QA in the Open

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https://github.com/mtreinish/qa-in-the-open

What do I mean by Open Source QA

- Doing Software QA in an Open Source manner
- ▶ Includes running tests and hosting results in the public
- ▶ Basically treat a project's QA like any other Open Source project

My Personal Experiences with Enterprise QA



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.

Current QA Projects

- ▶ bashate
- devstack
- devstack-plugin-cookiecutter
- devstack-plugin-ceph
- devstack-vagrant
- grenade
- ► tempest
- ▶ tempest-lib
- ► tempest-plugin-cookiecutter
- stackviz
- hacking
- eslint-config-openstack
- os-testr
- ▶ os-performance-tools
- openstack-health dashboard

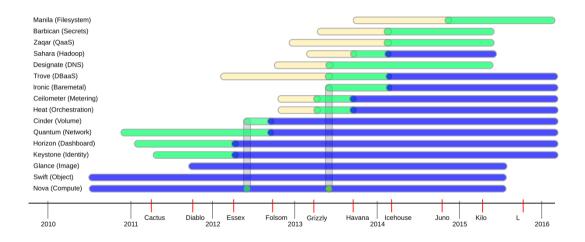
In The Beginning

- ► Projects had unit tests
- ► Some projects had functional tests
- ► Testing was central to OpenStack culture
- ► No dedicated effort on QA

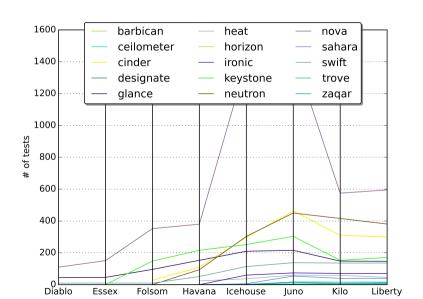
Tempest and becoming a defined group

- ▶ Tempest as separate integrated test suite to run against a deployed cloud
- ▶ 2 years later a separate project was created in governance around QA
- ► Slowly consolidated several existing and new projects

OpenStack Project Growth



Tempest Tests per Project



The Big Tent...



QA in the Big Tent

- QA projects now directly support base
- ▶ Provide stable plugin interfaces to expand functionality
- ▶ Better fits with the growth in projects

Lessons from OpenStack QA

- ► Monolithic and Separate doesn't scale
- ► Keeping Things Separate increases friction

Advantages

- ► Enables external audit of testing
- ► User confidence in project
- ► Enables indpendently repeatable testing
- ► Reusable components

Potential Issues

- ► Lack of Corporate Contribution
- ► Limited Free Resources for running tests
- ▶ Sometimes difficult to get community buy in

Where to get more information

- openstack-dev ML openstack-dev@lists.openstack.org
- ► #openstack-qa on Freenode

Questions?