

# DTEX **In**TERCEPT

## Next-Generation Insider Risk Management

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# ABOUT DTEX

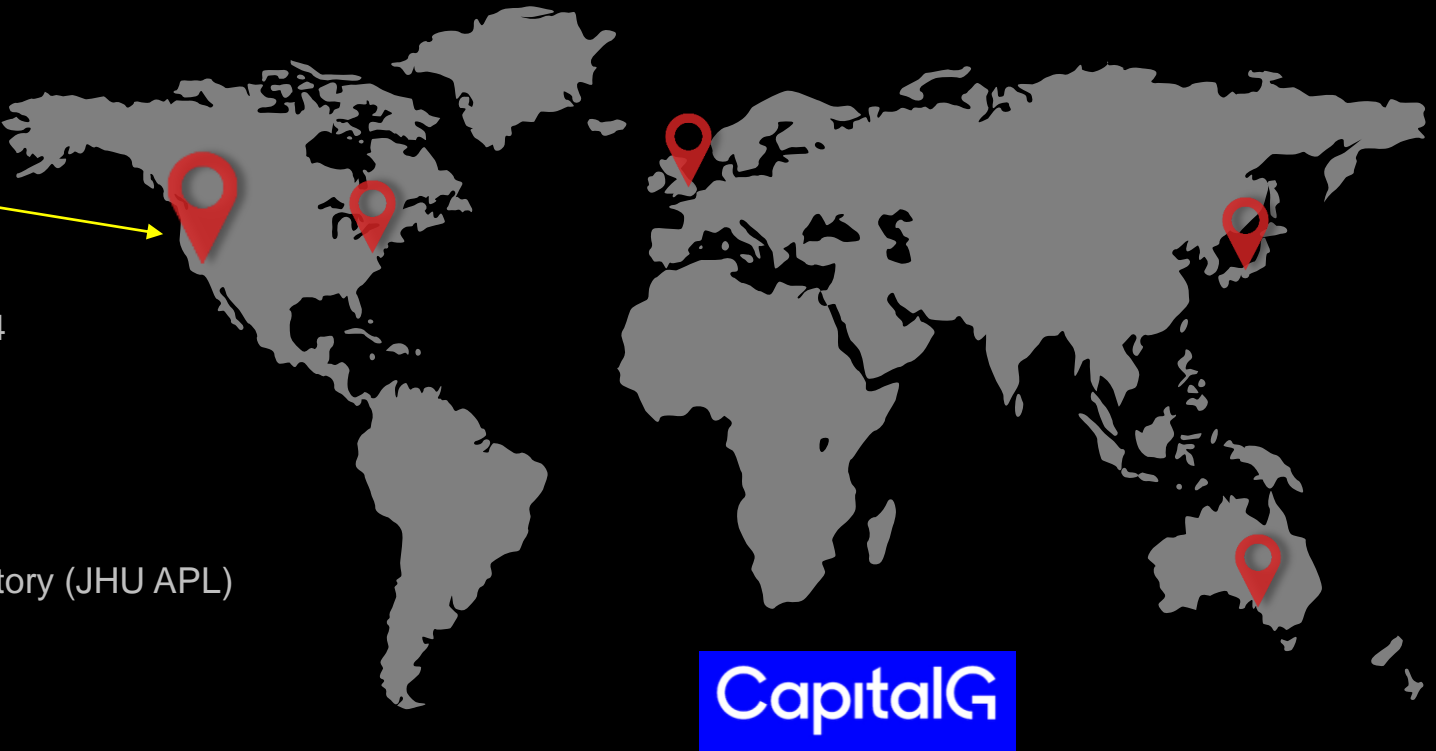
THE GLOBAL LEADER IN INSIDER RISK MGT (IRM)  
US Based in San Jose, Ca

