DevOps for Defense PLAN **DEV OPS** LERIAL MONITOR

DevOps for Defense Meetup: Code of Conduct

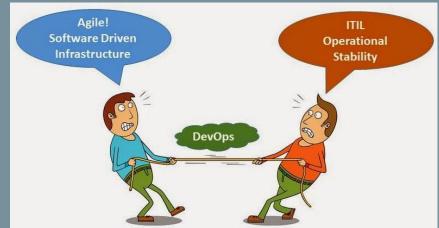
- UNCLASSIFIED ONLY!!!!
- Treat each other with respect and professionalism.
- Do not talk about private, sensitive, or proprietary work.
- Do talk about your experiences, needs, desires to improve work in our domain.
- Do share your thoughts.
- Do learn from others.
- Do respect & tip your bartenders!



Note: Gene Kim likes Scotch Rocket

Dev vs Ops







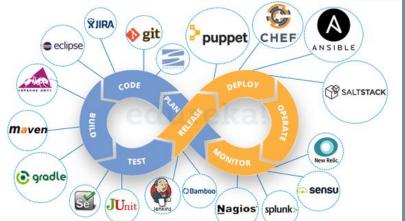


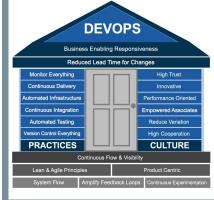
What is DevOps?

Agile++
NoOps
Wild West





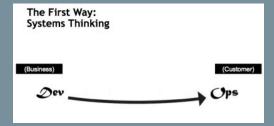




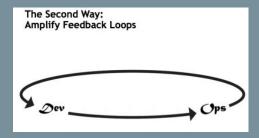


Core of DevOps

The 1st Way: Systems Thinking & Flow

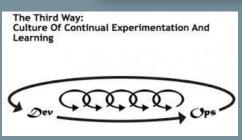


The 2nd Way: Feedback



DevOps Handbook HOW TO CREATE WORLD-CLASS AGILITY, RELIABILITY, & SECURITY IN TECHNOLOGY ORGANIZATIONS Gene Kim, lez Humble. Patrick Debois. & John Willis FOREWORD BY IOHN ALLSPAW

The 3rd Way: Experimentation & Learning



What is the Goal of DevOps?

When we can safely, quickly, reliably, securely achieve all the needs, goals, dreams and aspirations of everyone we serve...

...especially our citizens and warfighters

Why DevOps?

High Performers Are More Agile

46x

more frequent deployments

440x

faster lead times than their peers

High Performers Are More Reliable

5x

lower change failure rate

96x

faster mean time to recover (MTTR)

surce: Puppet DORA: 2017 State Of DevOps Report: https://puppet.com/resources/whitepaper/state-of-devops-repo

(Sectional)

urce: PuppetDORA: 2017 State Of DevOps Report: https://puppet.com/resources/whitepaper/state-of-devops-report

(B) (Sept (September 1))

High Performers Are More Secure And Controlled

2x

less time spent remediating security issues 29%

more time spent on new work

High Performers Win In The Marketplace

2x

more likely to exceed profitability, market share & productivity goals 2x

more likely to achieve organizational and mission goals, customer satisfaction, quantity & quality goals High Performers Win In The Marketplace

2.2x

higher employee Net Promoter Score 50%

higher market capitalization growth over 3 years*

(E)res

surce: Puppet DORA: 2017 State Of DevOgs Report. https://puppet.com/resources/whitepaper/state-of-devops-report

