QA in the Open

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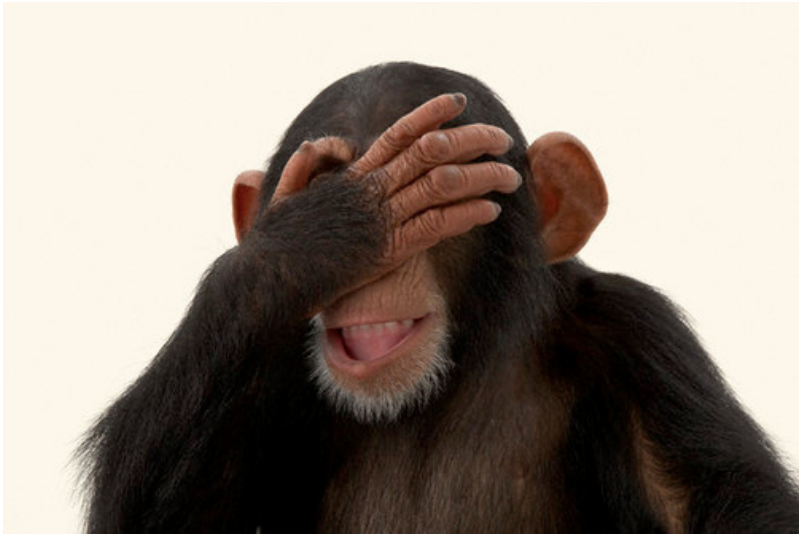
https://github.com/mtreinish/qa-in-the-open

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

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

In The Beginning

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

Then there was tempest

- Tempest is an integration suite that runs against a running OpenStack cloud via the REST APIs
- First dedicated QA effort in the community

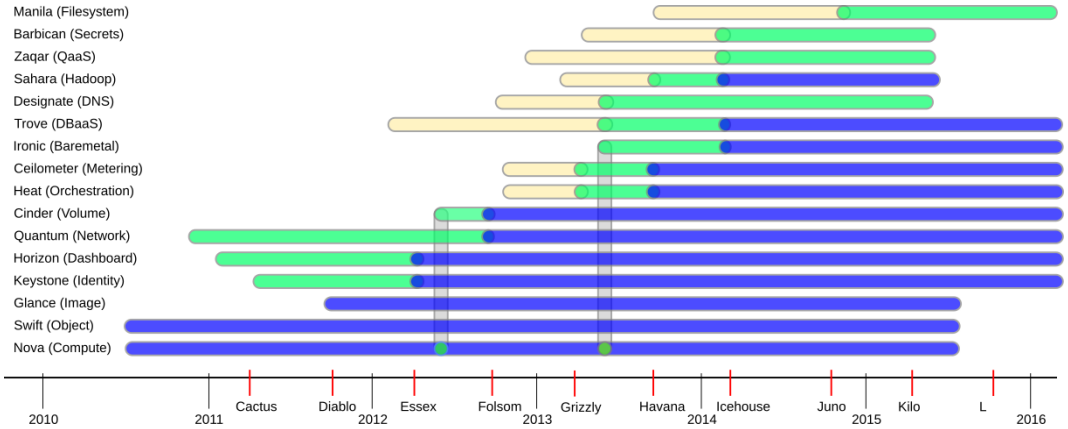
QA Becoming a Defined Group

- 2 years later a separate project was created in governance around QA
- Started with just 2 projects: Tempest and Grenade
- Slowly started to consolidate several existing and add new projects

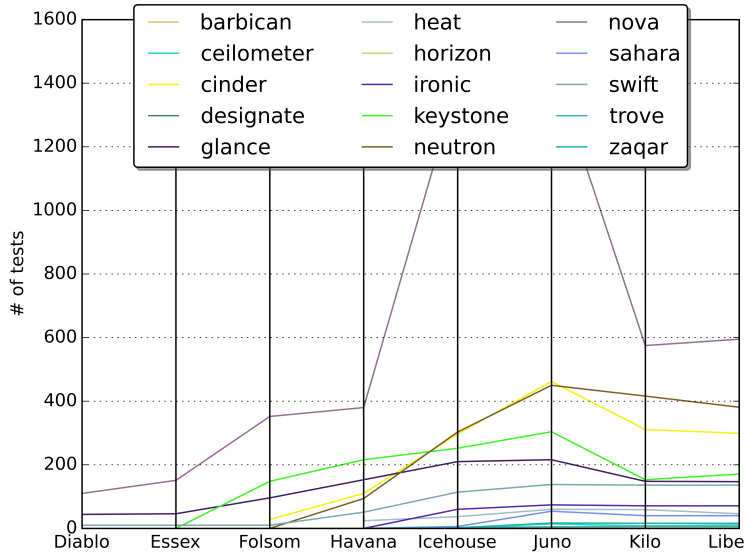
Early Problems

- Only support for testing **Integrated** and **Incubated** projects
- A more traditional top down approach
- Small team size made scaling with OpenStack difficult

OpenStack Project Growth



Tempest Tests per Project



The Big Tent...

The Big Tent

- OpenStack's most recent governance change
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- Integrated and incubated projects no longer a term
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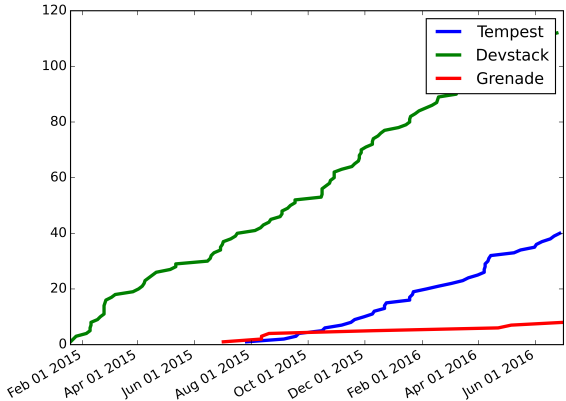
QA in the Big Tent

- QA projects will still provide direct support for base IaaS projects
- Provide stable plugin interfaces to expand functionality for other projects
- Better fits with the growth in projects

Introducing Plugin Interfaces

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
- https://wiki.openstack.org/wiki/QA

Questions?