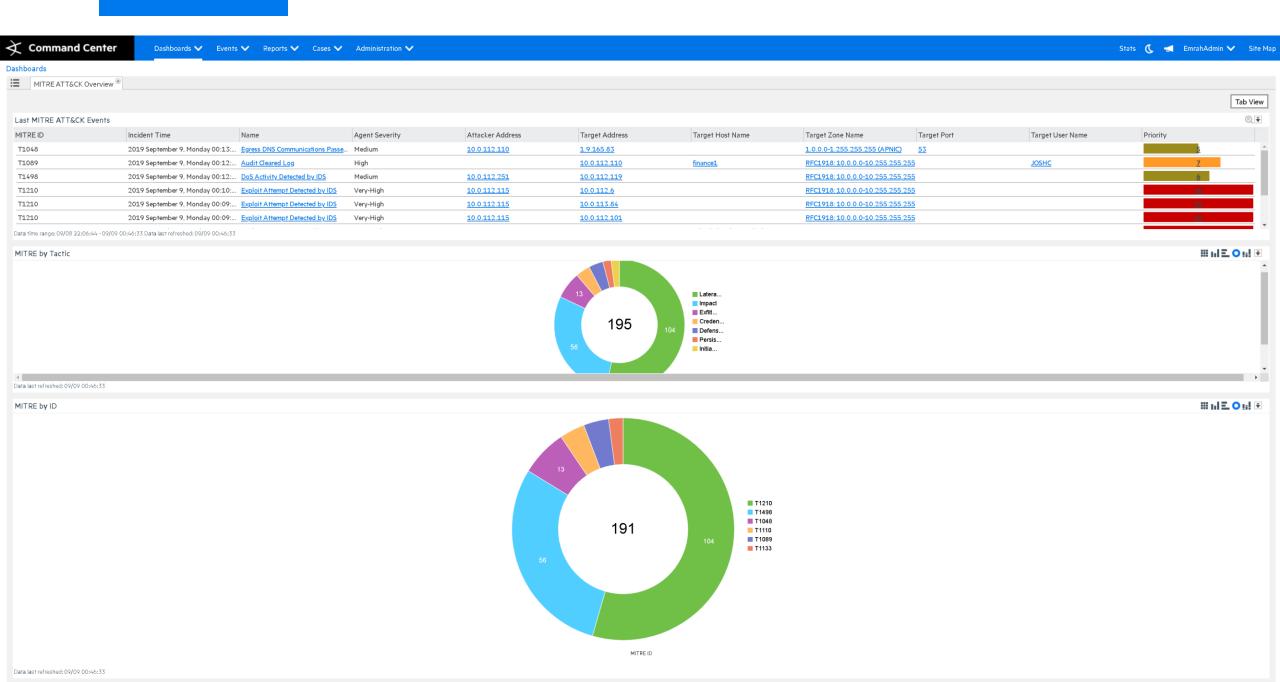
Peripheral Device

Discovery

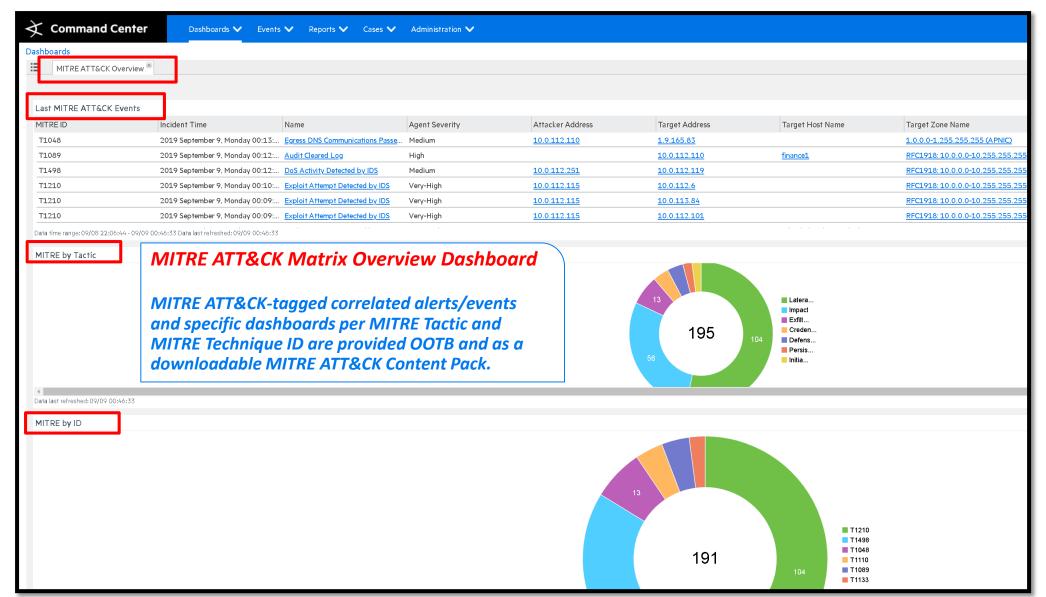
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# MITRE ATT&CK Packages

