



GIT AND GERRIT LUNCH AND LEARN, ORGANIZED BY THE WOMEN OF OPENSTACK

GITHUB REPO - [HTTPS://GITHUB.COM/SPOTZZ/BARCELONASUMMIT/](https://github.com/spotzz/barcelonasummit/)

LUNCH AND LEARN OBJECTIVES

- Learn the OpenStack Contribution Process
- Gain Working Knowledge of Git and Gerrit

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PRESENTERS

Amy Marrich



Tamara Johnston



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ROOM SUPPORT VOLUNTEERS

Emma Foley



Xing Yang and Jeff Olsen



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Aimee Ukasick



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WOMEN OF OPENSTACK

- Objectives
 - Increase Diversity of the Community
 - Develop Leadership Skills
- Community Stats (Women)
 - X% Community Members
 - 11% (24% ATCs) Barcelona Summit Attendees
- Barcelona WOO Sessions –
<http://bit.ly/BarcelonaWOO>



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Image courtesy of the OpenStack Foundation

AGENDA

- Why Contribute to The OpenStack Code Base
- Pre-Requirements Review
- OpenStack Contribution Process
- Create, Triage, and Assign Documentation Bug
- Create, Commit, and Verify Patch
- Reference Materials

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WHY CONTRIBUTE TO THE OPENSTACK CODE BASE

- Help Drive the Future of an OSS Project and Community
- Vote During TC and PTL Elections
- Free Pass to OpenStack Summit



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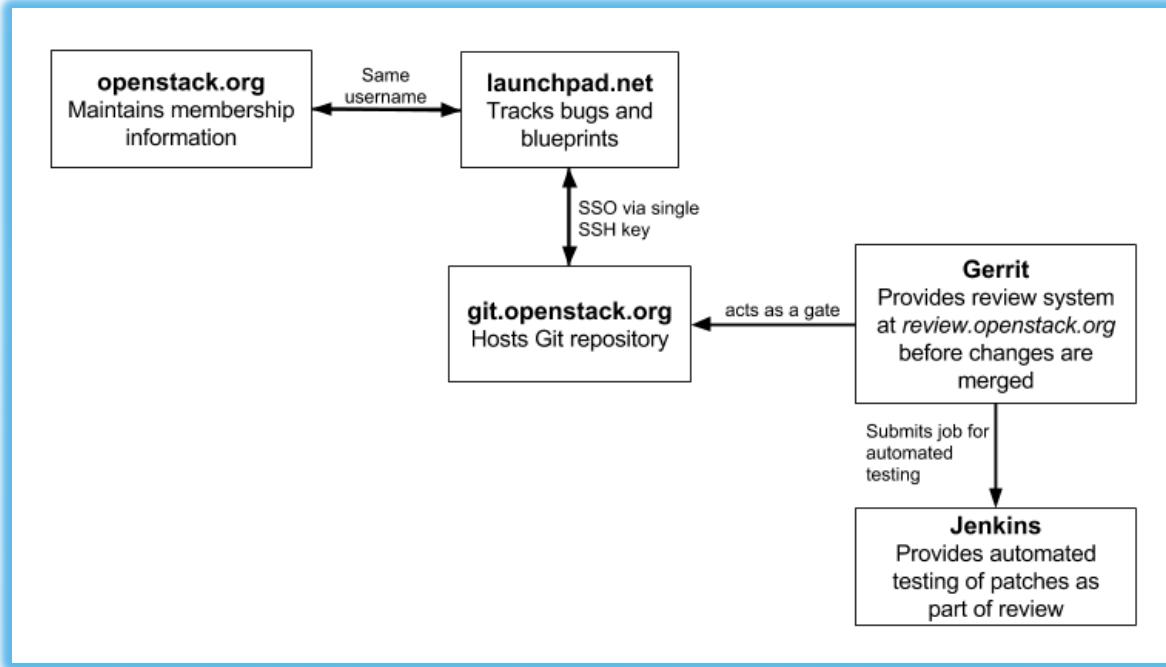
PRE-REQUIREMENTS REVIEW

