Continuous Delivery Workflow with Gerrit



Introductions







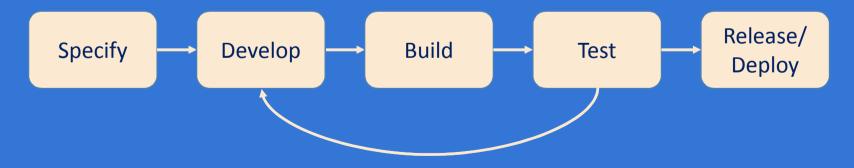
Let's dive in!

Continuous Delivery



- Customers get new features or bugfixes as soon as they are finished
- Frequent releases
- Less pressure on the release

Feature Lifecycle in Continuous Delivery

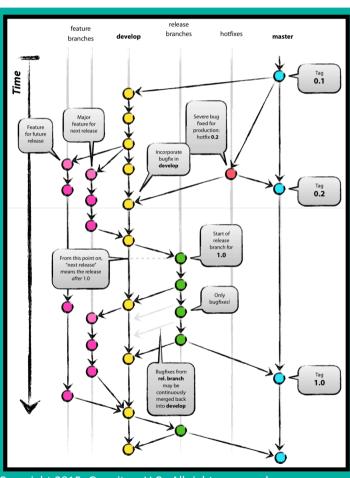




Continuous Delivery and Git

Git Branching Model





A successful Git branching model

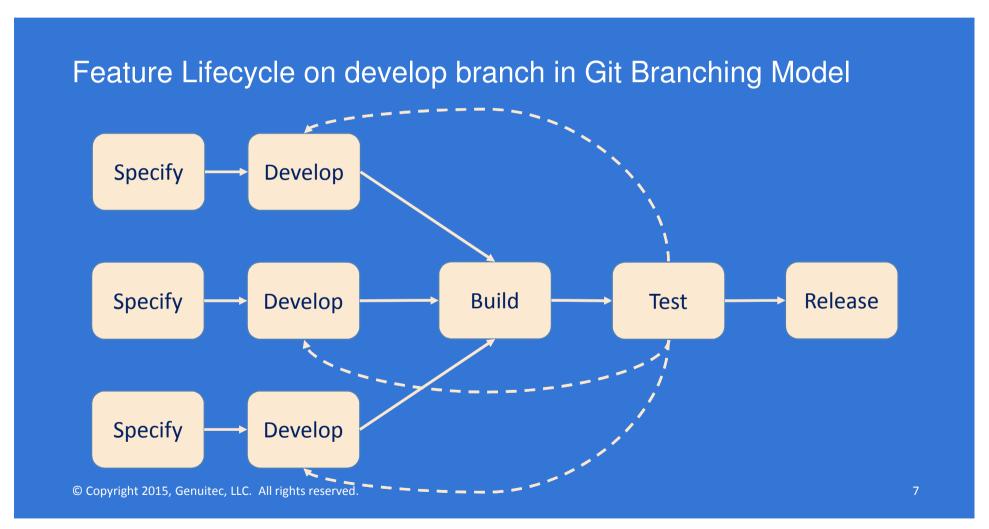
by Vincent Driessen

http://nvie.com/posts/a-successful-git-branching-model/

© Copyright 2015, Genuitec, LLC. All rights reserved.

Git Branching Model







Test before merge!

Pull Requests



- Code review
- Separate build and test for each pull request before merge
- Iterative improvement of code by adding new commits
- It's fit for Continuous Delivery process

07-22074 Saminiary. Chinese signs of To are not disptay correctly

57a2e6a Merge branch 'ActuateMaster' into EclipseMaster

Merge pull request #159 from xluo-actuate/master

Merges for single commit, useless commits

Branching mess

Merge vs (rebase + amend)



Rebase approach is better:

- History contains only quality commits
- Linear history
- Single commits easy to revert
- Merges only for feature branches
- Unimportant information is lost

Gerrit + rebase



- Code review
- Separate build and test for each change before merge
- Iterative improvement of code by amending commits
- Incoming changes easy to manage
- It's fit for Continuous Delivery process

Gerrit Workflow



Local change branch (bug fix or small feature)