## > Relevant References

- DISA Rapid Innovation Fund 2016 → CNSSD-504
- Services Australia
- ABS
- DSTG
- VIC & SA Govt
- Johns Hopkins University Applied Physics Laboratory (JHU APL)
- DHS
- Federal Trade Commission (FTC)
- Brookhaven National Laboratory, DOE
- MoD Netherlands
- Critical Infrastructure:
  - BHP / NBN / NAB / Fannie Mae / Citi / Capital One / Blackrock / NASDAQ / NextEra / Duke Energy / United Airlines

## > Executive References

- Marshall Heilman (17yr Mandiant Exec, now DTEX CEO)
- Bob Lentz (DTEX board member & former CISO, US DoD)
- Derek Smith (DTEX Shareholder & Founder of Raytheon SureView/Innerview solution)



## > Strategic Partnerships & Integrations



splunk>



Australian Government  
Department of Defence  
Defence Science and Technology Group



Deloitte.



# DTEX InT RESEARCH & DEVELOPMENT REFERENCE #1:

## DISA Insider Threat & Credential Misuse

2017 - 2019

### > 2 Year Rapid Innovation Fund (RIF) to research and develop a solution to automate:

- The detection of lateral movement
- Flag unusual use of legitimate credentials
- Alert on situations of multiple, simultaneous login attempts and other anomalous user behaviors

### > Interim ATO approved and demonstrated enterprise scalability and no impact to DISA devices

- Near-zero performance impact to endpoint/network (<0.5% CPU, 3 - 4MB per Endpoint per Day)

### > DISA recommendations become basis for new InTERCEPT Focused Observation module – released 2021

(includes screen recording, keystroke logging → full CNSSD 504 requirements met)

INITIAL CAPABILITY VALIDATION (CNSSD 504)				
FUNCTIONAL CATEGORIES	FUNCTIONAL TEST CRITERIA	DTEX PROVEN CAPABILITY	CORE BUSINESS OUTCOMES FOR DISA	DISA
1. ACCOUNT CHANGE	4 CRITERIA	4/4	• FULL VISIBILITY OVER UNAUTHORIZED OR ANOMALOUS CHANGES MADE TO A USER ACCOUNT OR GROUP	
2. AUTHENTICATION FAILURE / ANOMALY	7 CRITERIA	7/7	• VISIBILITY OVER ANOMALOUS FAILED AUTHENTIFICATIONS BY A USER OR PROCESS • VISIBILITY OVER SUCCESSFUL AUTHENTICATION THAT AROUSES SUSPICION (INCLUDING PRIVILEGED ACCOUNTS, SYSTEM ACCOUNTS, VENDOR ACCOUNTS AND DOMAIN USER ACCOUNTS)	
