## OpenStack: future of the cloud

Muharem Hrnjadovic
@al\_maisan

Rackspace International



### tl;dr

### IT → cloud → OpenStack → adopt → win!





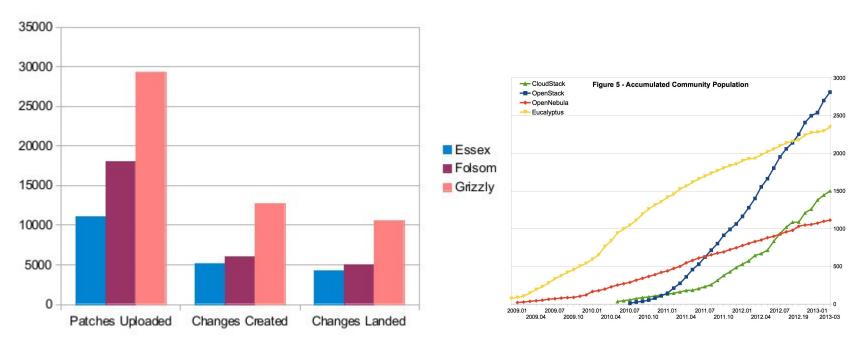
http://www.talend.com/sites/default/files/img/blog/uploads/2012/06/future.jpg

### "Linux of the cloud"





## Last cycle: 517 contributors

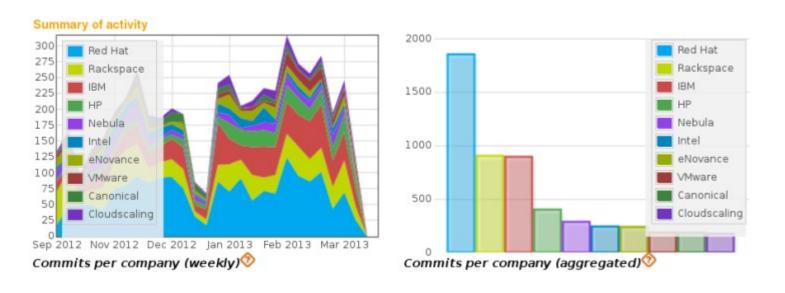


Fackspace the open cloud company

Source: http://lists.openstack.org/pipermail/openstack-dev/2013-April/007189.html

http://www.qyjohn.net/?p=3120

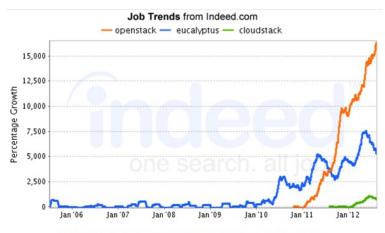
### Where are these devs coming from?

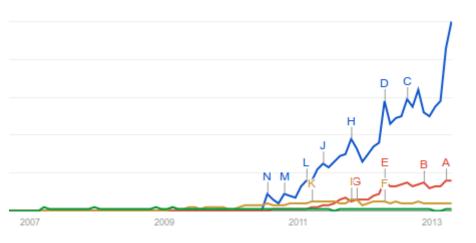




http://blog.bitergia.com/2013/04/04/companies-contributing-to-openstack-grizzly-analysis/

### Momentum





Indeed.com searches millions of jobs from thousands of job sites. This job trends graph shows relative growth for jobs we find matching your search terms.

http://www.rackspace.com/blog/openstack-is-cr
eating-thousands-of-it-jobs/



## Pick Openstack!

- Widely used (knowledge, staff, jobs)
- Versatile
  - -1-150,000 servers
  - public, private, hybrid
- Big, vibrant community
- Developed at fast clip (bug fixes, features)

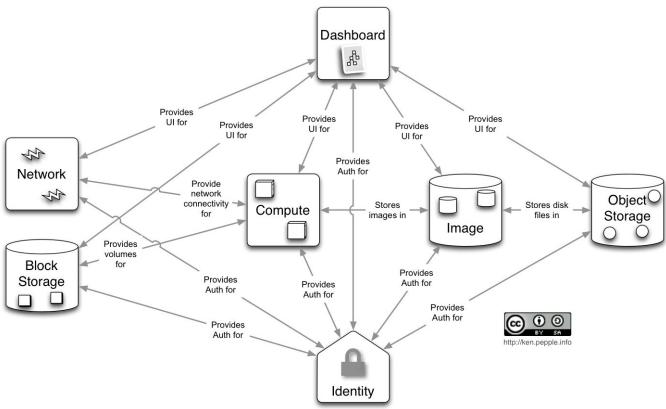




http://www.bauder.co.uk/media-centre/hot-project



# ~332,387 lines of code





http://ken.pepple.info/openstack/2012/09/25/openstack-folsom-architecture/

### Wait! There's more

heat - orchestration

ceilometer - metering & monitoring

Marconi - queuing as a service

reddwarf - database as a service

moniker - dns as a service



# Why is it cool?

- Free
- Open source
- Great community
- Fast pace
- Python!





## What's in for you?

### developer

Open source, great community, cool technology

#### user

- Lots of buzz & mind share
- Architect for the cloud, learn the services and APIs

### admin

Deploy & operate the cloud



http://www.openstack.org/community/jobs/

## Early warning signs

- Equalizer
- Disruptor
- New possibilities

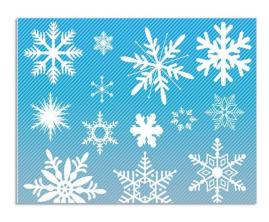


**REVOLUTION** 



### Be on the winning side :)

- Scale up out
- Gazillions of "machines" → automation
- No more snow flakes (\*sniff\*), pets vs. cattle









### Learn how to...

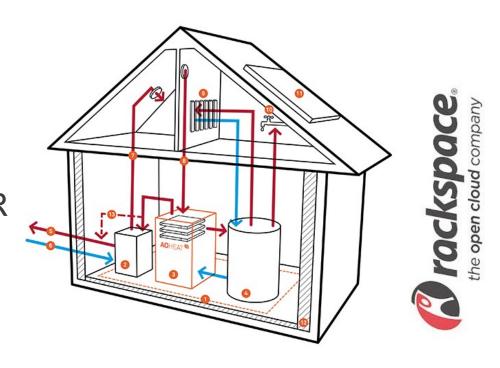
- leverage industrial strengh systems (linux)
- automate (Chef, puppet)
- program (python)





### Crazy stuff!!

- AOTERRA
- Heater systems
- Green energy, ecology
- Crowd funding: 750,000 EUR
- OpenStack







# cloud → IT → upside down

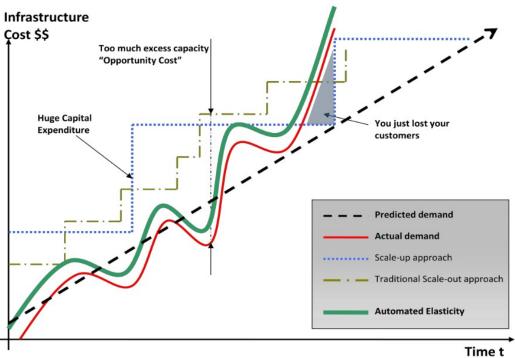




http://www.photosfan.com/images/view-upside-down-from-inside-an-airplanel.jpg



## Perspective





#### Automated Elasticity + Scalability

http://media.amazonwebservices.com/AWS\_Cloud\_Best\_Practices.pdf

### Cloud drivers

- "infinite" scale & elasticity
- Pay as you go (capex → opex)
- Self service
- Minimal time to resource (business agility)
- Automation

### **Data centre with an API**

