Devops Workshop
(Introduction)

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  • Books
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  • Patterns and Practices

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  • Understanding the Value Stream
  • Value Stream Mapping
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  • Deployment Strategies

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Happy 5th Anniversary, Phoenix Project!
Introduction to DevOps: Transforming and Improving Operations

Learn how to transform your organization using the principles and practices of DevOps.

About this course

"Introduction to DevOps: Transforming and Improving Operations" aims to help you develop a good working knowledge of the concept of DevOps, covering the foundation, principles, and practices of DevOps. This course will focus on the successful patterns used by high performance organizations over the past 10 years.

See more
- Module 1: The Phoenix Project
- Module 2: Goldratt
- Module 3: Deming
- Module 4: Lean
- Module 5: Safety Culture
- Module 6: Learning Organizations
- Module 7: Lean, Safety and Learning
- Module 8: Case Studies
- Module 9: Conclusion
References

BEYOND THE PHOENIX PROJECT (TRANSCRIPT)

The Origins and Evolution of DevOps (Official Transcript of the Audio Series)

GENE KIM, JOHN WILLIS

$9.99

In this transcript of the audio series, Gene Kim and John Willis present a nine-part discussion that includes an oral history of the DevOps movement, as well as discussions around pivotal figures and philosophies that DevOps draws upon, from Goldratt to Deming; from Lean to safety culture to learning organizations. The book is a great way for listeners to take an even deeper dive into topics relevant to DevOps and leading technology organizations.
IT Revolution Research Papers

- Mythbusting DevOps in the Enterprise
  - Addressing Culture and Leadership Aspects during Transforming

- Value Stream Architecture
  - Modernizing Traditional Enterprise Operating Models

- Moving from Project to Product
  - Overcoming Inefficiencies in Multiple Work Management Systems

- Industrial DevOps
  - Implementing DevOps and Data-Driven Decisions for Maximum Impact

- Transformational Leadership:
  - Tactics for Leading Change

- IT Operations in the Age of DevOps
  - Engaging with the Digital Business Transformation

- Tactics for Leading Change
  - Evaluating DevOps Patterns and Practices That Work Best for Your Business
Section 1 - Resources

References
Recommended Resources

- The Three Ways: The Principles Underpinning DevOps
- A Personal Reinterpretation Of The Three Ways
  - http://itrevolution.com/a-personal-reinterpretation-of-the-three-ways/
  - https://blog.docker.com/2015/05/docker-three-ways-devops/
Extra Resources

- Docker and the Three Ways of Devops
  - [https://www.docker.com/sites/default/files/WP_Docker%20and%20the%20Three%20Ways%20of%20Devops_07.31.2015%20v1.0.pdf](https://www.docker.com/sites/default/files/WP_Docker%20and%20the%20Three%20Ways%20of%20Devops_07.31.2015%20v1.0.pdf)
Recommended Resources

- DevOps Connect cdSummit: John Willis Kata Presentation
  - https://www.youtube.com/watch?v=0N0SBcp0mjY
- The Convergence of DevOps
  - http://itrevolution.com/the-convergence-of-devops/
- Operations is a competitive advantage… (Secret Sauce for Startups!)  
- The History Of DevOps
  - http://itrevolution.com/the-history-of-devops/
- Velocity 09: John Allspaw and Paul Hammond, "10+ Deploys Per Day
  - https://www.youtube.com/watch?v=LdOe18KhtT4
- The DevOps Transformation
  - https://www.youtube.com/watch?v=3KpPBnEtRj4
- Agile Infrastructure with Andrew Shafer – Agile Executive 004
Extra Resources

- Botchagalupe Presentations
  - https://gist.github.com/botchagalupe/984acf7b7ffe9eb287ffe
- The Andon Cord
  - http://itrevolution.com/kata/
- Netflix: Culture and Responsibility
  - http://www.slideshare.net/reed2001/culture-1798664/
- Spotify engineering culture (part 1)
- Agile Infrastructure Velocity 09 (wall of confusion)
  - http://www.slideshare.net/littleidea/agile-infrastructure-velocity-09
- there is no talent shortage -- velocity NYC 2013 -- andrew clay shafer
  - https://www.youtube.com/watch?v=P_sWGl7MzhU
- What is DevOps? (Wall of Confusion)
  - http://dev2ops.org/2010/02/what-is-devops/
Recommended Resources