Single commit for stable branch

Code review

Preverification of single commit (automated or manual)

Rebase on top of stable branch

Feature branch

Multiple commits for feature branch

Code review for each commit

Preverification of whole feature branch (automated or manual)

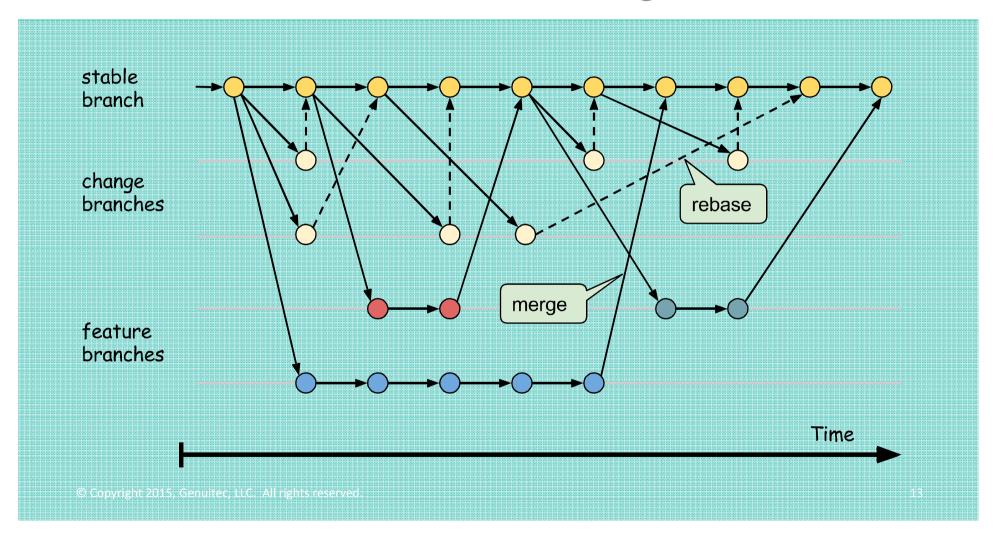
Merge with stable branch

Verify

Release

Gerrit Workflow - branching





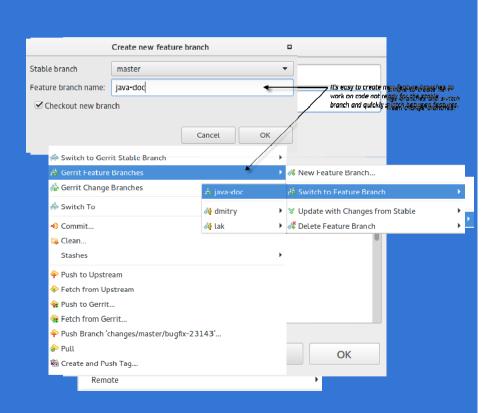


Who likes working on feature branches with Gerrit?

Gerrit Workflow for Eclipse



- Easy management of feature branches
- Covers Gerrit Workflow
- Improved Fetch from Gerrit
- Additional utilities



Tools in action





Good news! Free and open source!



Build, test, release!

Build



- Regular builds (from stable branch):
 - Maven
 - Hudson
 - Secure Delivery Center





1 hour

- Delta builds for quick testing iterations:
 - Custom Eclipse plugin based on PDE
 - Only modified plugins re-exported



5 minutes

- Installable to Regular build as a feature update
- SDC package

Test



- JUnit tests
- QF Tests
- Test Link for test cases (just migrated from Testopia)
- Manual QA verification and tests

Release



- MyEclipse:
 - distributed as SDC pack and a package
 - updates pushed to users
- Webclipse:
 - Eclipse marketplace
 - Evergreen updates



What's next?

Install



Gerrit Workflow for Eclipse can be installed from marketplace:

- Standalone
- With Webclipse
- With MyEclipse

Check Gerrit Workflow for Eclipse and Webclipse out at Genuitec booth!



Question?

Thank you!

- Meet our Sales Manager Emanuel Darlea
- [Emanuel@genuitec.com]
- Checkout marketplace for Gerrit Workflow for Eclipse