3. BASELINE ANOMALY	4 CRITERIA	3/4 1 ITEM NOT DISA APPLICABLE	• FULL VISIBILITY OVER SYSTEM CONFIGURATIONS THAT ARE INCONSISTENT WITH ESTABLISHED POLICY, INCLUDING UNAUTHORIZED SOFTWARE & NON-COMPLIANT PASSWORDS	
4. EXCESSIVE ACTIVITY	9 CRITERIA	9/9	• FULL VISIBILITY OVER ACTIVITY THAT, WHEN OCCURRING A FEW TIMES, IS BENIGN, BUT IS SUSPICIOUS ONCE ABOVE A THRESHOLD • FULL VISIBILITY OVER ANOMALOUS VOLUMES OF ADMIN, COPY/PASTE, PRINTING, PERSONAL WEBMAIL, FILE ACCESS AND OUT-OF-HOUR ACTIVITIES	
5. EVIDENCE TAMPERING	1 CRITERIA	1/1	• COMPLETE VISIBILITY OVER SUCCESSFUL OR UNSUCCESSFUL ATTEMPTS TO TAMPER WITH AUDIT DATA, ACCESS LOGS, OR OTHER RECORD KEEPING MECHANISMS	
6. EXFILTRATION	6 CRITERIA	6/6	• FULL VISIBILITY OVER MULTIPLE EXFILTRATION MEDIUMS, INCLUDING USB, WEB TRANSFERS, SCREEN CAPTURE, SOCIAL NETWORKS, BLACKLISTED WEBSITES • IDENTIFICATION OF HIGH RISK TRANSFERS CONTAINING KEYWORDS OR CLASSIFICATION MARKERS	
7. MALWARE	2 CRITERIA	0/2 ITEMS MARKED OUT-OF-SCOPE	• USE CASES WERE MARKED AS OUT-OF-SCOPE, HOWEVER DTEX NOW PROVIDES MITRE ATT&CK CORRELATIONS WHICH CAN PROVIDE VALUABLE INSIGHT INTO MALWARE ATTACKS IN FUTURE	
8. NETWORK TRAFFIC ANOMALY	2 CRITERIA	2/2	• COMPLETE VISIBILITY OVER ANOMALOUS NET FLOW BY USER, DEVICE OR PROCESS, BOTH ON AND OFF THE CORPORATE NETWORK	
9. PRIVILEGE VIOLATION	7 CRITERIA	7/7	• FULL VISIBILITY OVER ANY ATTEMPT TO ACCESS OR MODIFY INFORMATION, SETTINGS, OR OTHER DATA THAT IS PROHIBITED BY POLICY OR PERMISSIONS	
10. SYSTEM CONFIG CHANGE	4 CRITERIA	3/4 1 USE CASE OBSOLETE	• FULL VISIBILITY OVER ANY UNAUTHORIZED OR ANOMALOUS ACTION ALTERING THE CONFIGURATION OF THE HOST SYSTEM OR SUBSET OF SYSTEMS INCLUDING THE OPERATIONAL ENVIRONMENT	
11. USER BEHAVIOR ANOMALY	5 CRITERIA	5/5	• INSIGHT INTO ANY BEHAVIOR THAT DEVIATES FROM A USER'S NORMAL BASELINE • ANOMALOUS USE CASES INCLUDE OUT OF NORMAL HOURS ACTIVITY, SIMULTANEOUS LOGINS FROM DISPARATE LOCATIONS & PRINTING ANOMALIES	