- AWS - Transforming Software Development
  - https://www.youtube.com/watch?v=YCrhemssYuI
- Gene Kim - Leading A DevOps Transformation: Lessons Learned
  - http://www.slideshare.net/realgenekim/leading-a-devops-transformation-lessons-learned
- CAMS - What Devops Means to Me
  - https://www.chef.io/blog/2010/07/16/what-devops-means-to-me/
- The Agile Admin - What Is DevOps?
  - https://theagileadmin.com/what-is-devops/
Extra Resources

- Knight Capital
- 2015 State of DevOps Report
- Ron Westrum Model
  - [http://qualitysafety.bmj.com/content/13/suppl_2/ii22.full.pdf+html](http://qualitysafety.bmj.com/content/13/suppl_2/ii22.full.pdf+html)
- Lean software development
  - [https://en.wikipedia.org/wiki/Lean_software_development](https://en.wikipedia.org/wiki/Lean_software_development)
- DevOps Enterprise Summit 2014
  - [https://www.youtube.com/user/DOES2014](https://www.youtube.com/user/DOES2014)
- DevOps Enterprise Summit 2015
  - [https://www.youtube.com/channel/UCkyYEVVmT9vQ4yPBR4ciFUA](https://www.youtube.com/channel/UCkyYEVVmT9vQ4yPBR4ciFUA)
- CONTINUOUS DELIVERY
  - [https://continuousdelivery.com/](https://continuousdelivery.com/)
Section 2 - Resources
References
Recommended Resources

- David Anderson Kanban At Q Con
  - [http://www.slideshare.net/deimos/david-anderson-kanban-at-q-con](http://www.slideshare.net/deimos/david-anderson-kanban-at-q-con)

- Kanbans and DevOps: Resource Guide for “The Phoenix Project” (Part 2)
Extra Resources

- Personal Kanban: Mapping Work | Navigating Life
  - [https://www.amazon.com/Personal-Kanban-Mapping-Work-Navigating/dp/1453802266/ref=sr_1_1?&s=books&ie=UTF8&qid=1466121877&sr=1-1&keywords=jim+benson](https://www.amazon.com/Personal-Kanban-Mapping-Work-Navigating/dp/1453802266/ref=sr_1_1?&s=books&ie=UTF8&qid=1466121877&sr=1-1&keywords=jim+benson)

- Kanban: Successful Evolutionary Change for Your Technology Business
Recommended Resources

- The Small Batches Principle
  - [http://queue.acm.org/detail.cfm?id=2945077](http://queue.acm.org/detail.cfm?id=2945077)

- Watch This One Piece Flow vs. Mass Production Envelope Stuffing Lean Thinking Simulation
  - [https://www.youtube.com/watch?v=Dr67i5SdXiM](https://www.youtube.com/watch?v=Dr67i5SdXiM)

- Web Operations: Keeping the Data on Time (Chapter 4)
Extra Resources

- The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses
  - [https://www.amazon.com/Lean-Startup-Entrepreneurs-Continuous-Innovation/dp/0307887898](https://www.amazon.com/Lean-Startup-Entrepreneurs-Continuous-Innovation/dp/0307887898)
Recommended Resources

- David Anderson Kanban At Q Con
  - http://www.slideshare.net/deimos/david-anderson-kanban-at-q-con
- DOES15 - Dominica DeGrandis - The Shape of Uncertainty
  - https://www.youtube.com/watch?v=Gp05i0d34gg
Extra Resources

▪ Personal Kanban: Mapping Work | Navigating Life
  ▪ https://www.amazon.com/Personal-Kanban-Mapping-Work-Navigating/dp/1453802266/ref=sr_1_1?&ie=UTF8&qid=1466121877&sr=1-1&keywords=jim+benson

▪ Kanban: Successful Evolutionary Change for Your Technology Business
  ▪ https://www.amazon.com/Kanban-Successful-Evolutionary-Technology-Business/dp/0984521402
Recommended Resources

