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CHANGE
Challenge today's security thinking

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Using Team Structure as Defense in Depth

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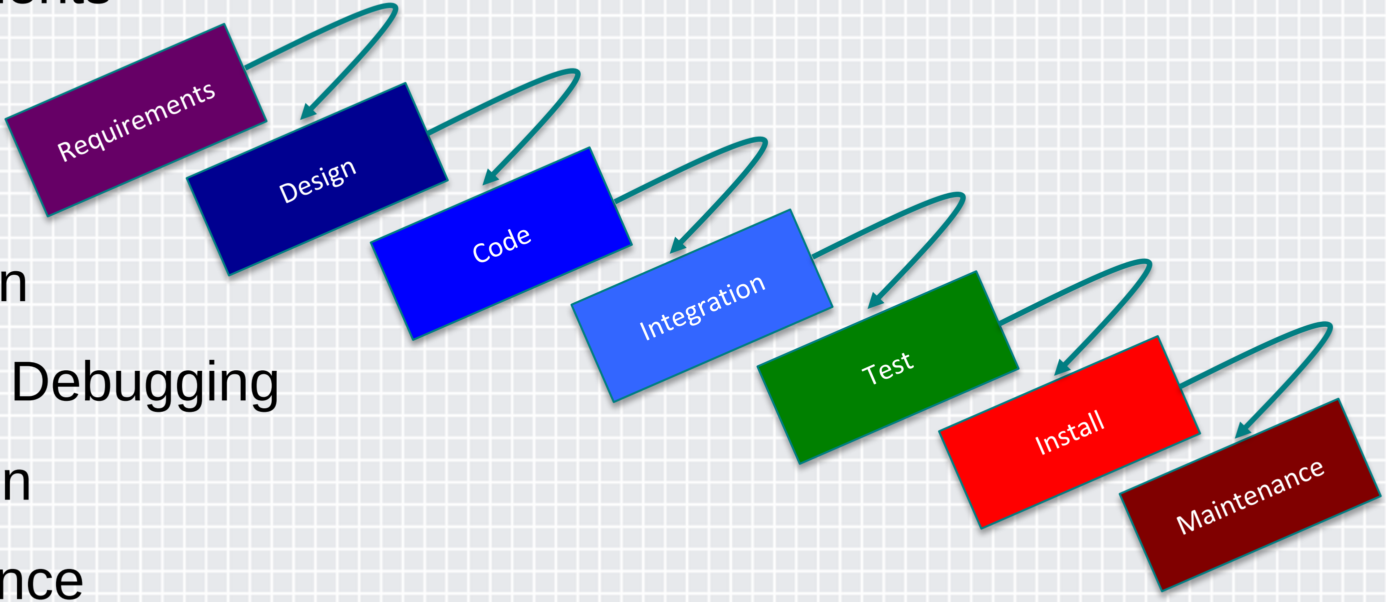
Stuff gets thrown over the fence

