

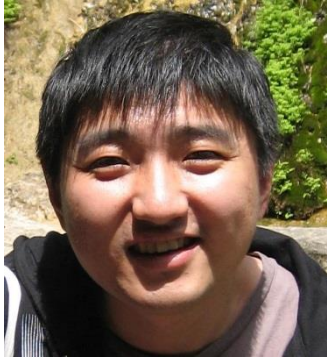
Continuous Integration and Delivery for Free and Open Source Software Development

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- Hewlett Packard Enterprise software engineer, focused on Free and Open Source Software development
- OpenStack Infrastructure Team software engineer focused on Jenkins and OpenStackCI
- FOSSology project core contributor

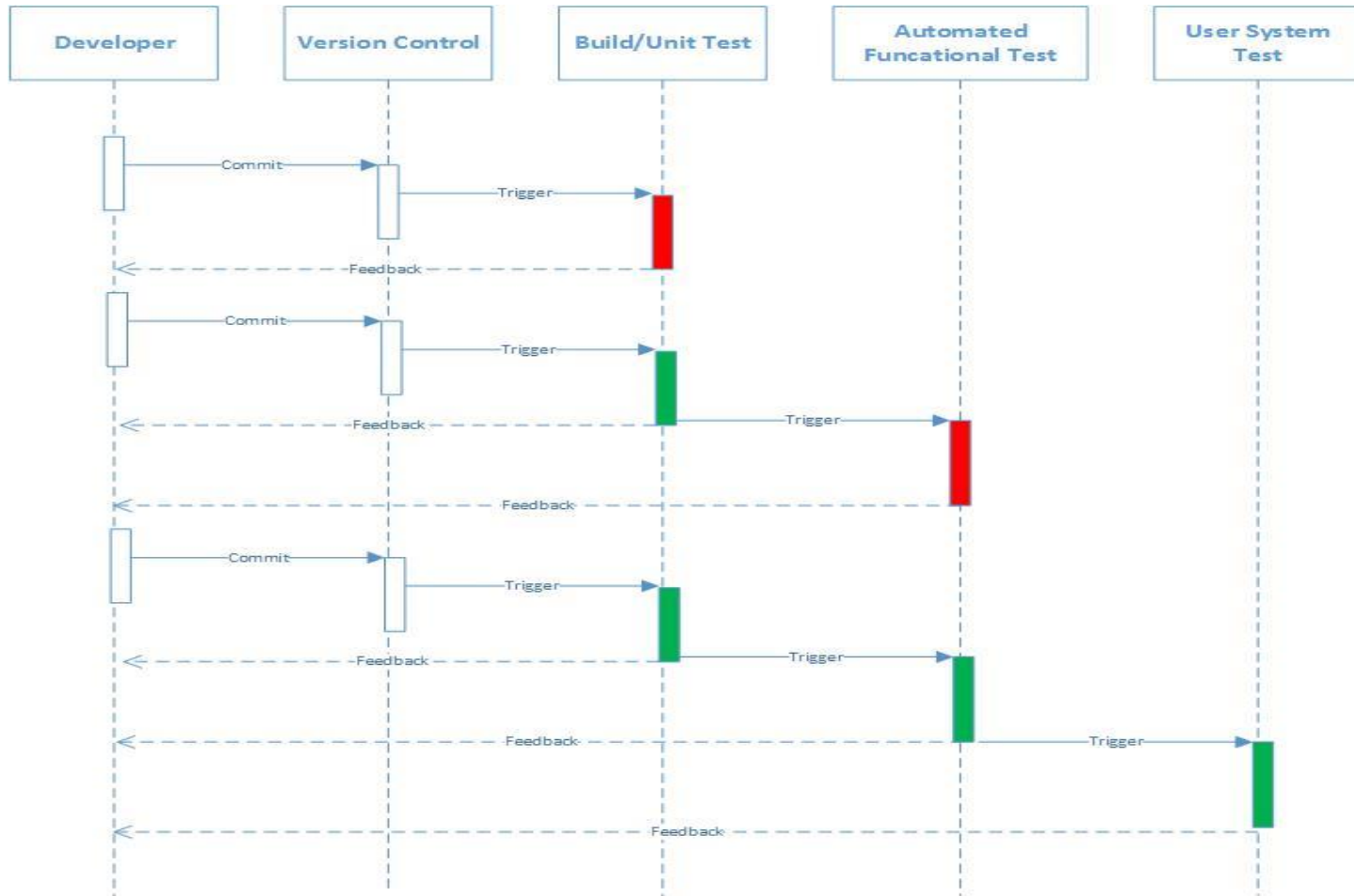
Topics

- What's CI/CD and why are they important for open source projects
- Typical workflow of CI/CD for OpenSource project
- OpenStack workflow
- How to leverage the OpenStack way

