



# Onboarding into the OpenStack Community with Git and Gerrit

http://github.com/spotz/OpenInfraSummit

## openstack.



Amy Marrich

IRC - spotz

Twitter - spotzz\_

Github - spotz

Email - <u>amy@demarco.com</u> or <u>amy@redhat.com</u>





# Agenda

- Pre-Requirements Review
- Create, Triage, and Assign Documentation Bug
- Create, Commit, and Verify Patch
- Reference Materials



# Pre-Requirements Review



## **Are Git and Gerrit Installed?**

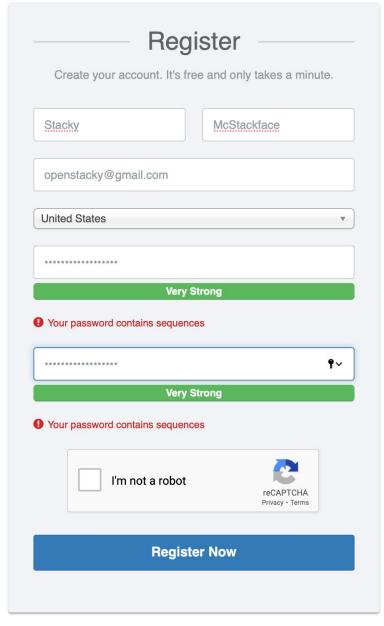
- Instructions for installing Git on MacOS, Linux and Windows:
  - https://docs.openstack.org/contributors/common/git.html
- Configuring Git
  - git config --global user.name "Firstname Lastname"
  - git config --global user.email "your\_email@youremail.com"
- Instructions for installing Gerrit on MacOS and Linux:
  - https://docs.openstack.org/contributors/common/setup-gerrit.html
     p-gerrit.html
    - Scroll to the bottom of the page!



OpenStack Community Membership

Signup at https://www.openstackorg/join

openstack.



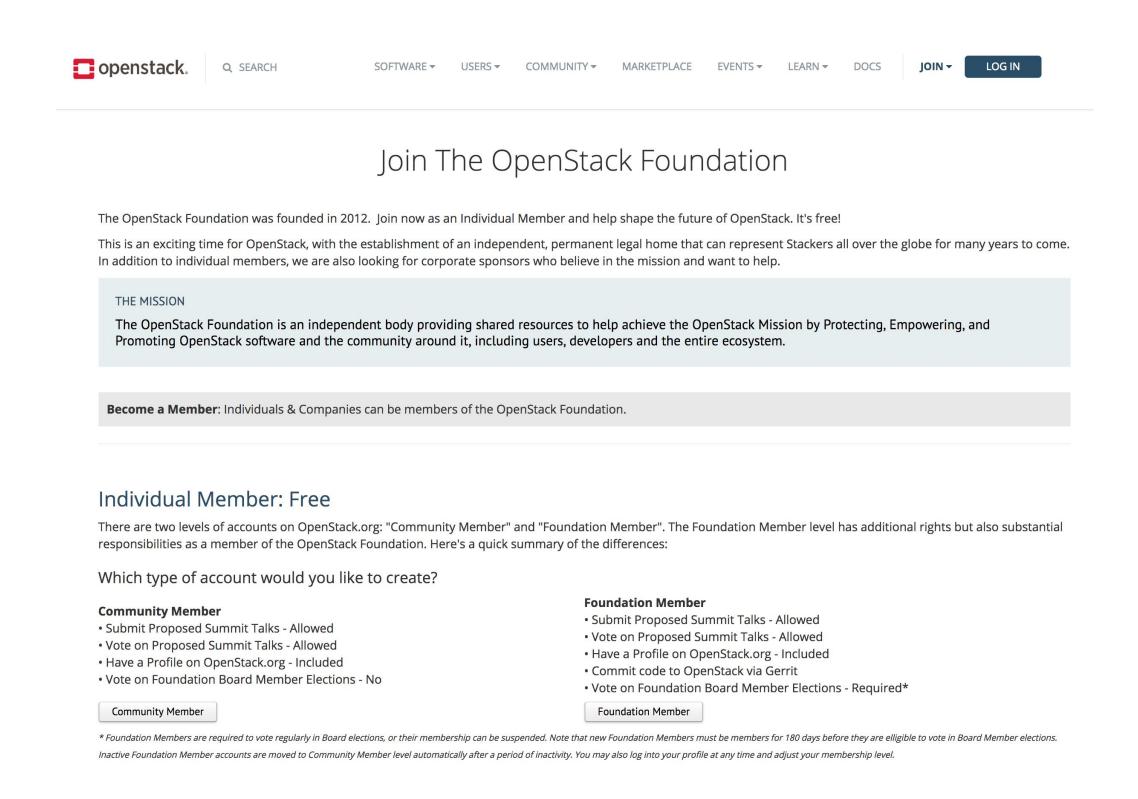
Already have an account? Sign in





#### OpenStack Community Membership

- Signup at https://www.openstackorg/join
- Pick Account Type







OpenStack Community Membership

- Signup at https://www.openstackorg/join
- Pick Account Type
- ✓ Sign ICLA





Ubuntu One Login

Go to <a href="https://storyboard.openstack.org">https://storyboard.openstack.org</a> or <a href="https://launchpad.net/openstack">https://launchpad.net/openstack</a>





