

2021.12.03



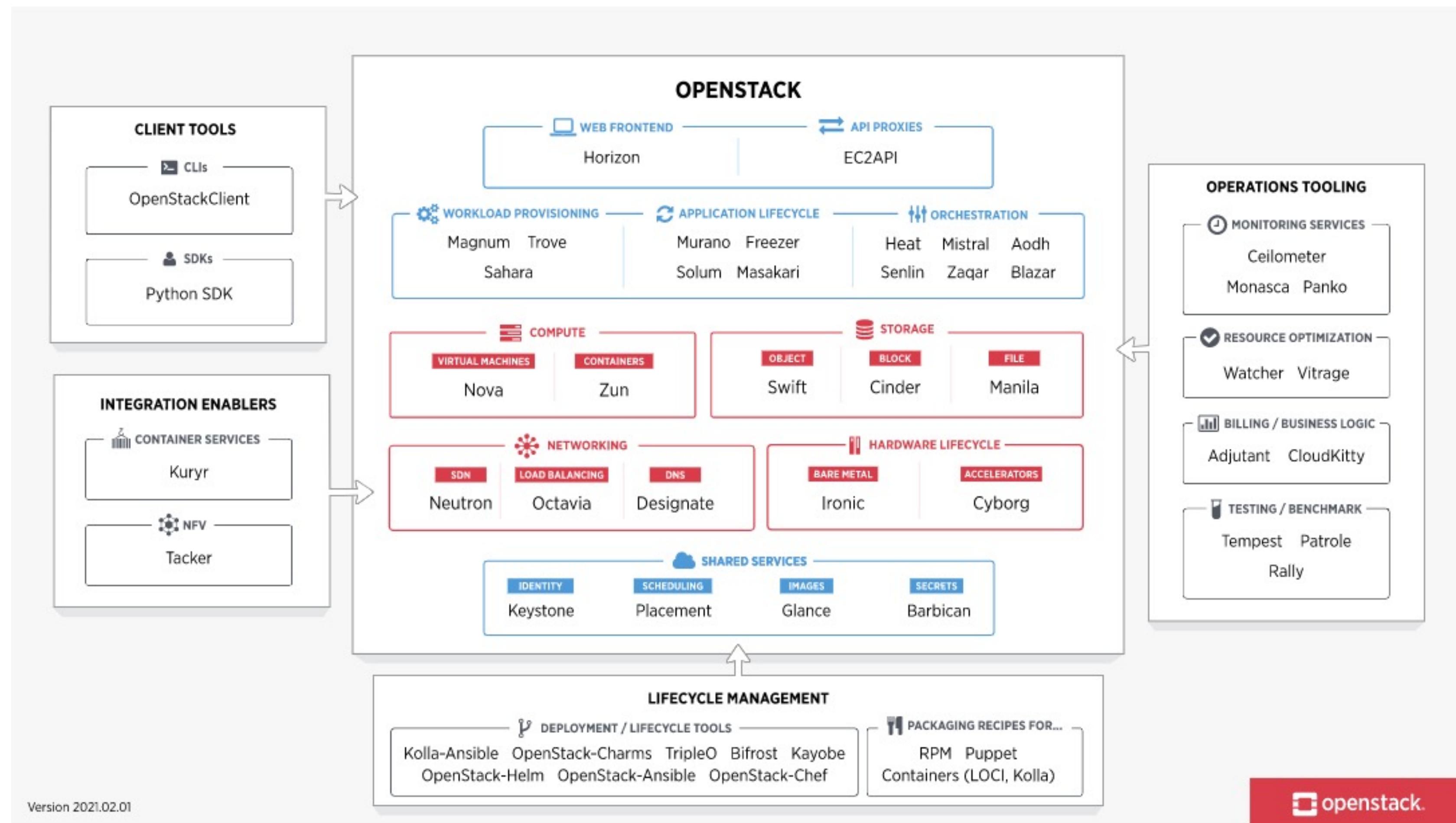
# From Zero to Hero: Contribution Guidebook for OpenStack Beginners

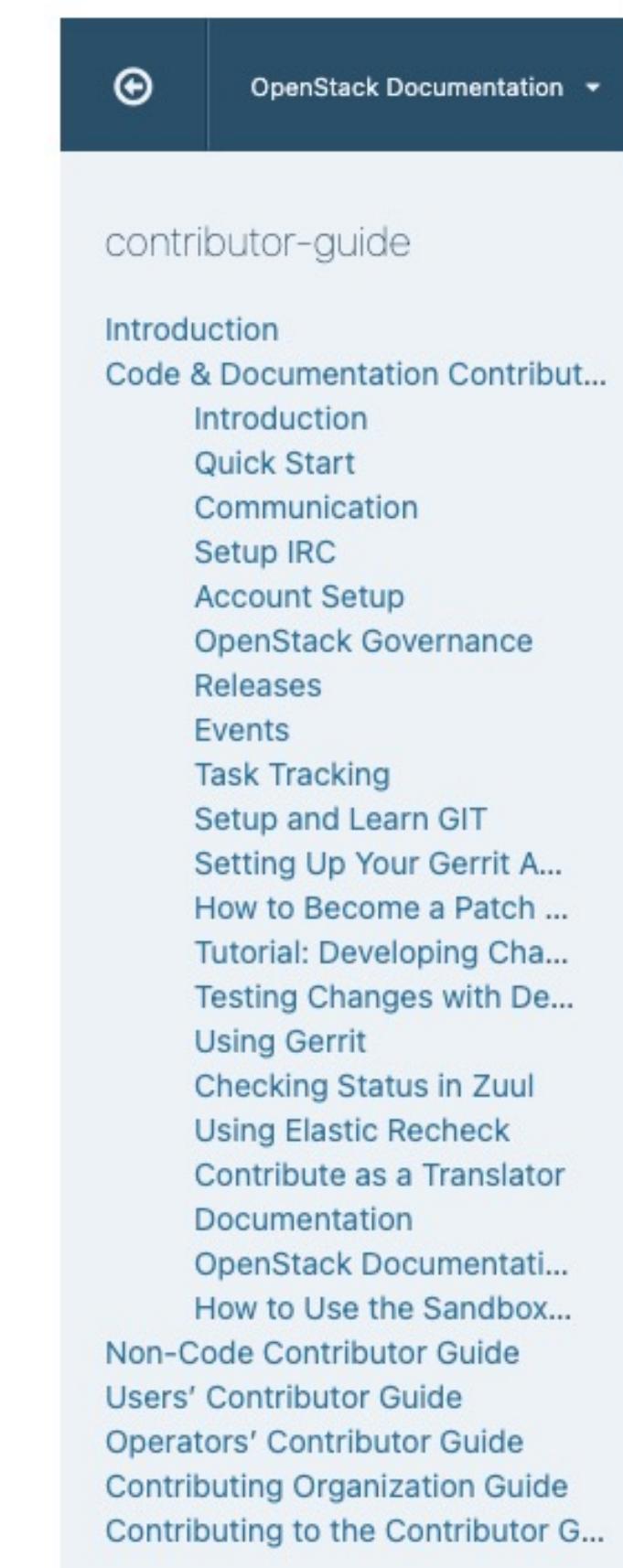
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Presenter : Seung Tae Kim



**Openstack is a huge project that combines multiple components.  
It basically consists of 6 core & 30 additional components independently.**





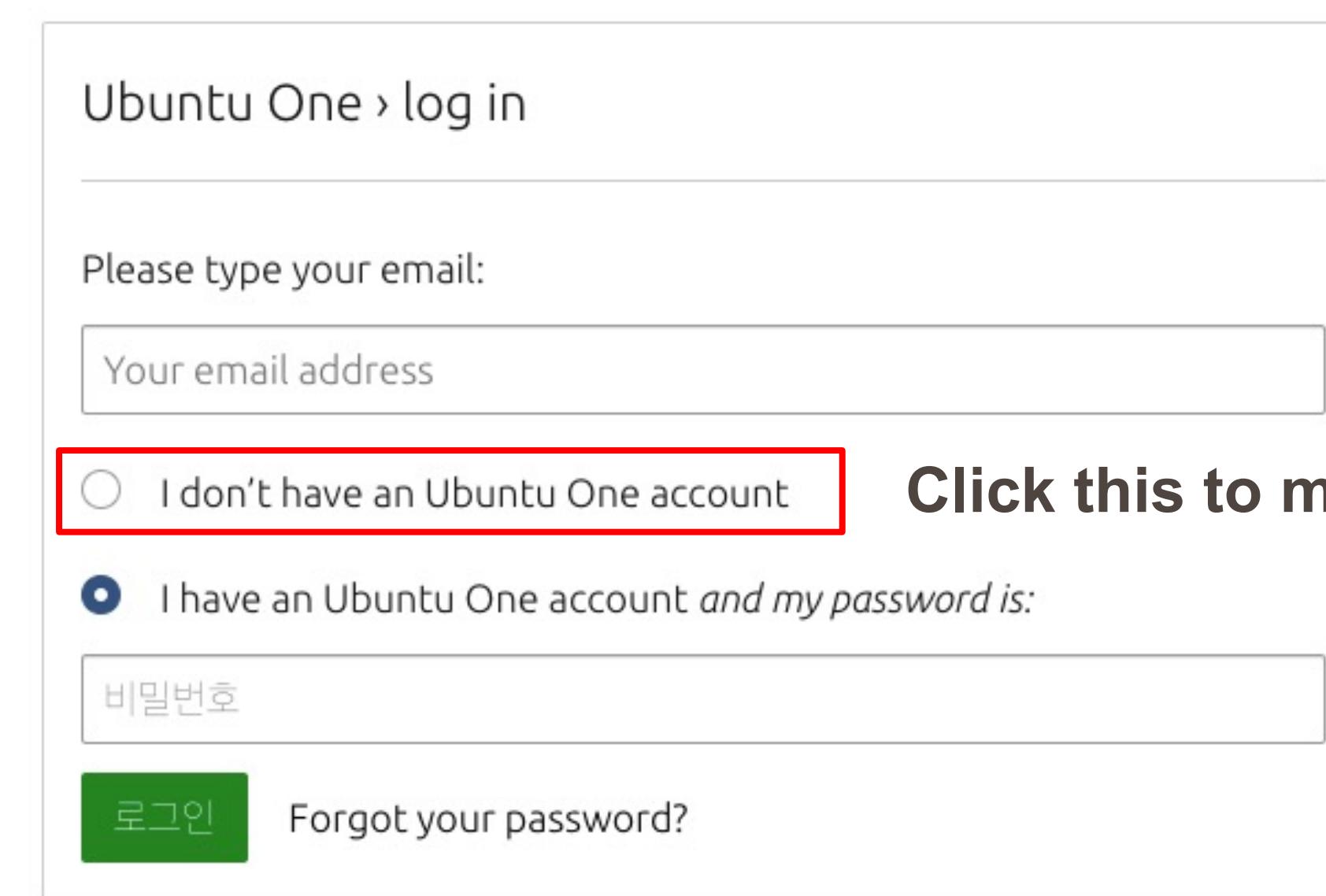
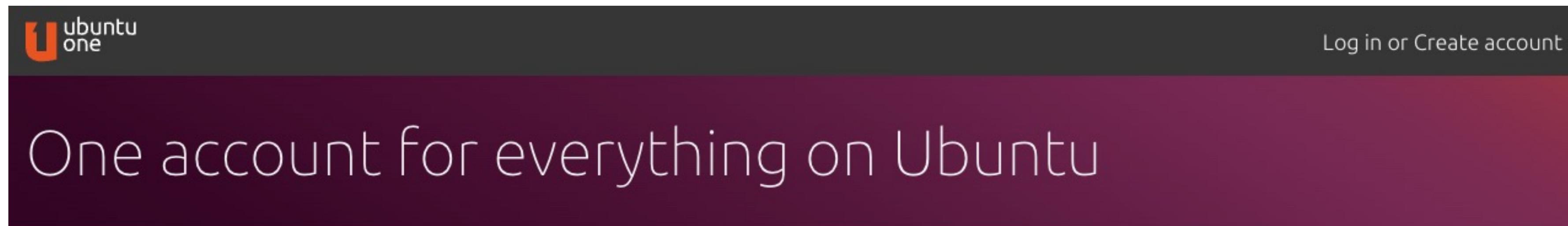
The screenshot shows the 'Code & Documentation Contributor Guide' page. At the top left is a sidebar with a navigation menu. The main content area has a title 'Code & Documentation Contributor Guide' and a language selection bar with links for English, Korean, Chinese, German, Spanish, and Indonesian. Below this is a section titled 'Code and Documentation Contributors' with a bulleted list of topics including Introduction, Quick Start, Communication, Setup IRC, Account Setup, OpenStack Governance, Releases, Events, Task Tracking, Setup and Learn GIT, Setting Up Your Gerrit A..., How to Become a Patch ..., Tutorial: Developing Cha..., Testing Changes with De..., Using Gerrit, Checking Status in Zuul, Using Elastic Recheck, Contribute as a Translator, Documentation, OpenStack Documentati..., How to Use the Sandbox..., Non-Code Contributor Guide, Users' Contributor Guide, Operators' Contributor Guide, Contributing Organization Guide, and Contributing to the Contributor G...'. There are also back and forward navigation arrows at the bottom right of the main content area.

