DevOps

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Who am I? Why am I here?

- Working as Systems Architect at Clemson University
- Actively involved with Open Source projects
  - SaltStack
  - OpenStack
  - GitLab
- Speaker at conferences:
  - SaltConf15, SaltConf16 (Keynote)
  - OpenStack Summit 2015 (Tokyo, Japan)
  - openSUSE Conference 2016 (Nuremberg, Germany)
- Certified and experienced using DevOps Tools
What is DevOps?
DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality.

- Bass, Weber, and Zhu
Definition and history

- Term first introduced in 2008 by Andrew Shafer & Patrick Debois
- Has been used in multiple contexts
  - Culture?
  - Role?
  - Tool?
- Practice/Methodology aiming at unifying software development (Dev) and operations (Ops)
- Not as simple as combining Dev and Ops
Goals

• Continuous Development
• Continuous Testing
• Continuous Integration
• Continuous Deployment
• Continuous Monitoring
What isn’t DevOps?
DevOps is NOT ... 

- Single term or a single process
- Developers trying to take over operations
- Just the use of CI/CD tools
- Just a culture
- Just a role/job title
- Just Dev and Ops
Significance of DevOps
Why DevOps?

- Shorter and Faster Development cycles
- Lesser deployment failures, rollbacks, time to recovery
- Improved collaboration
- Increased productivity and efficiency
- Reduced Cost
DevOps: Challenges
Challenges

• Culture
• Automation
• Legacy systems
• App complexity
• Skillset & Tools
Questions?

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