- Available as part of Default Content in ESM 7.2
- Will also be made available as a separate downloadable package @ Marketplace – targeted for October 2019

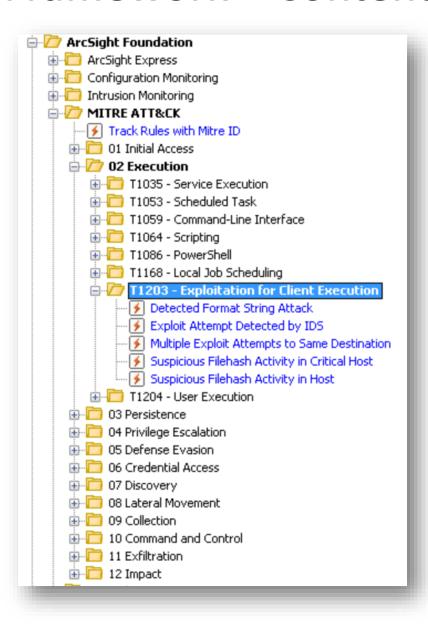


### MITRE ATT&CK Overview Dashboard





### MITRE ATT&CK Framework – Content Pack



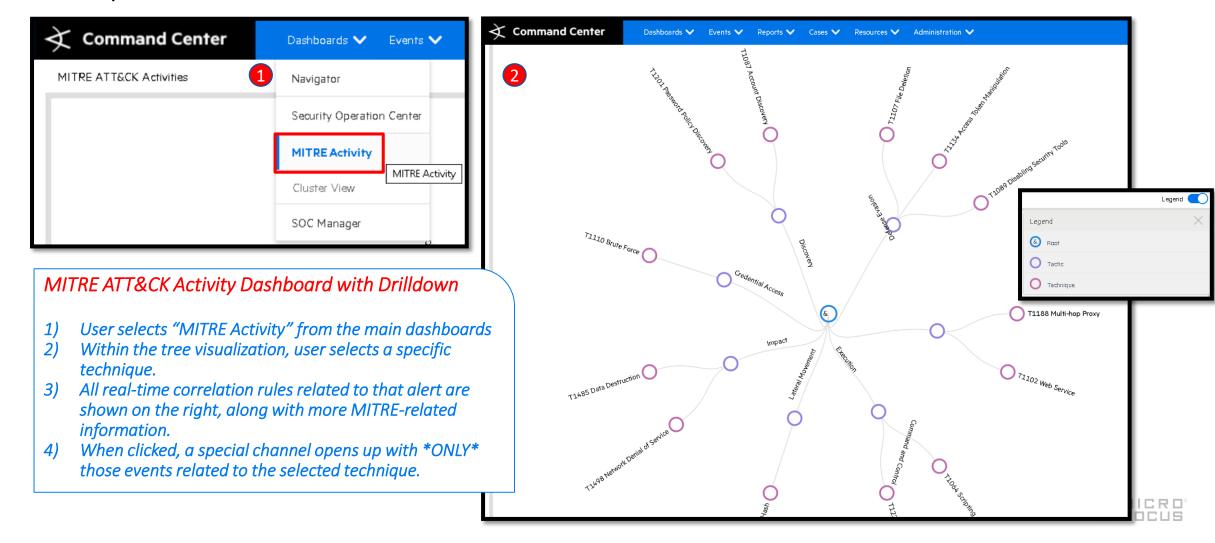




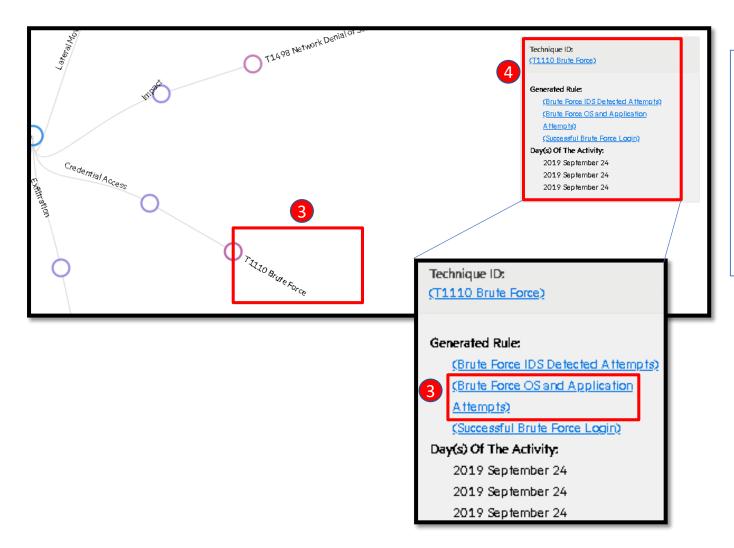
MITRE ATT&CK Visualizations
ESM 7.2 [targeted for November 2019]

## **MITRE ATT&CK Activity Dashboard**

A special visualization, showing a tree-view structure: MITRE ATT&CK tactics in the middle + techniques as the branches.