**It is an official account & contribution guide for those who are new to OpenStack.**

**All contents can be found in documents through the link below.**

- **Account setup**
- **Gerrit & Storyboard**
- **Commit message rule**
- **Git review setup**
- **IRC signup**
- **Sandbox commit practice**

# All of our journey begins with signing up for an ubuntu one account.



Ubuntu One › log in

Please type your email:

I don't have an Ubuntu One account **Click this to make your ubuntu one account**

I have an Ubuntu One account and my password is:

**로그인** [Forgot your password?](#)

# Fill the signup format and submit it!

Ubuntu One > create account

Please type your email:

I don't have an Ubuntu One account

I have an Ubuntu One account *and my password is:*

Please tell us your full name and choose a username and password:

Full name

Username

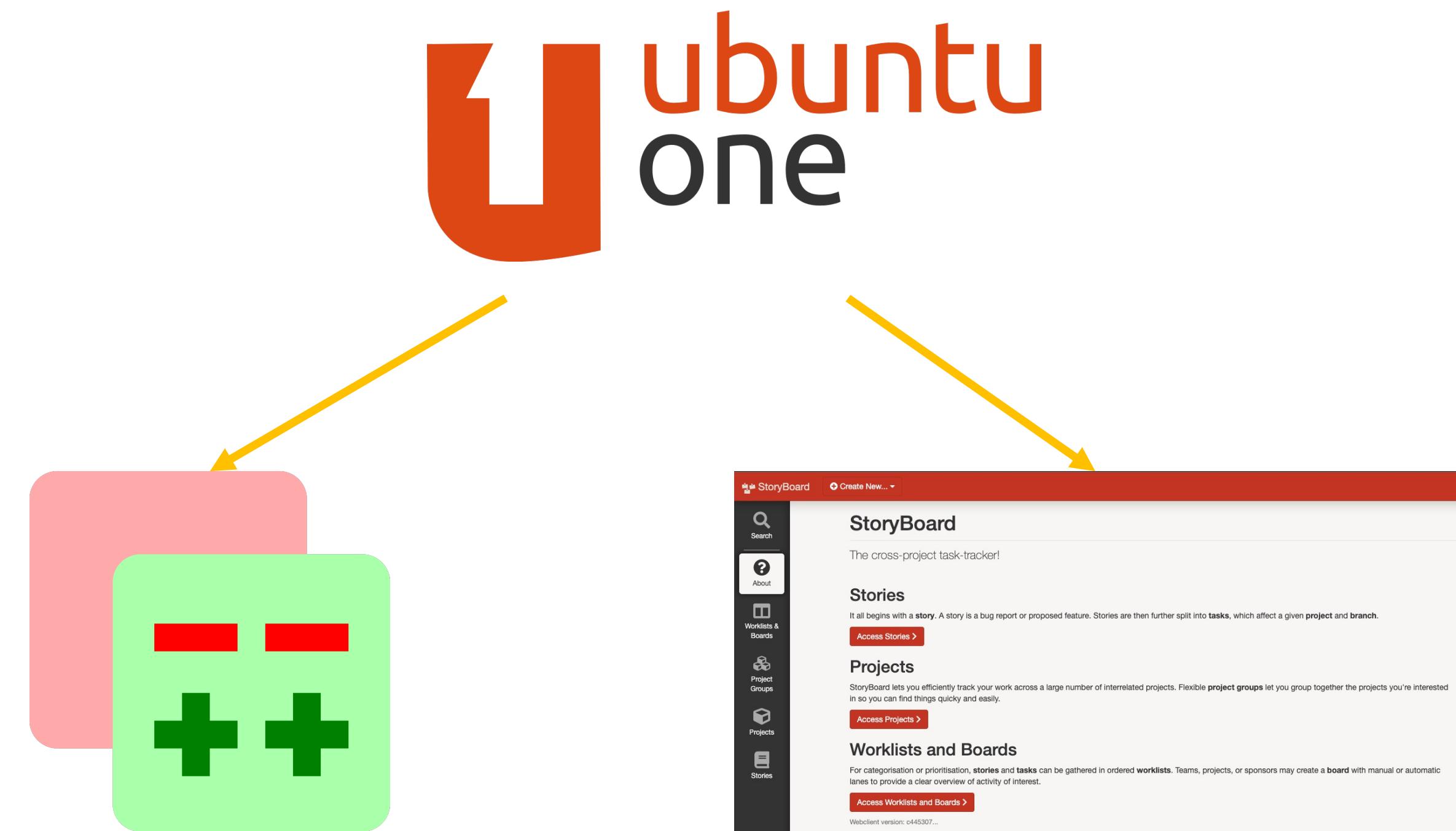
- Between 3 and 32 characters long.
- Allowed: lowercase letters, numbers and hyphens.
- NOT allowed: CAPITAL letters, special characters.
- NOT allowed: only numbers or consecutive hyphens.

Choose password

Re-type password

Ubuntu One is the single account you use to log in to all services and sites related to Ubuntu.

If you have an existing Ubuntu Single Sign On account, this is now called your Ubuntu One account. [Read More >](#)



You can use ubuntu one as an integrated account of gerrit & storyboard

# Gerrit

As a tool to commit & review to OpenStack, you can commit here the code that has been working on bug reports or functional improvement that you build. you can receive code review scores from the mainainer based on git.

opendev CHANGES ▾ DOCUMENTATION ▾ BROWSE ▾

status:open -is:wip

?

Sign in

Subject	Status	Owner	Reviewers	Repo	Branch	Updated	Size	CR	RP	V	W
Ensure we mount the certificates in container	--	Francesco Panta...	» cjeanner (...)	openstack/tripleo-ansible	stable/wallaby (cephadm/slurp-cert-stable/wall...)	10:11	XS			+1	
Correct how we fetch certificate for cephadm/rgw	--	Francesco Panta...	» cjeanner (...)	openstack/tripleo-ansible	stable/wallaby (cephadm/slurp-cert-stable/wall...)	09:58	S			-1	
Add missing "become: true"	--	Francesco Panta...	» cjeanner (...)	openstack/tripleo-ansible	stable/wallaby (cephadm/slurp-cert-stable/wall...)	09:34	XS			+1	
Add extra debug log to change cache	--	James E. Blair		zuul/zuul	master	09:07	XS				
Add cinder volume drivers for NEC V series Storage	--	» Naoki Saito	» Atsushi	openstack/cinder	master ( bp/nec-v-volume-driver )	08:45	XL	+1		+1	
db: Add tests to ensure we keep migrations in sync	--	» stephenfin		openstack/cinder	master ( bp/remove-sqlalchemy-migrate )	08:25	M			+1	
Upgrade react-router-dom	--	James E. Blair		zuul/zuul	master	08:15	M				
<u>WIP Use AuthProvider</u>	--	» James E. Blair	» Matthieu	zuul/zuul	master ( GUI_admin )	08:15	L				
Web UI: Show pipeline types as icons	--	» Matthieu Huin		zuul/zuul	master ( GUI_admin )	08:15	M				
Web UI: Add "Create Autohold Request" form, improve API error messages	--	» Matthieu Huin	Felix	zuul/zuul	master ( GUI_admin )	08:15	L				
web UI: allow a privileged user to promote a change	--	» Matthieu Huin	Felix	zuul/zuul	master ( GUI_admin )	08:15	M				
Example Docker compose: keycloak integration	--	Matthieu Huin		zuul/zuul	master ( GUI_admin )	08:15	XL				
Web UI: add Autoholds, Autohold page	--	» Matthieu Huin	Felix	zuul/zuul	master ( GUI_admin )	08:15	XL				
Web UI: allow a privileged user to request autohold	--	» Matthieu Huin	Felix	zuul/zuul	master ( GUI_admin )	08:15	M				
web UI: allow a privileged user to re-enqueue a change	--	» Matthieu Huin	Felix	zuul/zuul	master ( GUI_admin )	08:15	L				
web UI: allow a privileged user to dequeue a change	--	» Matthieu Huin	Felix, James	zuul/zuul	master ( GUI_admin )	08:15	L				
web UI: user login with OpenID Connect	--	» Matthieu Huin	Felix, James, +1	zuul/zuul	master ( GUI_admin )	08:15	XL				
[web][config] move timezone component to preferences	--	Andy Ladjadj	Ian, Matthieu	zuul/zuul	master	07:50	L			+1	
Upgrade DRBD Puppet module from 0.3.0 to 0.5.2 version	--	» Daniel Stevens...	» Scott, Roberto Nog...	starlingx/integ	master ( change-813015 )	06:51	L			+1	
Test aborting queued live migration	--	» Artom Lifshitz		openstack/nova	master ( bug/1949808 )	06:27	M			+1	
WIP: db: Remove unnecessary sqlalchemy abstraction	--	» stephenfin		openstack/cinder	master ( bp/remove-sqlalchemy-migrate )	06:19	XL			-1	
Implemented deferred service restart Nagios check	--	» Connor	Zuul	openstack/charm-rabbitmq-server	master ( check-deferred-restarts )	05:54	M			+1	
docs: Add whereto for testing redirect rules	--	» stephenfin		openstack/cinder	master ( bp/remove-sqlalchemy-migrate )	05:46	S			+1	
Create Keystone admin endpoint for Rally job	--	» Rodolfo Alonso	Bernard, Lajos	openstack/neutron	master ( bug/1949945 )	05:41	XS	✓		✗	✓

# Gerrit Contributor Agreement

When you finish signing up for Gerrit with Ubuntu one, go to the setting page and click on the contributor agreement.