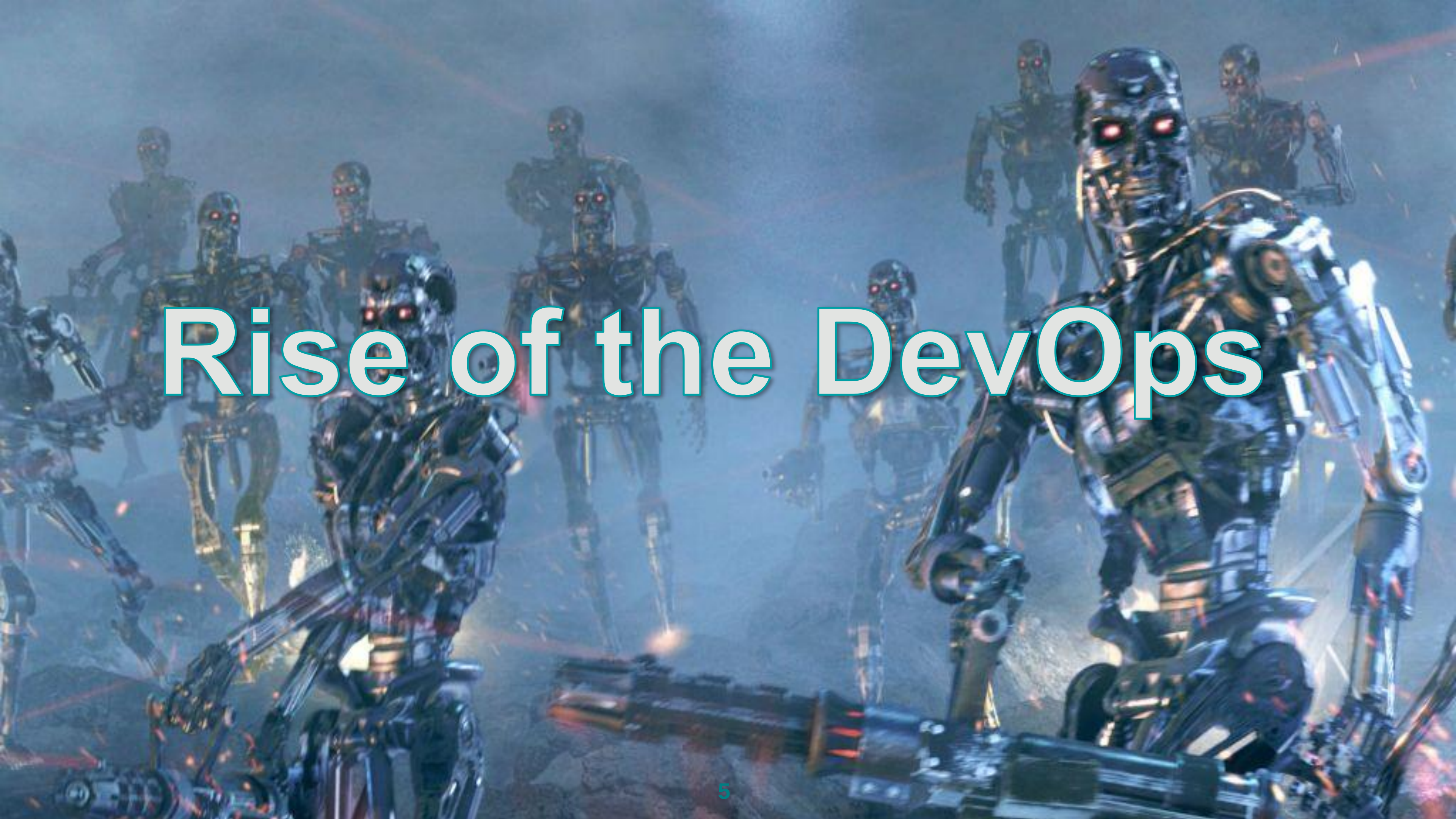
So Where Did All This Start?

- The traditional development methodology is a sequential design process commonly referred to as “Waterfall”
- Originally created in the manufacturing and construction industries where changes in scope are not typically possible due to costs
- First documented in software development in 1970
- **For some software companies it’s still in use today…**

What’s a Waterfall Look Like?

- Requirements
- Design
- Code
- Integration
- Testing & Debugging
- Installation
- Maintenance





