Gerrit
code review
What is Gerrit?

• web-based code review tool

• build on top of Git

• makes code review easy

• typical for open source projects
How Gerrit works?

- consider typical project
- central repository with project contents
• additional concept - a store of pending changes
• when developer makes a change, it is send to store of pending changes

• other developers discuss this change - notes and comments

• after it gets enough approvals, it is added to the codebase
Example - Recipe book

1. Making the change
2. Creating the review
3. Reviewing the change
4. Reworking the change
5. Verifying the change
6. Submitting the change
Making the change

- developer decides to make change to the project

clone ssh://gerrithost:29418/RecipeBook.git RecipeBook

*makes change*
Create the review

- push changes with Git

```
$ git commit
[master 9651f22] Change to a proper, yeast based pizza dough.
  1 files changed, 3 insertions(+), 2 deletions(-)
$ git push origin HEAD:refs/for/master
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 542 bytes, done.
Total 3 (delta 0), reused 0 (delta 0)
remote:
remote: New Changes:
remote:  http://gerrithost:8080/68
remote:
To ssh://gerrithost:29418/RecipeBook.git
  * [new branch] HEAD -> refs/for/master
```
- output of previous commands contains link to webpage
Reviewing the change

- reviewer needs to find the change
  - search feature
  - email notifications

- default Gerrit workflow
  - Code-Review - code meets projects guidelines
  - Verified - code compiles, passes tests
## Pizza Dough

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>New Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 cups Flour</td>
<td>1 tbsp Sugar</td>
</tr>
<tr>
<td>4 tsp Baking Soda</td>
<td>1 cup Yeast</td>
</tr>
<tr>
<td>1 cup Water</td>
<td></td>
</tr>
</tbody>
</table>

(Draft)

1 cup yeast? That seems like a lot. Are you sure you don’t mean 1 tbsp?

<table>
<thead>
<tr>
<th>Method</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ml Olive Oil</td>
<td>15 ml Olive Oil</td>
</tr>
</tbody>
</table>

Combine Dry Ingredients and form a well.

Add yeast and sugar to Tepid water and allow to

Create a well in the Flour.

Add Olive Oil and Water / Yeast mixture and mix

Knead into a rough ball, then turn out on to a
Switching to a Yeast based dough is a good idea, but please recheck the quantities.

1 cup yeast? That seems like a lot. Are you sure you don't mean 1 tbsp?
Reworking the change

- developer checks new reviews

  *makes changes*

- pushes changes with Git
Verifying the change

• fixed code gets +2 from reviewer, it means code meets project guidelines (Code-Review check)

• Verified check - code passes unit tests

• code is ready to be submitted
Submitting the change

*clicks Publish and Submit button*