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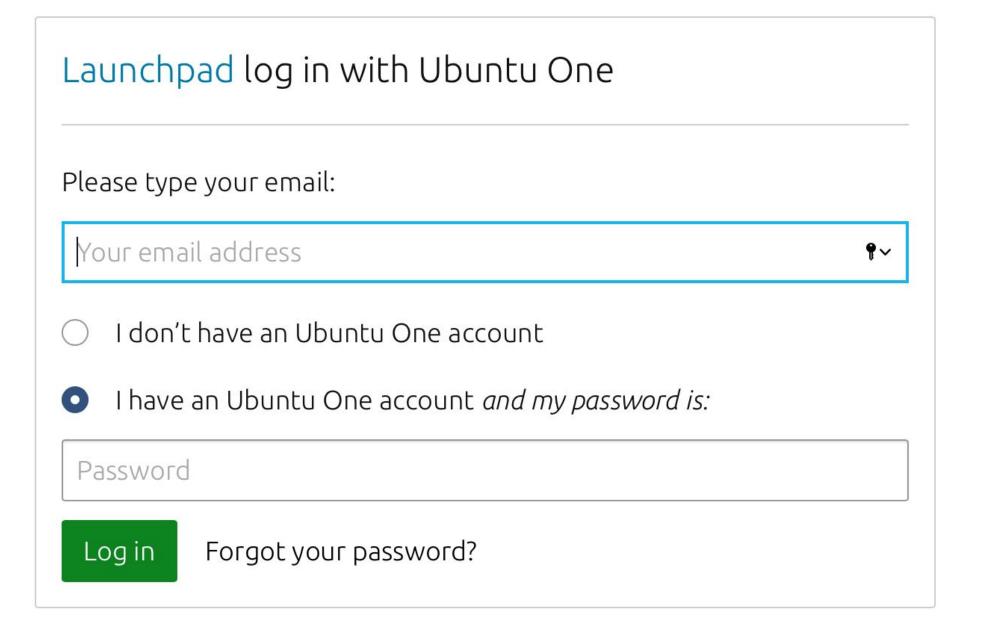
Click on Login





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- Select I don't have a Ubuntu One account

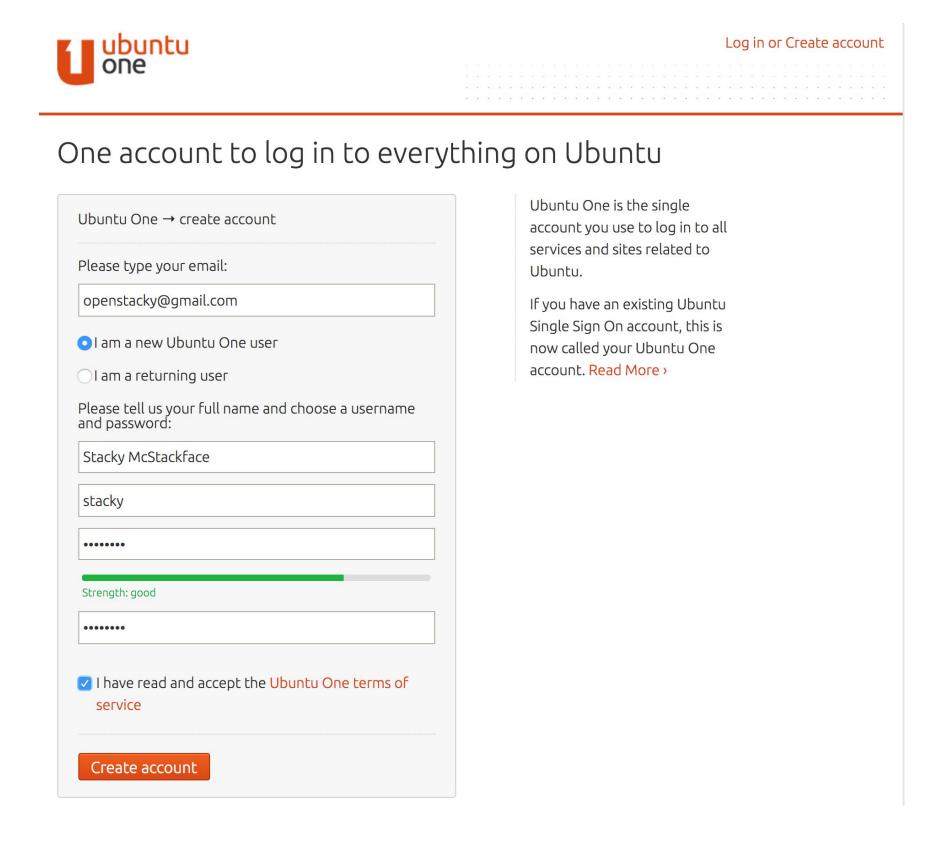






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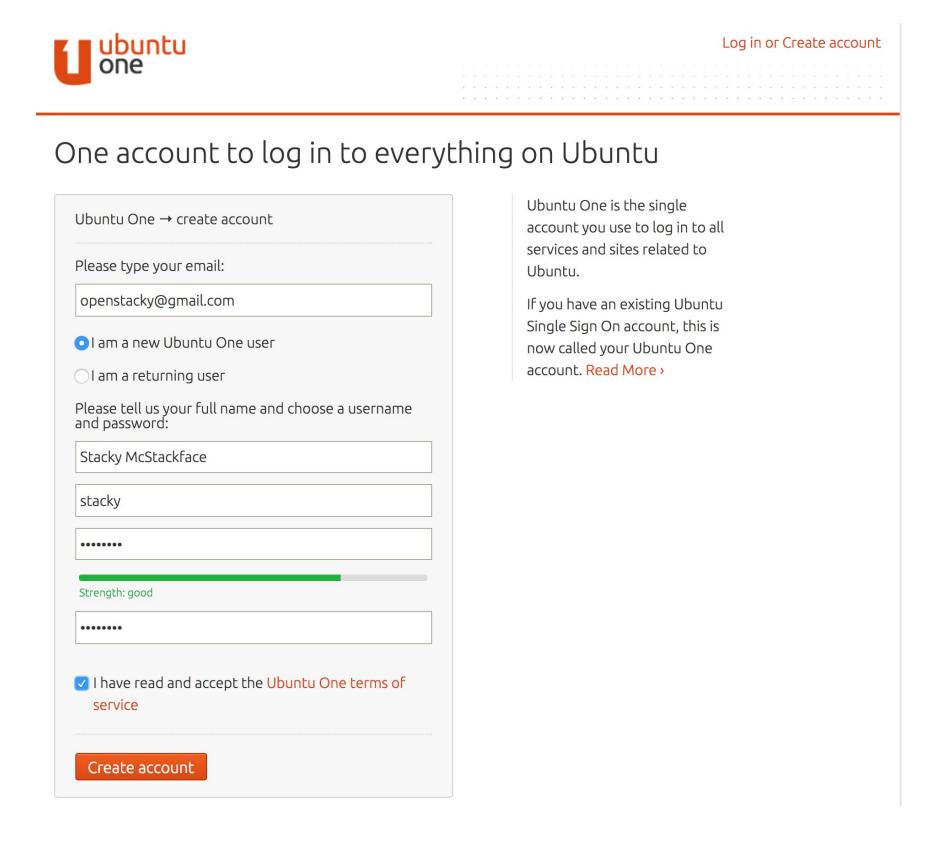