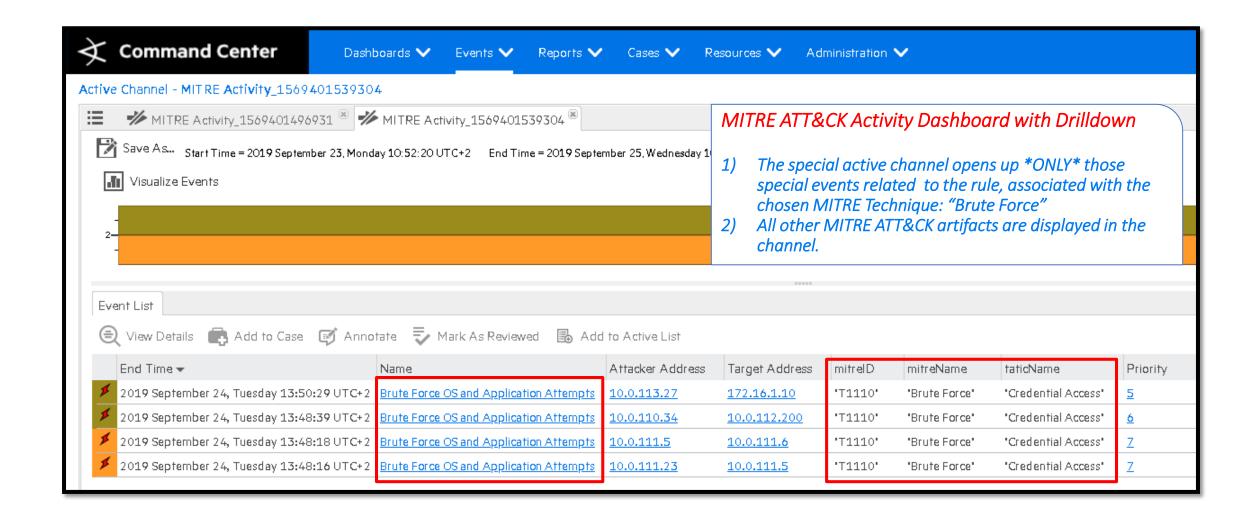
## MITRE ATT&CK Activity Dashboard

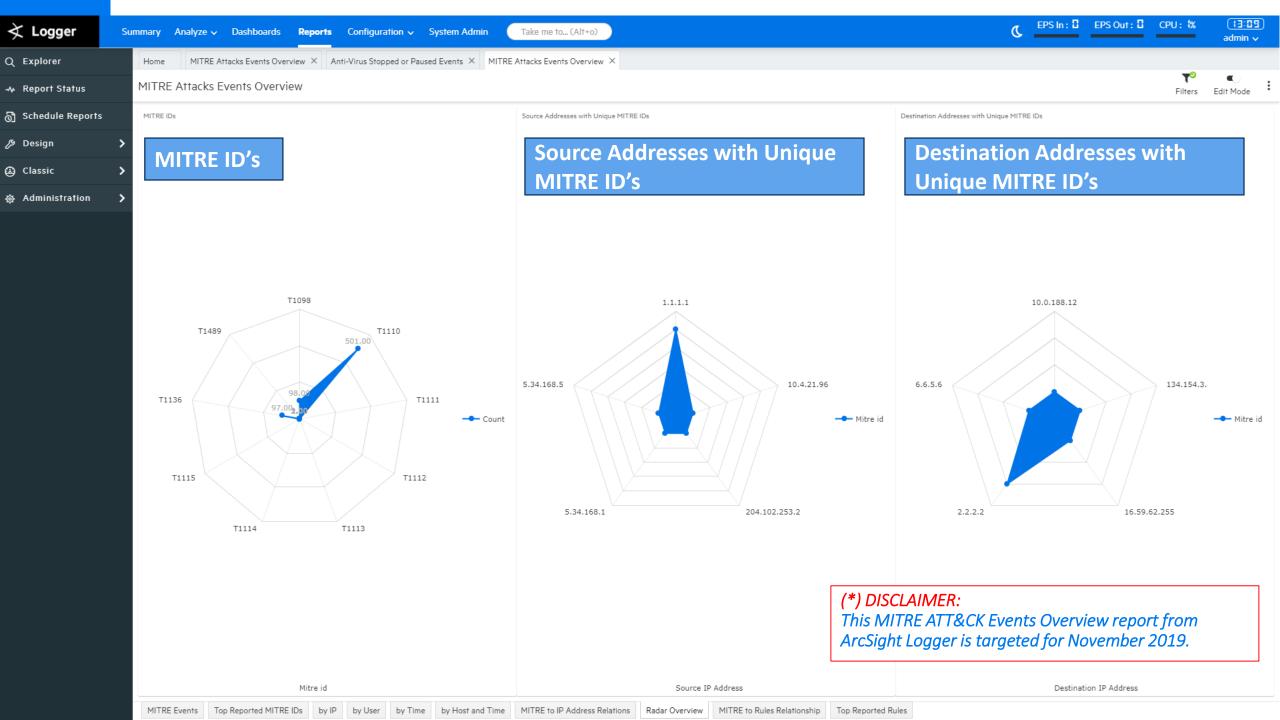


#### MITRE ATT&CK Activity Dashboard Drilldown Steps

- 1) User selects "MITRE Technique" from the main dashboard. E.g. "Brute Force"
- 2) All real-time correlation \*rules\* related to that alert are shown on the right, along with more MITRE-related information.
- 3) When clicked on a specific 'rule' (e.g. "Brute Force OS and Application Attempts"), a special channel opens up with \*ONLY\* those events related to that rule.

