CODE REVIEW KATA WITH GERRIT

Manuel Vacelet / @vaceletm

© Enalean, 2013



This work is licensed under a Creative Commons Attribution-ShareAlike 3.0 Unported License.

BIO / CONTEXT

Enalean CTO & Tuleap developer



WHY TO REVIEW CODE?



WHERE IT COMES FROM?

- Well known practice in FLOSS world
- Various strategy: patches (LKML), "pull requests", ...

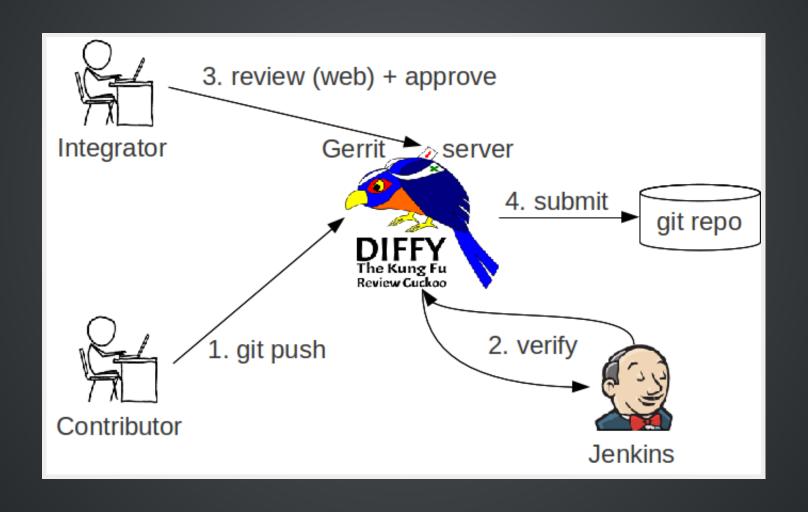
GERRIT



http://code.google.com/p/gerrit/

- Comes from Android project
- Git only
- users: Eclipse, QT, Mediawiki, Sony, Motorola, Google, SAP, ...

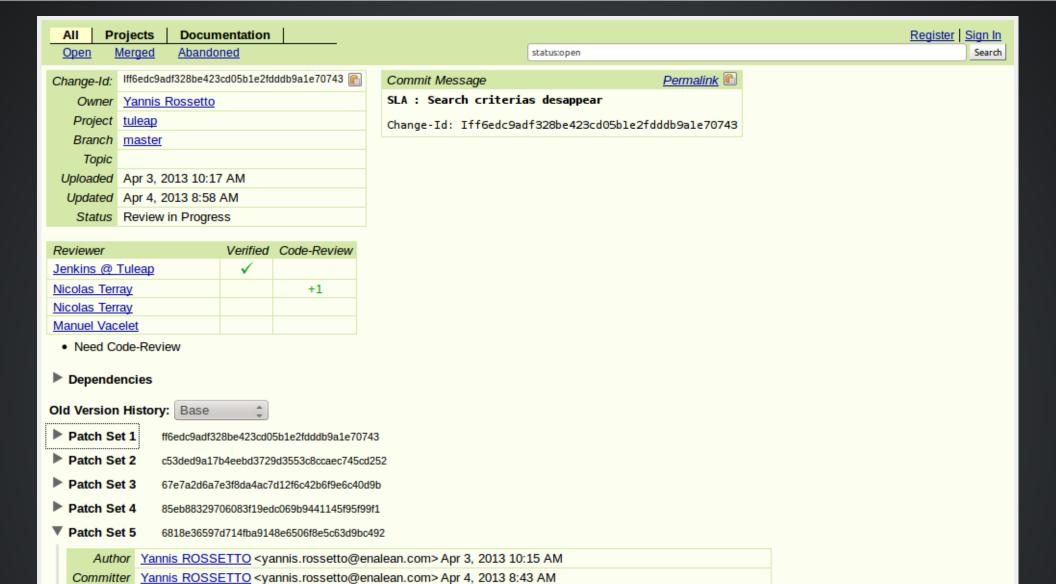
GERRIT WORKFLOW



REVIEWS DASHBOARD

All Project		itatus:open			Register	_	ın Ir earct
Search for status:open							
ID	Subject	Owner	Project	Branch	Updated	CR	V
▶ <u>Iff6edc9a</u>	SLA: Search criterias desappear	Yannis Rossetto	tuleap	master	8:58 AM	+1	~
<u>Ie04fd012</u>	on creation, right mimetype is set	Yannis Rossetto	tuleap	master	Apr 3		~
<u>Ie4dee9ea</u>	See grand-children of an artifact in its hierarchical view	Nicolas Terray	<u>tuleap</u>	master	Apr 3		~
<u>1904973c6</u>	fixing issue when there is no ugroups	Martin GOYOT	tuleap	master	Mar 27		×
<u>I3753fcc2</u>	changing read permission on report field values	Nicolas Terray	<u>tuleap</u>	master	Mar 26		~
<u>Ia04dd134</u>	search criteria disappears	Martin GOYOT	<u>tuleap</u>	master	Mar 26	-1	×