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#### Create Gerrit Account

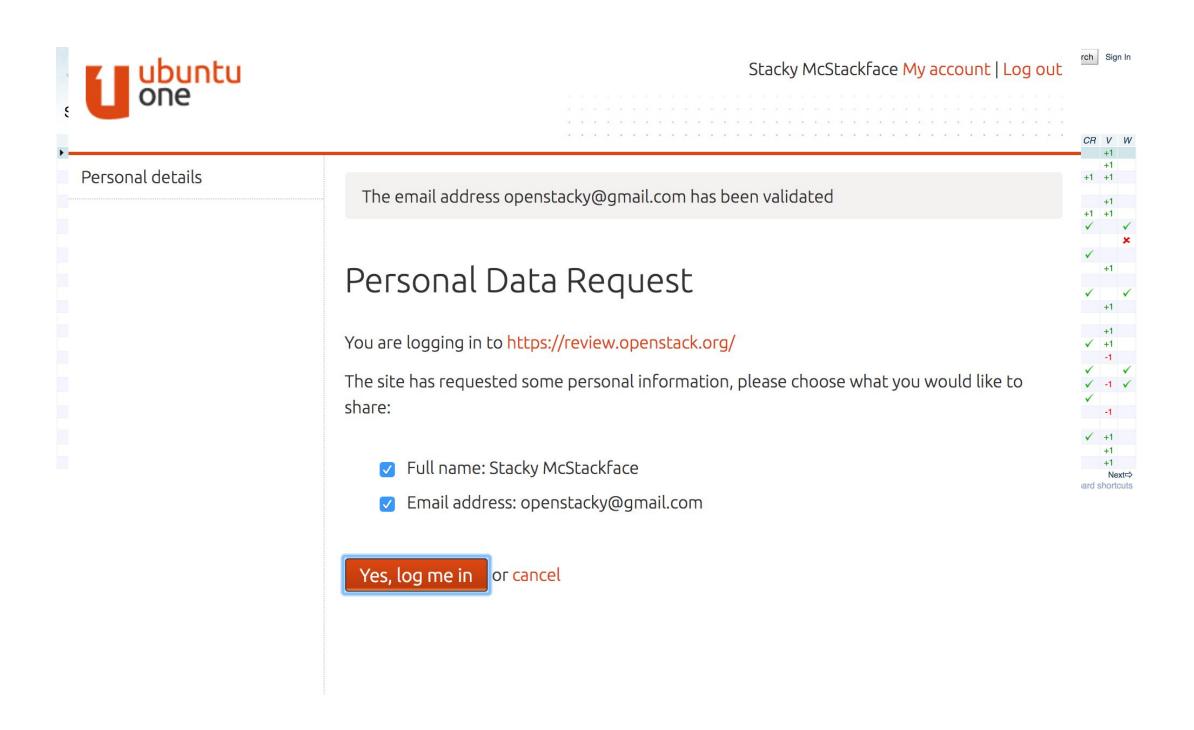
Go to <a href="https://review.openstack.org">https://review.openstack.org</a> and click on Sign In







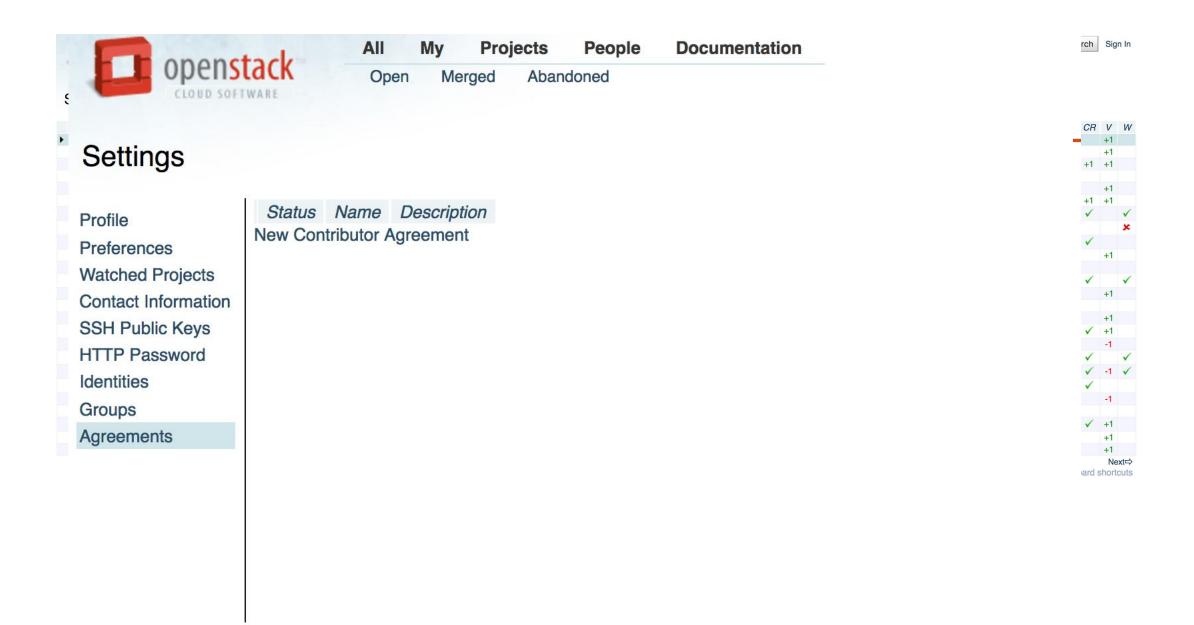
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- ✓ Login with your Ubuntu One account







