

LONDON

INTERNATIONAL  
SOFTWARE DEVELOPMENT

CONFERENCE 2015

goto;  
conference

# The Road to Rugged

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# Who I am

- 25+ years Technology and Security Experience
- Most of my career has been about being Rugged!
- Background in Security R&D
- Working with the Cloud before it was called the “Cloud”
- Manage my teams using DevOps and Scrum
- IR & Crisis Management



# Disclaimer

- Mistakes happen
- The truth may be difficult to bear
- Unknown unknowns will get discovered
- Success means less 3am phone calls
- Security is a broad topic
- Rugged takes practice



# Why is Rugged Important?



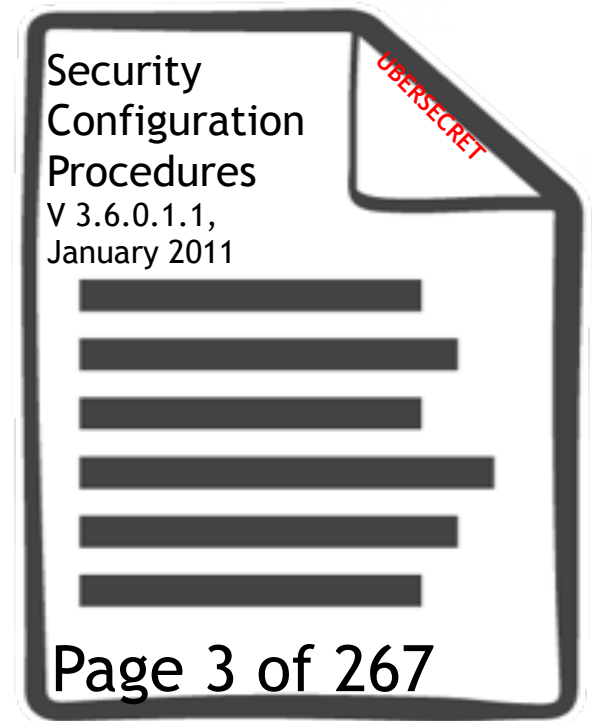
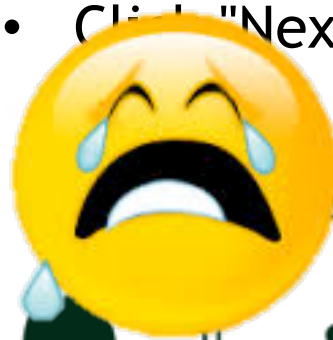
- Case for change is very compelling!
- Planning != Good Code, Less Security Breaches
- Perfection takes too long to get wrong

No one enjoys getting woken up to solve for someone else's mistakes, especially security breaches!!