PLEASE ADVISE A ROOM SUPPORT MEMBER IF YOU'VE NOT COMPLETED PRE-REQUIREMENTS

- ✓ Joined OpenStack Community as Foundation Member
- ✓ Signed ICLA
- ✓ Created Launchpad Account
- ✓ Created Gerrit Account and Uploaded Public SSH Key

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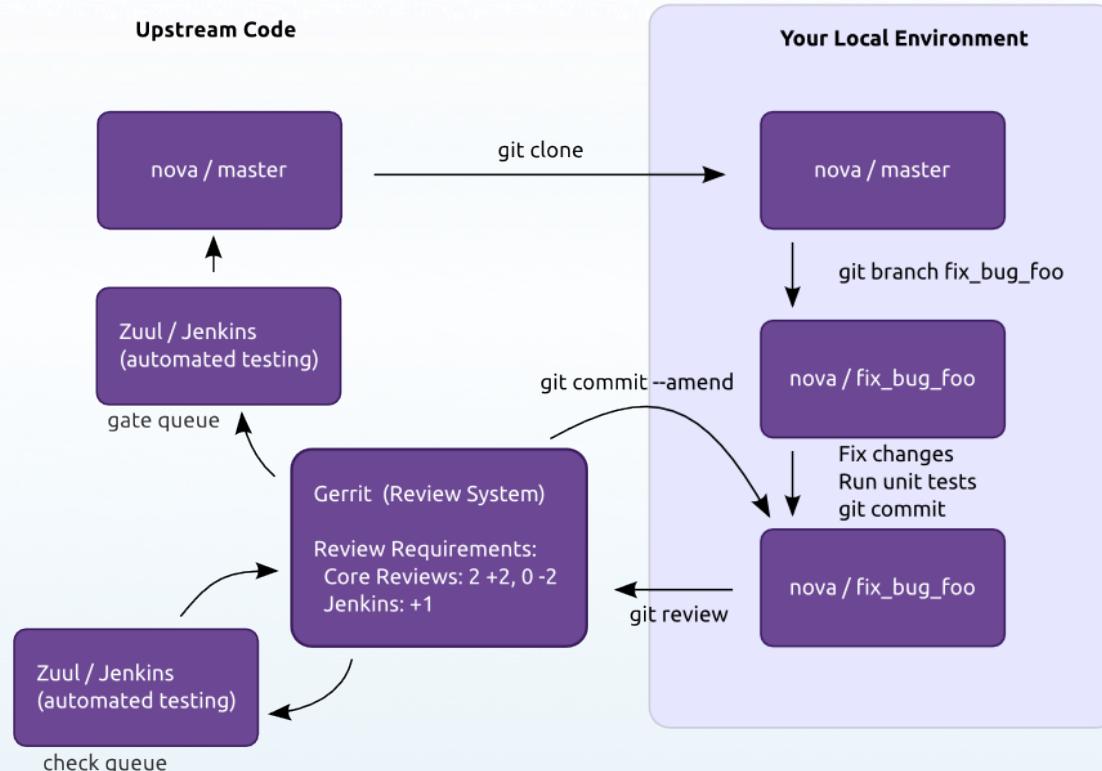
OPENSTACK CONTRIBUTION PROCESS



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Images courtesy of the OpenStack Foundation

OPENSTACK CONTRIBUTION PROCESS



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OPENSTACK BUG SYSTEM OVERVIEW

- URL - <https://bugs.launchpad.net/openstack/>
- Login - Launchpad Account
- When to Open or Assign a Bug
- How Bugs Are Created
 - Manually
 - DocImpact Flag in Commit Message
- Bug Triaging

Tips



- Do not start work on a documentation bug until it is confirmed
- Do not use Launchpad Answers, use Ask OpenStack

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CREATE AND ASSIGN DOCUMENTATION BUG

