



# OpenStack QA

Project Update, OpenStack Summit Denver

---

Ghanshyam Mann, IRC- gmann, [gmann@ghanshyammann.com](mailto:gmann@ghanshyammann.com)

Masayuki Igawa, IRC- masayukig [masayuki@igawa.io](mailto:masayuki@igawa.io)



# QUALITY ASSURANCE

*an OpenStack Community Project*

# What is OpenStack QA??

## Official Mission Statement:

*“Develop, maintain, and initiate tools and plans to ensure the upstream stability and quality of OpenStack, and its release readiness at any point during the release cycle.”*



**QUALITY ASSURANCE**

*an OpenStack Community Project*

# What is OpenStack QA??

## Dev & Test environment

DevStack

devstack-tools

devstack-plugin-ceph

devstack-plugin-container

Devstack plugin interface

## Test Frameworks

Tempest

Tempest plugin interface

Grenade

Grenade plugin interface

Patrole

tempest-stress

## Test Runners

stestr\*

os-testr

\* <https://stestr.readthedocs.io/>

## Test Results

openstack-health

Stackviz

coverage2sql

karma-subunit-reporter

## Syntax Checks

Hacking

bashate

eslint-config-openstack

os-performance-tools

devstack-vagrant

devstack-plugin-cookiecutter

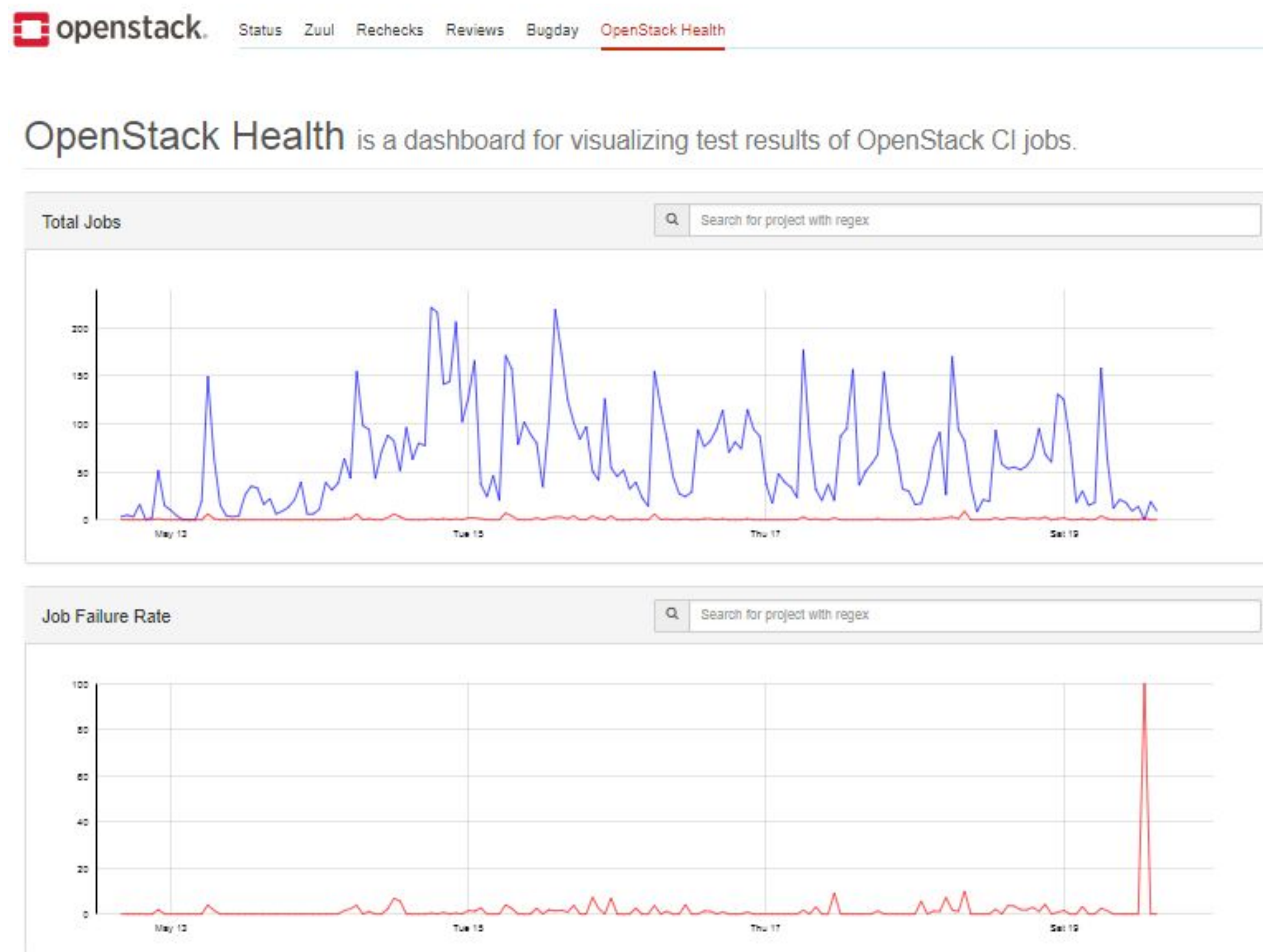
tempest-plugin-cookiecutter

tempest-lib (Deprecated)