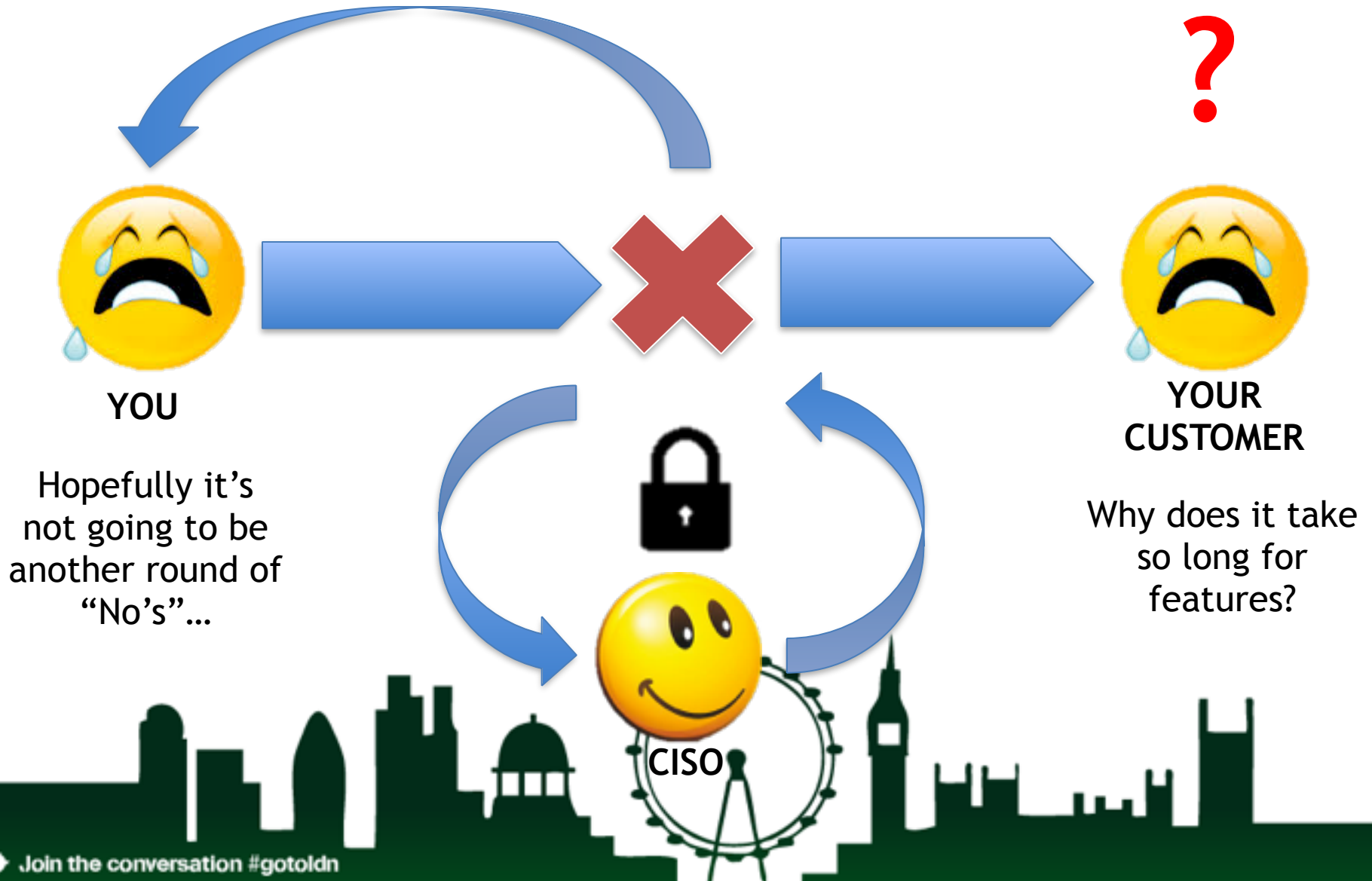
# This isn't rugged or helpful...

- Double-click installer
- Click "Next"
- Click "Next"
- Click "Next"
- Click "Next"
- Click "Next"
- Click "Next"
- Click "Next"
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- Click "Next"