What's CI/CD

- CI/CD
- Why CI/CD important for Open Source project

Typical Workflow of OpenSource project



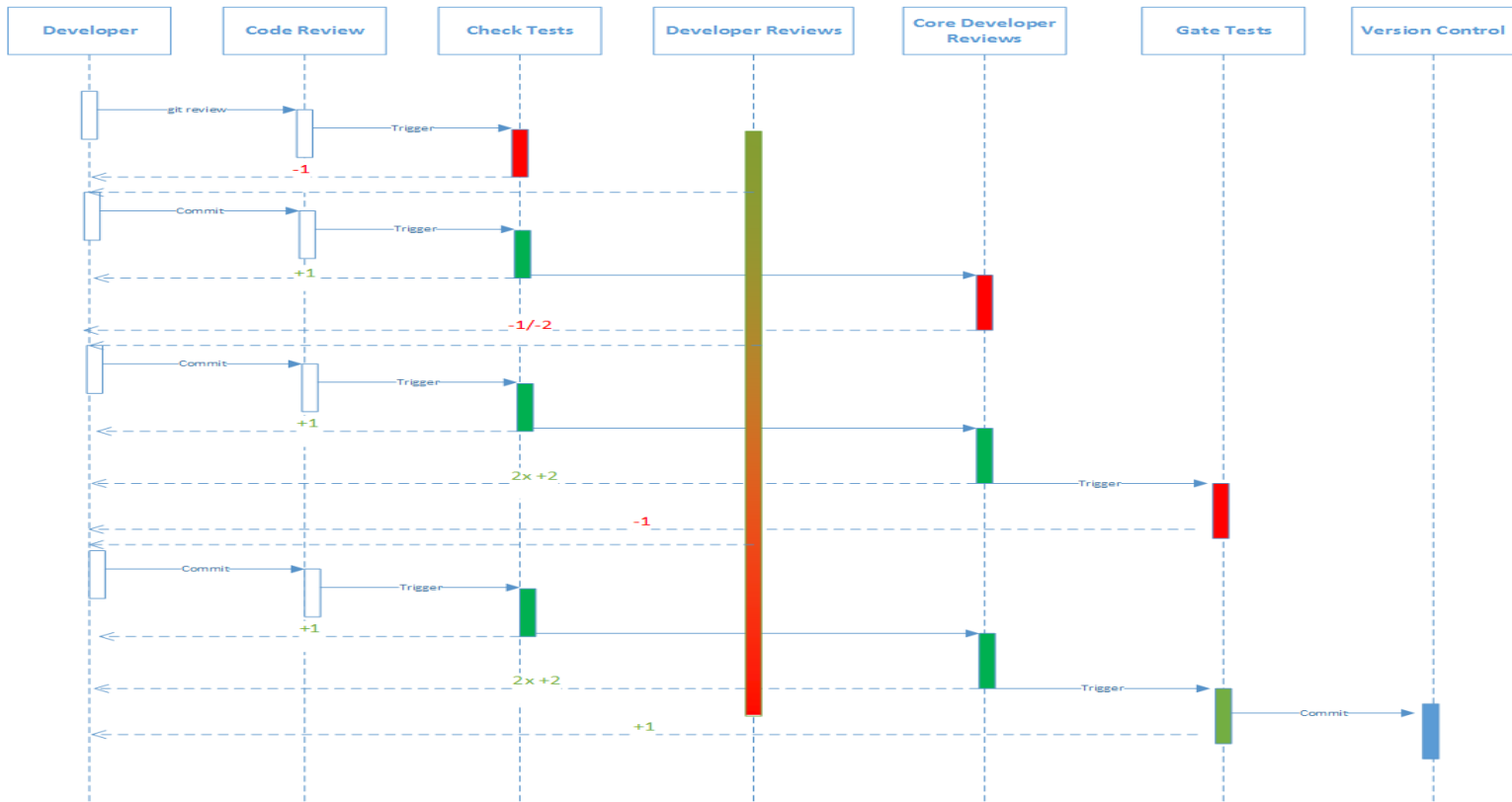
Problems

- Commits in rapid succession can make CI tests obsolete as they run
- It is possible to end up with a broken master temporarily, you not even know it.