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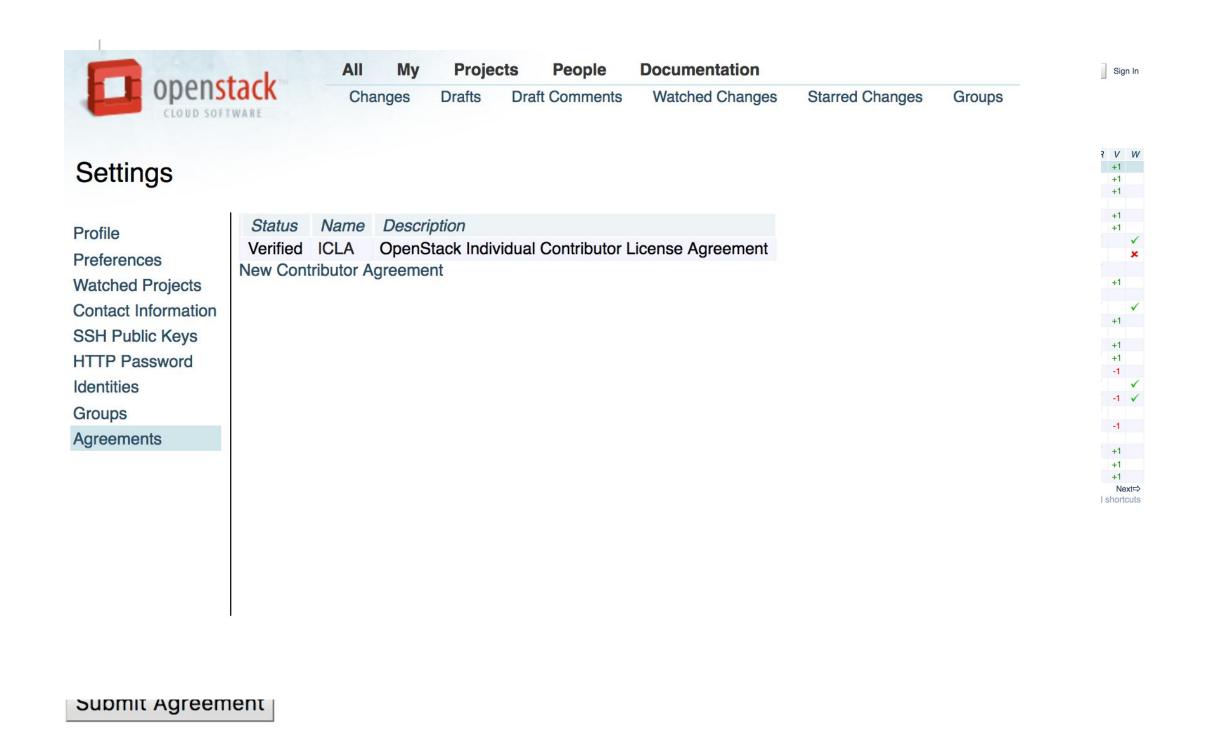
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- ✓ Login with your Ubuntu One account
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Review your cont	tact information:	rch Sign In
Full Name	Stacky McStackface	
Preferred Email	openstacky@gmail.com \$ Register New Email	CR V W +1 +1
The following of	ffline contact information is stored encrypted.	+1 +1 +1 +1 +1
you through non- strong public/priv	ion will only be made available to administrators if it is necessary to reach email based communication. Received data is stored encrypted with a rate key pair algorithm, and this site does not have the private key. Once e unable to retrieve previously stored contact details.	✓ ✓ × ✓ × ✓ +1 ✓ +1 ←1
Mailing Address	123 Abbey Road Austin, TX	√ +1 -1 √ √ 1 √ 1 √ √ 1 √ +1
Country	United States	+1 Next⇔
Phone Number	8305551234	
Fax Number		
Complete the agr	eement:	
l Agree (	enter I AGREE in the box to the left)	
Submit Agreeme	ent	





- Go to <a href="https://review.openstack.org">https://review.openstack.org</a> and click on Sign In
- ✓ Login with your Ubuntu One account
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Upload your SSH key for Gerrit

Create and get your Public SSH Key

Create an SSH key if you do not have one or want a new one ssh-keygen -C "emailaddress" cat ~/.ssh/id\_rsa.pub





