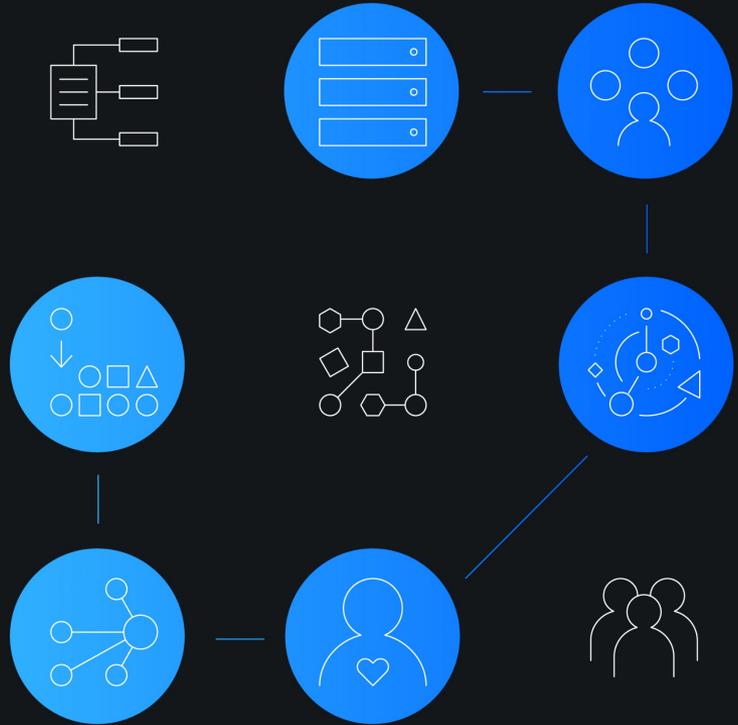


# Welcome to A Day in the Life with a Z Security Incident

## IBM Security Virtual User Group Day

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Cybersecurity Technical Specialist  
IBM Z  
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# 3J Mechanical Supplies, Inc.

- Industrial parts supplier
- 5,000 employees
- 10 warehouses in 6 states

## Mission Critical applications running on Z

- Parts transaction including orders, inventory, refunds, etc
- Human Resources including payroll
- Freight management

## Security Tools

- SIEM – QRadar
- RACF Administration, audit, and compliance – zSecure Suite



Jane Thomas

ID = JANET

- SOC Team Security Analyst
- Minimal mainframe experience



Bob Ryan

ID = BOBR

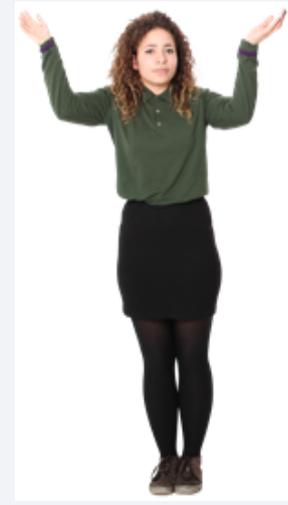
- RACF administrator
- 20+ mainframe and RACF experience
- No SOC experience



John Francis

ID = JOEF

- Bad actor
- Looking to cause harm and steal PII data



Lilly Thompson

ID = LILLYT

- Disgruntled Systems Programmer
- Passed up for promotion to manager

# QRadar terminology pertaining to Mainframe data

Alerts – zSecure Alert

Events – QRadar streaming events from log sources (zSecure Alert, SMF Events, etc)

Rules – Rules are set in QRadar to take action based on the number, type, or time of day an event is received

Offenses – QRadar rules trigger an offense in QRadar

# Security Incident Detected

# IBM QRadar

Manage Risks and Vulnerabilities

Username

Password

Login



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- Minimal mainframe experience



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ID = BOBR

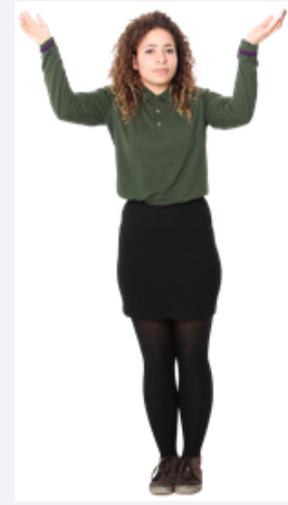
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# Investigation and Remediation

### Configured Sessions

Double-click an icon to start a session.

