Testing at Scale

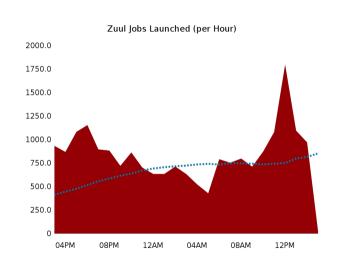
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Jun 2, 2017

https://github.com/andreafrittoli/testing_at_scale

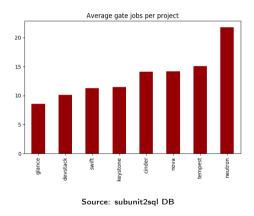
OpenStack CI in Numbers

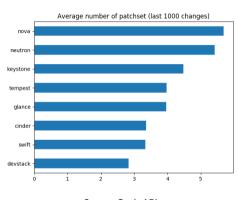
- \sim 1500 contributors
- ► 6 Clouds + 2 run by OpenStack Infra
- ► 1600+ repos in openstack(|-dev|-infra)
- ▶ 20k lines Zuul configuration



Source: Zuul, Graphite

Life as a contributor





My day in reviews

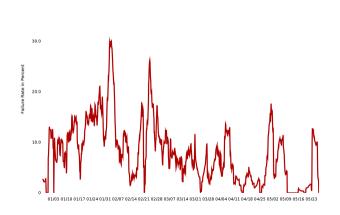
► Change in devstack:

Source: https://review.openstack.org/468060

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

Keep the gate flowing

- Number of services
- ► Service memory footprint
- ► Test load
- ► Libvirt instability under load
- ► Tempest bug in ssh test code
- ► Vanilla database configuration



Test failure rates over last 5 months (3 days rolling average)

40.0

Source: Zuul, Graphite

How it works

Data!

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

Beyond the gate

► Periodic jobs

Tools

More Automation

Deeper into data

Playing with AI

References



Thank you! Questions?