OpenStack

Open source software to build public and private clouds.

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OpenStack Feedback:

Quality Assurance Infrastructure

- Production Architecture
- Needs and Goals of QA Team
- Why OpenStack ?
- Installation & Deployment
- Usage
- Feedbacks



Production Architecture

More than 150 servers (physicals and virtuals)











Jenkins

















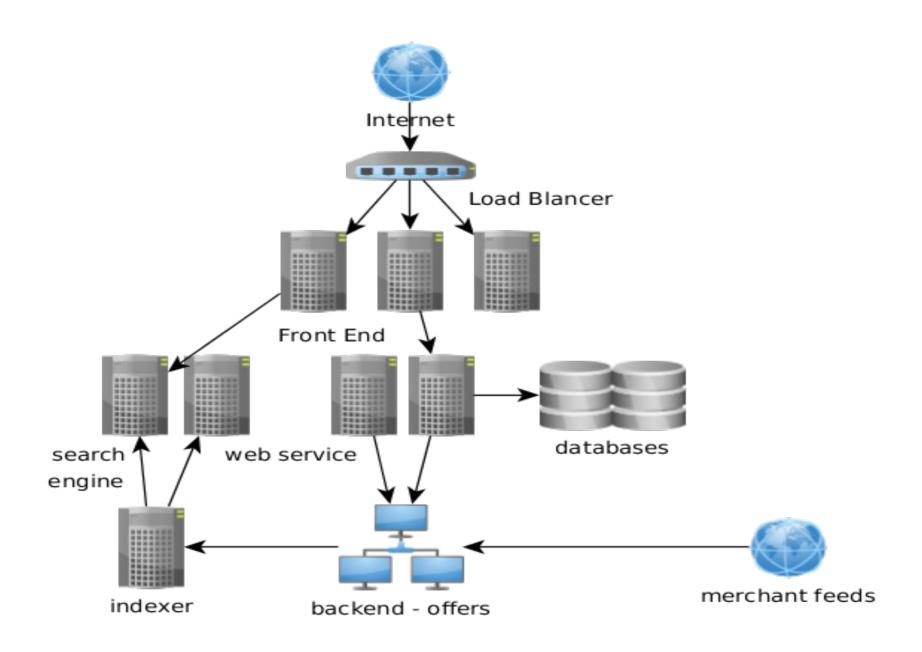








Production Architecture:



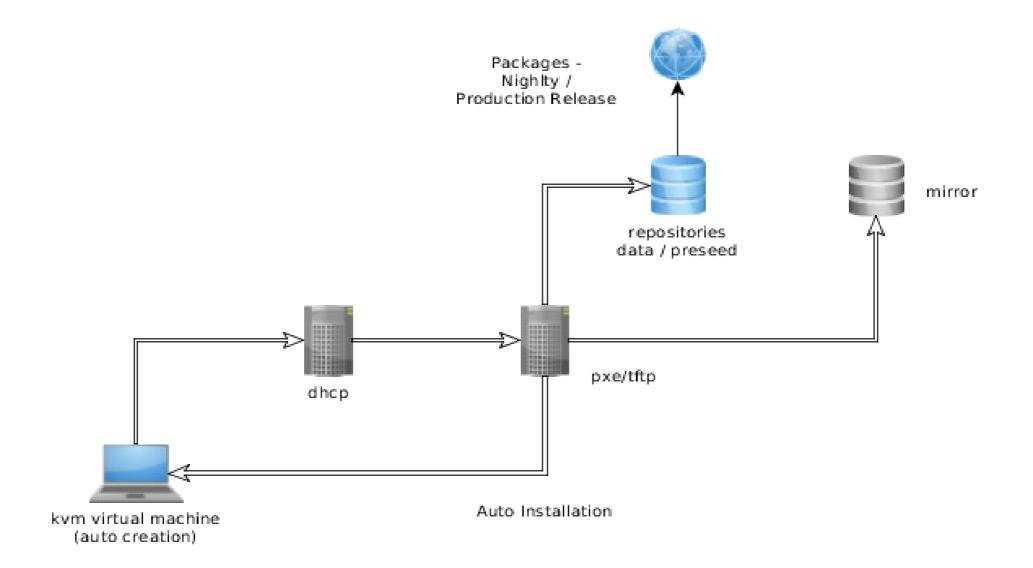


Needs and goals for the QA

- Be able to deploy on demand
- Deploying fast and easy
- Avoid manual tasks and boring actions
- Internal needs, no security issue



First process for QA infra





Why Open Stack?

- Scalabilty
- Quick & easy instance deployment
- User friendly interface
- Free software and big community
- Young and exciting project



Install & Deployment

- Open Stack was deployed on the begining of September 2013
- Using documentation and tutorial hosted on docs.openstack.org
- Thanks to a clear documentation, the installation was quick and easy





Install & Deployment

- Hardware
 - 2 physical machines
 - debian preseed & CentOs kickstart
 - 1 puppet master
 - 1 reposotory for Debian and Rpm packages
- Open Stack
 - Version Grizzly which is the standard wheezy release
 - Components:
 - Keystone, glance, nova and horizon dashboard
 - Mysql backend



Usage

- First Project & POC
 - Creation project & images for Retargetting project
 - 2 differents web server Images (debian)
 - Redis Image (debian)
 - Adserver Image (CentOs)
 - Testing environment for each iteration of the project
- Next used:
 - Front end images
 - Search engine and indexer images
 - Loaded tests vms



Feedback

- Pro
 - Covers major needs of the projects:
 - Cool dashboard : Quick & Easy to use
 - Good integration of Debian and CentOs images
 - Easy debuging
 - Using of Flavor → a good way to scale instance
 - Openstack + puppet



Feedback

- Cons
 - Grizzly Release not very stable:
 - Upgrade not easy (on Debian)



Today

- Try to cover all applications & servers with OpenStack Images
- Puppetize each servers
- Packages every applications