## MITRE ATT&CK Activity Dashboard

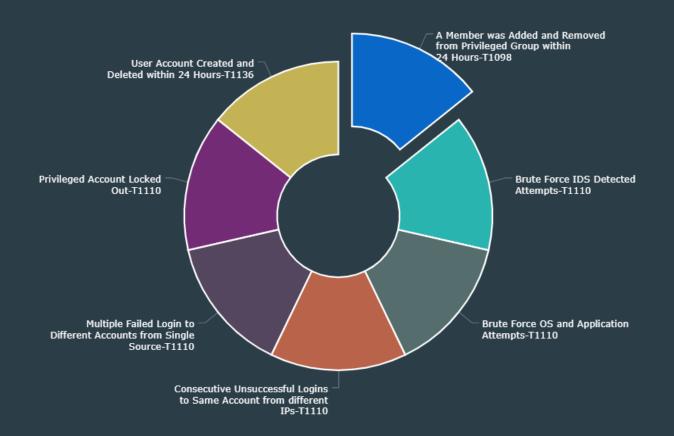




#### MITRE Attacks Events Overview



Top Reported Rules with MITRE IDs



- O A Member was Added and Removed from Privileged Group within 24 Hours-T1098
- Brute Force IDS Detected Attempts-T1110
- Brute Force OS and Application Attempts-T1110
- Consecutive Unsuccessful Logins to Same Account from different IPs-T1110
- Multiple Failed Login to Different Accounts from Single Source-T1110
- Privileged Account Locked Out-T1110
- User Account Created and Deleted within 24 Hours-T1136