Click ICLA there, set username and full name in your profile (it is necessary to set the git review, so make sure to set it up)

Agreements	
Name	Description
<a href="#">New Contributor Agreement</a>	

### New Contributor Agreement

Select an agreement type:

ICLA  
Agreement already submitted.

System CLA  
DON'T SIGN THIS: System CLA (externally managed)

USG CLA  
DON'T SIGN THIS: U.S. Government CLA (externally managed)

ID	<input type="text"/>
Email	<input type="text"/>
Registered	<input type="text"/>
Username	<input type="text"/>
Full name	<input type="text"/>
Display name	<input type="text"/>
Status (e.g. "Vacation")	<input type="text"/>
<input type="button" value="SAVE CHANGES"/>	

# Create & Register your SSH Key

After creating an account, type out the command below at the desktop terminal to check the SSH key currently on your computer.

```
ls -la ~/.ssh
```

If you enter the command, you will get the SSH key you own as below, or if you don't have it, nothing will come out.

```
(venv) (base) [REDACTED] seungtae_kim % ls -la ~/.ssh
total 24
[REDACTED] ryan_kim  staff  160 Aug 11 [REDACTED]
[REDACTED] ryan_kim  staff  1664 Sep  4 [REDACTED]
[REDACTED] ryan_kim  staff  1409 Aug 14 [REDACTED]
[REDACTED] ryan_kim  staff   529 Aug 11 [REDACTED] .old
[REDACTED] ryan_kim  staff  1679 Aug 10 [REDACTED] .pem
```

Create an SSH key to connect your terminal with your Gerrit account.

```
ssh-keygen -t rsa -b 4096 -C "your_email@example.com"
```

You can set the file name and password of the SSH key, but if you don't want to make custom settings, enter all the entities.

```
Enter a file in which to save the key (/Users/you/.ssh/id_rsa): [Press enter]
Enter passphrase (empty for no passphrase): [Type a passphrase]
Enter same passphrase again: [Type passphrase again]
```

## Create & Register your SSH Key

create config file using your terminal below the path

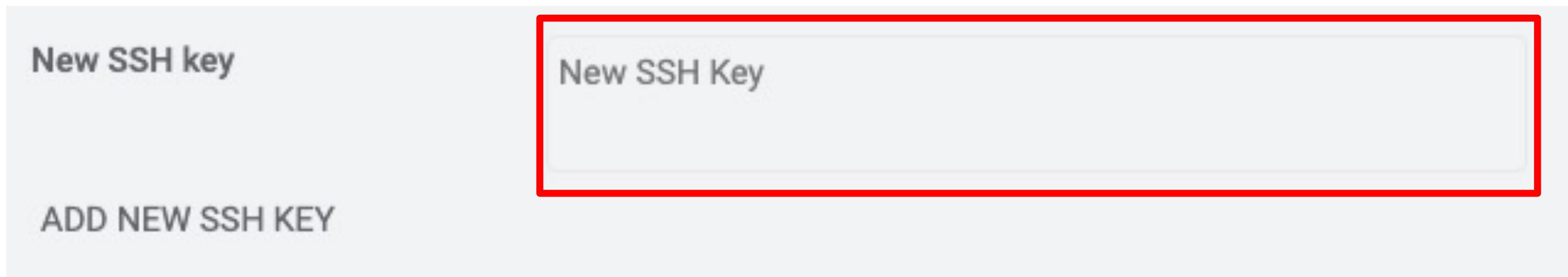
```
> vim ~/.ssh/config
```

Copy the text below and paste these into the config file

```
Host review.opendev.org
  Hostname review.opendev.org
  Port 29418
  User <your_gerrit_username>
  IdentityFile ~/.ssh/<your SSH Key File Name>
```

```
cat ~/.ssh/<your SSH key file.pub>
```

If you have set the text up, copy and paste the password value in SSH key file to “New SSH key box” at the bottom of your Gerrit account settings.

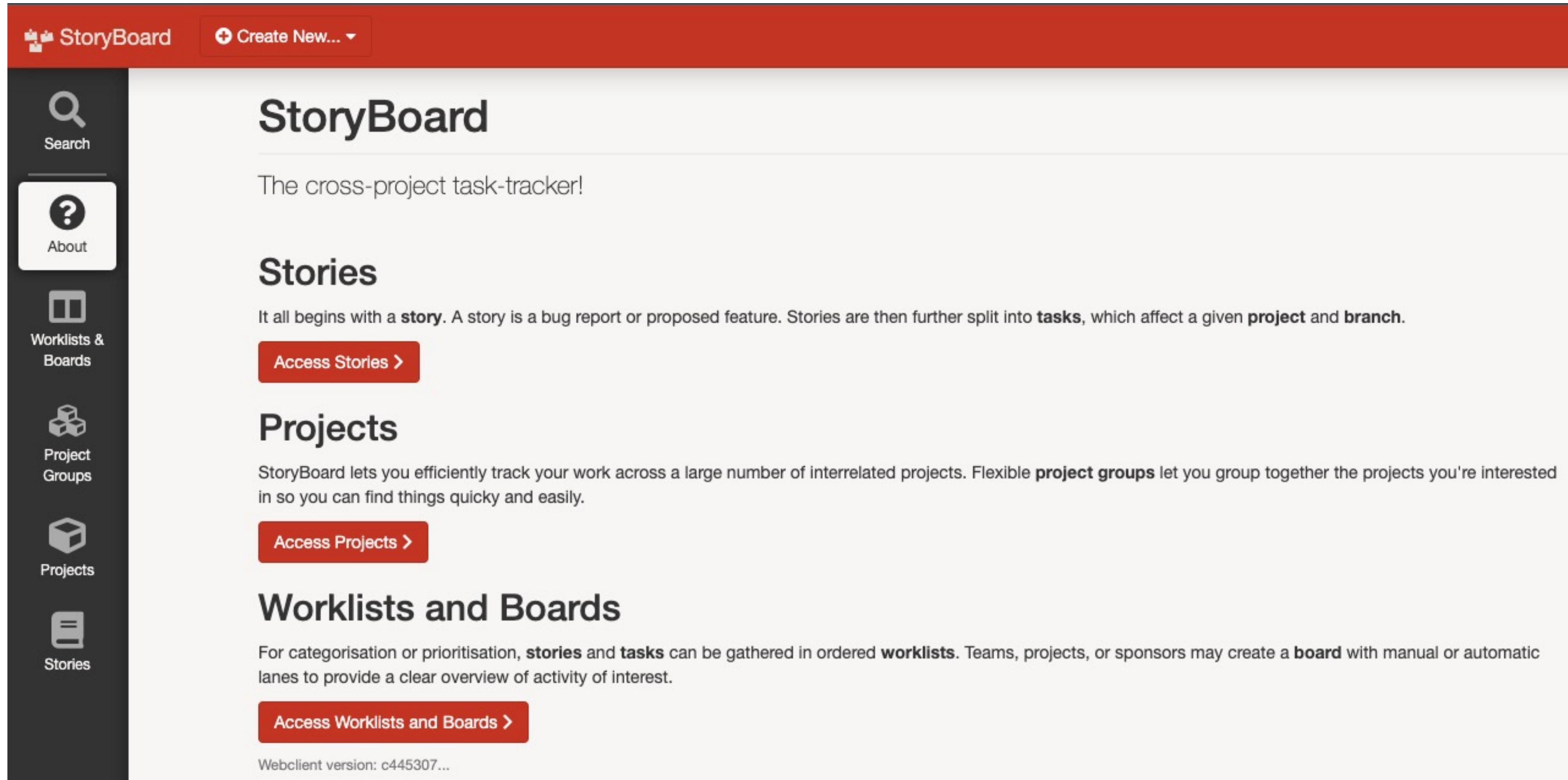


Reference :

<https://docs.openstack.org/contributors/common/setup-gerrit.html>

# Storyboard

It is a tool that leaves bug messages or issues that need to be improved while using open stack, and it is possible to work in conjunction with gerrit.



The screenshot shows the StoryBoard application interface. At the top, there is a red header bar with the StoryBoard logo and a "Create New..." button. On the left, a dark sidebar contains icons for Search, About, Worklists & Boards, Project Groups, Projects, and Stories. The main content area features a large title "StoryBoard" and a subtitle "The cross-project task-tracker!". Below this, there are three main sections: "Stories", "Projects", and "Worklists and Boards". Each section has a brief description and a red "Access [Section]" button. At the bottom of the page, there is a footer note about the webclient version.

StoryBoard

The cross-project task-tracker!

## Stories

It all begins with a **story**. A story is a bug report or proposed feature. Stories are then further split into **tasks**, which affect a given **project** and **branch**.

[Access Stories >](#)

## Projects

StoryBoard lets you efficiently track your work across a large number of interrelated projects. Flexible **project groups** let you group together the projects you're interested in so you can find things quickly and easily.

[Access Projects >](#)

## Worklists and Boards

For categorisation or prioritisation, **stories** and **tasks** can be gathered in ordered **worklists**. Teams, projects, or sponsors may create a **board** with manual or automatic lanes to provide a clear overview of activity of interest.

[Access Worklists and Boards >](#)

Webclient version: c445307...

# Commit Message Rule

```
Add "openstack network replace --tag" command
build "neutron tag-replace" command into openstack integrated
command into "openstack network replace --tag" with test codes.

(neutron tag-add & tag-remove are already built with openstack
network set --tag & openstack network unset --network respectively.)
setup.cfg, network.rst & neutron.csv files in the doc folder
also updated in this patch.

Change-Id: Ic086a9a4cea88dc3f210c46d301d117fc644cecf

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:      Tue Nov 9 22:43:22 2021 +0900
#
# On branch master
# Your branch and 'origin/master' have diverged,
# and have 4 and 2 different commits each, respectively.
#   (use "git pull" to merge the remote branch into yours)
#
# Changes to be committed:
```

## Summary Line

The summary line briefly describes the patch content. The character limit is 50 characters. The summary line should not end with a period. If the change is not finished at the time of the commit, start the commit message with WIP.

