

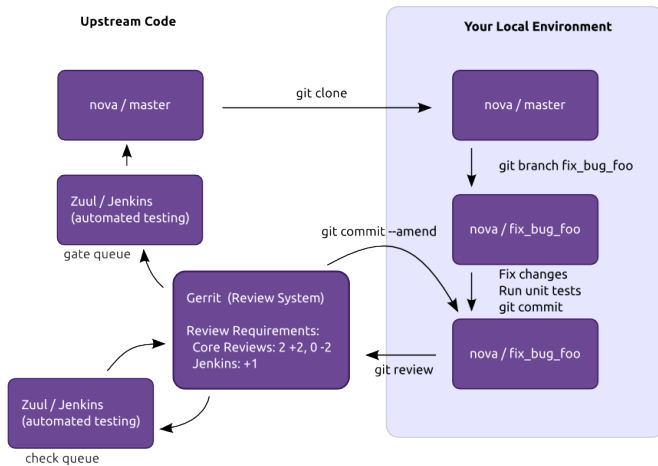
OpenStack-Health dashboard and Dealing with Data from the Gate

Matthew Treinish
mtreinish@kortar.org
mtreinish on Freenode

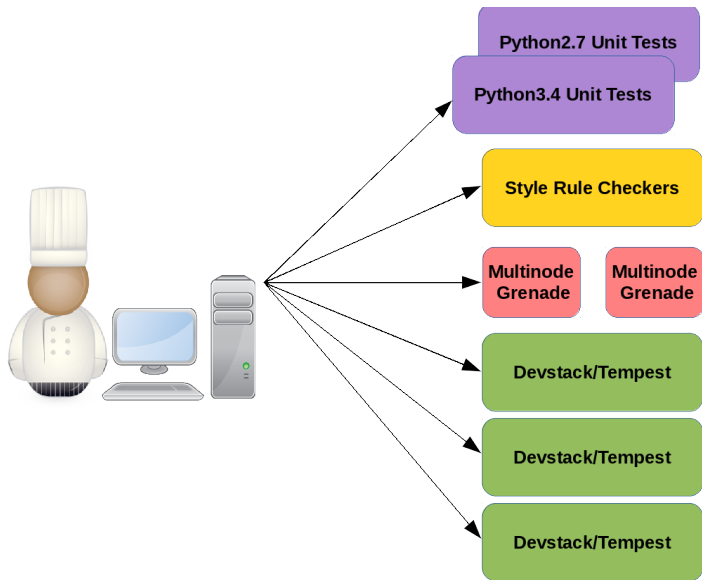
April 25, 2015

<https://github.com/mtreinish/openstack-health-presentation>

The OpenStack Gate



What Happens when you push a change?



The Size of the Gate

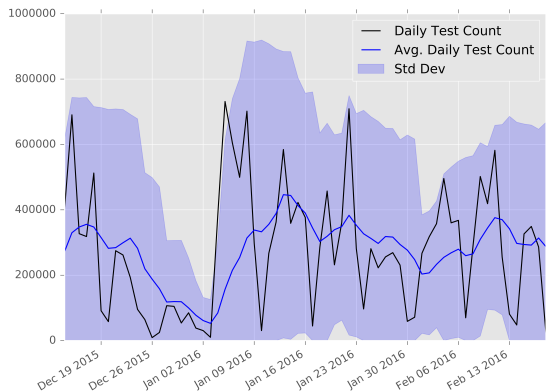
One Proposed Change Generates:

- ▶ 5-25 Devstacks
- ▶ ~10,000 integration tests (roughly 1.5k per devstack)
- ▶ ~180 2nd level guests brought up in devstack
- ▶ ~1 GB of logs uncompressed for each tempest run

In aggregate:

- ▶ ~12,500 jobs run in check and gate daily
- ▶ ~0.01% individual tempest test failure rate
- ▶ ~.77% tempest run failure rate

Number of Tempest Tests per Day in the Gate Queue:

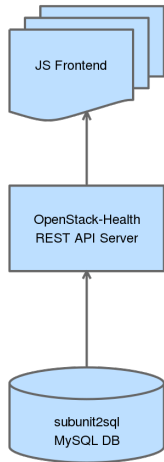


Existing Data Sources

- ▶ Log Server: <http://logs.openstack.org/>
- ▶ elasticsearch, logstash, and kibana
- ▶ graphite and grafana
- ▶ elastic-recheck
- ▶ subunit2sql

What is OpenStack-Health

OpenStack-Health Architecture



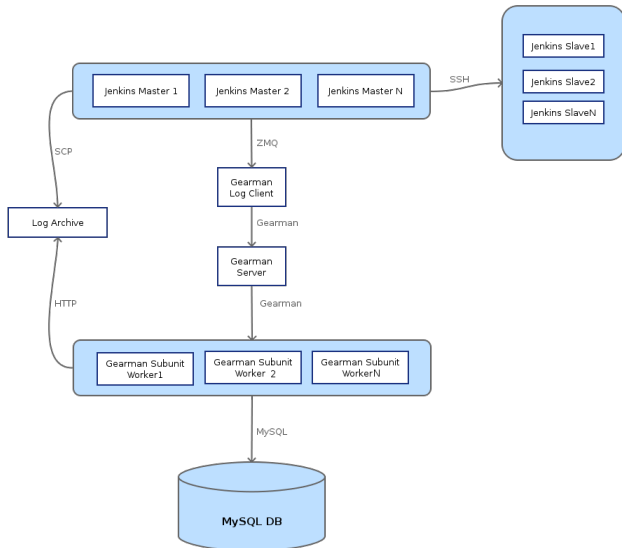
API Server

- ▶ Wraps subunit2sql DB API using flask
- ▶ Runs at <http://health.openstack.org>
- ▶ Continuously Deployed on every commit
- ▶ Not intended for external consumption (Read as: it will change on you)

subunit2sql



subunit2sql Data Collection



Frontend

- ▶ Built using AngularJS and NVD3
- ▶ Calls API server for data and renders in browser
- ▶
- ▶ Continuously Deployed on Every Commit

Using OpenStack Health

Current Limitations

- ▶ Only data from gate and periodic queues
- ▶ Only catches failures without subunit data (or that occur before or after subunit generation)
- ▶

Next Steps

- ▶ Include other data sources:
 - ▶ Use zuul as source for run/job level data
 - ▶ Integrate elastic-recheck data for run_failures
- ▶ Include data from check and experimental queues
- ▶

Where to get more information

- ▶ openstack-dev ML openstack-dev@lists.openstack.org
- ▶ #openstack-qa on Freenode
- ▶ <http://git.openstack.org/cgit/openstack/openstack-health/>
- ▶ <http://git.openstack.org/cgit/openstack-infra/subunit2sql>

Questions?