Search

### Active Sessions

Share

3270 MFA EOLE98   3270 MFA EOLE99   3270 zSecure PoT White Background   3270 MFA Demo PET System   3270 TECS   3270 Top Secret   3270 TECS - Green   3270 ACF2

3270  
TEC2 WSC



Ability 5

1/3

Screen Shot 2020-01-08...32.11 PM   Mom Letter   Screen Shot 2020-01-08...8.44 AM   Receipt.pdf



Jane Thomas

ID = JANET

- SOC Team Security Analyst
- Minimal mainframe experience



Bob Ryan

ID = BOBR

- RACF administrator
- 20+ mainframe and RACF experience
- No SOC experience



John Francis

ID = JOEF

- Bad actor
- Employee looking for financial gain by whatever means possible



Lilly Thompson

ID = LILLYT

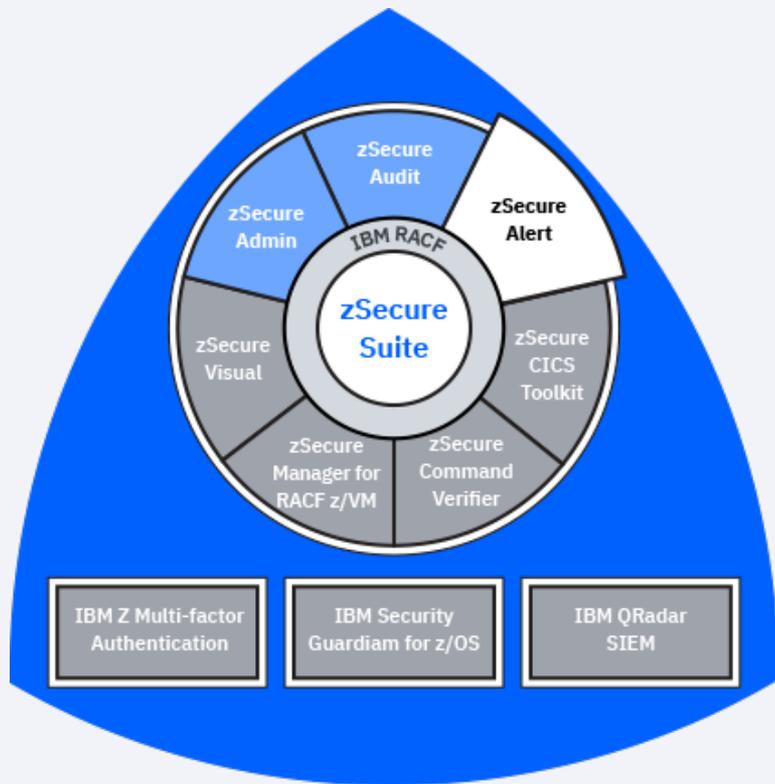
- Disgruntled Systems Programmer
- Passed up for promotion to manager

How did Jane and Bob find and eliminate the threat actors?

# IBM Security zSecure Alert

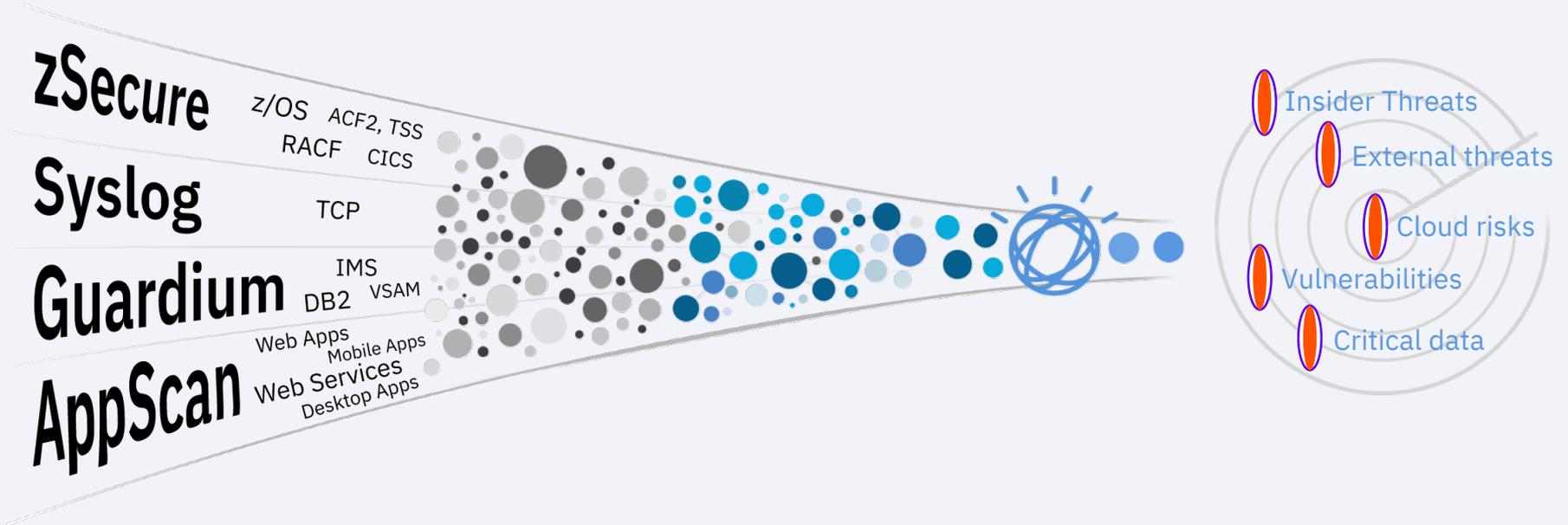
*Improves SOC effectiveness, threat detection and remediation with near real-time monitoring and triggers that automate alerts and corrective actions.*