## Body

The body contains the explanation of the issue being solved and why it should be fixed, the description of the solution, and additional optional information on how it improves the code structure, or references to other relevant patches, for example. The lines are limited to 72 characters. The body should contain all the important information related to the problem, without assuming that the reader understands the source of the problem or has access to external sites.

## Basic Commit message Format

All Commit message is written in compliance with the PEP8 rule.

- Summary Line
- Empty line
- Body
- Empty line
- Footers

There are also rules for configuring commit messages.

Fill in the title → empty line → body contents what you worked on → empty line → footer content in order.

# Commit Message Rule

```
Add "openstack network replace --tag" command  
  
build "neutron tag-replace" command into openstack integrated  
command into "openstack network replace --tag" with test codes.  
  
(neutron tag-add & tag-remove are already built with openstack  
network set --tag & openstack network unset --network respectively.)  
  
setup.cfg, network.rst & neutron.csv files in the doc folder  
also updated in this patch.  
  
Change-Id: Ic086a9a4cea88dc3f210c46d301d117fc644cecf
```

```
# Please enter the commit message for your changes. Lines starting  
# with '#' will be ignored, and an empty message aborts the commit.  
#  
# Date:      Tue Nov 9 22:43:22 2021 +0900  
#  
# On branch master  
# Your branch and 'origin/master' have diverged,  
# and have 4 and 2 different commits each, respectively.  
#   (use "git pull" to merge the remote branch into yours)  
#  
# Changes to be committed:
```

Write additional content on Footer, such as **story ID**.

**Change-Id** is created automatically, so do not write it.

## Footers

Footers are lines in the final paragraph of a commit message, used to link the change to other tools.

The following footer is required:

- The **Change-Id** line is a unique hash describing the change, which is generated automatically by a Git commit hook when you initially save a commit message. This should not be changed when rebasing a commit following review feedback, since it is used by Gerrit, to track versions of a patch. It won't appear when you're editing a new commit message for the first time, but if you `commit --amend` later you will see it.

StoryBoard specific footers:

- **Task:** 1234: the number of the task in Storyboard implemented by the change. This will auto update the task to 'Review' status and assign it to you when you push the patch.
- **Story:** 1234567: the number of the story in Storyboard to which the task being implemented belongs. This will post a comment on the story with a link to your patch.

Launchpad specific footers:

- **Closes-Bug:** #123456789: use **Closes-Bug** if the commit is intended to fully fix and close the bug being referenced. Use the Launchpad ID of the bug for the number; Gerrit automatically creates a link to the bug.
- **Partial-Bug:** #123456789: use **Partial-Bug** if the commit is only a partial fix and more work is needed. Use the Launchpad ID of the bug for the number; Gerrit automatically creates a link to the bug.
- **Related-Bug:** #12456789: use 'Related-Bug' if the commit is merely related to the referenced bug. Use the Launchpad ID of the bug for the number; Gerrit automatically creates a link to the bug.
- **Partial-Implements:** Use this footer if the change partially implements a Launchpad blueprint. Use the name of the blueprint as an ID.
- **Implements:** Use this footer if the change fully implements a Launchpad blueprint. Use the name of the blueprint as an ID.

The following footers are optional; however, their use is recommended if they are applicable to the patch:

- The **DocImpact** footer contains a comment about why the change impacts documentation. Put DocImpact on a line by itself. Use this footer to indicate that documentation is either contained in the patch or has documentation impact. When this footer is included in a commit message, Gerrit creates a bug for the project affected by the change for task tracking, or move to the openstack-api-site as needed.
- The **APIImpact** footer contains a comment about why the change impacts a public HTTP API. Put APIImpact on a line by itself. Use this footer to indicate that the patch impacts a public HTTP API. When this footer is included in a commit message, the API\_Working\_Group can use it to help find relevant reviews.
- The **SecurityImpact** footer is used to indicate that a change has security implications and should be reviewed by the OpenStack Security Group.
- The **UpgradeImpact** footer contains a comment about why the change impacts upgrades. It is used to indicate that a change has upgrade implications for those doing continuous deployment or N to N+1 upgrades. Also consider updating the 'Upgrade Notes' section in the release notes for the affected project.
- The **Depends-On:** <gerrit-change-url> footer is used to refer to a change the current one depends on. Use the permalink of the change.

# Git Review Setup

Let's prepare a commit setup to Gerrit.

## pip install git-review

Set your gitreview username at your local terminal.

```
git config — global — add gitreview.username “<your Gerrit Username>”
```

Run the following command on the path where you clone the OpenStack component:

```
git-review -s
```

If the SSH key you created is recognized, enter yes to complete the setting.

```
(venv) (base)          openstackclient % git review -s
The authenticity of host '[review.opendev.org]:29418 ([        ])':29418)' can't be established
ECDSA key fingerprint is SHA256:/[REDACTED].
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
```

### Installation

#### Mac OS

In a terminal type:

```
pip install git-review
```

If you don't have pip installed already, follow the [installation documentation](#) for pip.

#### >Note

Mac OS X El Capitan and Mac OS Sierra users might see an error message like "Operation not permitted" when installing with the command. In this case, there are two options to successfully install git-review.

Option 1: install using pip with more options:

```
pip install --install-option '--install-data=/usr/local' git-review
```

Option 2: Use the package manager [Homebrew](#), and type in a terminal:

```
brew install git-review
```

### Linux

For distributions like Debian, Ubuntu, or Mint open a terminal and type:

```
sudo apt install git-review
```

For distributions like RedHat, Fedora 21 or earlier, or CentOS open a terminal and type:

```
sudo yum install git-review
```

For Fedora 22 or later open a terminal and type:

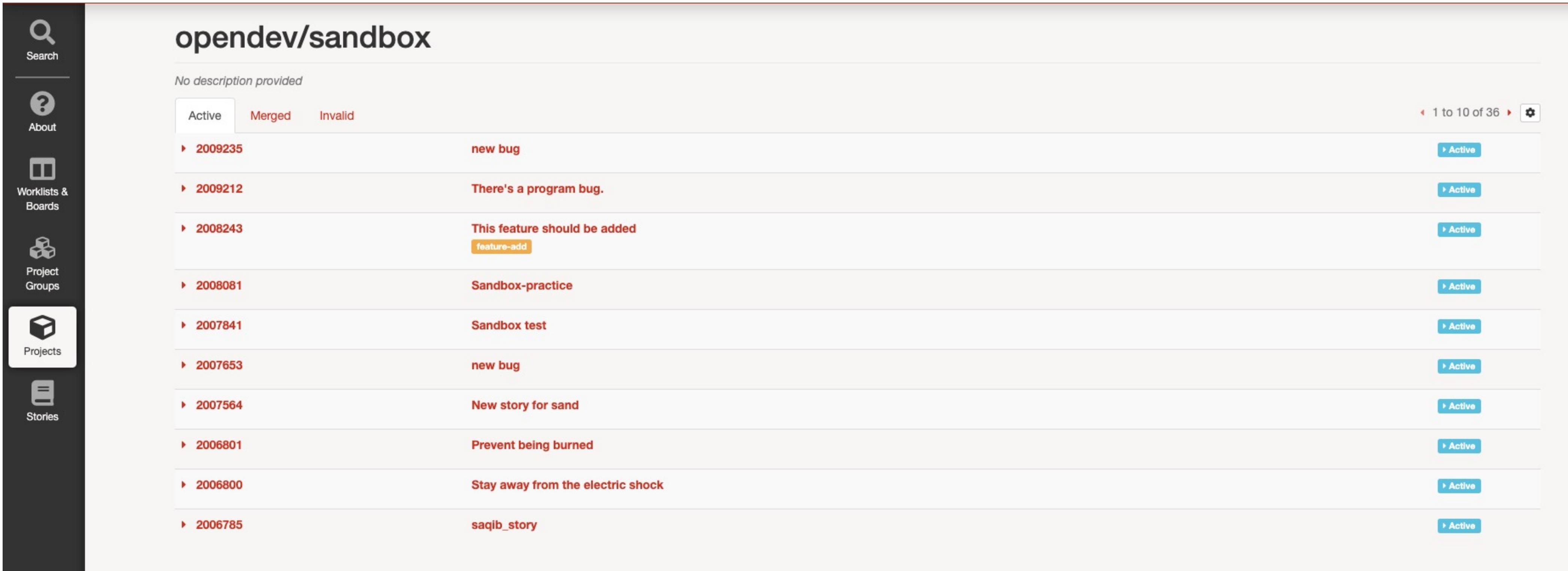
```
sudo dnf install git-review
```

For SUSE distributions open a terminal and type:

```
sudo zypper in python-git-review
```

# Storyboard & Sandbox Practice!

Let's practice the process of solving the bug on the storyboard and committing to Gerrit with a repository called Sandbox.



The screenshot shows the Storyboard interface for the 'opendev/sandbox' project. The left sidebar includes links for Search, About, Worklists & Boards, Project Groups, Projects (selected), and Stories. The main area displays a list of stories:

ID	Description	Status
2009235	new bug	Active
2009212	There's a program bug.	Active
2008243	This feature should be added feature-add	Active
2008081	Sandbox-practice	Active
2007841	Sandbox test	Active
2007653	new bug	Active
2007564	New story for sand	Active
2006801	Prevent being burned	Active
2006800	Stay away from the electric shock	Active
2006785	saqib_story	Active

The Sandbox repo was created to work on code practice using Gerrit.