Mitre id

MITRE Events

Top Reported MITRE IDs

by User by Time

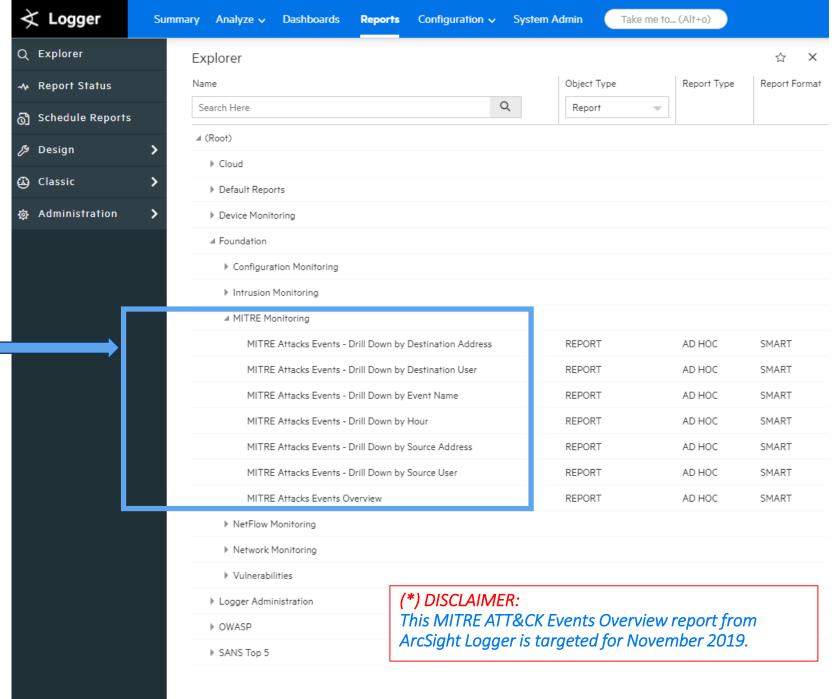
by Host and Time

MITRE to IP Address Relations Radar Overview

MITRE to Rules Relationship

Top Reported Rules

New Out of the Box MITRE Reports



# **MISP CRCL: Malware Information Sharing Platform**















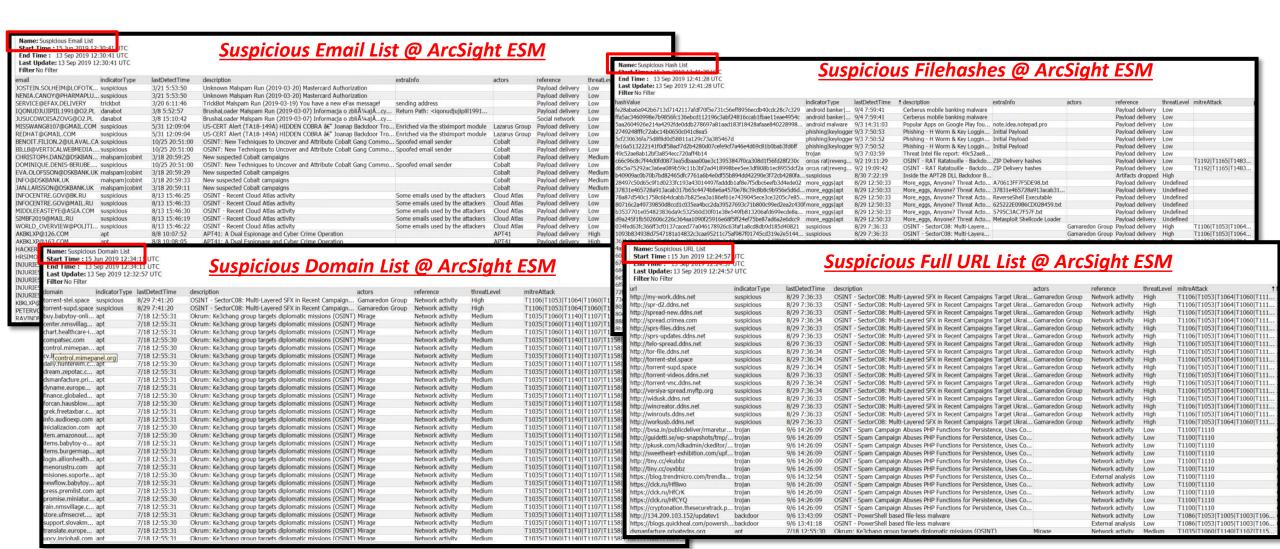
- **11.** Threat sharing platform API integration
- **02.** Free, Open Source & MITRE ATT&CK Compatible
- 03. 6,000+ organisations worldwide are using MISP

MISP CIRCL is a best-of-breed Public TI feed.