## NITTF EXECUTIVE ORDER 13587, DISA STIG, AND NIST FRAMEWORK

- Executive Order 13587 directs the US Government agencies to establish, implement, monitor and report on the effectiveness of insider threat programs to protect classified national security information (as defined in Executive Order 13526; hereinafter classified information), and requires the development of an executive branch program for the deterrence, detection, and mitigation of insider threats, including the safeguarding of classified information from exploitation, compromise, or other unauthorized disclosure.
- DTEX adheres to recommended best practices identified within government guidelines such as **US Government Configuration Baseline** and associated **DISA Security Technical Implementation Guides**
- All ports, interfaces, and services are documented and all ports, interfaces, and services that require authentication meet the requirements of **NIST SP 800-63** or other equivalent applicable standard.



# THE COST OF DOING NOTHING

**\$15.38M**

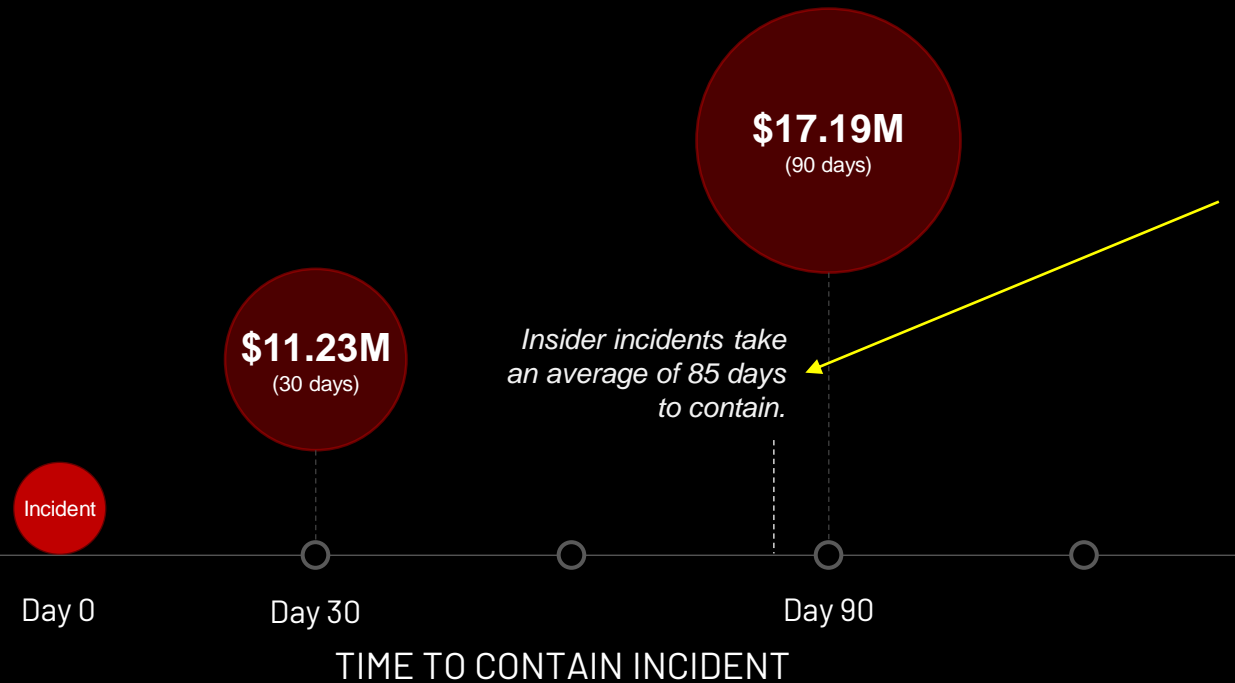
**average annual cost of  
insider-led cyber incidents**

(2022 Ponemon Cost of an Insider Threat Report)

**85%**

**of breaches involved  
human interaction**

(Verizon 2021 Data Breach Investigation)



# THE BENEFITS OF AN INSIDER RISK PROGRAM

**91%**

**fewer Insider Threat incidents**

(2022 DTEX Insider Risk Report)

**validated in the largest data driven  
Insider Threat study ever conducted**

**DTEX**  
InTERCEPT



**LEFT OF BOOM**

PROACTIVE DETECTION AND PREVENTION OF INSIDER THREATS

# THE COST OF DOING NOTHING

**\$15.38M**

average annual cost of  
insider-led cyber incidents

(2022 Ponemon Cost of an Insider Threat Report)

**85%**

of breaches involved an  
insider

(Verizon 2021 Data Breach Investigation)

Incident

Day 0

**\$11.23M**  
(30 days)

Day 30

Insider incidents take an  
average of 85 days to  
contain.

**\$17.19M**  
(90 days)

Day 90

TIME TO CONTAIN INCIDENT

# WHAT'S MISSING?



## NEXT-GEN AV

### MALWARE FOCUS

1. EPP (AV)
2. EDR
3. IOC's
4. MITRE ATT&CK



## NEXT-GEN SIEM

### DATA FOCUS

1. SIEM
2. SOAR
3. CASE MGMT
4. APP ECOSYSTEM



## NEXT-GEN FIREWALL


### NETWORK FOCUS

1. IDS / IPS
2. NDR
3. WAF
4. FIREWALL



\*logos shown are key DTEX integration partners



# WHAT'S MISSING?



**NEXT-GEN AV**

**MALWARE FOCUS**

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**HUMAN FOCUS**



**NEXT-GEN SIEM**

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**NEXT-GEN FIREWALL**

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# WHAT IS NEEDED?



# WHAT WENT WRONG?



## HUMAN FOCUS

### DLP

- Heavy on the Endpoint
- Primarily detects negligent behavior, not malicious data loss
- Doesn't scale