# Storyboard & Sandbox Practice!

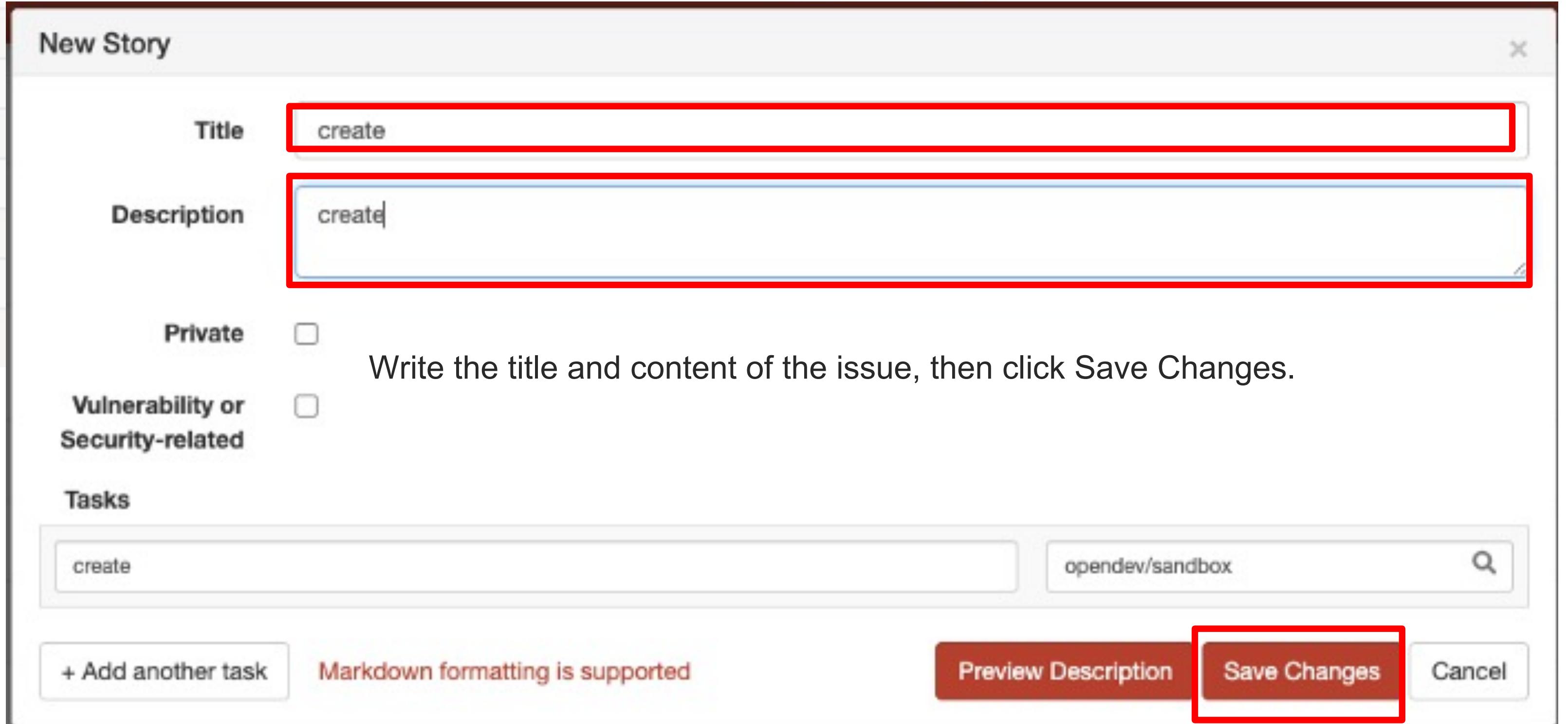
opendev/sandbox 

No description provided

Active Merged Invalid

#	Description
2008243	This feature should be added <small>feature-add</small>
2008061	Sandbox-practice
2007841	Sandbox test
2007653	new bug
2007564	New story for sand
2006801	Prevent being burned
2006800	Stay away from the electric shock
2006785	saqib_story
2006657	Try to create a story
2006444	RBAC and Policy

Click “Add story” and make an issue

 [+ Add story](#) 1 to 10 of 34

New Story

Title:   

Description:   

Private:

Vulnerability or Security-related:

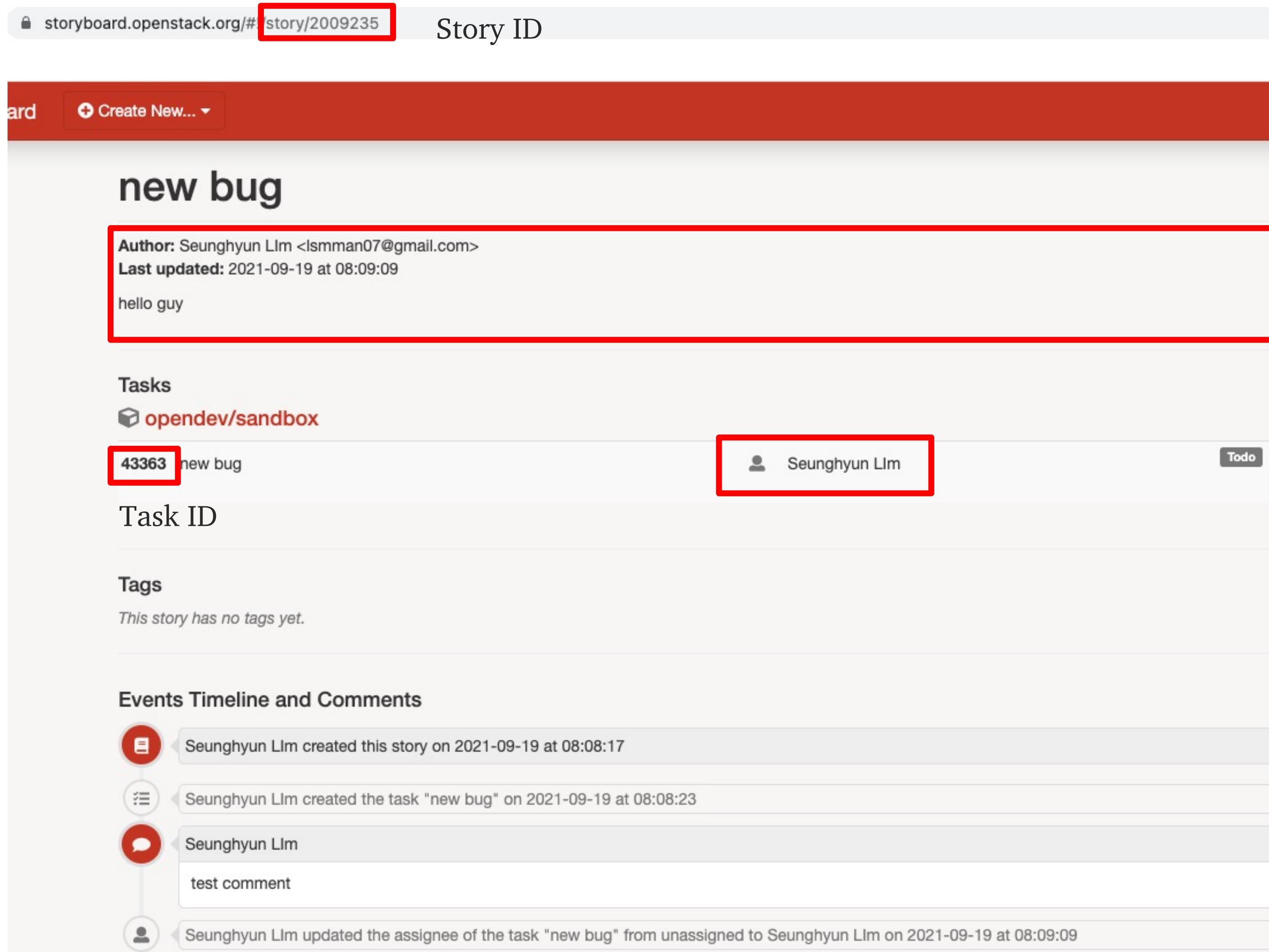
Tasks:

opendev/sandbox 

[+ Add another task](#) Markdown formatting is supported [Preview Description](#) Save Changes [Cancel](#)

Write the title and content of the issue, then click Save Changes.

# Check Story & Task ID!



The screenshot shows a storyboard interface for a project named "opendev/sandbox". A story titled "new bug" has been created. The story ID is highlighted with a red box and is "story/2009235". The story was created by Seunghyun Lim on 2021-09-19 at 08:08:17. A comment "hello guy" is present. The task ID for the story is "43363" and it is also highlighted with a red box. The task was created by Seunghyun Lim on 2021-09-19 at 08:08:23. The story has no assigned tags. The events timeline shows the creation of the story and task, a test comment from Seunghyun Lim, and the update of the assignee to Seunghyun Lim.

storyboard.openstack.org/#/story/2009235 Story ID

Card Create New... new bug

Author: Seunghyun Lim <lsmman07@gmail.com>  
Last updated: 2021-09-19 at 08:09:09

hello guy

Tasks

opendev/sandbox

43363 new bug Seunghyun Lim Todo

Task ID

Tags

This story has no tags yet.

Events Timeline and Comments

- Seunghyun Lim created this story on 2021-09-19 at 08:08:17
- Seunghyun Lim created the task "new bug" on 2021-09-19 at 08:08:23
- Seunghyun Lim test comment
- Seunghyun Lim updated the assignee of the task "new bug" from unassigned to Seunghyun Lim on 2021-09-19 at 08:09:09

Check the issue you created, Story & Task ID.

If you can solve the bug yourself, (if the issue does not be created by your self) assign you in the story.

# Clone Sandbox Project

opendev / sandbox

<> 코드 ⌂ 이슈 ⌂ Proposed changes

Sandbox for first time contributors

저장소 검색  Q

⌚ 1357 커밋 ⌚ 5 브랜치 ⌚ 10 태그 ⌚ 125 MiB

브랜치: master ▾

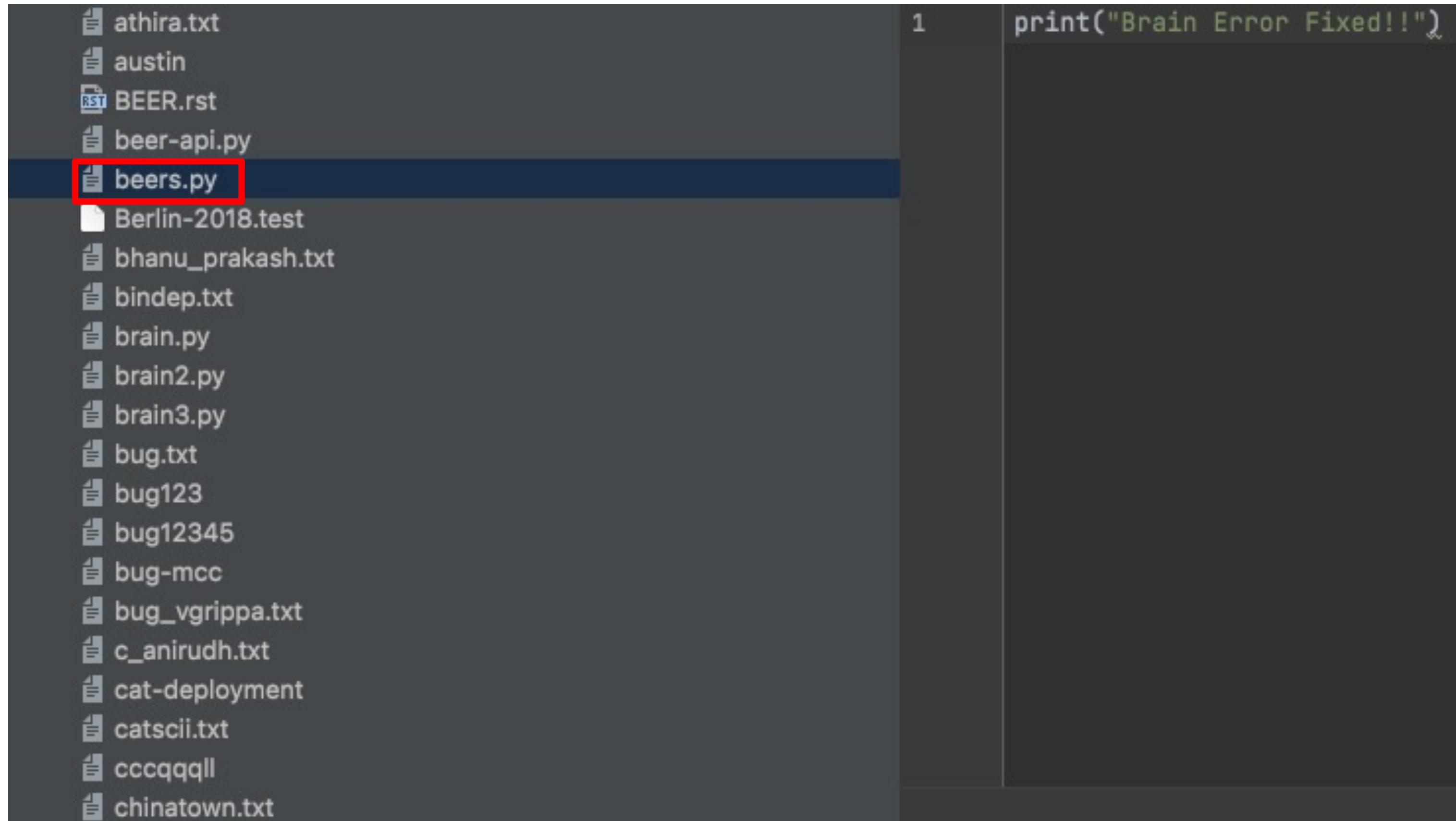
HTTPS <https://opendev.org/opendev/sandbox> ⌂ ⌂