# What is OpenStack QA??

## Things we do:

- ❑ Community driven approach to QA
- ❑ Serve the OpenStack community
- ❑ Drive testing best practices
- ❑ Maintain test tools and frameworks
- ❑ Keep the gate running smoothly
- ❑ Support interoperability testing efforts
- ❑ Cross Community collaboration on testing tools etc
- ❑ Open for new testing ideas/projects



# QA CONTRIBUTION STATS: (Stein Cycle)

<https://www.stackalytics.com/?module=quality%20assurance-group&metric=marks&release=stein>

**Commits: Total 753 (Rocky 497)**

**Reviews: Total 3242 (Rocky-2159)**

**Bugs**

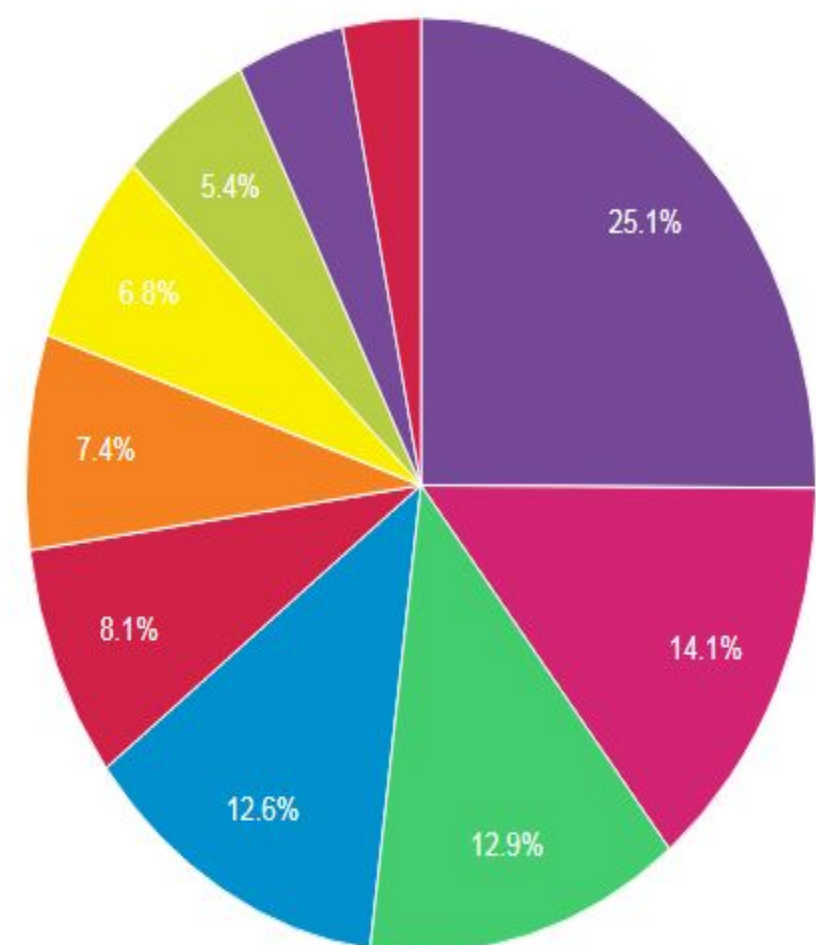
Filed Bugs: 175

Resolve Bugs: 77

Commits by Company

Show  entries

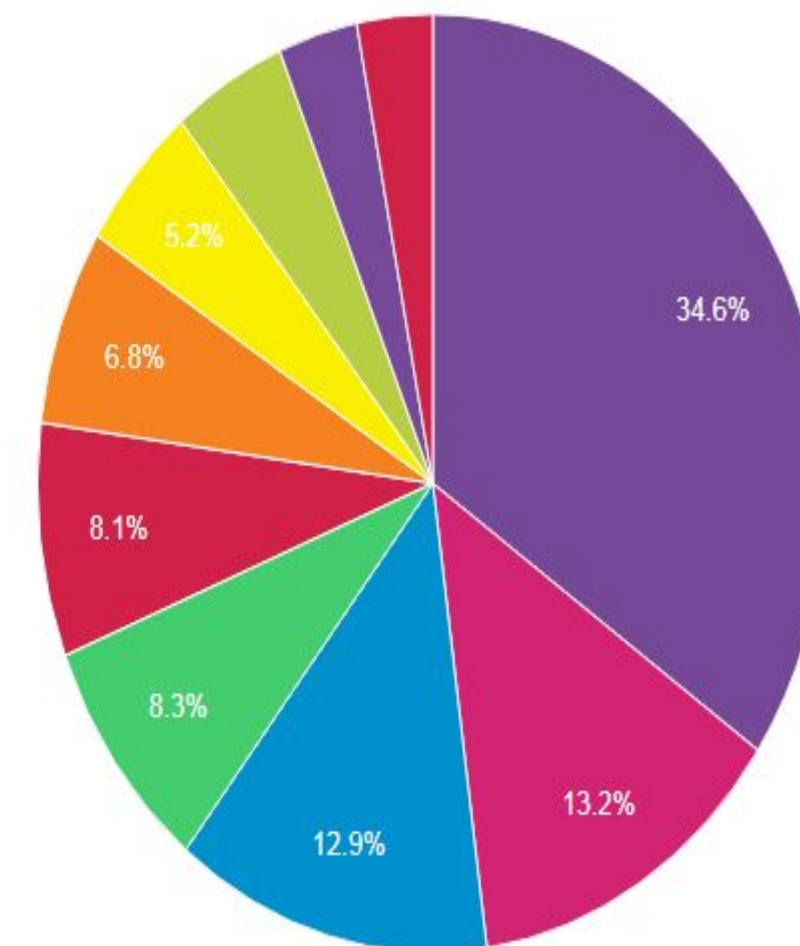
#	Company	Commits
1	Red Hat	189
2	NEC	106
3	AT&T	95
4	Huawei	61
5	SUSE	56
6	ZTE Corporation	51
7	99cloud	41
	*independent	33
8	Mirantis	24
9	Inspur	21
10	x-ion	17
11	VMware	7