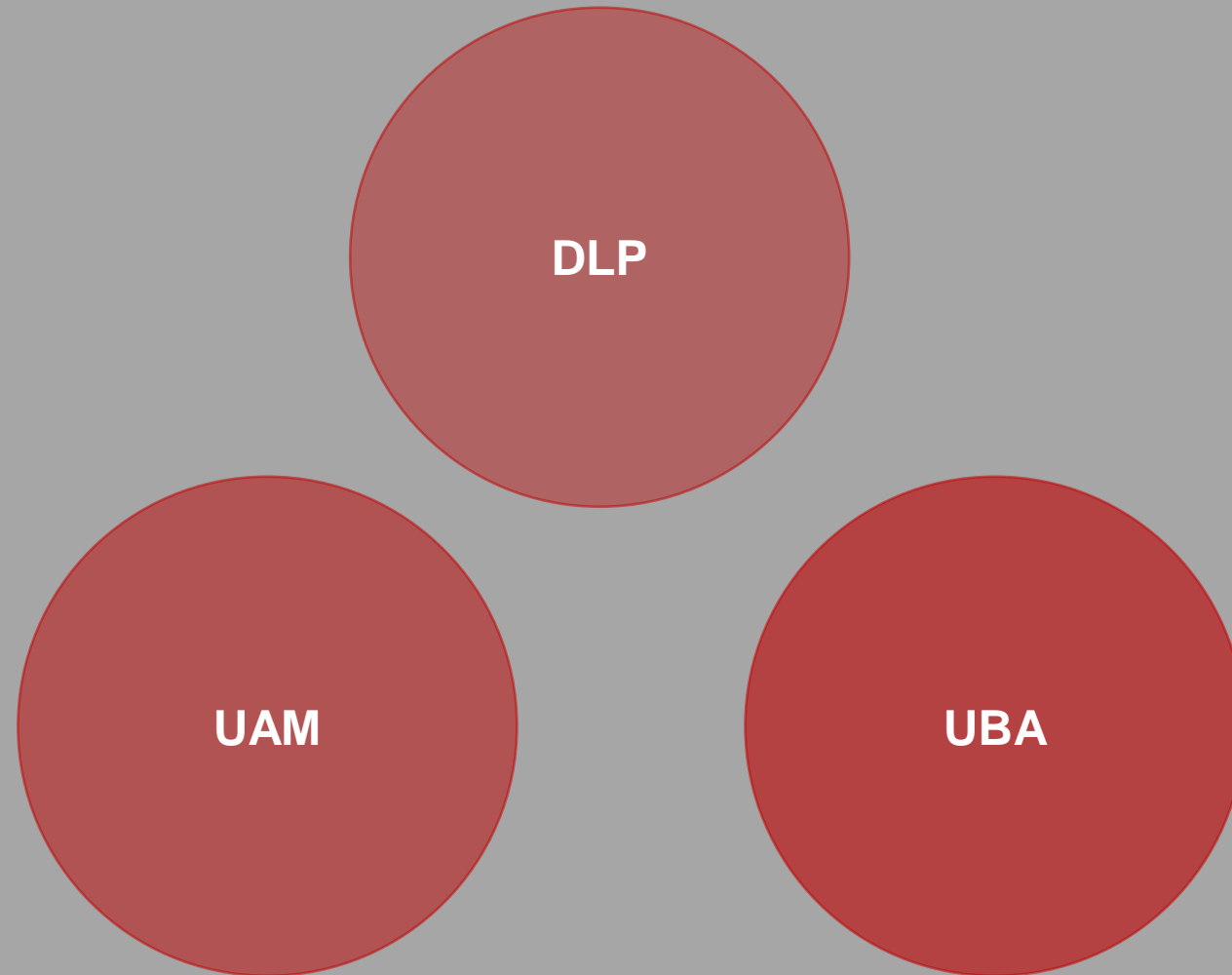
### UAM

- Surveillance-based capabilities difficult to scale
- Point and shoot → used reactively
- Prone to interop issues