### **5 x ESM Active Lists**

Always up-to-date through MISP CRCL Model Import Connector.



# How we get there

Run In: AWS, Azure

Monitor: AWS, Azure, Google, Oracle

Other key SaaS Apps: O365, G-Suite, Slack, Workday, Box

Under Investigation
Micro Focus delivery
of ArcSight as SaaS
product in 2020





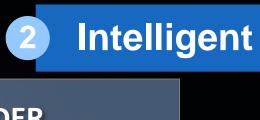
#### **About Interset**

In-Q-Tel Portfolio Company

Headquartered in Ottawa, Canada

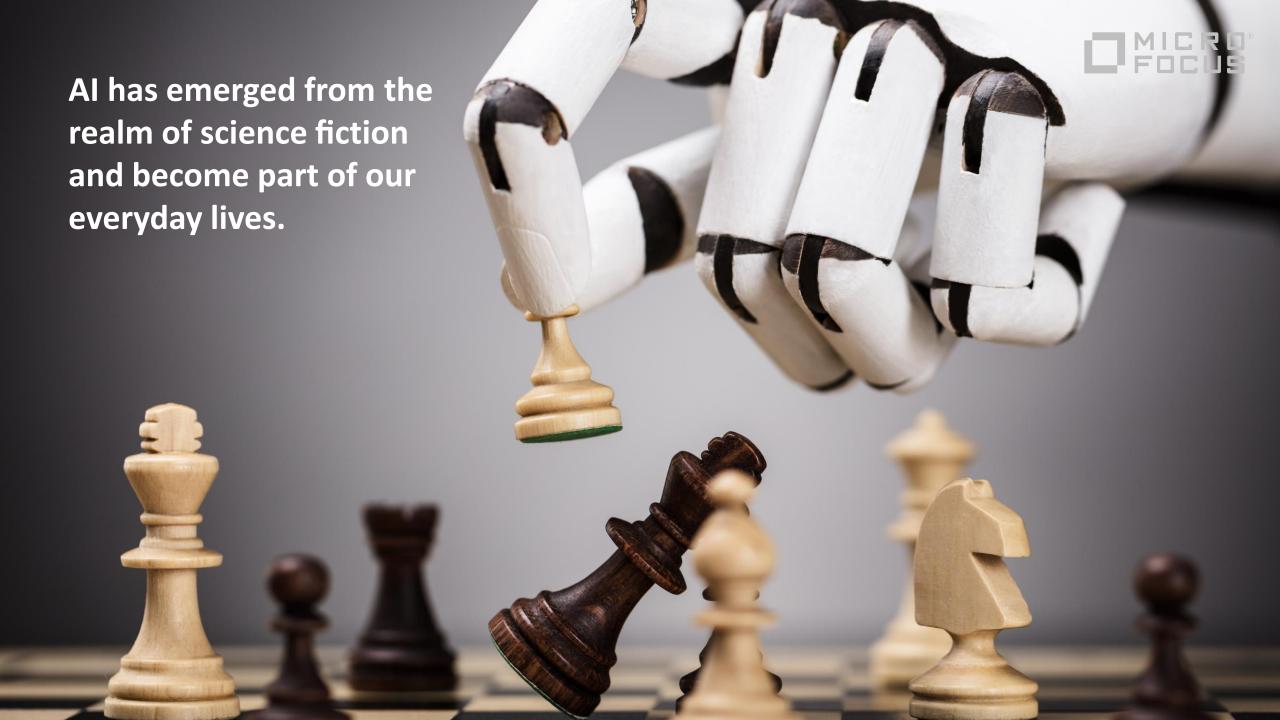
Data science & analytics focused on cybersecurity