- Monitors for configuration changes in z/OS, RACF, and ACF2
- Provides over 65 out of the box alerts for common security concerns
  - Includes emergency user logins
- Provides the ability to build customized, predefined alerts to match your operational model
- Sends alerts to SOC with SIEM integration (QRadar and others)
- Send alerts as email or SMS

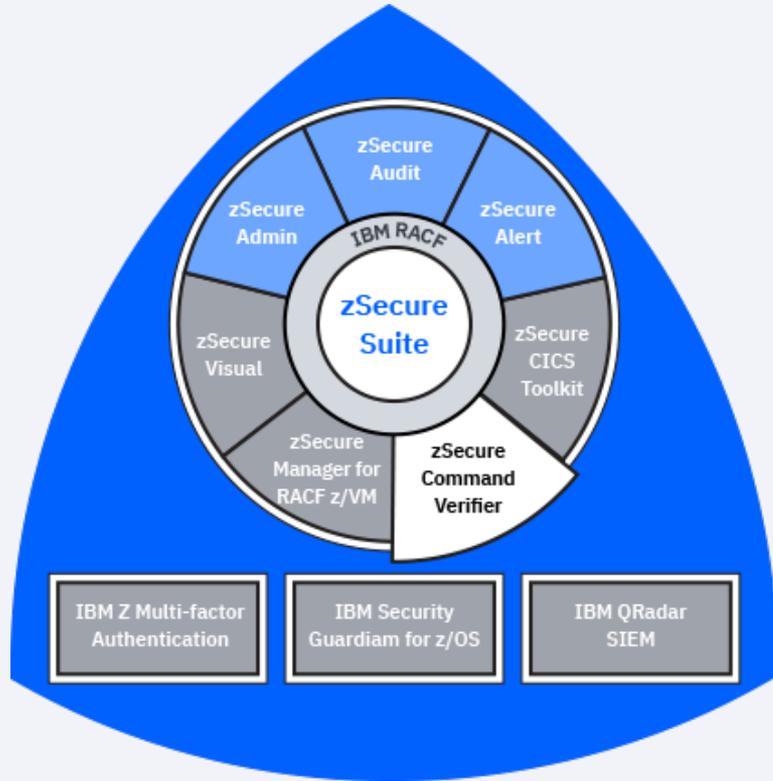


# Included with zSecure Audit...Real time security logs to SIEM (QRadar, Splunk, Arcsight, etc)

Mainframe data sources and integration



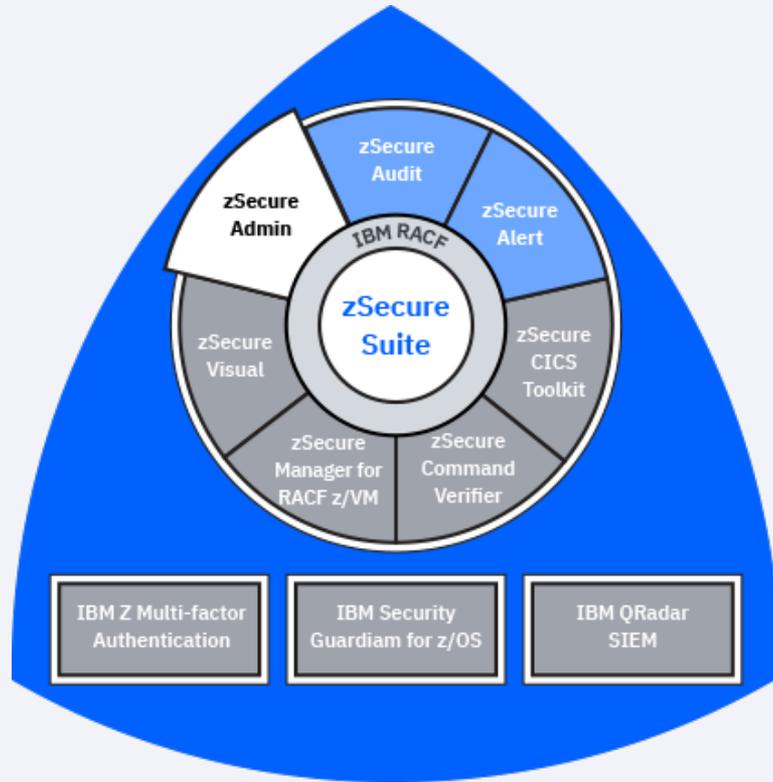
# IBM Security zSecure Command Verifier



*Reduce the risk of security breaches and failed audits caused by internal errors and noncompliant commands*