**Frozen in Time**

# And this just creates friction... **goto;** conference



# Which makes everyone...

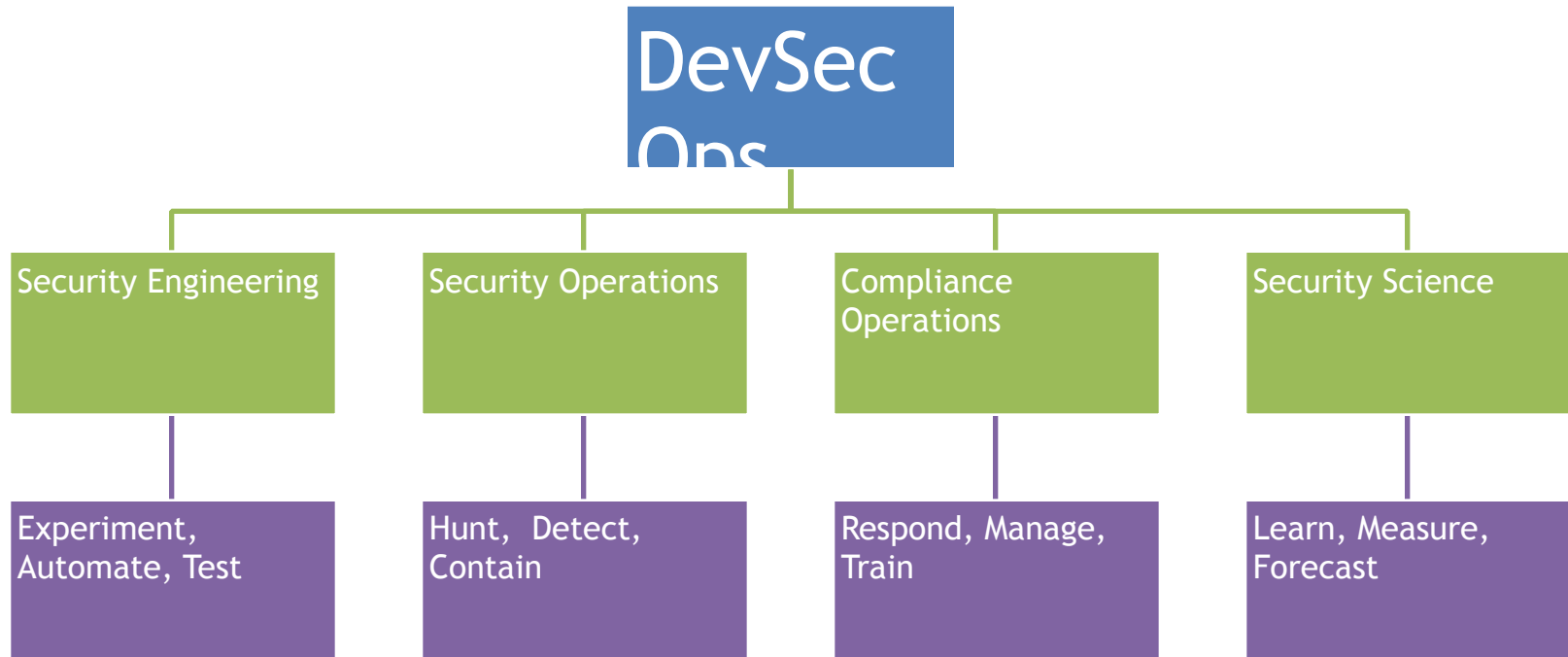
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Bang  
Head  
Here





# But - What if Security can be Rugged?



# Let's Get Rugged!!!



## Problem Statement

- DevOps requires continuous Deployments
- Fast decision making is critical to DevOps success
- Traditional Security just doesn't scale or move fast enough...