- Theory of constraints
Extra Resources

- Beyond the Goal: Eliyahu Goldratt Speaks on the Theory of Constraints (Your Coach in a Box)
Recommended Resources

- Lean software development
  - [https://en.wikipedia.org/wiki/Lean_software_development](https://en.wikipedia.org/wiki/Lean_software_development)
Extra Resources

- Lean Software Development: An Agile Toolkit
Recommended Resources

- Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation

- DevOps Kaizen: Practical Steps to Start & Sustain a Transformation
  - http://www.slideshare.net/dev2ops/devops-kaizen-practical-steps-to-start-sustain-a-transformation
Extra Resources

- Learning to See: Value Stream Mapping to Add Value and Eliminate MUDA
  - [https://www.amazon.com/Learning-See-Stream-Mapping-Eliminate/dp/0966784308?ie=UTF8&hvadid=30911744901&hvdev=c&hvexid=&hvnetw=g&hvpone=60.00&hvpos=1t1&hvptwo=&hvqmt=b&hvrand=8624445624253798359&ref=pd_sl_3hk32rzq94_b&tag=googhydr-20](https://www.amazon.com/Learning-See-Stream-Mapping-Eliminate/dp/0966784308?ie=UTF8&hvadid=30911744901&hvdev=c&hvexid=&hvnetw=g&hvpone=60.00&hvpos=1t1&hvptwo=&hvqmt=b&hvrand=8624445624253798359&ref=pd_sl_3hk32rzq94_b&tag=googhydr-20)

- Support and Initiate a DevOps Transformation
  - [http://www.slideshare.net/dev2ops/support-and-initiate-a-devops-transformation](http://www.slideshare.net/dev2ops/support-and-initiate-a-devops-transformation)

- The Satir Change Model
Extra Resources

- Beyond the Goal: Eliyahu Goldratt Speaks on the Theory of Constraints (Your Coach in a Box)
Recommended Resources

- Lean software development
  - https://en.wikipedia.org/wiki/Learn_software_development
Extra Resources

- Lean Software Development: An Agile Toolkit
Recommended Resources

- Value Stream Mapping: How to Visualize Work and Align Leadership for Organizational Transformation

- DevOps Kaizen: Practical Steps to Start & Sustain a Transformation
  - http://www.slideshare.net/dev2ops/devops-kaizen-practical-steps-to-start-sustain-a-transformation
Extra Resources

▪ Learning to See: Value Stream Mapping to Add Value and Eliminate MUDA
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▪ Support and Initiate a DevOps Transformation
  ▪ http://www.slideshare.net/dev2ops/support-and-initiate-a-devops-transformation

▪ The Satir Change Model
  ▪ http://stevenmsmith.com/ar-satir-change-model/
Section 3 - Resources

References
Recommended Resources

- Why Order Matters: Turing Equivalence in Automated Systems Administration
Recommended Resources

- Continuous Delivery: Reliable Software Releases through Build, Test, and Deployment Automation
  - Jen Humble and David Farley

- The Practice of Cloud System Administration: Designing and Operating Large Distributed Systems, Volume 2
  - Thomas A. Limoncelli

- Effective DevOps: Building a Culture of Collaboration, Affinity, and Tooling at Scale
  - Jennifer Davis and Katherine Daniels
Section 4 - Resources
References
Recommended Resources

- Simple math for anomaly detection toufic
Extra Resources

- The Art of Monitoring
  - https://www.artofmonitoring.com/
- Monitoring with Graphite Tracking Dynamic Host and Application Metrics at Scale
- Monitorama’s Videos
  - https://vimeo.com/monitorama/videos/
Recommended Resources

- GameDay: Creating Resiliency Through Destruction
  - [https://www.youtube.com/watch?v=zoz0ZjfrQ9s](https://www.youtube.com/watch?v=zoz0ZjfrQ9s)

- Resilience Engineering: Learning to Embrace Failure
  - [http://queue.acm.org/detail.cfm?id=2371297](http://queue.acm.org/detail.cfm?id=2371297)

