

Automate everything

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Media Soft Day
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Agenda

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3. Operational environment
4. DevOps
5. Motivation for automation
6. Concepts & Actions
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 - Idea
 - Challenges
 - Technologies
 - Automation
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Introduction



Jouni Leino

- Senior Technology Consultant
 - Team Lead, SAP eCommerce Services
 - SAP Technology Consultant
 - eCommerce Consultant
 - Web Developer
- Competence:
 - eCommerce
 - SAP technologies
 - Web/Mobile development
 - Automation
 - DevOps

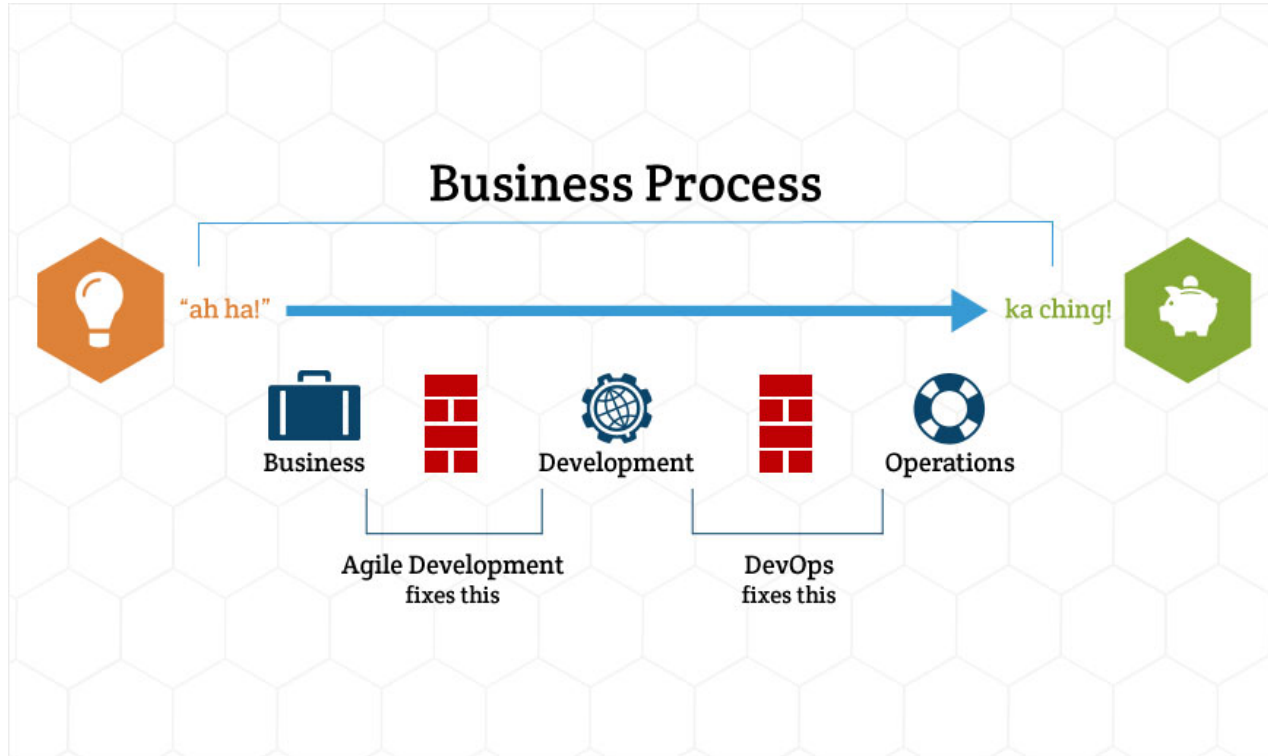
Common difficulties

- Is your company developing software in silos?
- Experiencing communication barriers?
- Still testing applications manually?
- Missing landscape details?
- Having inconsistent environments?
- Your sysadmin hero is a bottleneck?
- Are you constantly firefighting?

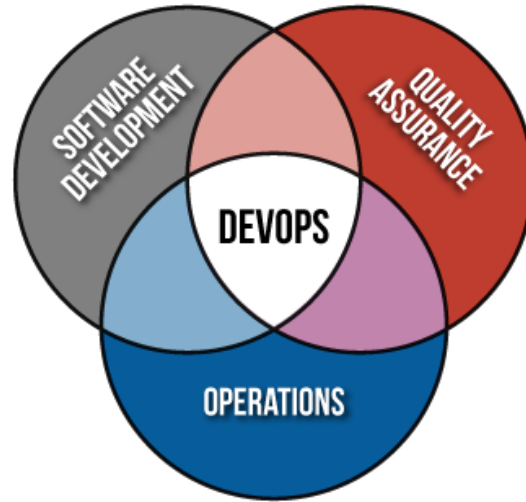
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Stop the madness!