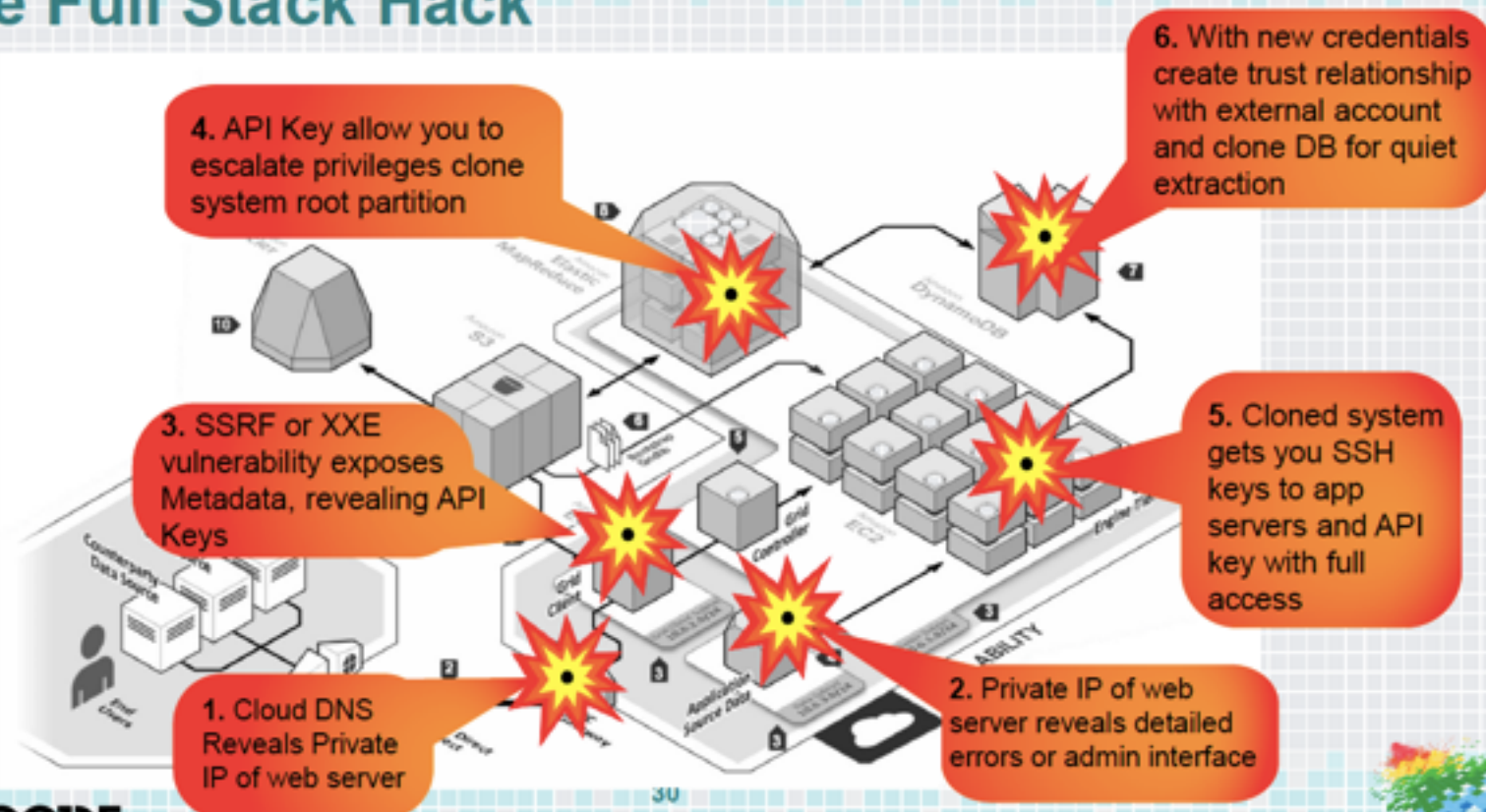
## Welcome DevSecOps!!

- Customer focused Mindset
- Scale, Scale, Scale
- Objective Criteria
- Proactive Hunting
- Continuous Detection & Response



# What if Security were no longer just theory?

## The Full Stack Hack



VERACODE

RSAConference2015

# What if you could check Security via API? Or Self-Service?



```
• begin
•   (iam.client.list_role_policies(:role_name => role)[:policy_names]\
•     - roledb.list_policies(role)).each do |policy|
•     log.warn("Deleting Policy '#{policy}'", which is not part of the approved baseline.")
•     if policydiff({},
•       URI.decode(iam.client.get_role_policy(\
•         :role_name => role,
•         :policy_name => policy
•      )[:policy_document])),
•       {:argv => ARGV, :diff => options.diff})
•     end
•     options.dryrun ? nil : \
•       iam.client.delete_role_policy(
•         :role_name => role,
•         :policy_name => policy
•       )
• end
```