ONE REVIEW



Parent(s) a0c2f99a0b34cf9c1b287ba5b35256673dd417c7 Do not include mediawiki stuff in PHP51

PATCH

Author	Yannis ROSSETTO <yannis.rossetto@enalean.com> Apr 3, 2013 10:15 AM</yannis.rossetto@enalean.com>			
Committer	Yannis ROSSETTO <yannis.rossetto@enalean.com> Apr 4, 2013 8:43 AM</yannis.rossetto@enalean.com>			
Parent(s)	a0c2f99a0b34cf9c1b287ba5b35256673dd417c7 Do not include mediawiki stuff in PHP51			
Download	checkout pull cherry-pick patch Anonymous HTTP git fetch http://gerrit.tuleap.net/tuleap refs/changes/49/349/5 && git checkout FETCH_HEAD			
Diff All Side-	by-Side Diff All Unified			

	File Path	Comments	Size	Diff	
	Commit Message			Side-by-Side	Unified
М	$\underline{plugins/tracker/include/Tracker/FormElement/Tracker_FormElement_Field.class.php}$		+11, -3	Side-by-Side	Unified
М	plugins/tracker/include/Tracker/Report/Tracker_Report.class.php		+11, -3	Side-by-Side	Unified
М	plugins/tracker/include/Tracker/Report/Tracker_Report_Criteria.class.php		+4, -0	Side-by-Side	Unified
М	tests/bin/simpletest		+3, -0	Side-by-Side	Unified
			+29, -6		

Comments	Expand Recent Expand All Collapse All
Jenkins @ Tuleap Patch Set 1: Build Started	Apr 3 10:17 AM
Jenkins @ Tuleap Patch Set 1: Build Started	Apr 3 10:17 AM
Jenkins @ Tuleap Patch Set 1: Build Started	Apr 3 10:17 AM
Jenkins @ Tuleap Patch Set 1: Fails Build Failed	Apr 3 10:27 AM
Yannis Rossetto Uploaded patch set 2.	Apr 3 1:55 PM
Jenkins @ Tuleap Patch Set 2: Build Started	Apr 3 1:55 PM
Jenkins @ Tuleap Patch Set 2: Build Started	Apr 3 1:55 PM
Jenkins @ Tuleap Patch Set 2: Build Started	Apr 3 1:55 PM
Nicolas Terray Patch Set 2: (1 inline comment)	Apr 3 2:02 PM
Jenkins @ Tuleap Patch Set 2: Fails Build Failed	Apr 3 2:05 PM
Yannis Rossetto Uploaded patch set 3.	Apr 3 5:14 PM
Jenkins @ Tuleap Patch Set 3: Build Started	Apr 3 5:14 PM
lankins @ Tulean Datch Set 3: Ruild Started	Δnr 2 5·1/ DM

DIFF, COMMENTS

plugins/tracker/include/Tracker/Report/Tracker_Report_Criteria.class.php

⇔Tracker Report.class.php

■ Reviewed & next

→

simpletest⇒

```
⇔Tracker Report.class.php

	☐ Up to change

                                                                                                                                              <u>simpletest</u>⇒
                        Patch Set Base 1 2 3 4 5
                                                                                                        Patch Set 1 2 3 4 5
                                                              +10 1 ... skipped 56 common lines ... +10 1
             return $this->field->getCriteriaFrom($this);
                                                                            return $this->field->getCriteriaFrom($this);
 57
        }
 58
                                                                                                                                                       58
                                                                                                                                                       59
 59
 60
        public function getWhere() {
                                                                        public function getWhere() {
                                                                                                                                                       60
 61
             return $this->field->getCriteriaWhere($this);
                                                                            return $this->field->getCriteriaWhere($this);
                                                                                                                                                       61
 62
                                                                                                                                                       62
 63
                                                                                                                                                       63
 64
        public function fetch() {
                                                                        public function fetch() {
                                                                                                                                                       64
             return $this->field->fetchCriteria($this);
                                                                            return $this->field->fetchCriteria($this);
                                                                                                                                                       65
 65
 66
        }
                                                                        public function fetchWithoutExpandFunctionnality() {
                                                                    (Draft)
                                                                                                                                     Draft saved at 9:11 AM
                                                                    What about a better name ?
                                                                    Edit
                                                                            return $this->field->fetchCriteriaWithoutExpandFunctionnality($this); 69
 67
        public function delete() {
                                                                        public function delete() {
                                                                                                                                                       72
 68
                                                                                                                                                        73
 69
             return $this->field->deleteCriteriaValue($this);
                                                                            return $this->field->deleteCriteriaValue($this);
        }
 70
                                                                                                                                                       74
 71
                                                                                                                                                        75
 72
        public function setId($id) {
                                                                        public function setId($id) {
                                                                                                                                                       76
 73
             $this->id = $id;
                                                                            $this->id = $id;
 74
                                                                                                                                                       78
 75
                                                                                                                                                        79
 76
                                                                                                                                                       80
                                                                    skipped 27 common lines ..
```

