Testing at Scale
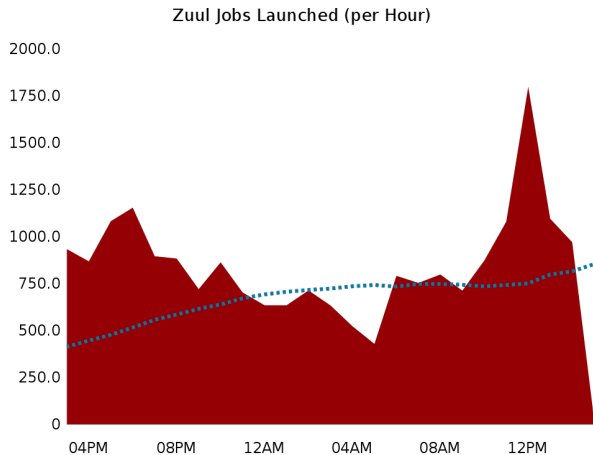
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https://github.com/andreafrittoli/testing_at_scale
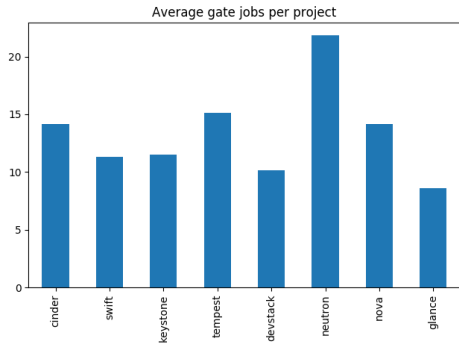
OpenStack CI in Numbers

- ∼1500 contributors
- 6 Clouds + 2 run by OpenStack Infra
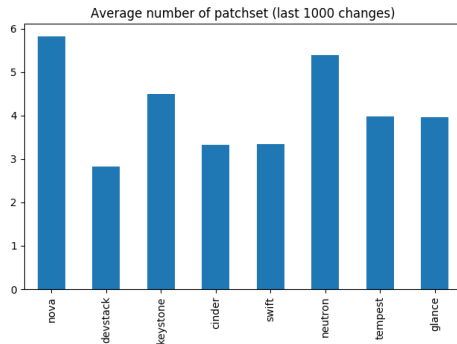- 1600+ repos in openstack(|-dev|-infra)
- 20k lines Zuul configuration

Zuul Jobs Launched (per Hour)

Source: Zuul, Graphite

Life as a contributor

Average gate jobs per project

Source: subunit2sql DB

Average number of patchset (last 1000 changes)

Source: Gerrit API

My day in reviews

- Change in devstack:

```
536    +    if [ -z "$VRIT_DRIVER" ]; then
537    +        # If there is not virt driver defined we assume nova is not installed
538    +        iniset $TEMPEST_CONFIG service_available nova "False"
539    +    fi
540    +
```

Source: https://review.openstack.org/#/c/468060/2/lib/tempest@536

- CI reports all green
- Can you see the error?

Keep the gate flowing

- List of gate issues at beginning of pike

How it works

- TBD

Data!

- Logs and their size in integration gate
- Test result data
- Zuul data

Beyond the gate

- Periodic jobs

Tools

- TBD

More Automation

- TBD

Deeper into data

- TBD

Playing with AI

- TBD

Thank you!
Questions?