Rise of the DevOps

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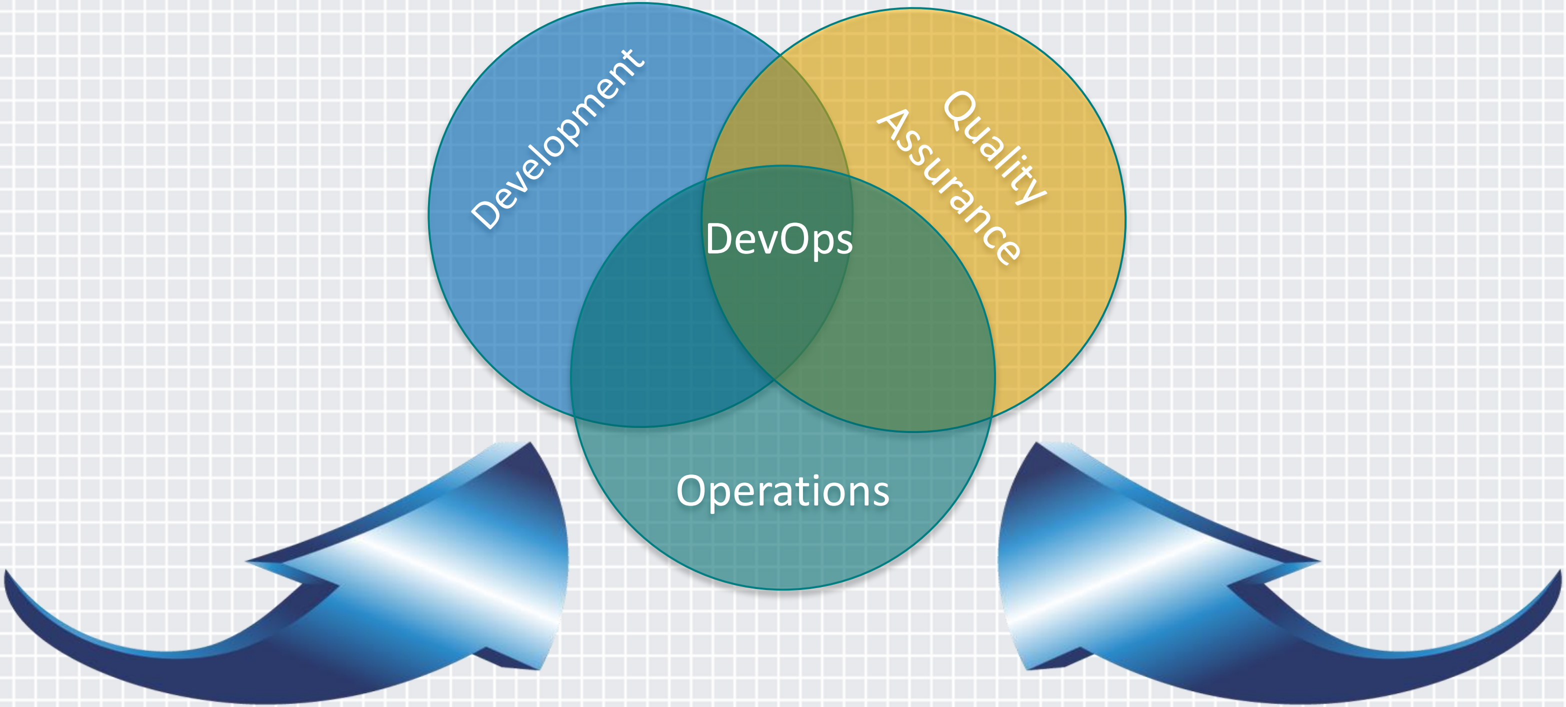


Now That DevOps Rules….