- Fault Injection in Production - Making the case for resilience testing
  - [http://queue.acm.org/detail.cfm?id=2353017](http://queue.acm.org/detail.cfm?id=2353017)

- The Netflix Simian Army

- FIT : Failure Injection Testing
  - [http://techblog.netflix.com/2014/10/fit-failure-injection-testing.html](http://techblog.netflix.com/2014/10/fit-failure-injection-testing.html)
Recommended Resources

- DevOps keeps it cool with ICE
- The Cynefin Framework
  - [https://www.youtube.com/watch?v=N7oz366X0-8](https://www.youtube.com/watch?v=N7oz366X0-8)
- Web Operations: Keeping the Data on Time (Chapter 7)
- Empathy: The Essence of DevOps
Extra Resources

- Effective DevOps

- Reversing Burnout

- Botchagalupe on Burnout
  - [https://gist.github.com/botchagalupe/984acf7b7ffe5b287ffe#burnout](https://gist.github.com/botchagalupe/984acf7b7ffe5b287ffe#burnout)
Recommended Resources

▪ Feature flags, dark launches, and canary releases for all: LaunchDarkly first year in review
▪ Feature flags and canary, dark, and A/B releases
▪ How does Etsy manage development and operations?
Extra Resources

- The Practice of Cloud System Administration: Designing and Operating Large Distributed Systems, Volume 2
  - https://www.amazon.com/Practice-Cloud-System-Administration-Distributed/dp/032194318X
Understanding Monitoring

- Anomaly Detection
  - http://doi.acm.org/10.1145/1541880.1541882
Recommended Resources

- GameDay: Creating Resiliency Through Destruction
  - https://www.youtube.com/watch?v=zoz0ZjfrQ9s
- Resilience Engineering: Learning to Embrace Failure
  - http://queue.acm.org/detail.cfm?id=2371297
- Fault Injection in Production - Making the case for resilience testing
  - http://queue.acm.org/detail.cfm?id=2353017
- The Netflix Simian Army
- FIT : Failure Injection Testing
Extra Resources

- The Practice of Cloud System Administration: Designing and Operating Large Distributed Systems, Volume 2
  - https://www.amazon.com/Practice-Cloud-System-Administration-Distributed/dp/032194318X
Recommended Resources

- Simple math for anomaly detection toufic
Section 5 - Resources
References
Recommended Resources

- Introduction to the Improvement Kata
  - [http://www.slideshare.net/mike734/introduction-to-the-improvement-kata](http://www.slideshare.net/mike734/introduction-to-the-improvement-kata)
- DOES15 - Courtney Kissler & Jason Josephy - Mindsets and Metrics and Mainframes... Oh My!
  - [https://www.youtube.com/watch?v=88_y1YFsRig](https://www.youtube.com/watch?v=88_y1YFsRig)
- DOES15 - Steve Spear - Creating High Velocity Organizations
  - [https://www.youtube.com/watch?v=onwhZwoQHs](https://www.youtube.com/watch?v=onwhZwoQHs)
- How Many Times Do You Pull the Andon Cord Each Day?
  - [http://gembapantarei.com/2008/04/how_many_times_do_you_pull_the_andon_cord_each_day.html](http://gembapantarei.com/2008/04/how_many_times_do_you_pull_the_andon_cord_each_day.html)
Recommended Resources

- Rebecca Miller-Webster - Frameworks for Feedback
- [https://youtu.be/WcdNAloTjfU?list=PL5pdUnQbCX6sgW8SUD0yE7dWiL1SHTO1o](https://youtu.be/WcdNAloTjfU?list=PL5pdUnQbCX6sgW8SUD0yE7dWiL1SHTO1o)
Extra Resources

- Botchagalupu Presentations
  - https://gist.github.com/botchagalupu/984acf7b7f7feeb287ffe
- The Heart of Change: Real-Life Stories of How People Change Their Organizations
  - https://www.amazon.com/Heart-Change-Real-Life-Stories-Organizations/dp/1422187330
- Spotify engineering culture (part 1)
- there is no talent shortage -- velocity NYC 2013 -- andrew clay shafer
  - https://www.youtube.com/watch?v=P_sWGl7MzhU
- Thinking in Systems: A Primer