ubuntu-ir

OpenStack Clouds on Ubuntu

open infrastructure introduction

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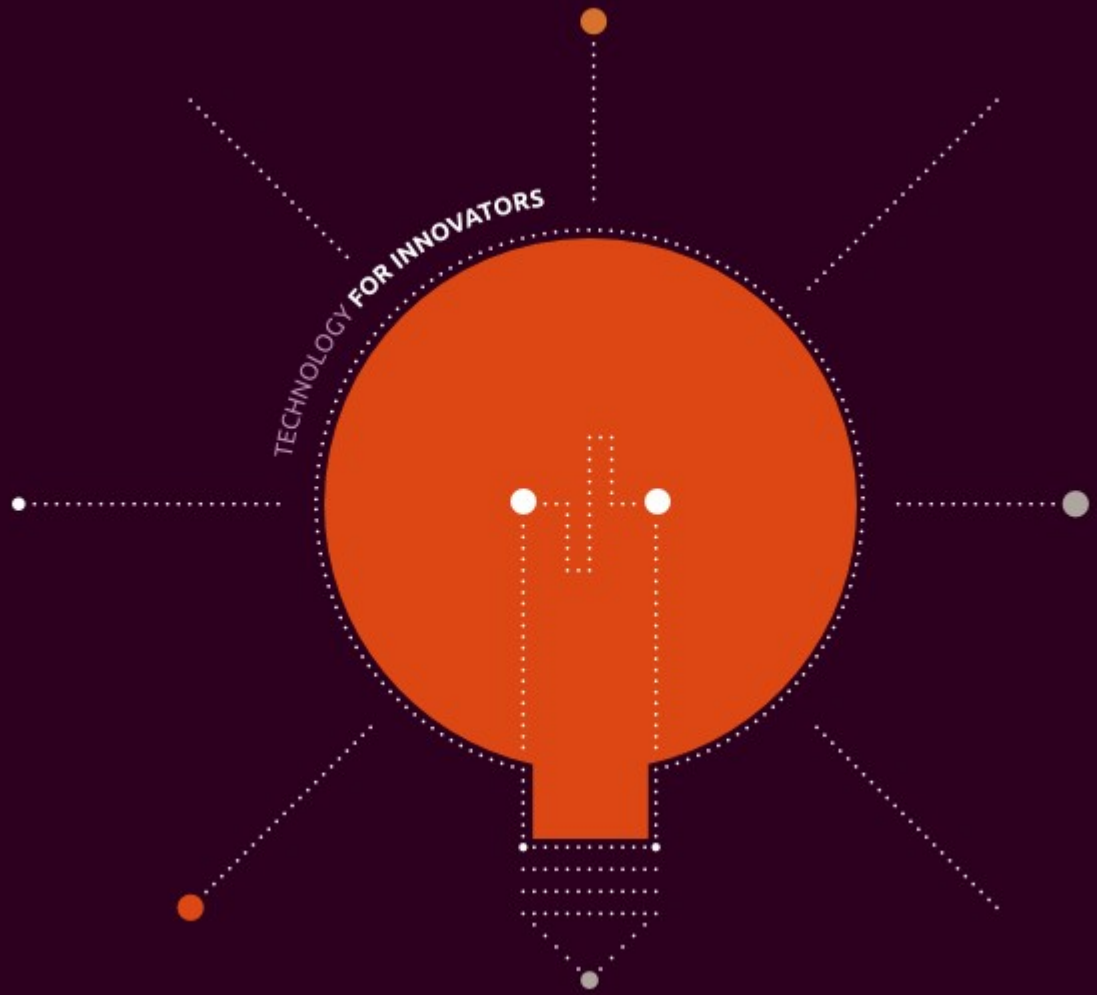
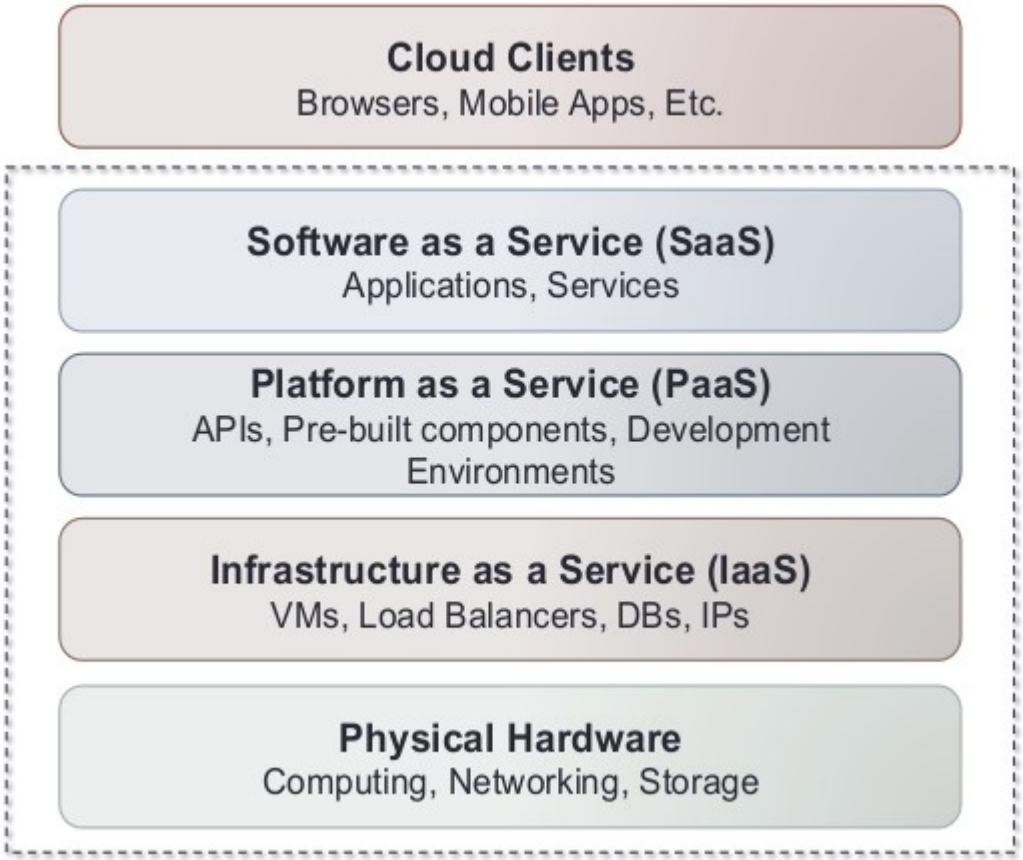