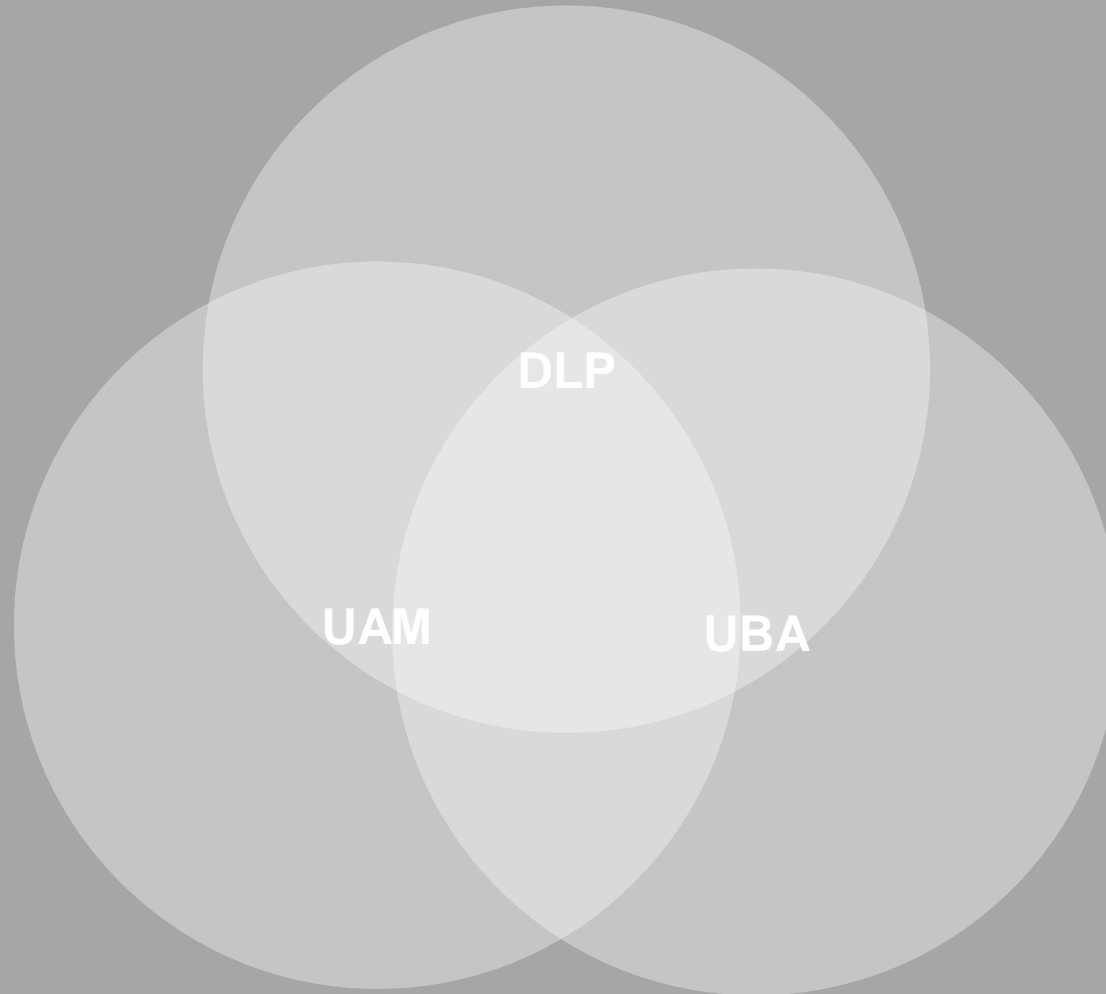
### UBA

- Log data lacks context
- Too much time spent on data engineering – NOT data science
- Too many false positives