Reviews by Company

Show  entries

#	Company	Reviews
1	NEC	1122
2	Red Hat	427
3	AT&T	419
	*independent	261
4	SUSE	220
5	99cloud	167
6	ZTE Corporation	151
7	x-ion	105
8	Mirantis	100
9	VMware	63
10	Huawei	57
11	IBM	37



## Open Change Request

### Summary

- Total open reviews: 903
- Waiting on submitter: 575
- Waiting on reviewer: 232

---

# OpenStack Stein Features

- ❖ Migration of OpenStack gate testing from Ubuntu Xenial(16.04) to Bionic(18.04)
- ❖ Devstack
  - ◆ Devstack base jobs switched to Ubuntu Bionic
  - ◆ Testing gate with shared network env
  - ◆ Base job for IPv6 and fixes bug for IPv6
  - ◆ Bug fixes etc
- ❖ Tempest
  - ◆ Tempest CLI testing improvement
  - ◆ Proper handling of interface/volume/pci device attach/detach hotplug/unplug
  - ◆ API Microversion schema gap testing
  - ◆ Placement service client support
  - ◆ Tempest multinode jobs working for stable branches
  - ◆ Immutable user source support

# OpenStack Stein Features

- ❖ Patrole
  - ◆ More neutron policy tests coverage
  - ◆ Documentation Improvements
  - ◆ Misc updates for stable release of Patrole
- ❖ Other projects are going with usual bug fix and support updates.



# OpenStack Train

## ◆ New

- Finish Zuul v3 native jobs for grenade
- Patrole stable release
- Keystone system scope testing support in Tempest & Devstack along with gate job setup
- Volume strict validation testing using JSON schema
- Support k8s installation in devstack-plugin-container

## ◆ Stability

- Making integrated-gate jobs like tempest-full more stable
- More documentation and guidelines for Tempest plugins
- Cross Tempest Plugins sanity check job
- Consuming all Tempest CLI in gate
- Make scenario manager stable for plugins
- Tempest smart cleanup feature
- Keep gate stable

## Beyond Train

- ❖ RBAC testing on gate using Patrole
- ❖ Strict validation testing using JSON schema for more projects

## Cross-Project Work

- ❖ Zuul v3 migration for grenade jobs
- ❖ Plugins help on fixing the usage and guidelines
- ❖ Integrated-gate jobs more stable
- ❖ Support the OpenStack CI/CD platform updates

# How to give feedback

## ❖ Report Bug

- Bug Tracking links - <https://wiki.openstack.org/wiki/QA>

## ❖ Send mail on **ML**: [openstack-discuss@lists.openstack.org](mailto:openstack-discuss@lists.openstack.org) with [qa] in subject

## ❖ Ping on IRC **#openstack-qa**

## ❖ Forum session

- [Users / Operators Feedback on QA](#)
- [QA Onboarding sessions](#)

## How to contribute

- ❖ **Tomorrow:** [QA Onboarding sessions](#), Wednesday, May 1, 9:00am-9:40am  
The Colorado Convention Center - 406
- ❖ **Join us in** #openstack-qa, [Freenode IRC](#)
  - [https://wiki.openstack.org/wiki/Meetings/QATeamMeeting#Weekly\\_QA\\_Team\\_meeting](https://wiki.openstack.org/wiki/Meetings/QATeamMeeting#Weekly_QA_Team_meeting)
- ❖ **PTG:** OpenStack QA Room 105 @[PTG](#) May 2-3, 2019
  - <https://etherpad.openstack.org/p/qa-train-ptg>
- ❖ [OpenStack Contributor Guide](#)

# Q&A

Thank you!



openstack



@OpenStack



openstack



OpenStackFoundation