100 person-years of security analytics and anomaly detection R&D



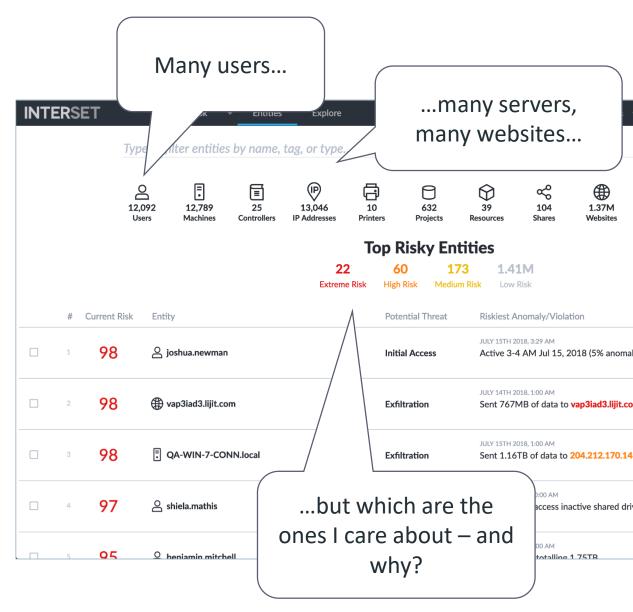
#### SECURITY ANALYTICS LEADER





### **Interset for Insider Risk**

We give you a short list of high-quality leads.



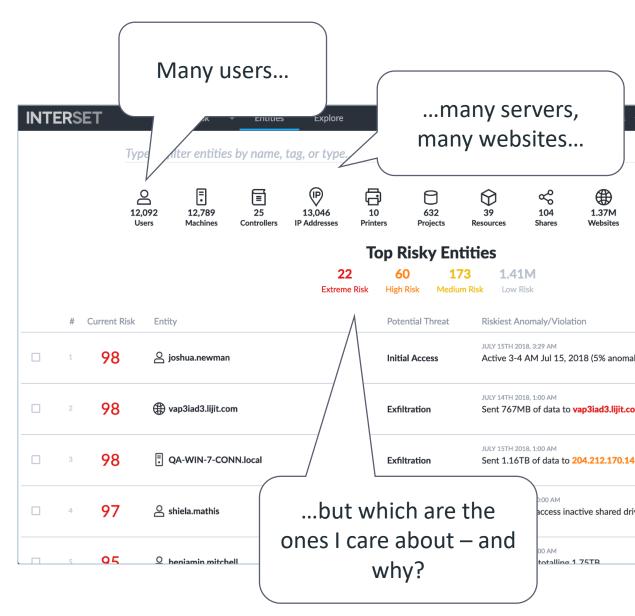


### **Interset for Insider Risk**

Anomalous behavior for each entity is collected to build a case to describe its potential risk

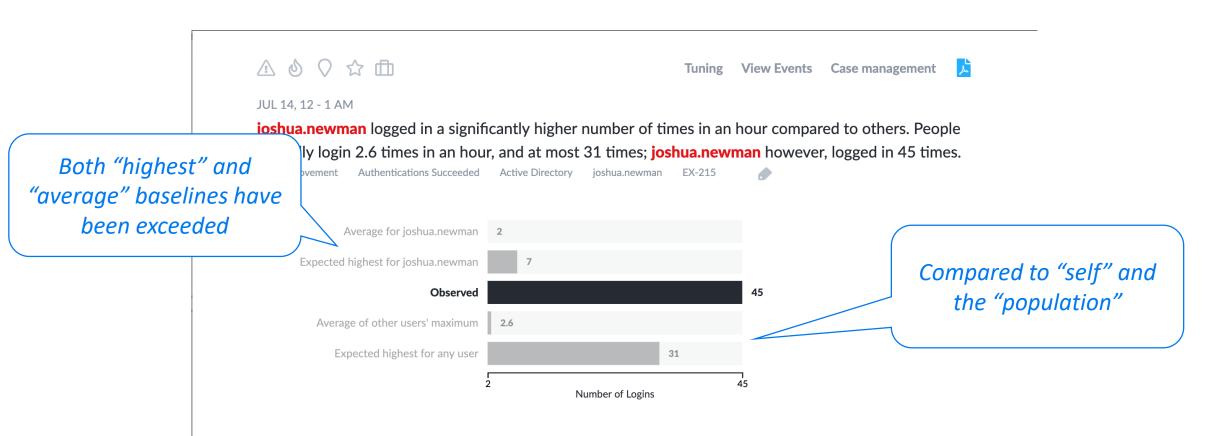
The priority of the entity in terms of potential risk is described on a scale from 0 to 100

(from normal to anomalous & risky)



## This Alert displays multiple Anomalies

Alerts "rollup" Anomalies so that a clear story emerges from the timeline



When a user logs in an unusually large number of times, this may indicate that the user's account is being used for lateral movement.