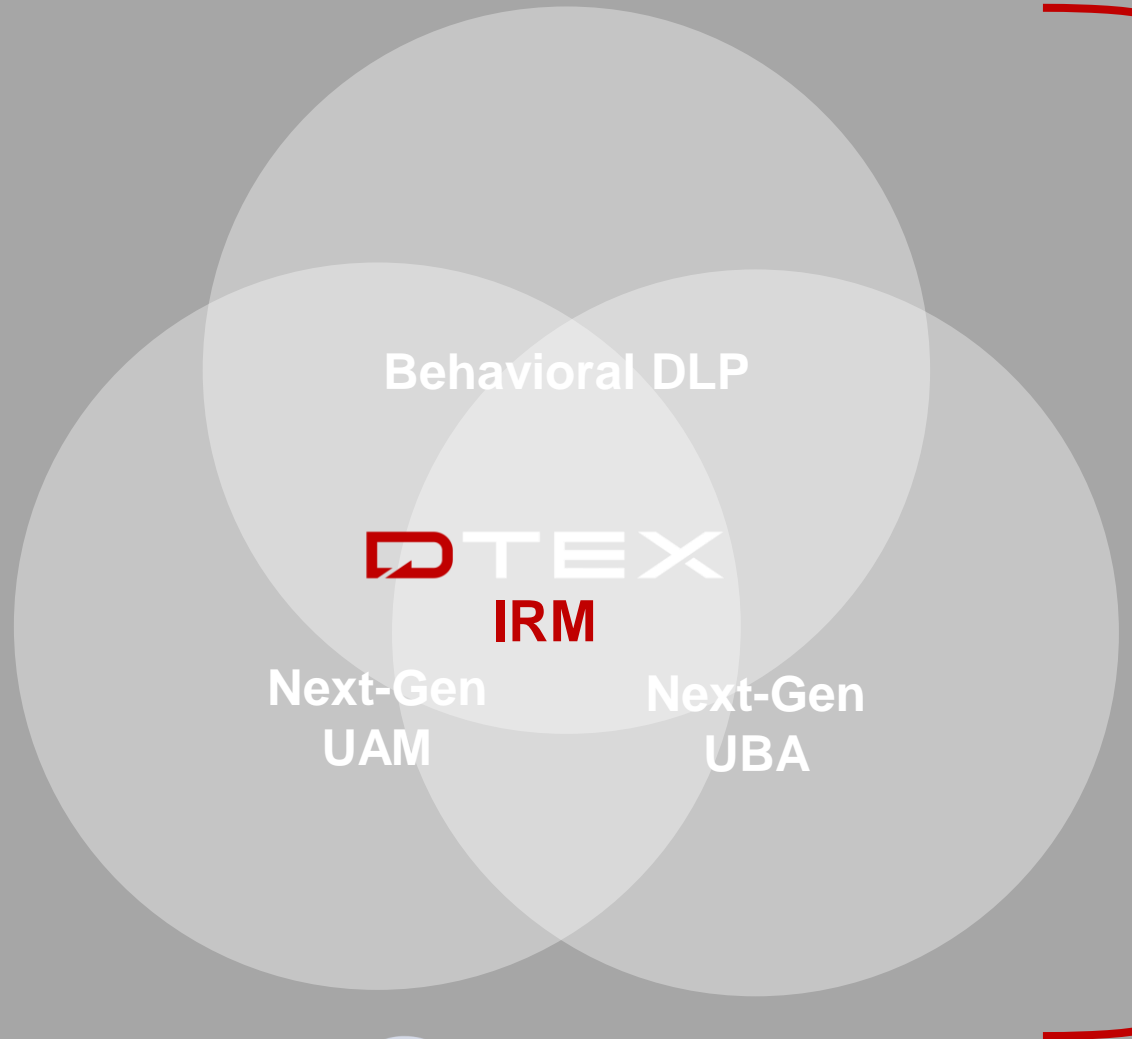
# THE CONVERGENCE



# THE CONVERGENCE



# THE CONVERGENCE



Insider Risk  
Management  
(IRM)

Gartner®



## NEXT-GEN INSIDER

### HUMAN FOCUS

1. UAM
2. DLP
3. UBA
4. FORENSICS



# COMPLETING THE PICTURE



## NEXT-GEN AV

### MALWARE FOCUS

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## NEXT-GEN INSIDER

### HUMAN FOCUS

1. UAM
2. DLP
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4. FORENSICS



## NEXT-GEN SIEM

### DATA FOCUS

1. SIEM
2. SOAR
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4. APP ECOSYSTEM



## NEXT-GEN FIREWALL

### NETWORK FOCUS

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# DTEX InTERCEPT PLATFORM

## Most Common Types of Insider Threats



CARELESS WORKERS



INSIDE AGENTS



DISGRUNTLED EMPLOYEES



MALICIOUS INSIDERS



THIRD-PARTY USERS

### UNIFIED TELEMETRY

#### USER ENDPOINT



#### SERVER ENDPOINT



#### VDI



#### CLOUD



#### OTHER



Insider Risk  
(UAM+UEBA)