Upload your SSH key for Gerrit

Create and get your Public SSH Key

Go to

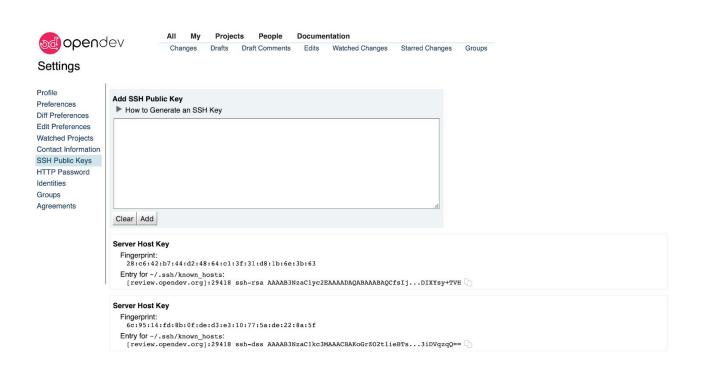
https://review.opendev.org/@settings/ssh-keys





#### Upload your SSH key for Gerrit

- Create and get your Public SSH Key
- Go to https://review.opendev.org/@settings/ssh-keys
- Login if needed and cut and paste your key





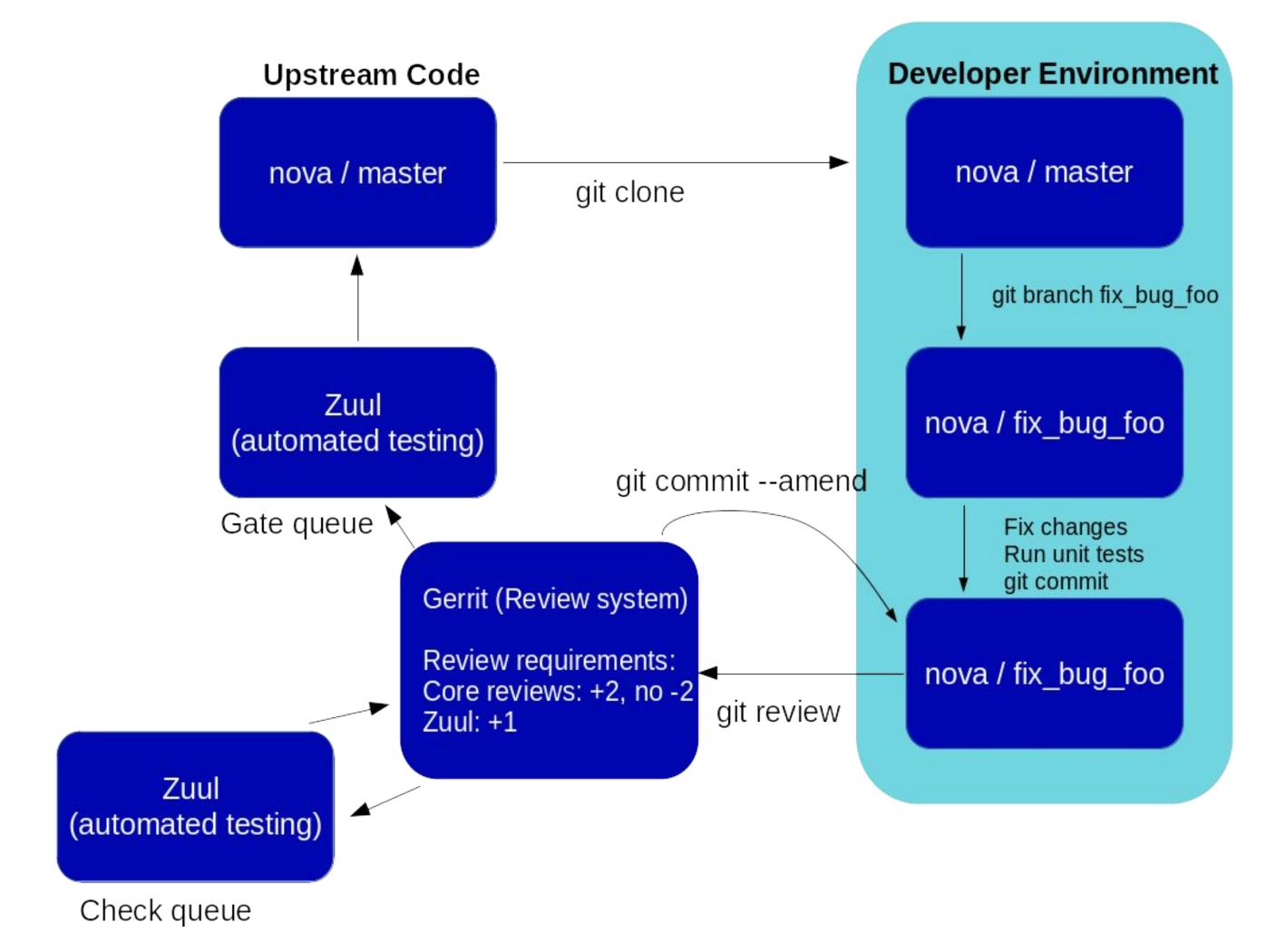
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# **OpenStack Contribution Process**