Zuul	a4193e3c7d Merge "Playing around...."	1 개월 전
↳ Sudeep	Testing	12 달 전
↳ VOI	1st commit	2 년 전
↳ amfoss	Add prabhakar	2 년 전
↳ boston_training_folder	Cleaning up demo change for Patrick Healy	5 년 전
↳ code	Another file	2 년 전
↳ doc/source	zuulv3: start testing doc publishing	4 년 전
↳ helea	testing commit	1 년 전
↳ hello0723	edit text file	4 달 전
↳ kemopq-test	Adding hello world python script.	6 달 전
↳ knu-camp	Add knu-camp dir	3 년 전
↳ project_exercises_boston	[upstream] Add patch for Manila deep dive exercise	5 년 전
↳ releasenotes/notes	abc	4 년 전
↳ tests	Add beer pouring capabilities to sandbox	3 년 전
↳ train_denver_OUI	Setup Folder for Denver (Train) OUI	3 년 전

Clone the Sandbox repository to resolve issues in Sandbox storyboard.

Reference :  
<https://opendev.org/opendev/sandbox>

# Sandbox Project



The screenshot shows a terminal window with two panes. The left pane is a file browser listing various files and folders. The right pane is a code editor displaying a single line of Python code.

File Browser (Left Pane):

- athira.txt
- austin
- BEER.rst
- beer-api.py
- beers.py** (highlighted with a red border)
- Berlin-2018.test
- bhanu\_prakash.txt
- bindep.txt
- brain.py
- brain2.py
- brain3.py
- bug.txt
- bug123
- bug12345
- bug-mcc
- bug\_vgrippa.txt
- c\_anirudh.txt
- cat-deployment
- catscii.txt
- cccqqqll
- chinatown.txt

Code Editor (Right Pane):

```
1 print("Brain Error Fixed!!")
```

You can work on the file name in the form you want.

Please fill out the contents of the generated file as much as you want.

# Remember the Commit Message Rule!

```
Add "openstack network replace --tag" command

build "neutron tag-replace" command into openstack integrated
command into "openstack network replace --tag" with test codes.

(neutron tag-add & tag-remove are already built with openstack
network set --tag & openstack network unset --network respectively.)

setup.cfg, network.rst & neutron.csv files in the doc folder
also updated in this patch.

Change-Id: Ic086a9a4cea88dc3f210c46d301d117fc644cecf

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:      Tue Nov 9 22:43:22 2021 +0900
#
# On branch master
# Your branch and 'origin/master' have diverged,
# and have 4 and 2 different commits each, respectively.
#   (use "git pull" to merge the remote branch into yours)
#
# Changes to be committed:
```

Active 817208 Add "openstack network replace --tag" command

Updated	Nov 12	Add "openstack network replace --tag" command
Owner	SEUNG TAE KIM	build "neutron tag-replace" command into openstack integrated
Reviewers	Zuul	command into "openstack network replace --tag" with test codes.
CC	Seongsoo Cho	(neutron tag-add & tag-remove are already built with openstack
Repo   Branch	openstack/python-openstackclient   master	network set --tag & openstack network unset --network respectively.)
Parent	<a href="#">93c3d74</a>	setup.cfg, network.rst & neutron.csv files in the doc folder
Topic	No topic	also updated in this patch.
Strategy	Merge if Necessary	
Hashtags		
Code-Review	No votes.	
Verified	+1 Zuul	
Workflow	No votes.	
Links	<a href="#">gitweb</a>	

Commit messages written by your local terminal are displayed in the form of red boxes above in Gerrit.

When you complete the commit message, press “**esc**” and enter “**:wq**” to save the commit message and exit.

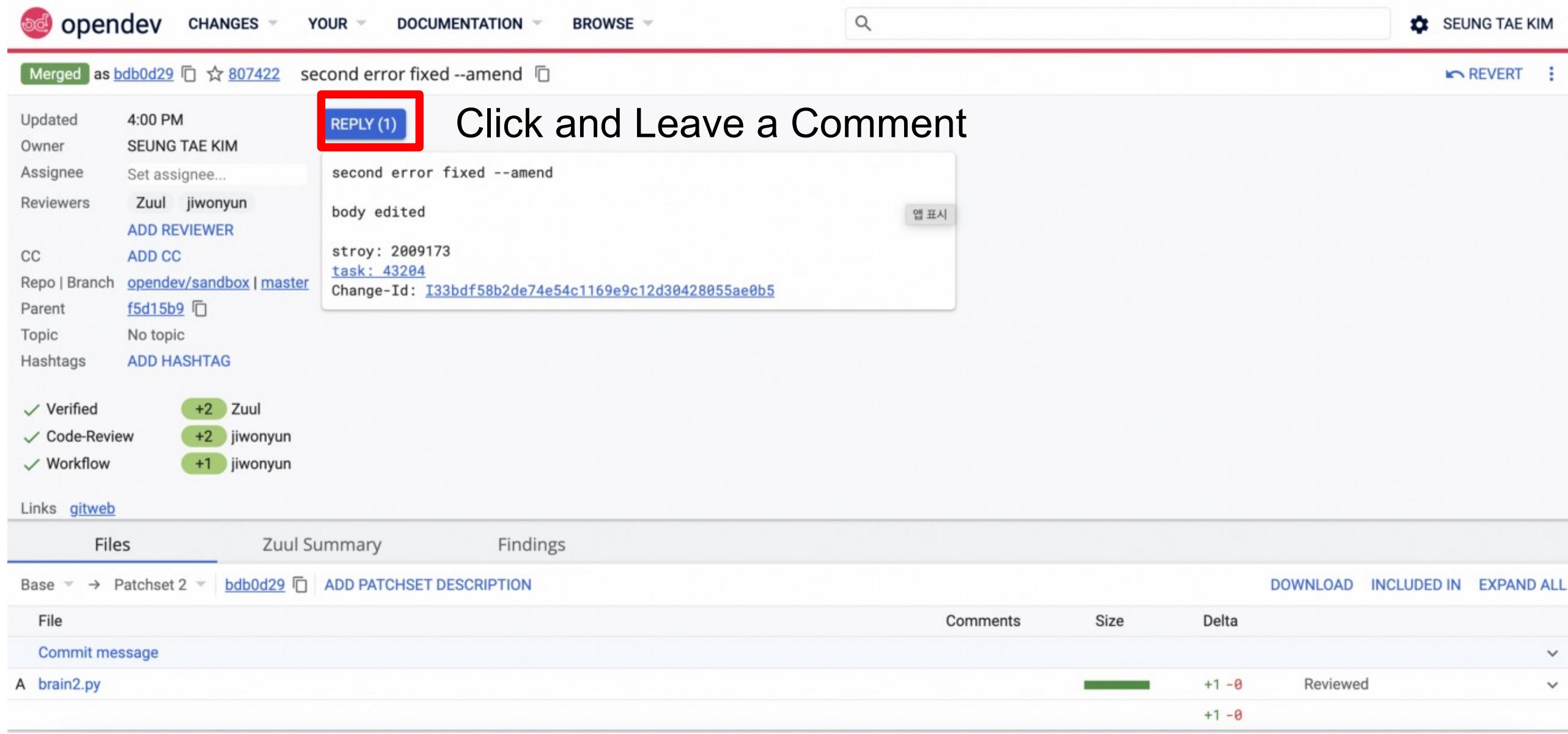
# Push Your Commit

> git review

```
(venv) (base) [REDACTED] sandbox % git review
remote:
remote: Processing changes: refs: 1, new: 1
remote: Processing changes: refs: 1, new: 1
remote: Processing changes: refs: 1, new: 1, done
remote:
remote: SUCCESS
remote:
remote: https://review.opendev.org/c/opendev/sandbox/+/807415 This is the stroyboard sandbox error fix test. [NEW]
remote:
To ssh://review.opendev.org:29418/opendev/sandbox.git
 * [new branch]      HEAD -> refs/for/master
```

When the commit is completed, it is possible to check the link to the commit page.

# Review Your Code with Your Partner

 opendev CHANGES YOUR DOCUMENTATION BROWSE

Merged as [bdb0d29](#) [807422](#) second error fixed --amend

REVERT :

Updated	4:00 PM	<b>REPLY (1)</b>
Owner	SEUNG TAE KIM	
Assignee	Set assignee...	
Reviewers	Zuul jiwonyun	<a href="#">ADD REVIEWER</a>
CC	<a href="#">ADD CC</a>	
Repo   Branch	<a href="#">opendev/sandbox</a>   <a href="#">master</a>	
Parent	<a href="#">f5d15b9</a>	
Topic	No topic	
Hashtags	<a href="#">ADD HASHTAG</a>	
✓ Verified	+2 Zuul	
✓ Code-Review	+2 jiwonyun	
✓ Workflow	+1 jiwonyun	
Links <a href="#">gitweb</a>		

Files Zuul Summary Findings

Base → Patchset 2 [bdb0d29](#) ADD PATCHSET DESCRIPTION

File	Comments	Size	Delta
Commit message			
A <a href="#">brain2.py</a>	+1 -0 Reviewed		

Leave a review of the uploaded commit in pairs.  
 check the review and modify the code according to the review.  
 (You can't review your code by yourself)

807422 second error fixed--amend  [brain2.py](#)

Base → Patchset 2 [gitweb browse](#) DOWNLOAD

File 2 of 2 | Prev | Up | Next

SHOW BLAME Diff view:

new file mode 100644

File 1 print("Thank you")

No newline at end of revision file.