- URL - <https://launchpad.net/woolunchandlearn>
- Click “Report a Bug”
- Enter Bug Summary (Brief Description)
- Provide Further Information on the Bug
- Extra Options
 - Status – New
 - Importance – Undecided
 - Assign Bug to Yourself



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Images courtesy of the OpenStack Foundation

CONFIGURE GIT AND GIT REVIEW

- \$ git config --global user.name "Firstname Lastname"
- \$ git config --global user.email "your_email@youremail.com"
- \$ git config --global gitreview.username yourgerritusername
- \$ git config --list

Tip



"We don't know where
your gerrit is" Error? git
remote add gerrit ssh://
<username>@review.open
stack.org:29418/
openstack/sandbox.git

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CLONE OPENSTACK SANDBOX REPO AND CREATE BRANCH

- \$ git clone <https://git.openstack.org/openstack-dev/sandbox.git>
- \$ cd sandbox/
- Setup git review
 - Mac/Ubuntu - \$ git review -s
 - Windows - \$ git review
- \$ git remote update
- \$ git checkout master
- \$ git pull --ff-only origin master
- \$ git checkout -b bug/bugID

Tip

Commit Message Best Practices -
<https://wiki.openstack.org/wiki/GitCommitMessages>

GITHUB REPO <https://github.com/spotzz/barcelonasummit/>

CREATE, COMMIT, AND VERIFY PATCH

- \$ cat > mytestfile << EOF
Add text unique to your file
- \$ git status
- \$ git add mytestfile
- \$ git status
- \$ git commit -a
- \$ git commit --amend
- \$ git show
- \$ git review

GITHUB REPO - [HTTPS://GITHUB.COM/SPOTZZ/BARCELONASUMMIT](https://github.com/spotzz/barcelonasummit)

Tip



Commit Message Best Practices -
<https://wiki.openstack.org/wiki/GitCommitMessages>

GERRIT AND JENKINS WORKFLOW REVIEW

- Gerrit - <https://review.openstack.org/#c/<ID>>
- Gate Checking - <http://status.openstack.org/zuul/>

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GERRIT REVIEW

The screenshot shows a Gerrit code review interface for a merged patch set. The top navigation bar includes links for All, My, Projects, People, Documentation, and a search bar. The main content area displays a note about adding a link to cli_manage_images, a Closes-Bug entry for #1548109, and a Change-Id of ld833890ce6aa7916b36aa1197ce703a1e7fe57b0. The right sidebar provides detailed information about the patch set, including the owner (Tamara Johnston), reviewers (Darren Chan, Jenkins, KATO Tomoyuki, chen.xing, venkatamahesh), project (openstack/openstack-manuals), branch (master), topic (bug/1548109), and update time (6 weeks ago). Below this are 'Cherry Pick' and 'Revert' buttons. A 'Code-Review +2' section lists reviews from Darren Chan, KATO Tomoyuki, chen.xing, and venkatamahesh. A 'Verified +2' section lists Jenkins. A 'Workflow +1' section lists KATO Tomoyuki. The commit details table shows the author (Tamara Johnston), committer (Tamara Johnston), date (Mar 2, 2016 6:47 PM), and commit message (doc/user-guide/source/dashboard_manage_images.rst). The commit history shows Tamara Johnston uploading the patch set at Mar 2 6:56 PM, followed by reviews from chen.xing, venkatamahesh, Darren Chan, and KATO Tomoyuki, and finally a merge into Jenkins at Mar 3 12:04 AM. The bottom section shows the file path 'Commit Message' and a 'Comments Size' chart indicating 3 positive and 2 negative comments.