github
SOCIAL CODING

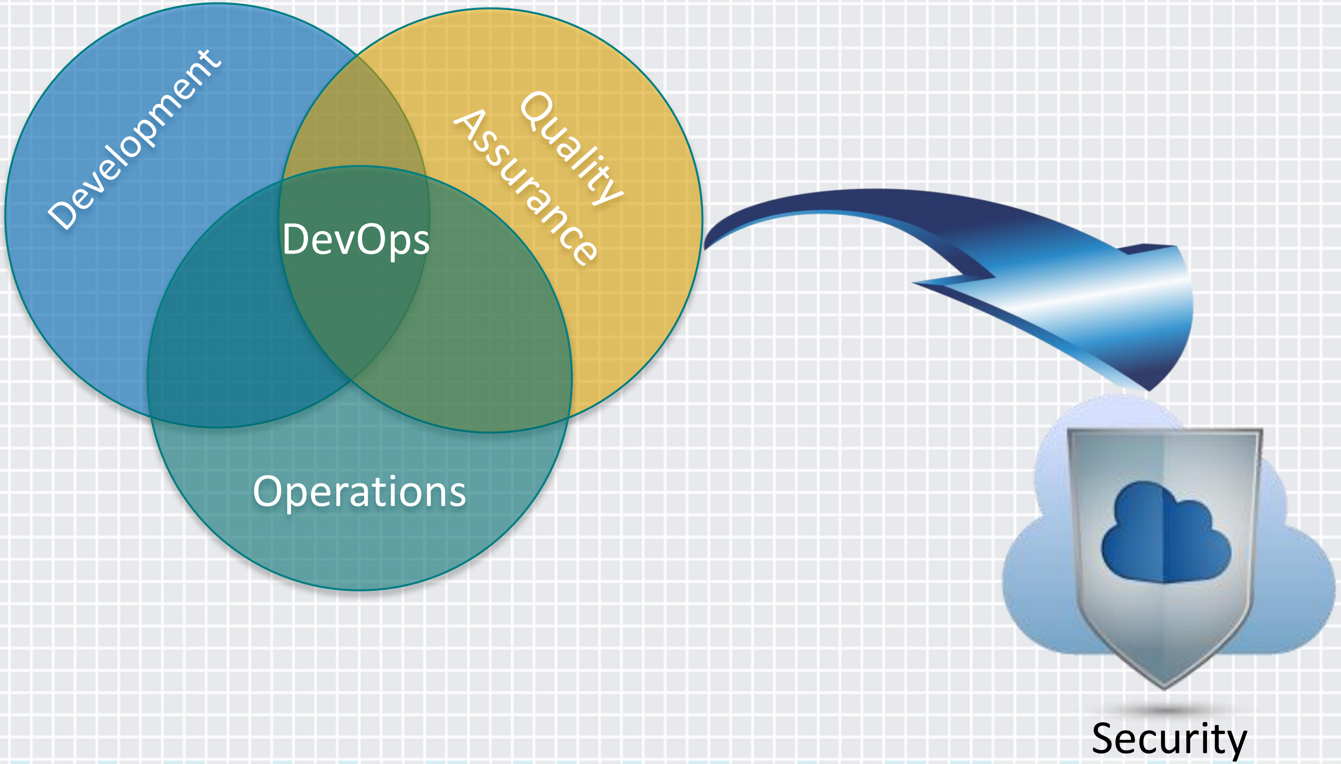
Jenkins

Nagios®

puppet
labs®

logstash

The New Waterfall



It’s all about the mergers

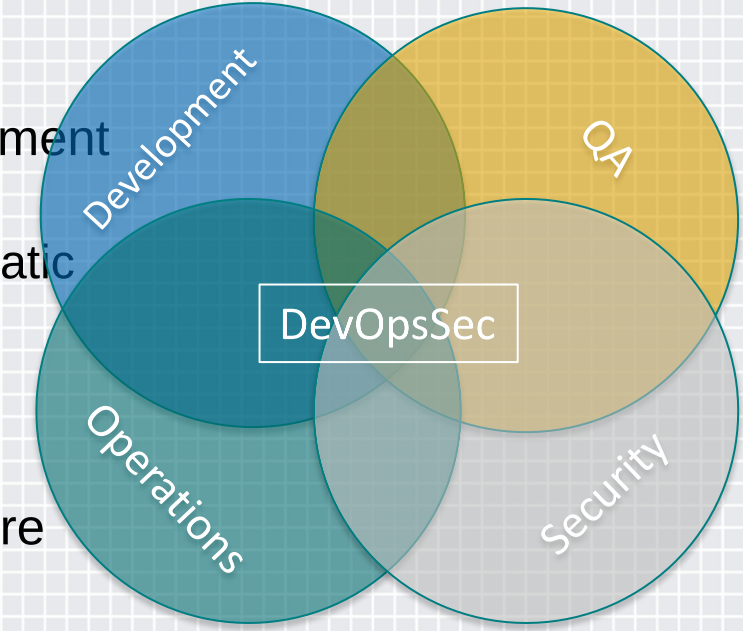
If merging Development with Operations was so successful, why not include Security?