Operational environment

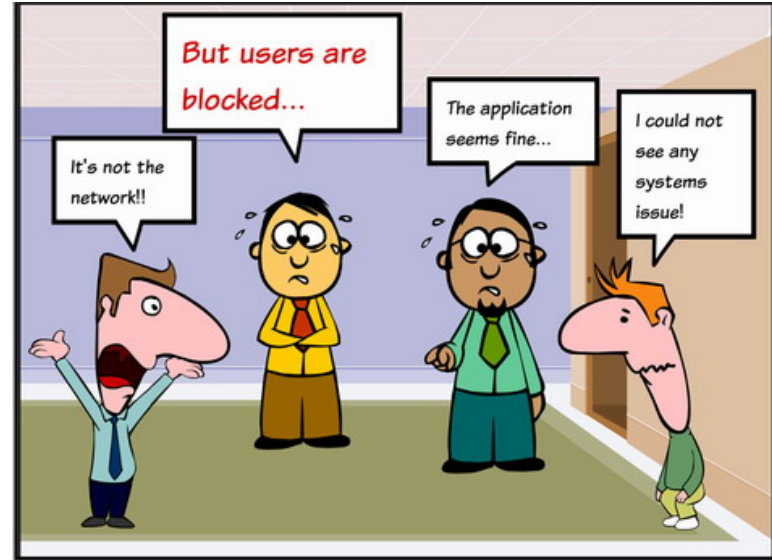


DevOps



Motivation for automation

- Repeatable operations
- Delivery certainty
- Improve quality
- Uniformity
- Disaster recovery
- Reducing costs
- Environment documentation
- Less firefighting
- More time to do interesting stuff



Concepts & Actions

DevOps

1. Infrastructure as Code
2. Continuous Delivery
3. Continuous Feedback Loop

Automate

- Environment provisioning
- Environment configuration
- Application build
- Application testing
- Application deployment
- Code quality inspection
- Server monitoring
- Application monitoring
- Feed improvement suggestions back into development process

Example Case



Communication between school and home needs better services.



Iiro Uusitalo

@iiusit



Follow

Ajattelin koodata Wilmalle kilpailijan - koodi tulee olemaan avointa lähdekoodia ja ilmainen. Muita mukana? Ping

[@katleena](#) [@rolle](#)

10:04 PM - 20 Jul 2015



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- Limited resources
- Multiple applications
- Various technologies
- 70+ community members
- Need to keep moving forward

Technologies



Frontend

- Angular JS
- npm
- Gulp

Backend

- Clojure

Database

- Postgres

Testing

- Robot framework
- Travis
- Karma
- Leiningen

Version control

- Github

Servers

- Upcloud

Domains

- AWS

Linux provisioning & configuration

- Ansible

Continuous integration

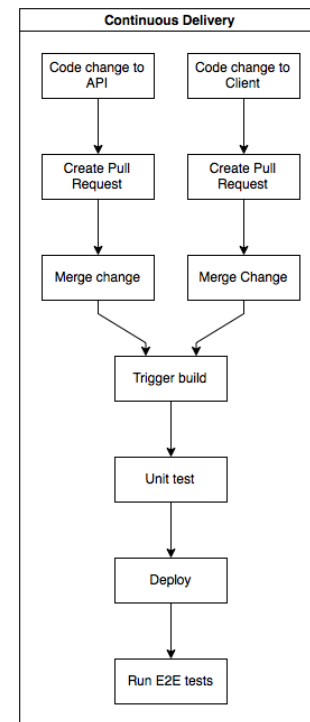
- Jenkins

Infrastructure as code

- Upcloud instances are provisioned with Ansible
- Server configurations are implemented with Ansible
- Jenkins jobs are created with DSL scripts

Continuous Delivery

1. Code
2. Create pull request
3. Merge change to master branch
 - Merge to API → Run Travis tests
 - Merge to Client → Run Karma tests
4. Trigger Build automatically
 - Clone repos to Jenkins workspace
 - Run Gulp build
 - Compile Clojure code
 - Combine Client and API to UberJAR file
5. Run Unit tests
6. Deploy
 - rsync JAR file to Upcloud server
7. Run end-to-end tests automatically
 - Jenkins triggers Robot framework tests
 - Robot executes test scenarios simulating user behavior in the browser



Continuous Feedback Loop

- Jenkins delivers test report
- Jenkins ping server
- Jenkins sends email notifications
- Jenkins notifies Slack channel

Join

- <http://qlma.fi>
- <https://qlma-slackin.herokuapp.com/>
- <https://github.com/qlma>
- <https://qlma-koulu.atlassian.net>

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- <http://newsroom.qlma.fi/>

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Mestari ja kisälli

Me Siilissä pidämme ohjelmointia käsityöammattina. Kuten perinteisissä käden töissä, myös ohjelmoinnissa korostuvat yksilöllinen tekeminen, korkeatasoinen suunnittelu ja laatua korostava valmistustyö. Me siilit olemme harjoittaneet tätä käsityöammattia keskimäärin 14 vuotta, ja meillä on talossa jo lähes 400 kokenutta käsityöläistä. Vain uudet kisällit puuttuvat. Haluatko sinä olla Siilin historian ensimmäisiä kisälliharjoittelijoita ja päästä mestarin oppiin?

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