After reviewing, you can get code review scores from your partner as follows.

✓ Verified

+2 Zuul

✓ Code-Review

+2 jiwonyun

✓ Workflow

+1 jiwonyun

# Review Your Partner's Code

Reviewers Zuul jiwonyun Add reviewer...

CC Add CC...

Say something nice...

Review your partner's code and check the results!

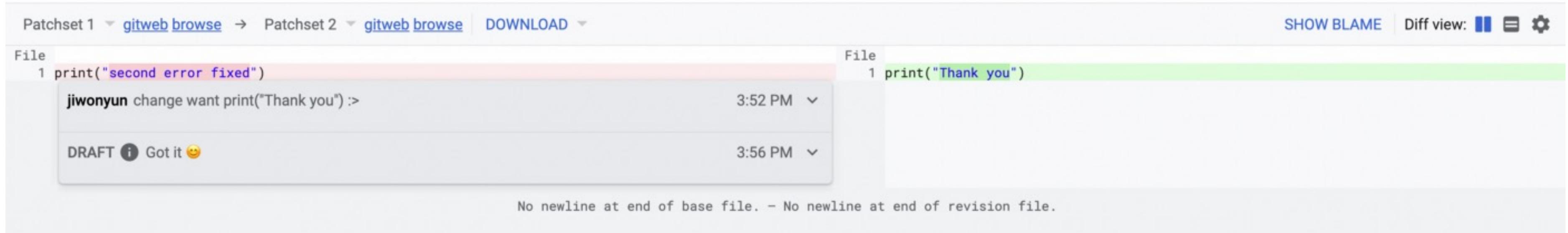
Preview formatting

Code-Review 0 +1 +2 No score

Verified You don't have permission to edit this label.

Workflow 0 +1 Ready for reviews

*Because this change has been merged, votes may not be decreased.*



Patchset 1 → gitweb browse → Patchset 2 → gitweb browse DOWNLOAD SHOW BLAME Diff view: |||

File 1 print("second error fixed")  
jiwonyun change want print("Thank you") :> 3:52 PM

DRAFT ⓘ Got it 😊 3:56 PM

No newline at end of base file. - No newline at end of revision file.

# Caution! Use “Commit --amend” After Review

```
Add "openstack network replace --tag" command

build "neutron tag-replace" command into openstack integrated
command into "openstack network replace --tag" with test codes.

(neutron tag-add & tag-remove are already built with openstack
network set --tag & openstack network unset --network respectively.)

setup.cfg, network.rst & neutron.csv files in the doc folder
also updated in this patch.

Change-Id: Ic086a9a4cea88dc3f210c46d301d117fc644cecf

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:      Tue Nov 9 22:43:22 2021 +0900
#
# On branch master
# Your branch and 'origin/master' have diverged,
# and have 4 and 2 different commits each, respectively.
# (use "git pull" to merge the remote branch into yours)
#
# Changes to be committed:
```

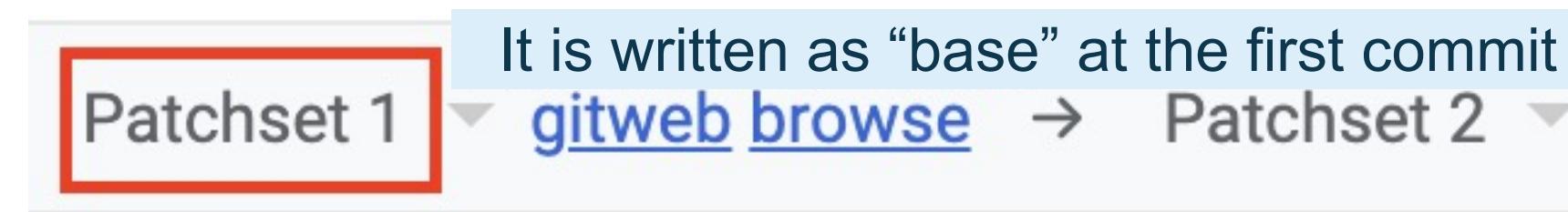
After you get code review, there are precautions when updating a work piece.

It's not working with a “**git commit**” like the first commit.

Please **use git commit --amend** to modify and commit the existing commit message.

A new commit is used to create a code that is completely different from the existing results.

# Caution! Change Patch

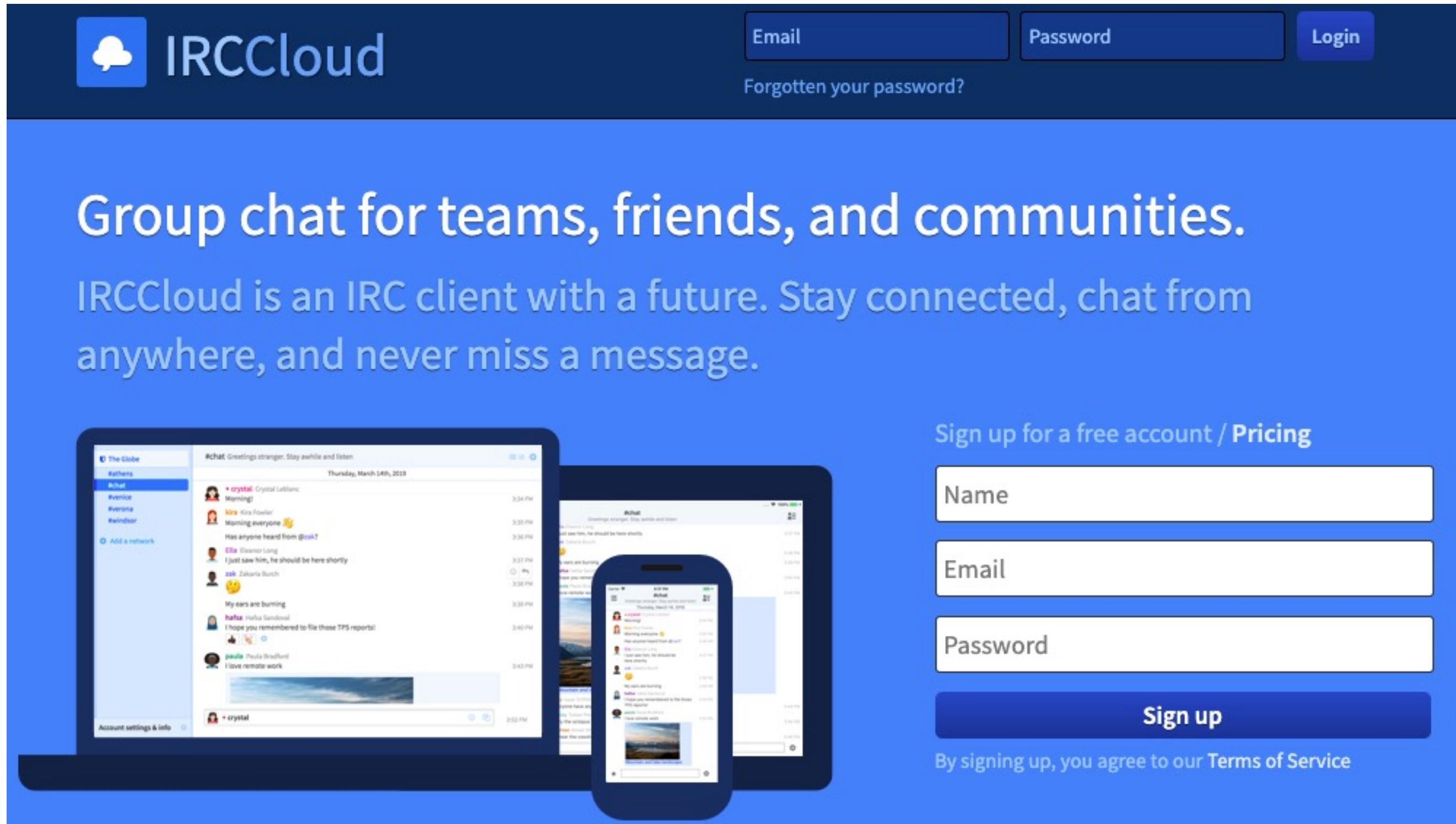


Change the part that says Base at the top of the code review screen above to Patchset1, and when you complete code modification, let's mention that the code has been modified to the person who left the code review and **press Done**.



Then you can see that the person who left the review says patchset2 on the right side of the article (when you leave a review on the initial commit, it says patchset1) and the code is merged and closed by both gerrit and storyboard when the final approver gives the workflow score.

# IRC & Mailing



The screenshot shows the IRCCloud website. At the top, there's a dark blue header with the "IRCCloud" logo (a white cloud icon) and the word "IRCCloud" in white. Below the logo are fields for "Email" and "Password" with a "Login" button. A "Forgotten your password?" link is also present. The main content area has a large blue background with white text. It features the heading "Group chat for teams, friends, and communities." followed by a subtext: "IRCCloud is an IRC client with a future. Stay connected, chat from anywhere, and never miss a message." Below this, there are two device mockups: a laptop and a smartphone, both displaying the IRCCloud interface with a list of messages and users.

**Sign up for a free account / Pricing**

Name

Email

Password

**Sign up**

By signing up, you agree to our [Terms of Service](#)

**IRC**, or Internet Relay Chat, is often used as a real-time communication capability with open source projects.

If you have any questions about OpenStack to the maintainers, please proceed with the membership here and contact directly.

# IRC Setup your account & Nickname



The screenshot shows an IRC log from the #NickServ channel. The log starts with a message from NickServ asking for account authentication. It then shows the user registering their nickname with a password and email. NickServ confirms the registration and provides instructions for verification via a link. Subsequent messages show NickServ protecting the registered nickname and sending a welcome message.

NickServ

Sunday, October 10th, 2021 (about a month ago)

R ryanKor SeungTaeKim  
REGISTER password email

NickServ  
Nickname ryanKor has been registered successfully and is now yours to use.  
See HELP SET for information on settings that you can set on your new  
nickname. If you change nickname or reconnect to the IRC network you will be  
required to identify using the password you chose when you registered. See  
HELP IDENTIFY for more information on identifying your nickname.

To complete the registration, the nickname must be VERIFIED. Note that we  
do **not** validate the e-mail address.  
To verify your nick, please visit the following link in your browser:

<https://services.oftc.net/verify/7279616E4B6F72:1633869278:13F25D657EAA03E4078FEE0B1FAFF444D03F2D9>

This link expires in 1 hour. If the link expires, see REVERIFY.  
Successfully set +R on your nick.