## Development Workflow





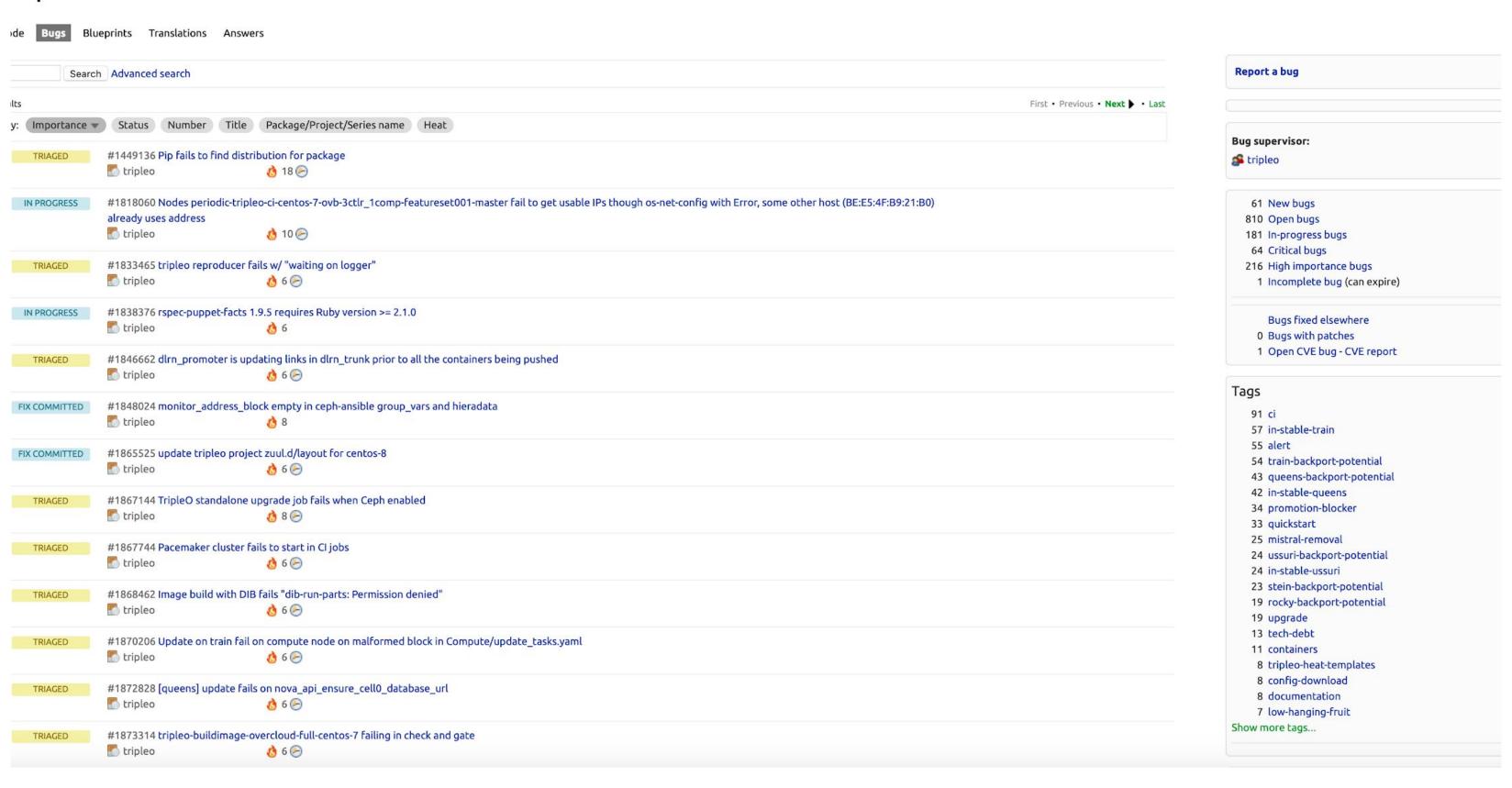
## LaunchPad System Overview

- LaunchPad Example:
   <a href="https://bugs.launchpad.net/openstack-manuals/+bug/1663485">https://bugs.launchpad.net/openstack-manuals/+bug/1663485</a>
- Login Ubuntu One Account
- When to Open or Assign a Bug
- How Bugs Are Created
  - Manually
- Bug Triaging