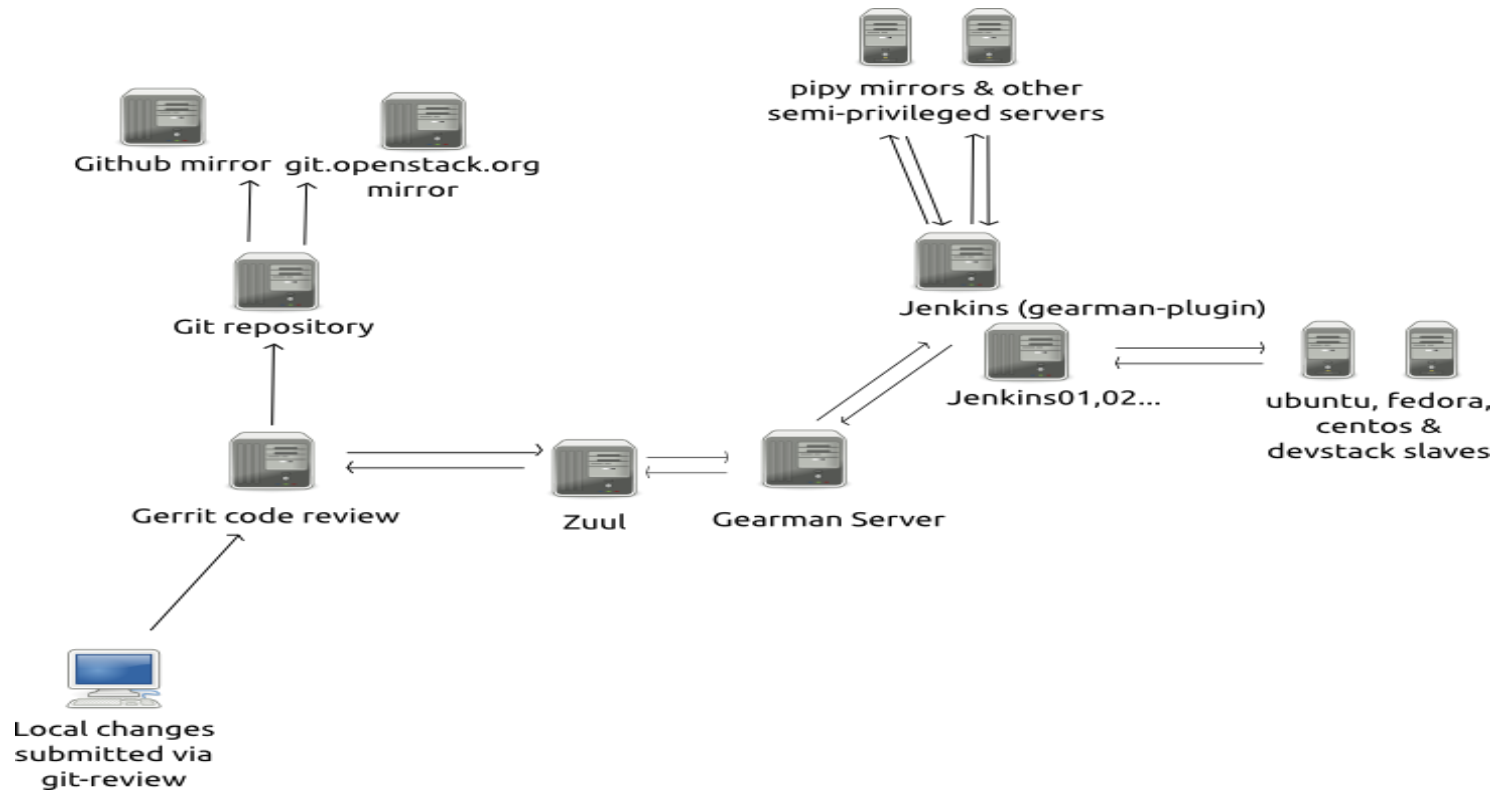
Doesn't scale to large open source projects

- OpenStack
 - **50+ official projects**
 - More than **2000 contributors**
 - 100K+ patchsets submitted in the last development cycle

OpenStack workflow



OpenStack Infrastructure



OpenStack Infrastructure update

- Zuul v3 and ansible to replace Jenkins
- Zuul v2.5 to solve immediate problems

Problems solved

- The master version is always OK at any time
- Nodepool reduce the infrastructure costs
- Gated commits with Zuul ensure that tests are never obsolete

How to leverage OpenStack way

- Tools we can use
 - Git
 - Gerrit
 - Zuul
 - Jenkins (jenkins-job-builder)
 - Nodepool
- <http://docs.openstack.org/infra/openstackci/>

Questions

- Contact

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- Freenode: larainema

- Resource

- <http://docs.openstack.org/infra/system-config/>