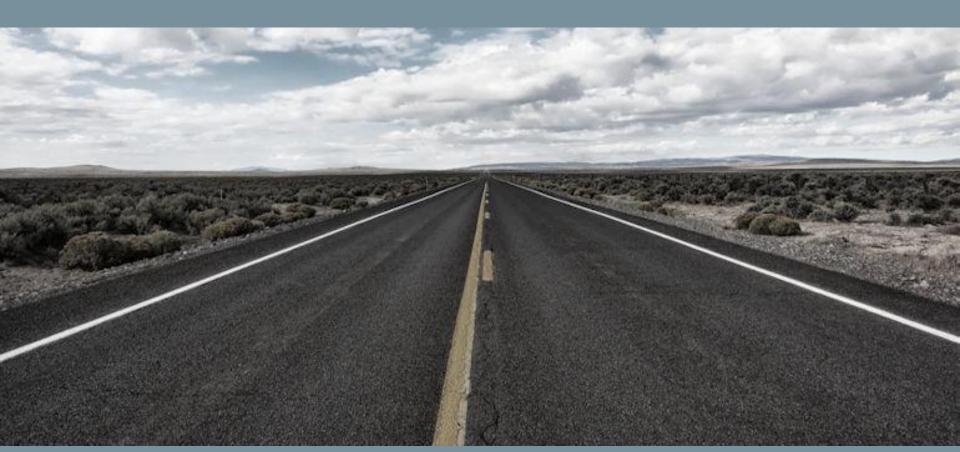
Differed Characteristics

lource: Puppet Labs 2016 State Of DevOps Report: https://puppet.com/resources/white-paper/2016-state-of-devops-report

(BENDESAN)

re: Puppet Labs 2016 State Of DevOps Report: https://puppet.com/resources/white-paper/2016-state-of-devops-report

How do we get to DevOps?



Key Capabilities that Drive High Performance

Technology and automation

- Version control
- · Deployment automation
- · Continuous integration
- Trunk-based development
- Test automation
- · Test data management
- · Shift left on security
- · Continuous delivery
- · Loosely-coupled architecture
- · Architect for empowered teams

@nicolefy



Process

- Gather and implement customer feedback
- · Work in small batches
- · Lightweight change approval process
- Team experimentation

@nicolefv



Measurement and Monitoring

- Visual management
- Monitoring for business decisions
- Check system health proactively
- WIP limits
- Visualizations

Culture

- · Westrum organizational culture
- · Climate for learning
- Collaboration among teams
- · Make work meaningful
- · Transformational leadership





DevOps Seems Easy...Right?

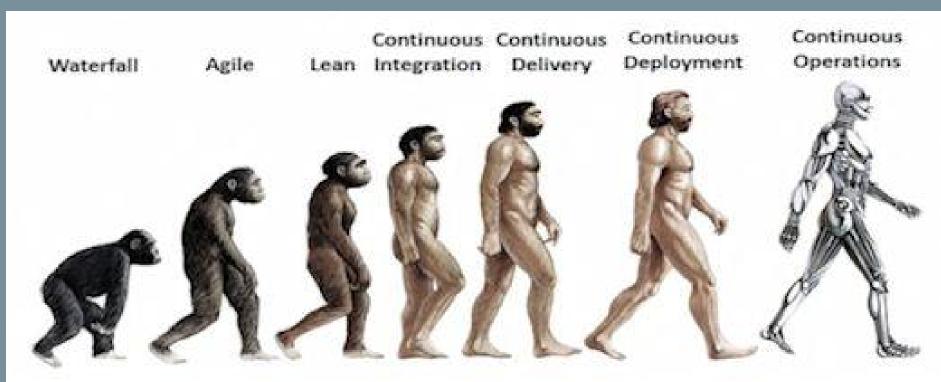
"Risk is a consequence of progress."

- Grier Wilt - EVA Flight Controller

"It takes a change in people, a change in thinking, a change in culture..."

- Chris Kraft - Flight Director, MSC/JSC Director

Where are we today?



What Are The Biggest Obstacles to DevOps in Defense?

- > Take two note cards and a marker.
- > On each card, write down one obstacle.
- Lay all the cards on a table.
- Take a few minutes to read the cards (stack duplicates you see).
- ➤ With your marker, vote by putting a dot on the top 3 obstacles you see to achieving DevOps in Defense.

DevOps Resources

Books / Publications:

- The Phoenix Project
- The DevOps Handbook
- Continuous Delivery
- Lean Enterprise
- Lean Startup
- The State of DevOps Report

Conference Presentations (YouTube):

- DevOps Enterprise Summit (DOES)
- Velocity
- GoTo

Thank You for Attending DevOps for Defense!

We'll meet again on January 4th.

Send me your feedback and ideas...volunteer to present a topic or lead a breakout!

Special thanks to those I "liberally borrowed" material from:

Gene Kim, Nicole Forsgren, Jez Humble, anyone who puts DevOps images on the internet!

Take some time to talk with the people around you. Meet 1 new person today!

Thank Rocket Republic for hosting us! Tip your bartenders!!!