# Launchpad

#### tripleo



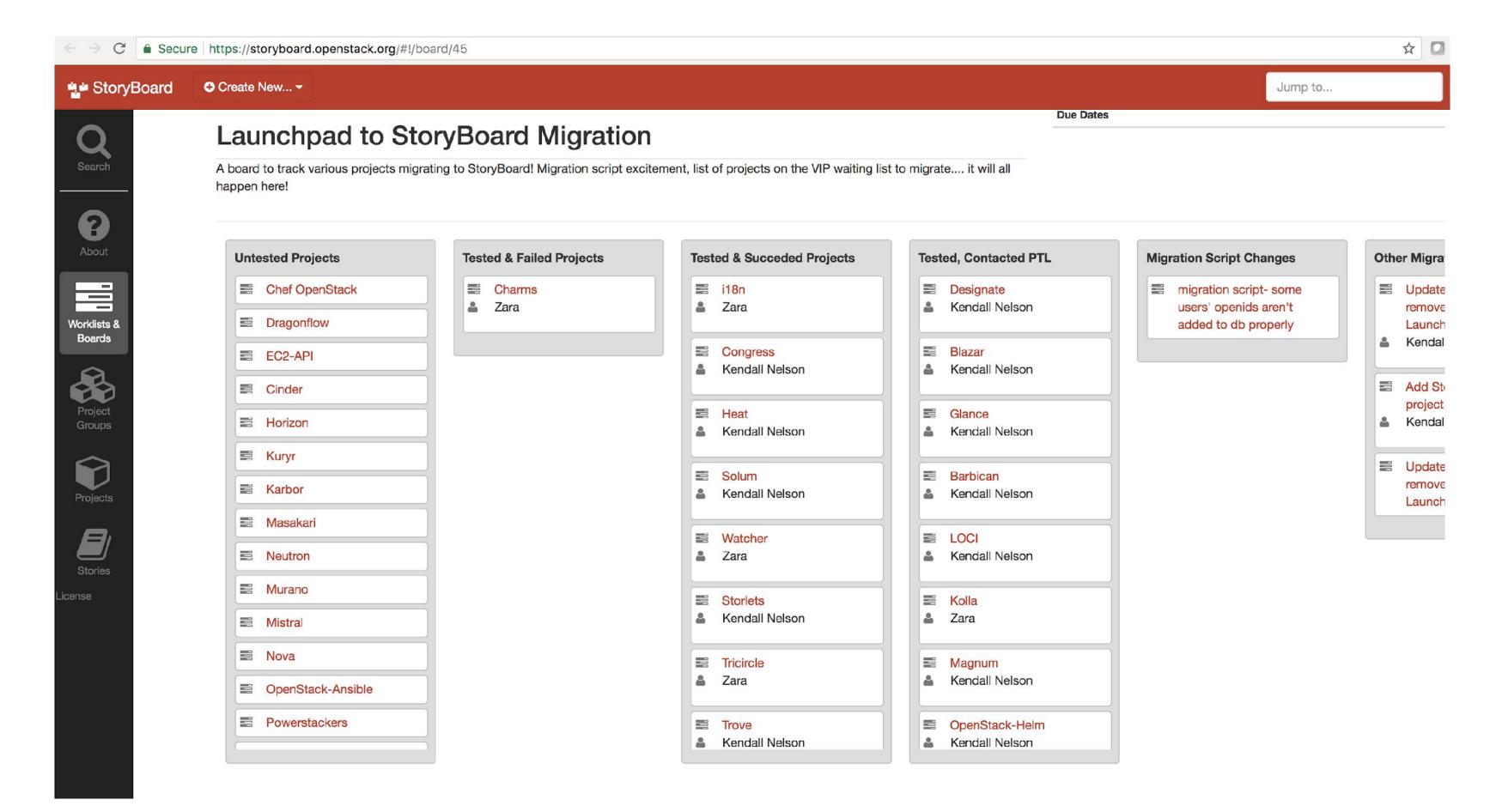


## StoryBoard System Overview

- StoryBoard Example: <u>https://storyboard.openstack.org/#!/story/2004144</u>
- Login Ubuntu One Account
- When to Open or Assign a Bug
- How Bugs Are Created
  - Manually
- Bug Triaging



## StoryBoard





## Filing a Bug

- URL <a href="https://launchpad.net/gitandgerrittraining">https://launchpad.net/gitandgerrittraining</a>
- 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



## Configure Git and Gerrit 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.opendev.org:29418/opendev/sandbox.git



## Cloning and Branching

```
$ git clone https://opendev.org/opendev/sandbox
```

- \$ 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



## Create, Commit, and Verify a 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

Tip

Commit Message Best
Practices https://wiki.openstack.org/wiki/

GitCommitMessages

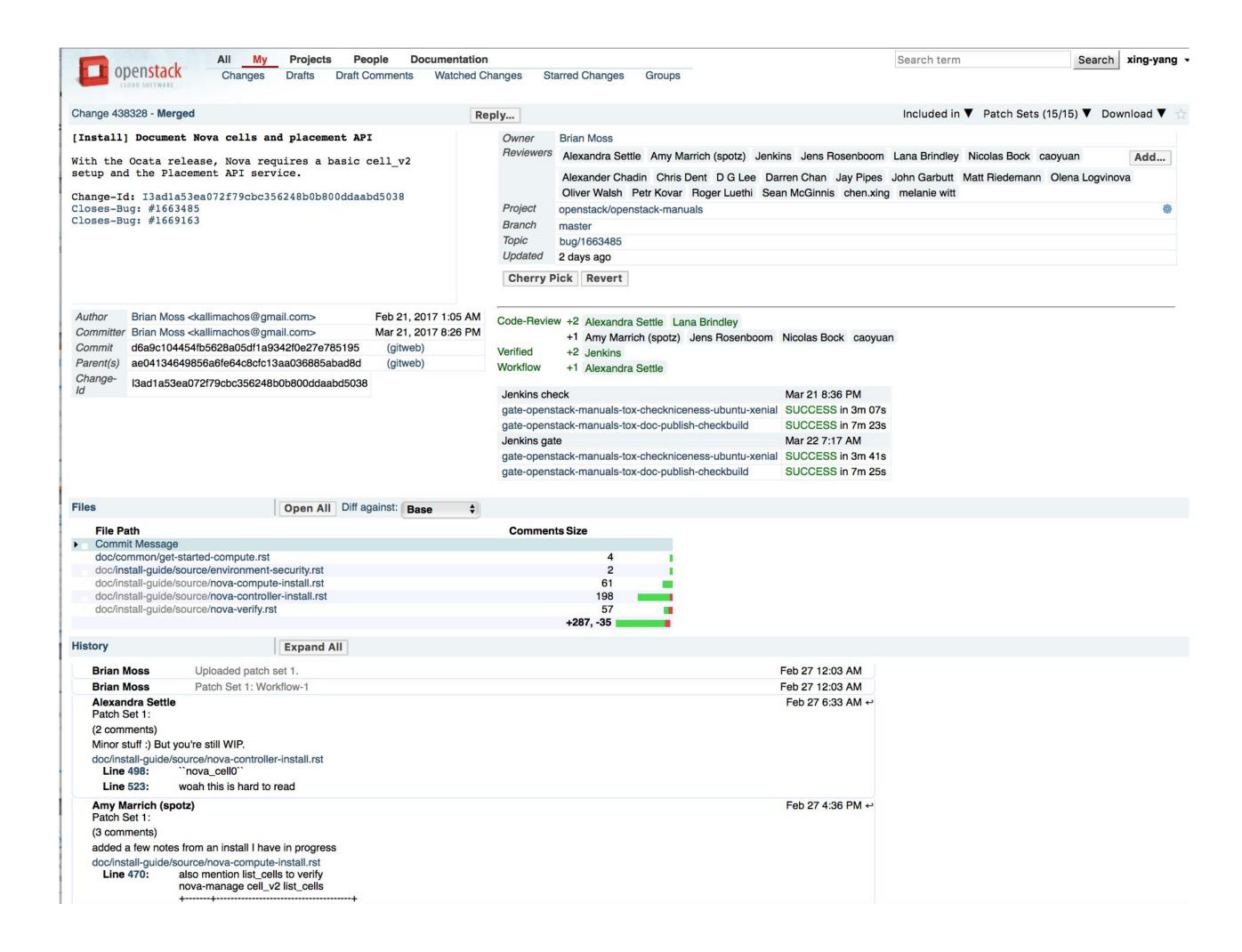


## Gerrit and Zuul Workflow

- Gerrit <a href="https://review.opendev.org/#/c/<ID></a>
  - Example patch: <a href="https://review.opendev.org/#/c/438328/">https://review.opendev.org/#/c/438328/</a>
- Gate Checking <a href="http://status.openstack.org/zuul/">http://status.openstack.org/zuul/</a>