- Prevents RACF commands that are erroneous or do not adhere to corporate security policy
- Reduces database pollution by preventing noncompliant commands
- Enforces naming conventions
- Provides audit trail to determine who, what, and when changes were made to RACF

# IBM Security zSecure Admin



*Maximizes IT resources, reduces administrative overhead and errors, and minimizes security risks.*

- Automate routine tasks to save time and ensure accuracy
- Prevents overentitled users by monitoring user access
  - Provides the ability to remove unused access
- Test RACF database changes in an offline database before running in production

# IBM Z MFA

## SOMETHING THAT YOU KNOW

- Usernames and passwords
- PIN Code



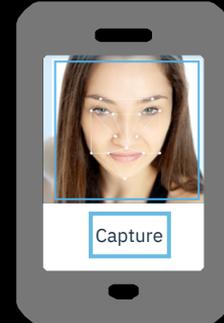
## SOMETHING THAT YOU HAVE

- ID Badge
- One time passwords
- Time-based



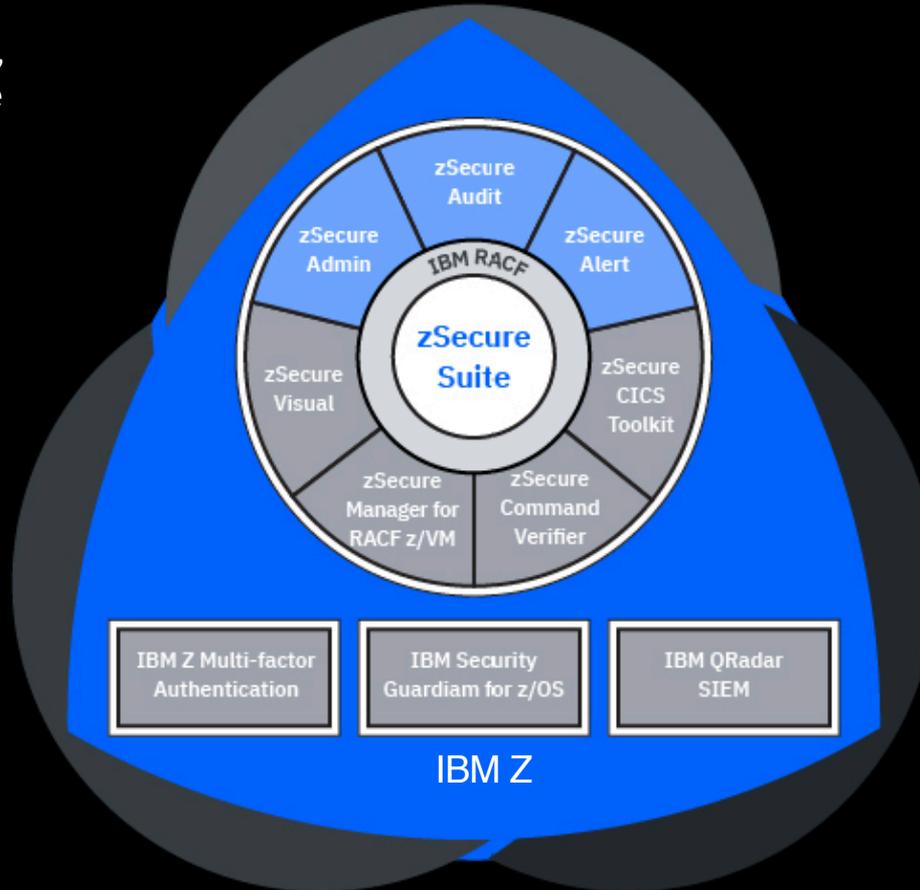
## SOMETHING THAT YOU ARE

- Biometrics



# IBM Z Security

A rich portfolio for modern, comprehensive mainframe security



# zSecurity Events/Engagements

## **zSecure Value Assessment**

- Guided assessment of customers zSecure configuration/utilization

## **zSecure Demo and Technical Discussion**

- “Day in The Life” of zSecure User as it relates to customer environment

## **zSecure Health Check**

- 3 day zSecure Audit review of your environment for potential vulnerabilities

## **Mainframe Security Control Review**

- Guided security assessment of the highest priority security controls

## **zSecurity Technical Workshop**

- Hands on experience with zSecure and Guardium solutions

## **Proof of Concept**

- Install and use zSecure in your environment for a predetermined amount of time

## 2 Question Survey

<https://www.surveymonkey.com/r/HK89MPR>

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Questions?



# Thank you

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