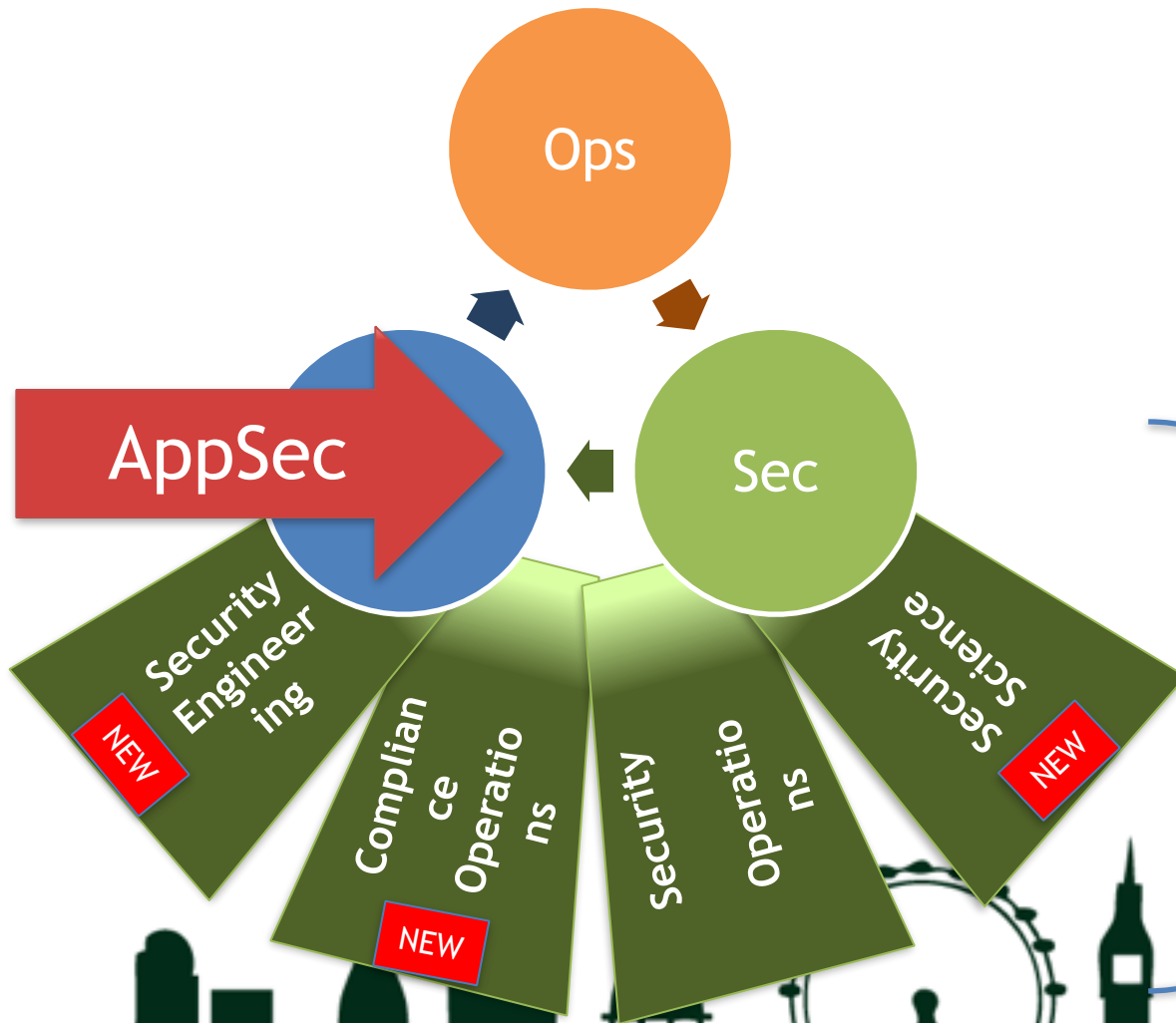
Account Grade:

B

Heal Account?



# Sign me up! What's next?



- Security as Code
- Self-Service Testing
- Red Team/Blue Team
- Inline Enforcement
- Analytics & Insights
- Detect & Contain
- Incident Response
- Investigations
- Forensics

# Migrate App Security into DevOps Teams



- Planning Security
- Testing Features for Security Defects
- Integrating Security Testing into CI/CD
- Remediating Security Issues