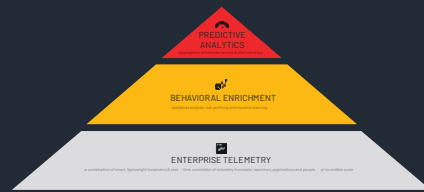
Behavioral  
Data Loss  
Prevention  
(DLP)

Credential  
Theft  
(ATT&CK)

Digital  
Forensics

Fraud  
Risk &  
Compliance

**ENCRYPTION LAYER:** Employee Privacy & GDPR Compliance



### DMAP+ TECHNOLOGY

a patent-pending, real-time correlation of DMAP telemetry introspection and predictive modeling that leads to accurate detection of insider threats at scale

### THIRD-PARTY INTEGRATIONS

SIEM

SOAR

ITSM

DTEX

PULSE

DTEX InTERCEPT PLATFORM

**ZERO IMPACT →  
5MB PER DAY  
(PER ENDPOINT)**

# Demonstration

## DTEX **In**TERCEPT

VERTICAL: FED



# Agency of DHS

**Pain: UAM/UBA**

DTEX Systems

[www.dtexsystems.com](http://www.dtexsystems.com)

## Competition:

Forcepoint (DHS Incumbent)

1

## Background

Department of Homeland Security (DHS) requires all DHS Components to procure and deploy a UAM/UBA capability on all DHS networks by Executive Order 13587

This agency had a desire to consolidate various endpoint log data sources into a single data telemetry, which could not be achieved with the current solution.

Goal: Integration with Existing Tools – to improve performance of existing security tools in building a stronger security eco-system and procure Next Gen Technology

2

## Approach

Developed an internal champion; educated agency on value of DTEX leveraging MITRE Partnership; dwelled on Forcepoint pain points

Built confidence and established a relationship with the right partner, GuidePoint

Proved value and received technical win via POV

Validated Sales Process with technical results – providing technical resources and focused work sessions tailored to each team (SOC, IRM, EP, Data Protection, Analytics)

3

## Outcomes

Helped agency meet their UAM/UBA requirements in a single platform

Agency saw improved performance, consolidation to Insider Risk/UAM, Forensics, User Behavior Data Sensitivity, User Behavior Privacy all to support offices within agency to include several offices. This agencies current tools lacked the ability to detect malicious and/or anomalous activity typically indicative of insider threats as required by the Executive Order

Opportunity for future growth here, winning over such a large agency provides an opportunity into further FED business and has a ripple effect on our commercial side of our business

## MITRE AND DTEX SYSTEMS ANNOUNCE PUBLIC-PRIVATE PARTNERSHIP TO ELEVATE INSIDER RISK PROGRAMS AND ADVANCE HUMAN-CENTRIC SECURITY

Multi-Program Initiative Launches MITRE Inside-R Protect  
and Delivers First-of-its-Kind Behavioral Research

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*From left to right: Rajan Koo, DTEX; James Doodson, MITRE; Mohan Koo, DTEX; Julie Bowen, Chris Folk, and Deanna Caputo, MITRE.*

**San Jose, Calif., and McLean, Va., Feb. 1, 2022**—MITRE and DTEX Systems™, the Workforce Cyber Intelligence & Security Company™, today announced a partnership to elevate insider risk awareness and human-centric security strategies through behavioral-based research and the launch of the MITRE Inside-R Protect™ program.

# MITRE | INSIDE-R PROTECT™

IN PARTNERSHIP WITH **DTEX**

Launched in January 2022

- ❖ New indicators for Super Malicious Insiders
- ❖ Not-for-profit Service Offering
- ❖ MITRE Applied Research Centre in ADL
- ❖ MITRE 'Inside-R' Framework