

# How OpenStack and Debian work together

*Debian en action*

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Julien Danjou

# About me

- Free Software hacker  
& independent consultant
- Debian Developer since 2002
- OpenStack Developer since 2011
  - Ceilometer *Project Technical Leader* for Havana (2013.2)

# About OpenStack

- IaaS platform
- Composed of several components (Nova, Cinder, Glance...)
- 2 releases a year (April & October, based on Ubuntu)
- Apache license
- Handled by a foundation
- Backed by hundreds of companies
- 900 developers since 2010



# 2011 history

- *pkg-openstack* Alioth group created by Thomas Goirand
- Team composed of two persons
- *Diablo* packages copied directly from Ubuntu into Debian
  - Low quality packages
- eNovance wants to deploy OpenStack on Debian
  - Joining *pkg-openstack* to help and fork Ubuntu packages for Debian

# 2012 history

- *Essex* packaged before it's released!
- Massive bug fixing
- Introduction of *debconf*
- After *Essex* is released: pause
  - eNovance deploys the first OpenStack cloud based on Debian
- *Wheezy* is freezed & released with *Essex*
- Thomas Goirand jumps in for *Folsom* release

# 2013

- All packaging done by Thomas Goirand, sponsored by eNovance



- *Grizzly* uploaded to *experimental* and now in *unstable*



# Numbers

- 48 source packages maintained by *pkg-openstack* team
- Team composed of only one active person
- And only 31 bugs!



# OpenStack set-up

- Setting up OpenStack is complicated
  - lots of services
    - Nova, Glance, Swift, Cinder, Quantum, Keystone, Ceilometer, Horizon, Heat, ...
  - lots of dependent services (RabbitMQ, Memcached, MySQL...)
  - lots of configuration
  - service registration



# Debian packages for OpenStack

- dbconfig and debconf for configuration
  - can be preseeded
- Automated service and endpoint creation
- Documentation: <http://wiki.debian.org/OpenStackHowto>
  - Covers *Essex* & *Folsom*
- Meta-packages
  - apt-get install openstack-proxy-node
  - apt-get install openstack-compute-node
  - apt-get install openstack-toaster
    - Install everything in one call!