Secure Components

Scanners

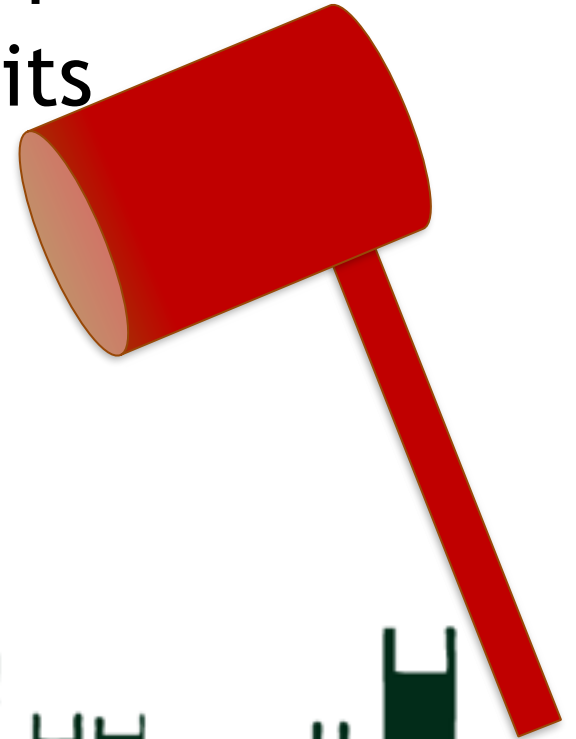
Instrumentation



# Red Team Via Security Engineering



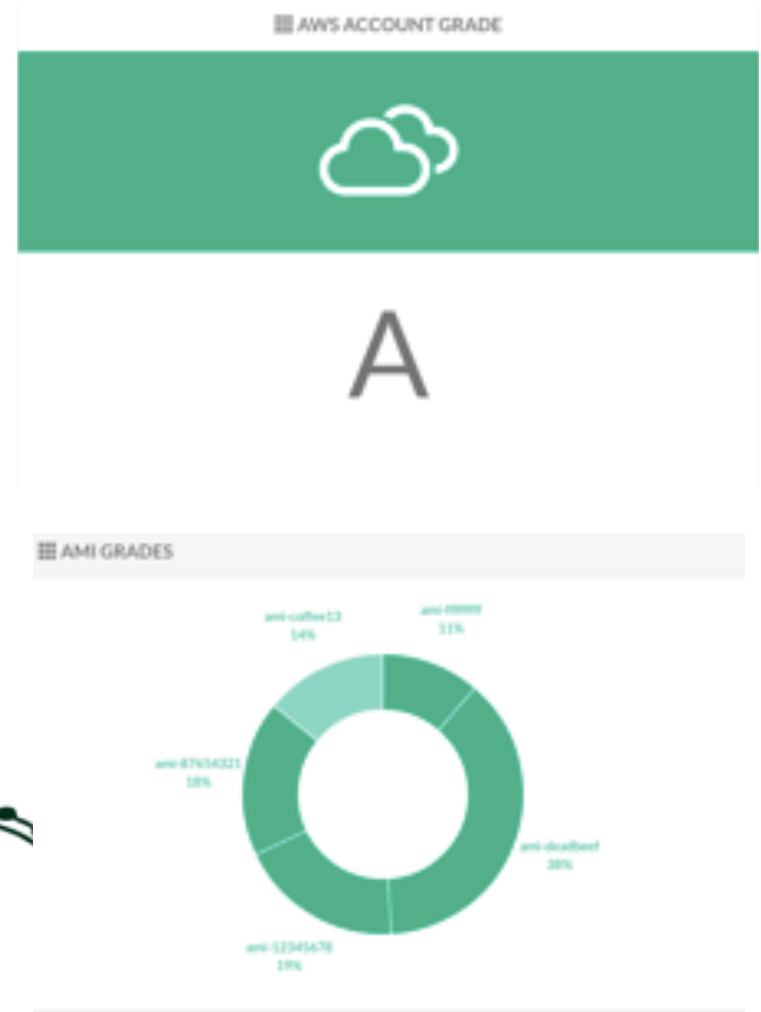
- #RedTeamMonday
- Developing Secure Code Components
- Reverse Engineering & Exploits
- Increased Education
- Mass Reconnaissance
- Scoring & Prioritization



# Enforce in Real-time with Compliance Operations



- Metrics & Reporting
- Discover Compliance Issues in Real-time
- Improve maturity of controls
- Prepare for Security Operations & Red Team





