Continuous Delivery

Wolf Schlegel
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What is it and how to do it?
Release on demand

http://www.flickr.com/photos/tmunki/411422996/
Working software

http://www.flickr.com/photos/gribbers/6435781551
Is this what your customers want?

http://www.flickr.com/photos/gtailed/4595013312/
Minimum viable product

http://www.flickr.com/photos/estevenson/589507682/
Listen to your customers
How to do it?

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http://www.flickr.com/photos/selasasore/572019699
Delivery pipeline

Backlog → Analysis → Automated tests → Manual tests → Automated CFR tests → Review → Story done → Live

Code & Commit → Automated tests → Manual tests → Automated CFR tests
Pipelining pipelines

- Review
- Manual Tests
- Live
- Automated Tests
- Analysis
- Backlog
- Code & Commit
- Story
- Done
- Automated CFR Tests
Walking skeleton

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Push the same button. Everybody
Standardise your environments

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Self service

http://www.freedigitalphotos.net/images/Oil_And_Gas_g393-Gas_Pump_Nozzles_At_Gas_Station_p77154.html
How many branches?

http://www.freedigitalphotos.net/images/Winter_g147-Tree_Branches_Without_Leaf_p42416.html
Pilots and technical debt

http://www.freedigitalphotos.net/images/Aircraft_g72-Wright_Flyer_III_Replica_p37800.html
http://www.freedigitalphotos.net/images/Aircraft_g72-Virgin_Atlantic_Jumbo_Jet_p81007.html
Beware of frameworks

http://www.freedigitalphotos.net/images/Decorative_g130-Golden_Picture_Frames_p25477.html
Code coverage

http://www.freedigitalphotos.net/images/Other_Architecture_g299-Peeling_Paint_p20412.html
Handling databases

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Go live

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Titanic releases and release trains

http://www.freedigitalphotos.net/images/Trains_g253-Tain_Seats_p21684.html
Find your next bottleneck

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Thank you
How can we help?

ThoughtWorks is a global custom software solutions consultancy trusted by many of the world’s leading businesses with their most complex and critical systems.

We deliver consulting grounded in delivery expertise, build custom applications and help organisations across all market sectors to drive IT efficiency — working to an exceptionally high standard.

Contact us

Wolf Schlegel
+49 173 543 7465
wolf.schlegel@.thoughtworks.com
www.thoughtworks.com
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Snapshots

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One size fits all?

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Just enough tools

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Understand what you automate

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Pipelining pipelines

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If it ain’t broke don’t fix it

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Cautious optimism

http://www.freedigitalphotos.net/images/Spring_g102-One_Drop_97741.html
Accept that things will break

http://www.freedigitalphotos.net/images/Diseases_and_Other_M_g287-Broken_Forearm_p19380.html
Textbook-ism
Understand the problem behind the problem

* But do not throw tools at it

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People are the key

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People are the key

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http://www.freedigitalphotos.net/images/Sports_g372-_Bicycle_Jump_p10049.html
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Building blocks

Basic deployment pipeline

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Components and their dependencies
Integration pipeline

J. Humble and D. Farley, Continuous Delivery
Branching

- Avoid feature branches
- Minimize merging and not deployable code

J. Humble and D. Farley, Continuous Delivery
Release branching strategy

- Create branches for releases only
- Merge bug fixes between release branches and trunk
- Keep branches and trunk deployable all time

J. Humble and D. Farley, Continuous Delivery
When to trigger builds?

- Cautious optimism model by Alex Chaffee
- Dependencies are static, guarded or fluid

J. Humble and D. Farley, Continuous Delivery
What is DevOps?

What happens here?

Delivery

Stability
DevOps in a nutshell

- DevOps = Dealing with the interface between dev and ops
- DevOps is **not** a role
- DevOps is part of what underpins Continuous Delivery
- DevOps leverages enablers known from agile software development
  - Communication
  - Collaboration
  - Automation

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Releases as non-events

Not hoping to release a Titanic every three months but hopping on a release train that departs often and reliably
Building blocks