# Problem

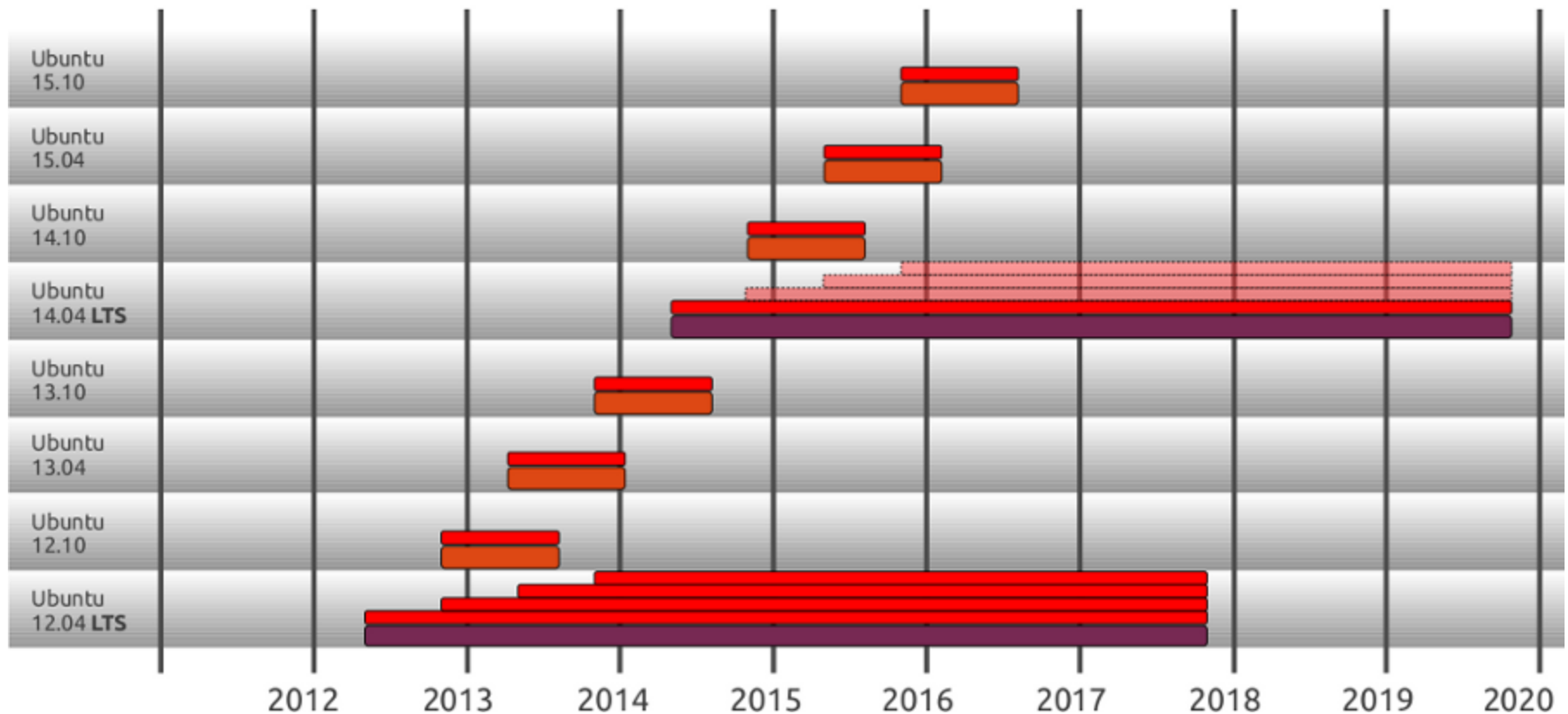
- *Essex* in *Wheezy*
- *Grizzly* already in *Sid*
- *Jessie* will (probably) be released with *J*

➡ No upgrade path!



# Ubuntu solution: cloud archive

Standard Release Support    Ubuntu Server LTS Release Support    OpenStack Release Support

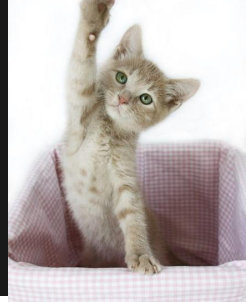


# Debian on OpenStack

- Steps
  - a. Debian disk image
    - can be installed via KVM + ISO
    - should only consists of one primary partition
  - b. apt-get install cloud-init
  - c. apt-get install cloud-initramfs-growroot
- Future work
  - a. VMBuilder? debian-installer?
  - b. distribution of official images

# Questions?

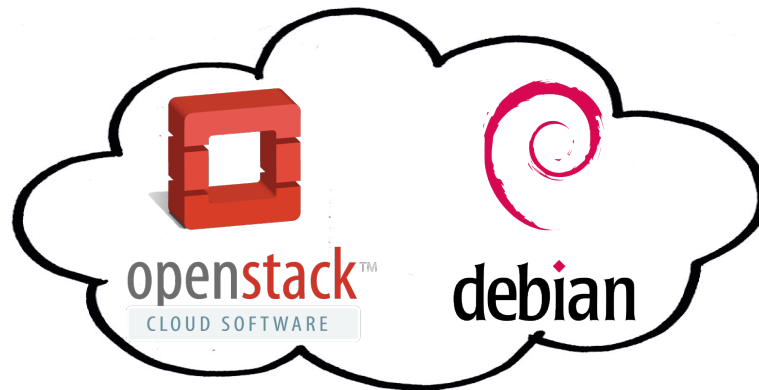
I has a question...



Mailing list: [openstack@lists.alioth.debian.org](mailto:openstack@lists.alioth.debian.org)

IRC: #debian-openstack @ OFTC

Doc: <http://wiki.debian.org/OpenStackHowto>



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