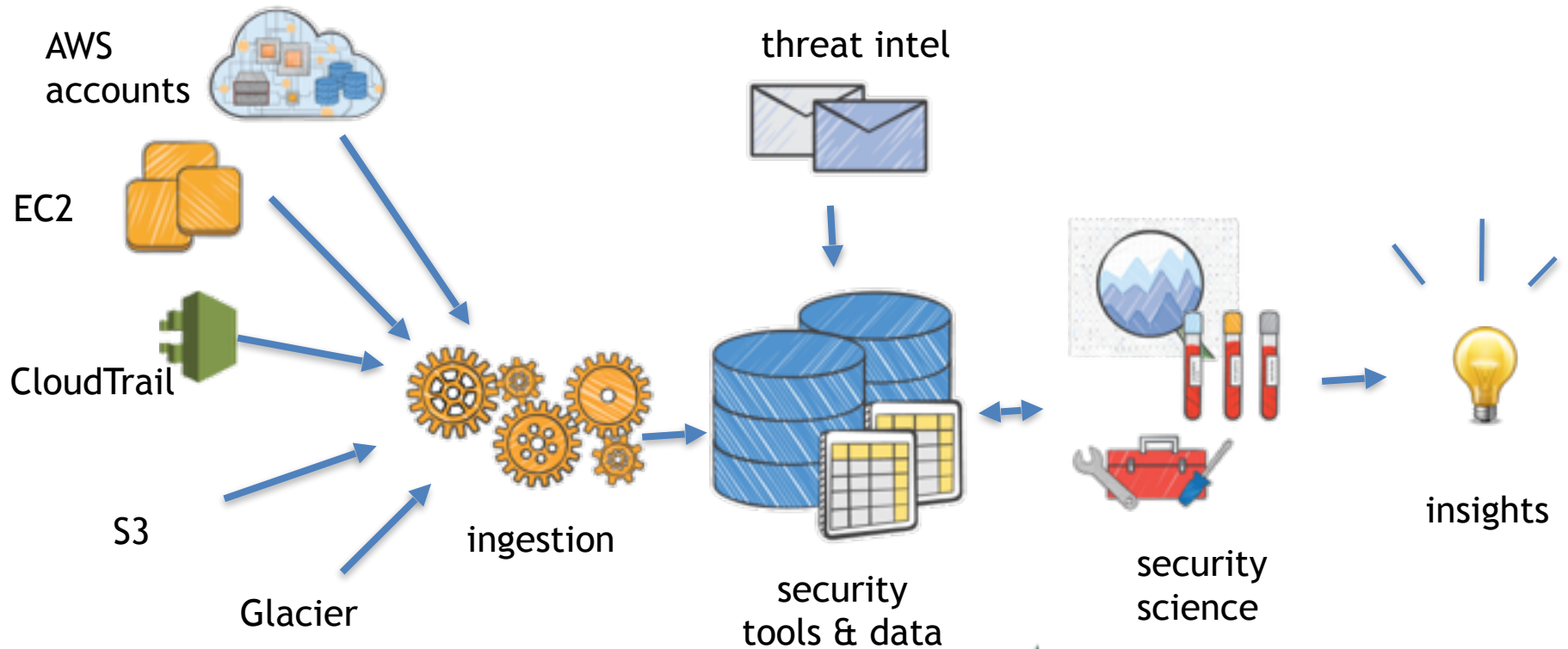
# Blue Team via Security Operations



- Detect & Contain
- Research Red Team Events
- Keep Track of Threat Intel
- Develop Monitoring & Alerting
- Triage Events
- Perform Forensics



# Data is Critical



# Emerging Security Trends



- Shortage of Security Professionals
- Big companies are attempting to scale security to move faster: Facebook, Netflix, LinkedIn, AWS, Intuit
- Industry Leaders talking about the integration of DevOps & Security: Joe Sullivan, Jason Chan, Gene Kim, Josh Corman
- Introduction of DevSecOps at MIRCon in 2014
- SecDevOps at RSA 2015 was full day of dedicated content
- LinkedIn People Search: 36 DevSecOps, 13 SecDevOps, 11 DevOpsSec, 33k+ Cloud Security





*Please*

**Remember to  
rate this session**

*Thank you!*

# Thanks !