û Up to change

PUSH FOR REVIEW

git push ssh://vaceletm@gerrit.tuleap.net:29418 HEAD:refs/for/master

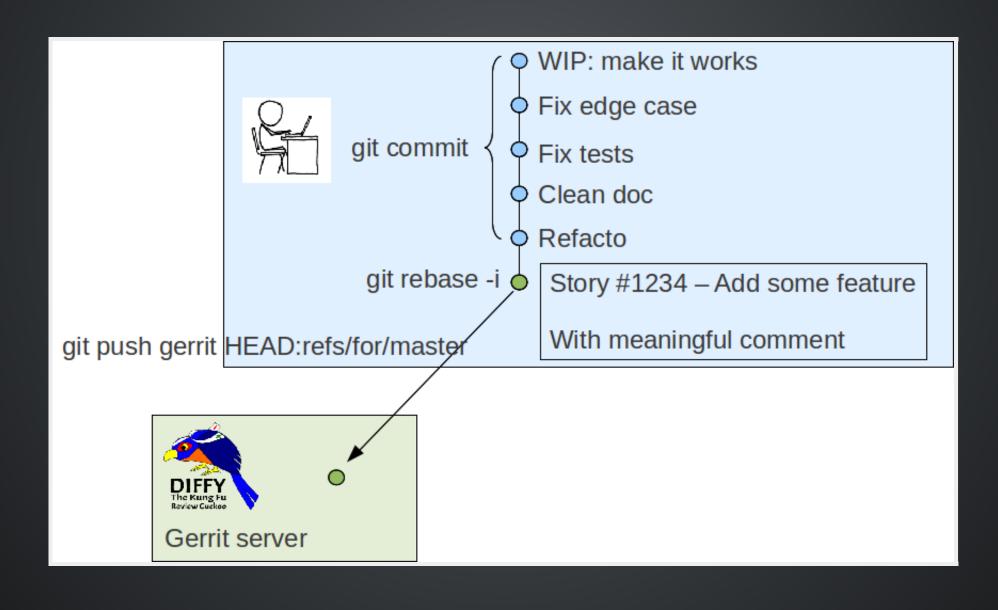
- One commit == One review
- Shape your commits (history rewriting!)

COMMITS: SIZE MATTERS

- Beware The Big One
- Difficult to grasp it
- Tiny not better whatsoever

	М	src/www/account/index.php	+32, -0	Side
	М	tests/simpletest/common/user/UserTest.php	+2, -2	Side
	М	tests/simpletest/common/user/UserTestBuilder.php	+1, -1	Side
П	М	tools/utils/purge_bad_sshkeys.php	+2, -2	Side
			+1356, -145	

SHAPE YOUR COMMITS!



GOOD PRACTICES

- Reduce the wait list
- Define review rules
- Damn fast Continuous Integration

ACCESS CONTROL

Project painter/migoo

General Branches Access

Edit Rights Inherit From: All-Projects Reference: refs/* Owner Exclusive ALLOW ^ painter/migoo-owners Read Exclusive shunt.cro.enalean.com-replication ALLOW ^ Reference: refs/changes/* Push Exclusive ALLOW ^ painter/migoo-contributors Force Push painter/migoo-integrators ALLOW ^ Force Push ALLOW ^ painter/migoo-supermen Force Push Push Merge Commit Exclusive painter/migoo-integrators ALLOW _ Reference: refs/for/* Push Merge Commit Exclusive ALLOW

Administrators Reference: refs/for/refs/heads/* Push Exclusive ALLOW ^ painter/migoo-contributors ALLOW ^ painter/migoo-integrators Push Merge Commit Exclusive ALLOW <u>painter/migoo-integrators</u> Reference: refs/heads/* Read Exclusive Registered Users ALLOW _

CONCLUSION

- Powerful
- High learning curve
- @Enalean: highest dev ROI this year

QUESTIONS?

CREDITS

- It's all about feedback code review as a great tool in the agile toolbox
- Scaling Up JGit
- Deploying Gerrit Code Review