Monday, October 11th, 2021

NickServ  
This nickname is registered and protected. If it is your nickname, you may  
authenticate yourself to services with the IDENTIFY command. You are  
getting this message because you are not on the access list for the  
ryanKor nickname.

Tuesday, October 12th, 2021

New messages

Saturday, October 16th, 2021

NickServ  
This nickname is registered and protected. If it is your nickname, you may  
authenticate yourself to services with the IDENTIFY command. You are  
getting this message because you are not on the access list for the  
ryanKor nickname.

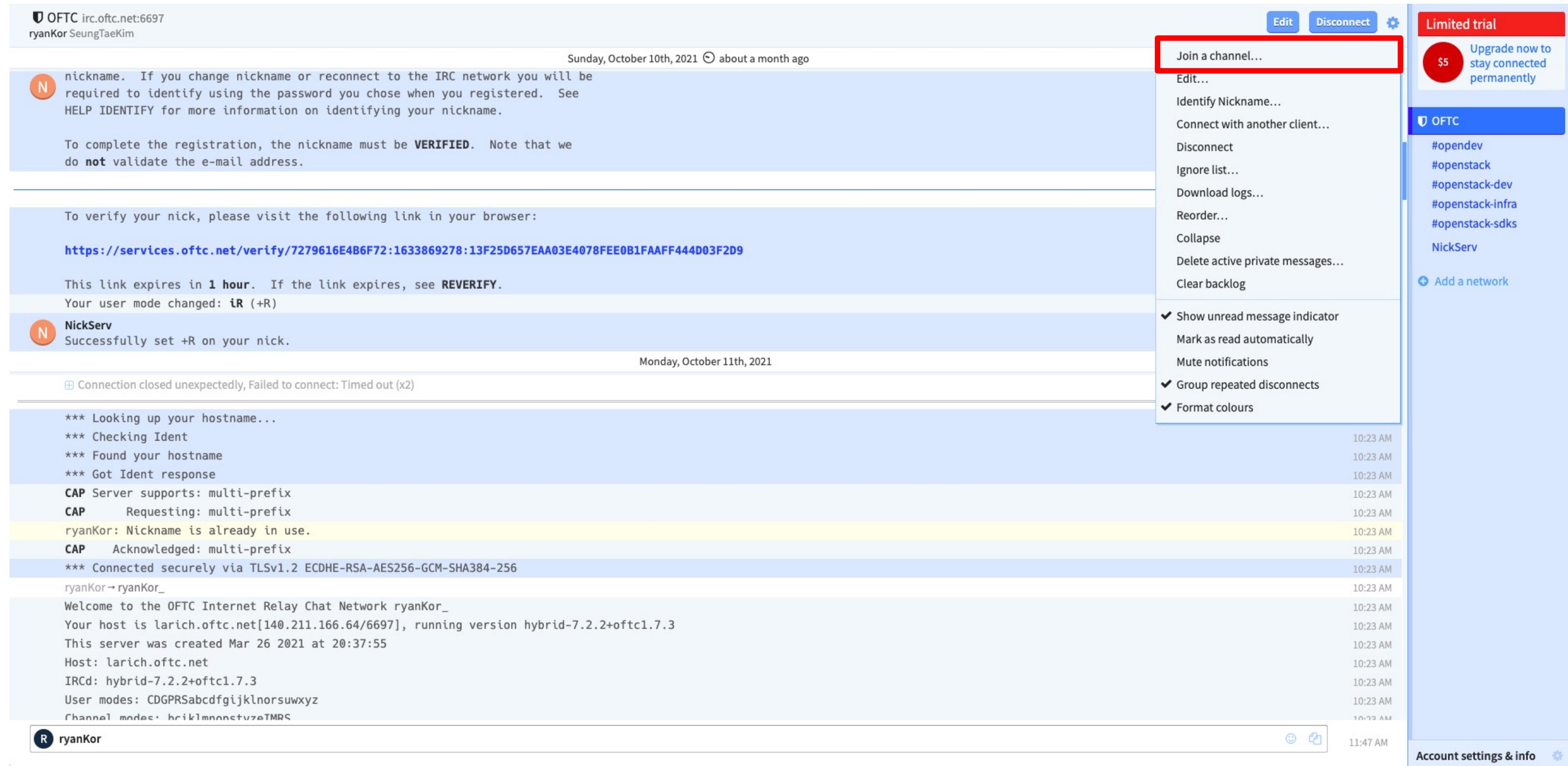
After signing up as a member, you proceed with account authentication.

You should authenticate your nickname on the #NickServ channel.

**/msg NickServ REGISTER <password> <e-mail>**

Registering your account, verify your nickname according to the instructions in the channel.

# Join IRC Channel & Ask Questions with Maintainers



OFTC irc.oftc.net:6697  
ryanKor SeungTaekKim

Sunday, October 10th, 2021 (about a month ago)

Nickname. If you change nickname or reconnect to the IRC network you will be required to identify using the password you chose when you registered. See HELP IDENTIFY for more information on identifying your nickname.

To complete the registration, the nickname must be **VERIFIED**. Note that we do **not** validate the e-mail address.

To verify your nick, please visit the following link in your browser:

<https://services.oftc.net/verify/7279616E4B6F72:1633869278:13F25D657EAA03E4078FEE0B1FAAFF444D03F2D9>

This link expires in 1 hour. If the link expires, see REVERIFY.

Your user mode changed: iR (+R)

NickServ Successfully set +R on your nick.

Connection closed unexpectedly, Failed to connect: Timed out (x2)

\*\*\* Looking up your hostname...  
 \*\*\* Checking Ident  
 \*\*\* Found your hostname  
 \*\*\* Got Ident response  
 CAP Server supports: multi-prefix  
 CAP Requesting: multi-prefix  
 ryanKor: Nickname is already in use.  
 CAP Acknowledged: multi-prefix  
 \*\*\* Connected securely via TLSv1.2 ECDHE-RSA-AES256-GCM-SHA384-256

ryanKor→ryanKor\_ Welcome to the OFTC Internet Relay Chat Network ryanKor\_  
 Your host is larich.oftc.net[140.211.166.64/6697], running version hybrid-7.2.2+oftc1.7.3  
 This server was created Mar 26 2021 at 20:37:55  
 Host: larich.oftc.net  
 IRCd: hybrid-7.2.2+oftc1.7.3  
 User modes: CDGPRSabcdfgijklnorsuvwxyz  
 Channel modes: hiklmnopqrstuvwxyzTMRS

R ryanKor

Join a channel...

Edit...  
 Identify Nickname...  
 Connect with another client...  
 Disconnect  
 Ignore list...  
 Download logs...  
 Reorder...  
 Collapse  
 Delete active private messages...  
 Clear backlog  
 Show unread message indicator  
 Mark as read automatically  
 Mute notifications  
 Group repeated disconnects  
 Format colours

Limited trial  
 \$5 Upgrade now to stay connected permanently

OFTC  
 #opendev  
 #openstack  
 #openstack-dev  
 #openstack-infra  
 #openstack-sdks  
 NickServ  
 Add a network

Account settings & info

Click on the Join a channel to find an IRC channel where you can inquire about the project you are working on.

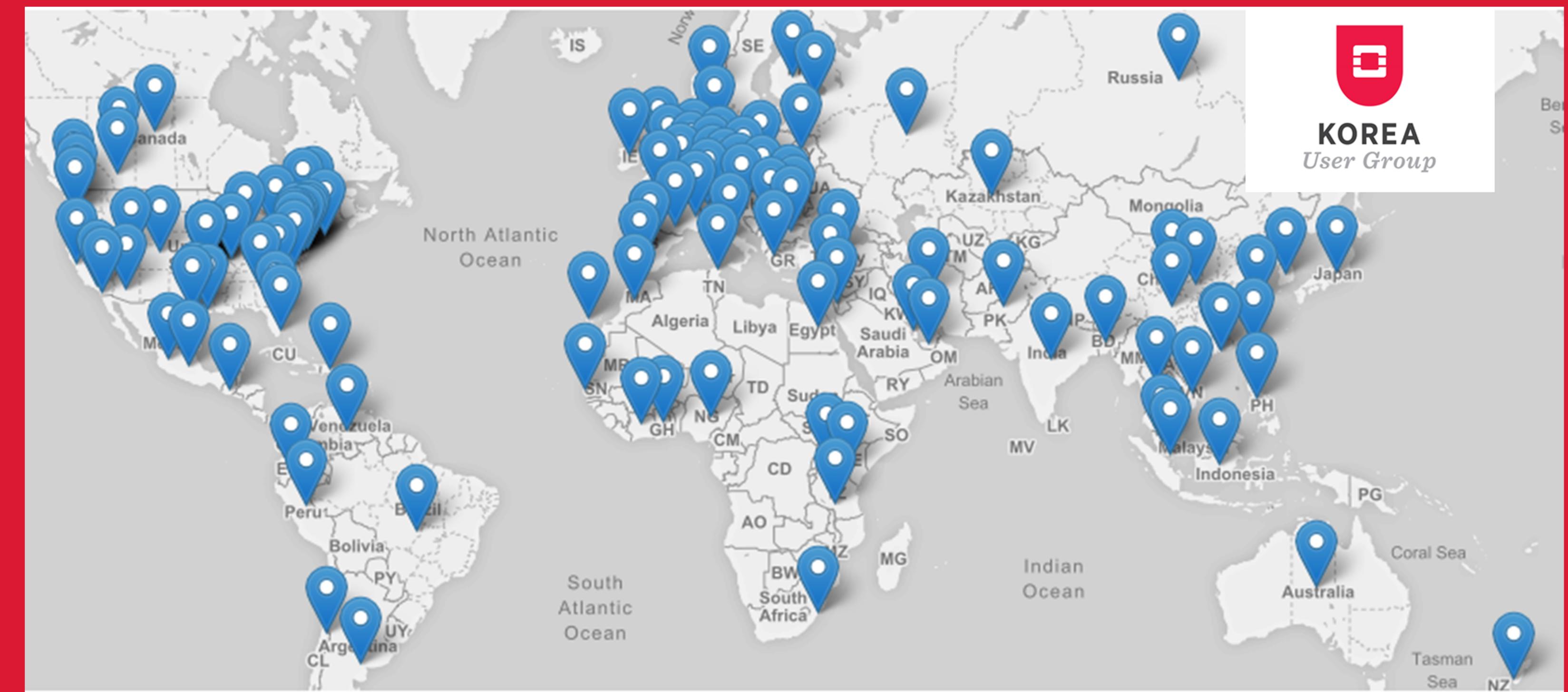
Refer to the link at the bottom to see the all channels.

## Join IRC Channel & Ask Questions with Maintainers



After entering the channel you are looking for as input, click **ok** to enter the channel!

# Thank you!



[openstack.kr](#)



<http://www.openstack.or.kr>



<http://bit.ly/openstack-kr-videos>