“Nothing is so painful to the human mind as great and sudden change.

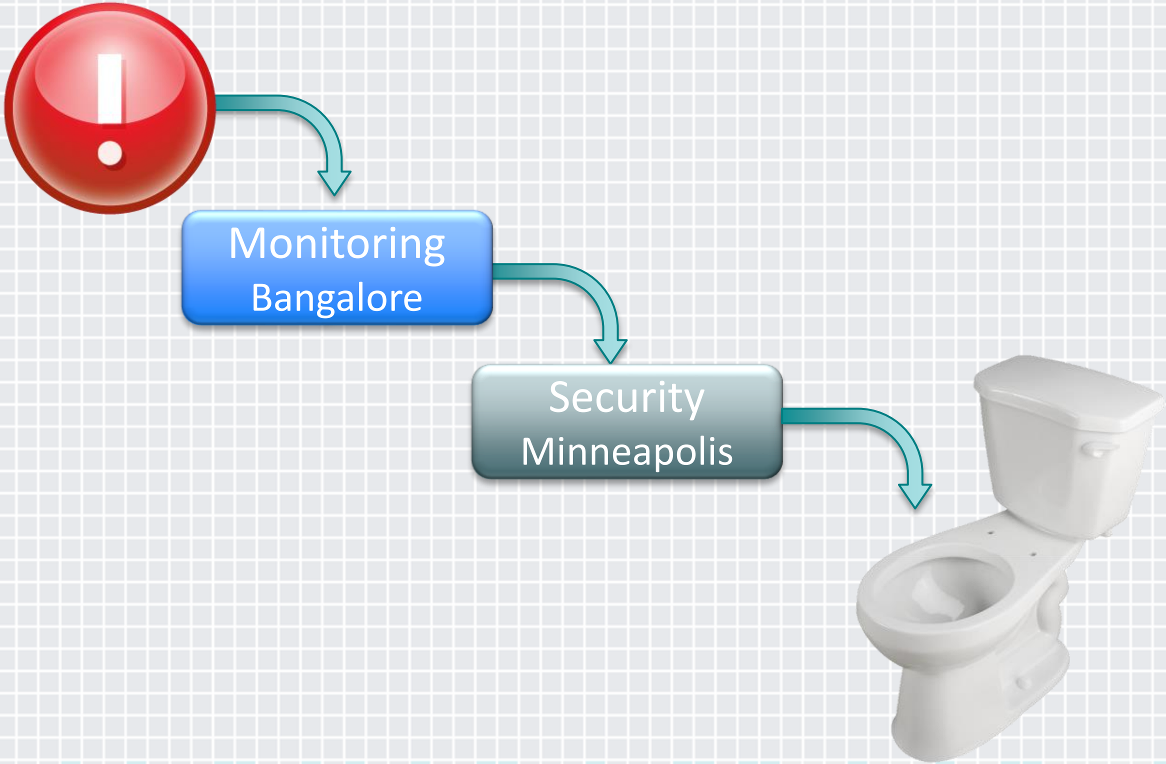
Mary Shelley, *Frankenstein*

Along comes DevOpsSec

- Security is no longer at the end of the Waterfall
  - Application Security is part of the Development and tested in QA
    - Web App Testing, OWASP, PenTesting, Static Code analysis
  - Security Operations is part of Ops
    - Logging, Monitoring, IDS,
  - Infrastructure Security is part of Architecture
    - Firewalls, Proxies, IPS, Anti-virus, APT Detection