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ZUUL STATUS

The screenshot shows the Zuul Status page for the OpenStack project. The top navigation bar includes links for Status, Zuul (which is active), Rechecks, Reviews, Bugday, and OpenStack-Health. Below the navigation is a section titled "Zuul Status" with a brief description of what Zuul does. A search bar and filter options are present. The main content area displays three horizontal timelines: "check" (194 items), "gate" (13 items), and "post" (107 items). Each timeline lists individual change queue entries with details like author, commit ID, and duration.

check (194)

- Newly uploaded patchsets enter this pipeline to receive an initial +/-1 Verified vote from Jenkins.
- Change queue: integrated
 - openstack/nova 304714,2 0 min 2 hr 2 min
 - openstack/nova 282442,22 0 min 1 hr 59 min
 - openstack/nova 282442,22 0 min 1 hr 59 min
 - openstack/nova 281945,30 0 min 1 hr 58 min
 - Change queue: openstack/manila
 - openstack/manila 305189,2 4 min 1 hr 54 min
 - Change queue: integrated
 - openstack/nova 305079,3 14 min 1 hr 50 min
 - Change queue: openstack/neutron

gate (13)

- Changes that have been approved by core developers are enqueued in order in this pipeline, and if they pass tests in Jenkins, will be merged.
- Change queue: integrated
 - openstack/nova 305204,2 16 min 1 hr 44 min
 - openstack/nova 301213,3 16 min 1 hr 18 min
 - openstack/horizon 304805,2 39 min 1 hr 18 min
 - openstack/neutron 305605,1 39 min 57 min
 - openstack/neutron 274023,10 39 min 49 min
 - openstack/neutron 303563,2 39 min 44 min
 - Change queue: openstack/fuel-web
 - openstack/fuel-web 304438,4 3 min 13 min

post (107)

- This pipeline runs jobs that operate after each change is merged.
- Change queue: openstack/kolla
 - openstack/kolla 17916f2 unknown 3 hr 48 min
- Change queue: openstack/python-tripleoclient
 - openstack/python-tripleoclient 092adcc unknown 3 hr 35 min
- Change queue: openstack/tripleo-heat-templates
 - openstack/tripleo-heat-templates 2b15978 unknown 3 hr 34 min
- Change queue: openstack/openstack-ansible
 - openstack/openstack-ansible dbe6808 unknown 3 hr 34 min
- Change queue: openstack-infra/project-config
 - openstack-infra/project-config 27025c6 unknown 3 hr 34 min
- Change queue: openstack/aodh
 - openstack/aodh 3b030c4 unknown 3 hr 32 min

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ADDITIONAL EXERCISE – EDIT PATCH

- Edit File
- \$ git add filename
- \$ git commit -a --amend
- \$ git review

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ADDITIONAL EXERCISE – CREATE PATCH DEPENDENCY AND REBASE

- `$ git pull origin master`
 - (updates your local version of the master branch)
- `$ git checkout <your_branch>`
- `$ git rebase -i master`
- `$ git rebase --continue`

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ABANDON COMMIT

```
ssh -l YOUR_GERRIT_USERNAME>\  
  -p 29418 \  
  review.openstack.org 'gerrit review' \  
  --project openstack-dev/sandbox.git \  
  --abandon THE_CHANGE_ID,2
```

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WHERE TO FIND HELP

- Ask OpenStack - <https://ask.openstack.org>
- IRC
 - <https://wiki.openstack.org/wiki/IRC>
 - <http://docs.openstack.org/upstream-training/irc.html>
- Mail Lists -
https://wiki.openstack.org/wiki/Mailing_Lists

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REFERENCE MATERIALS

- Contributors Guide - <http://docs.openstack.org/contributor-guide/>
- First Time Contributors QuickStart Guide -
<http://docs.openstack.org/contributor-guide/first-timers-quickstart.html>
- Documentation Bugs -
<http://docs.openstack.org/contributor-guide/doc-bugs.html>
- Learn The Gerrit Workflow in the Sandbox -
<http://docs.openstack.org/infra/manual/sandbox.html>

GITHUB REPO - [HTTPS://GITHUB.COM/SPOTZZ/BARCELONASUMMIT/](https://github.com/spotzz/barcelonasummit/)

REFERENCE MATERIALS

- Commit Messages -
<https://wiki.openstack.org/wiki/GitCommitMessages>
- Testing - <https://wiki.openstack.org/wiki/Testing>
- Setup and Learn Git -
<http://docs.openstack.org/upstream-training/git.html>

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Q&A