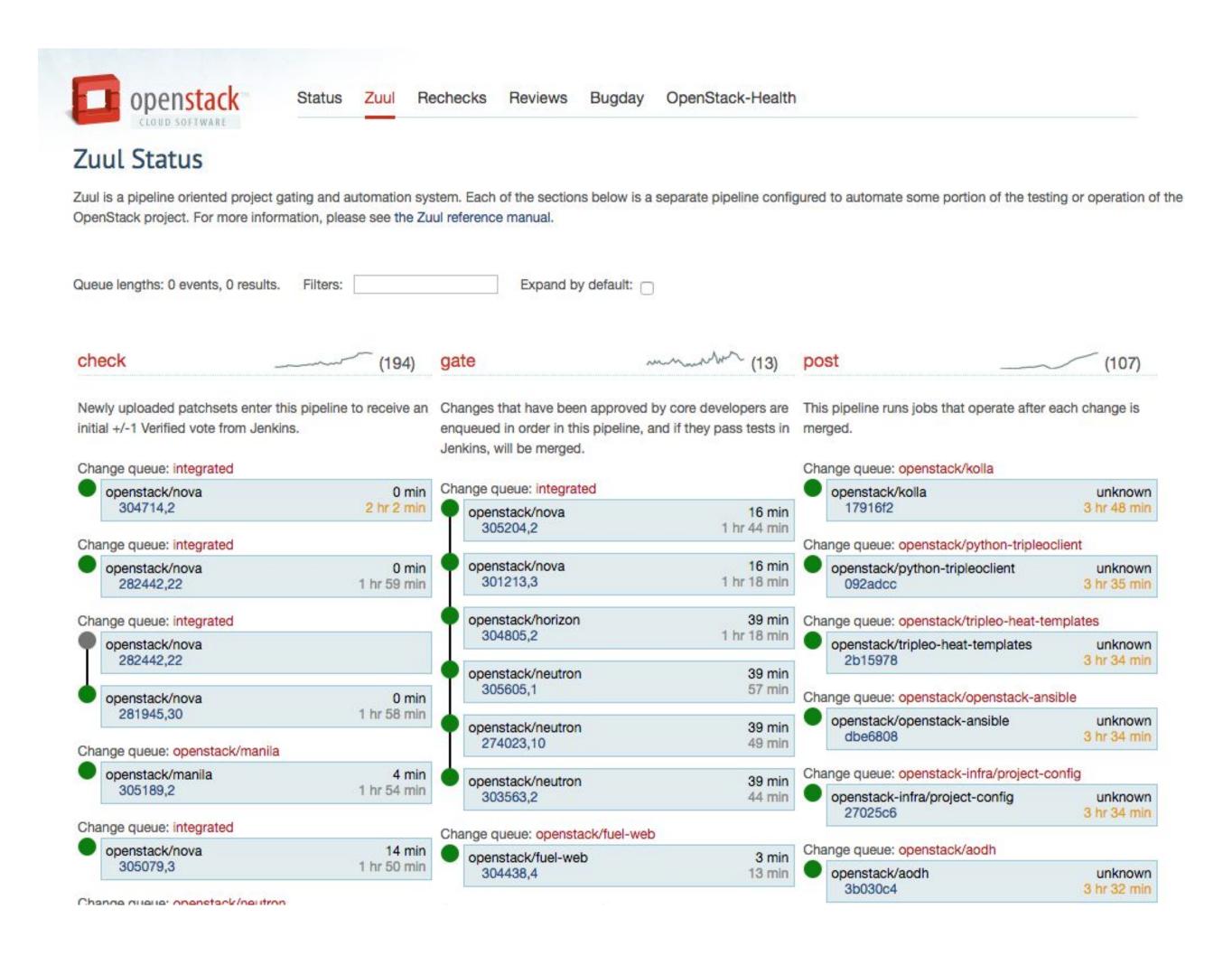


## **Gerrit Review**





## **Zuul Status**





## **Additional Exercises**



## Edit a Patch

Edit File

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



## Create a 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



# Help and Resources



## Where to Find Help

- IRC
  - https://wiki.openstack.org/wiki/IRC
  - https://docs.openstack.org/contributors/common/irc.html
- Mail Lists <a href="https://wiki.openstack.org/wiki/Mailing\_Lists">https://wiki.openstack.org/wiki/Mailing\_Lists</a>



## Reference Materials

- Contributors Guide
  - https://docs.openstack.org/contributors/code-and-documentation/index.html
- First Time Contributors QuickStart Guide
  - https://docs.openstack.org/doc-contrib-guide/guickstart/first-timers.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



## Reference Materials

- Commit Messages <a href="https://wiki.openstack.org/wiki/GitCommitMessages">https://wiki.openstack.org/wiki/GitCommitMessages</a>
- Testing <a href="https://wiki.openstack.org/wiki/Testing">https://wiki.openstack.org/wiki/Testing</a>
- Setup and Learn Git <a href="https://docs.openstack.org/contributors/common/git.html">https://docs.openstack.org/contributors/common/git.html</a>



# Q&A

Thank you for your time









openstack (D) OpenStackFoundation