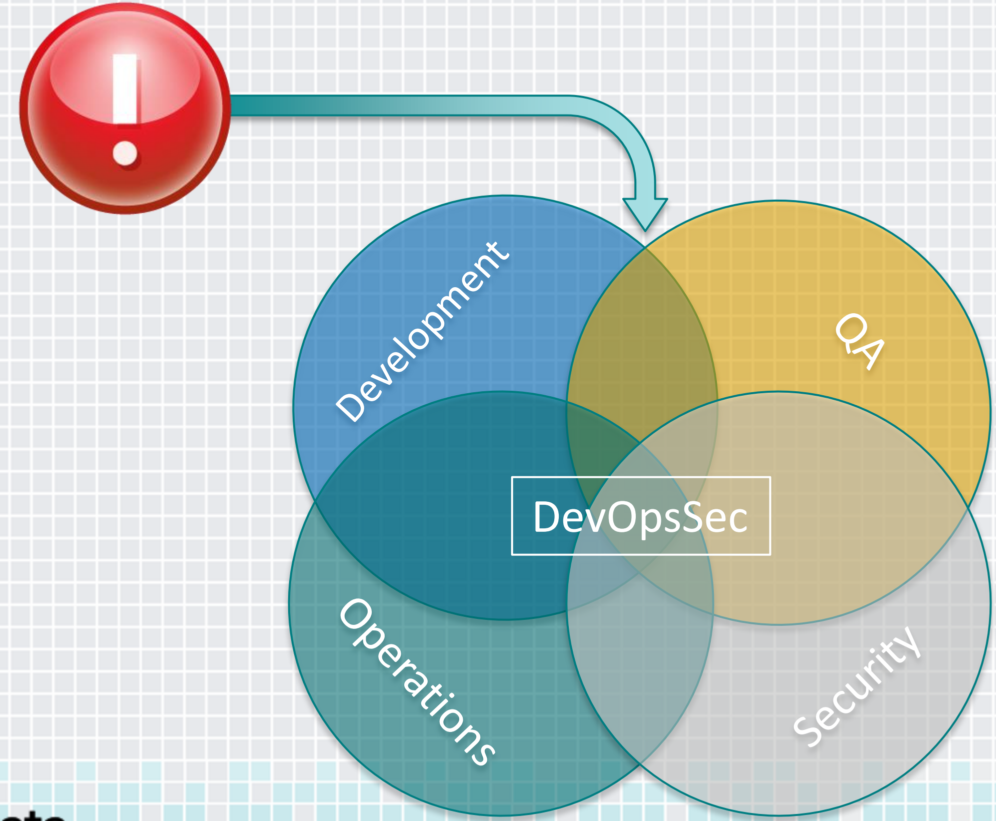
Reduce Failures in Incident Response



Monitoring
Bangalore

Security
Minneapolis

What Should Have Happened



Personal Experience

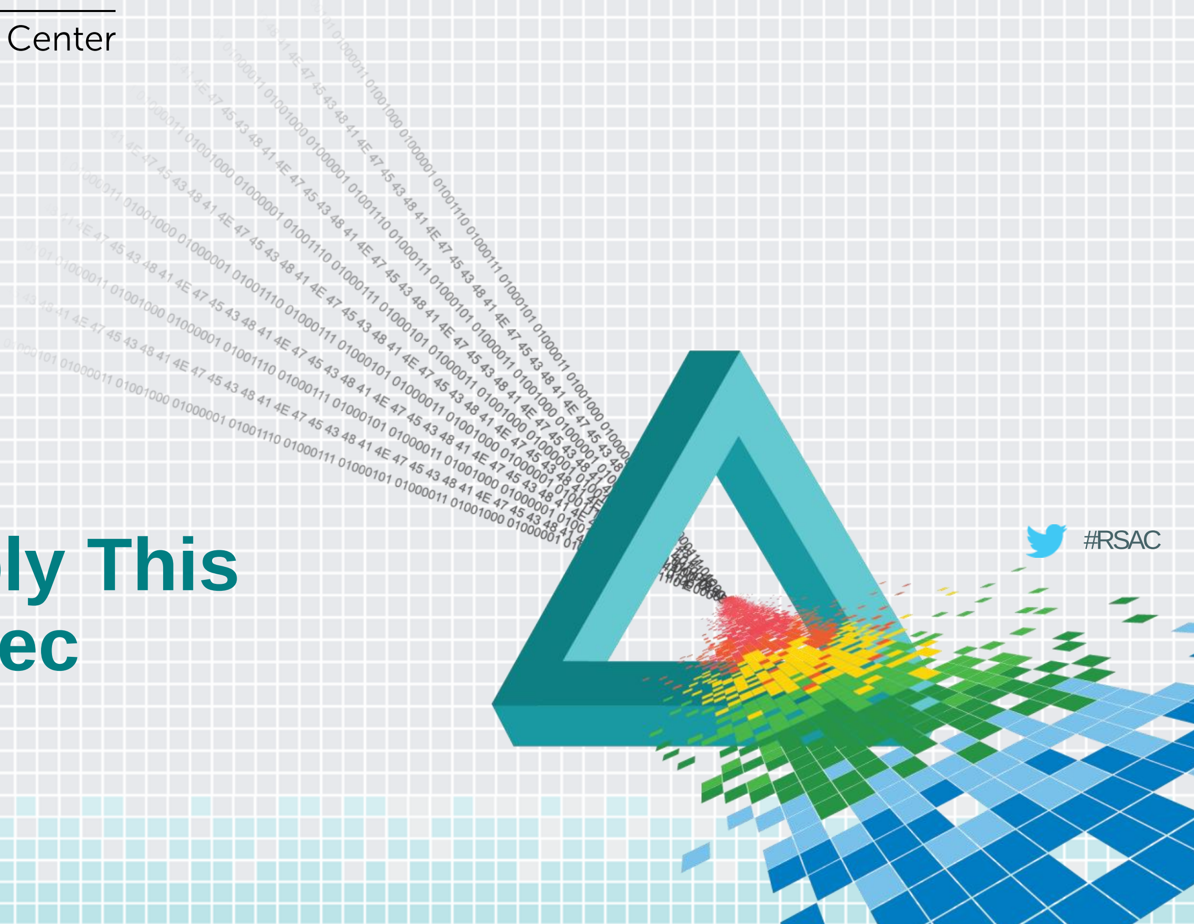
Using DevOpsSec

- Shellshock – 60 minutes
- Poodle – 3 days
- Ghost – 3 days

Using traditional silos

- Shellshock – 8 weeks
- Poodle – 6 weeks
- Ghost – 8 weeks

How Can You Apply This Outside DevOpsSec



#RSAC

COMPLIANCE is the new BLACK

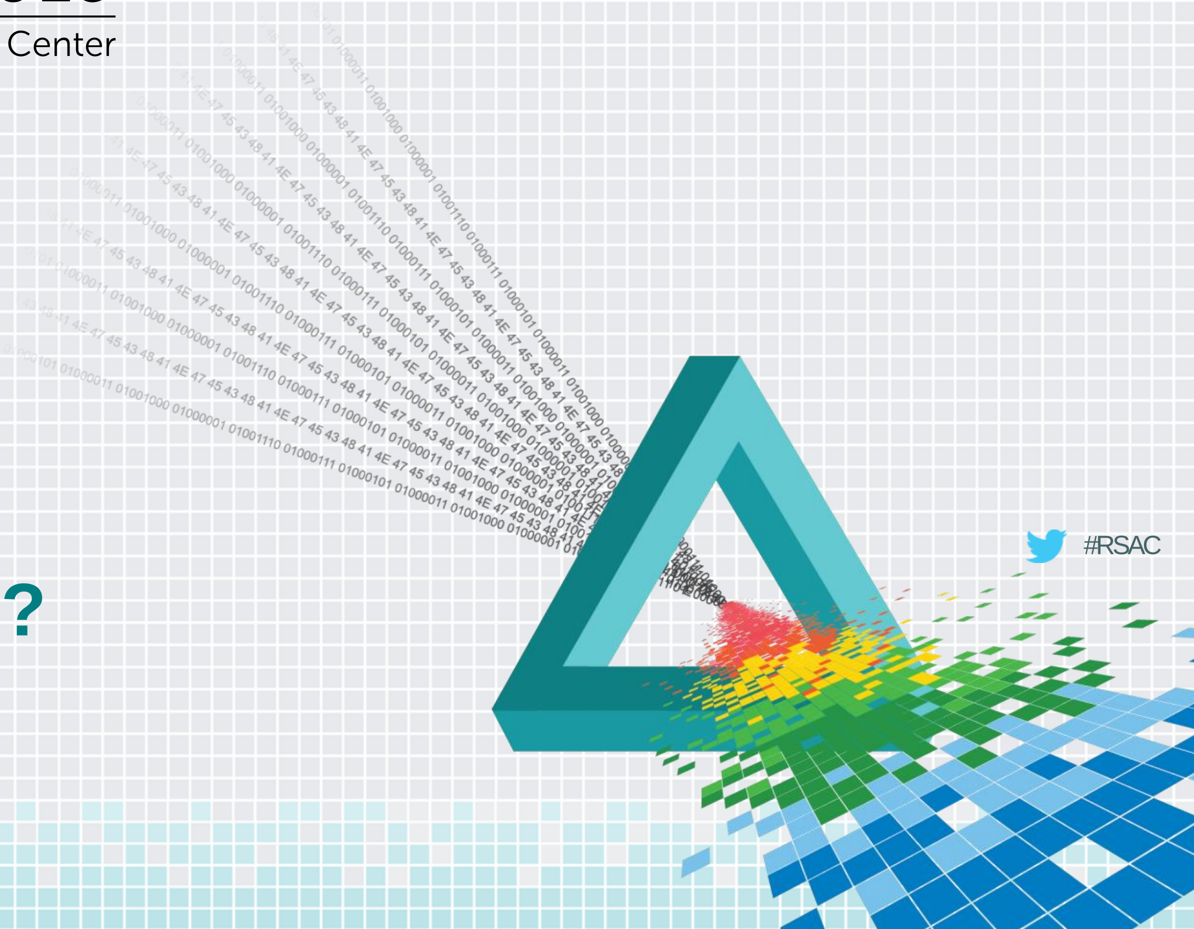
Governance, Policies and Contracts…Oh My!

- **Privacy professional** – International compliance
- **Auditor** – Validate compliance
- **Documentation Specialist** – Document how to comply
- **Training** – Teach employees how to stay compliant
- **Legal** – Contractual compliance