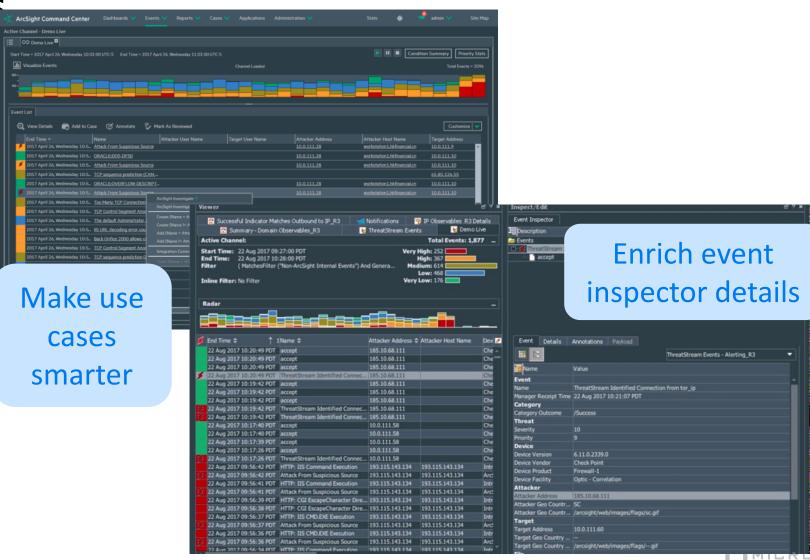
"Number of Logins" is the number of times that authentication logs have recorded logins by this user's account to any domain controller destinations. The observed value reflects the number of a specific event type associated with successful logins in a timeframe for this user. The anomaly is based on the observed number of login attempts to any domain controller destination in comparison to normal behavior.



ArcSight: Enhance and combine use cases with

anomaly findings





## Improved User Experience

One overarching solution dashboard

Immersive personadriven design

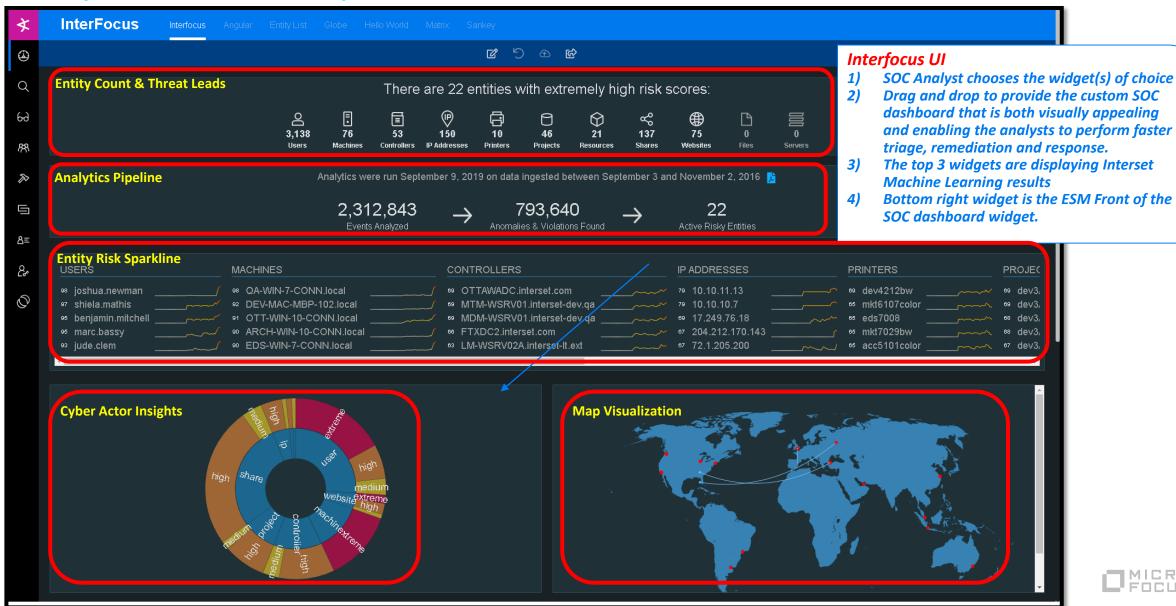
Outcome centric, vs. monitoring centric

Provides proactive focus on high value work



#### Interset and ArcSight in the Same Centralized SOC UI

**Project name: Interfocus – Top Window** 





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