What Can They Do?

- Deliver Sprint like runs when dealing with:
  - Contract negotiations to ensure they reflect what the company can delivery
  - Document the requirements that come out of the contracts
  - Build training programs that target subjects needed to ensure security and compliance based on the regulations they are operating in or based on the obligations in the contract
  - Verify what the DevOpsSec teams are doing to provide transparency back to the customers

Can we go further?



What About a Sales Team?

- **Sales Rep** – manage the sale
- **Compliance** – manage the security & privacy
- **Services** – manage the software requirements
- **Account Mgmt.** – manage the customer
- **Finance** – manage the terms
- **Legal** – manage the contract

What can YOU do?

- Find an internal example of where you “waterfall” your process
- Create a scrum team using representatives from each of the layers of the waterfall
- Enable the team to operate with autonomy and make decisions
- Review the effectiveness of the autonomous team
- Find other places in the Org to make changes

Further Reading

- Security monitoring – Penetration testing meets monitoring
  - Gareth Rushgrove
  - https://speakerdeck.com/garethr/security-monitoring-penetration-testing-meets-monitoring

- DevOpsSec: Appling DevOps Principles to Security
  - Nick Galbreath
  - http://www.slideshare.net/nickgsuperstar/devopssec-apply-devops-principles-to-security/

Thank You!

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