Now... It's show time !

Walking on edge of technology...

Cloud Services



Everyone uses cloud services everyday

- Ubuntu One
- ownCloud
- Dropbox
- Google Docs
- Office 360

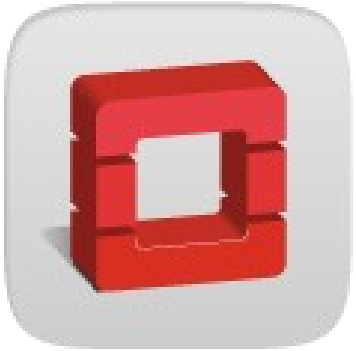
  &...

Software on clouds does run on an infrastructure

Software on clouds run on an infrastructure

- CloudStack
- Eucalyptus
- Amazon EC2
- OpenStack

OpenStack runs as cloud infrastructure



OpenStack

cloud infrastructure

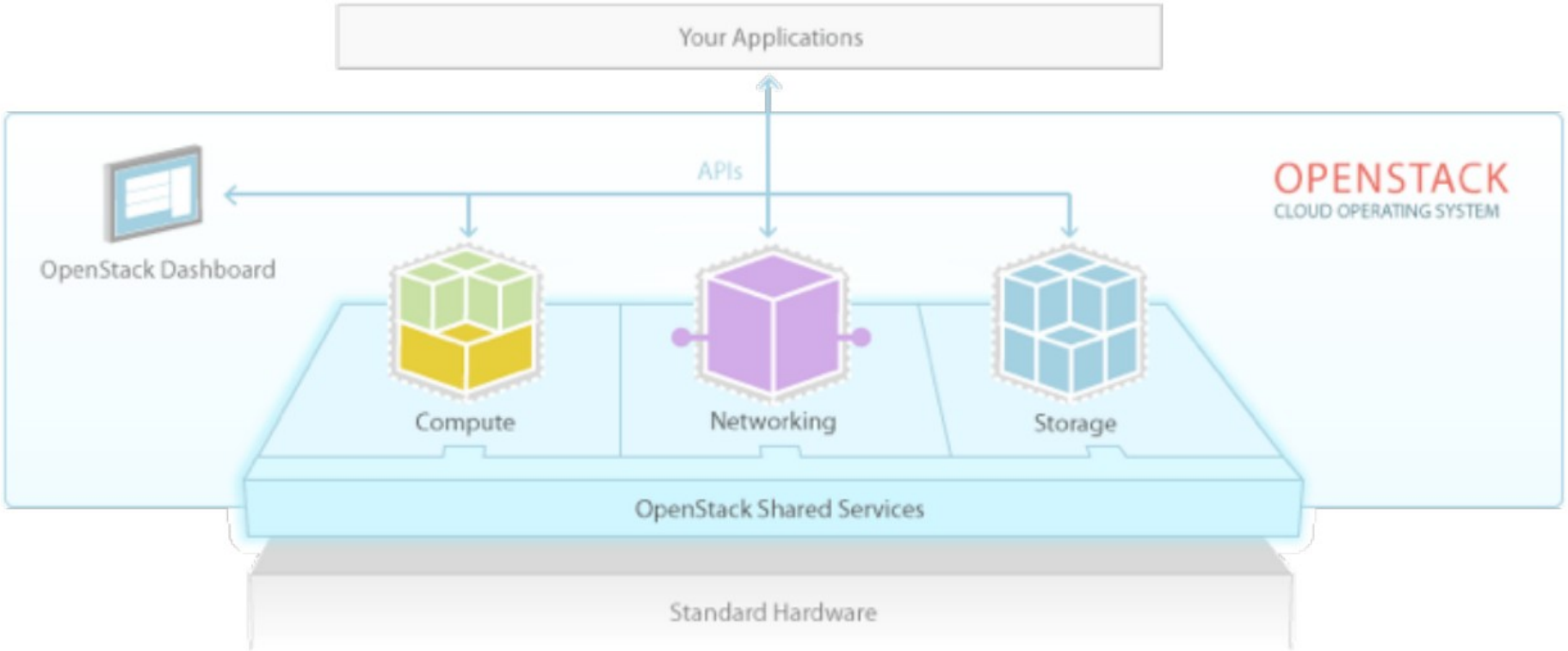
About OpenStack

- Founded by Rackspace and NASA
- The most favorite open source project since 2010
- Over 1200 developers and contributors from 130 countries
- 140 user groups around the world with 16520 people
- Cross platform and written in Python
- Released under Apache License 2.0

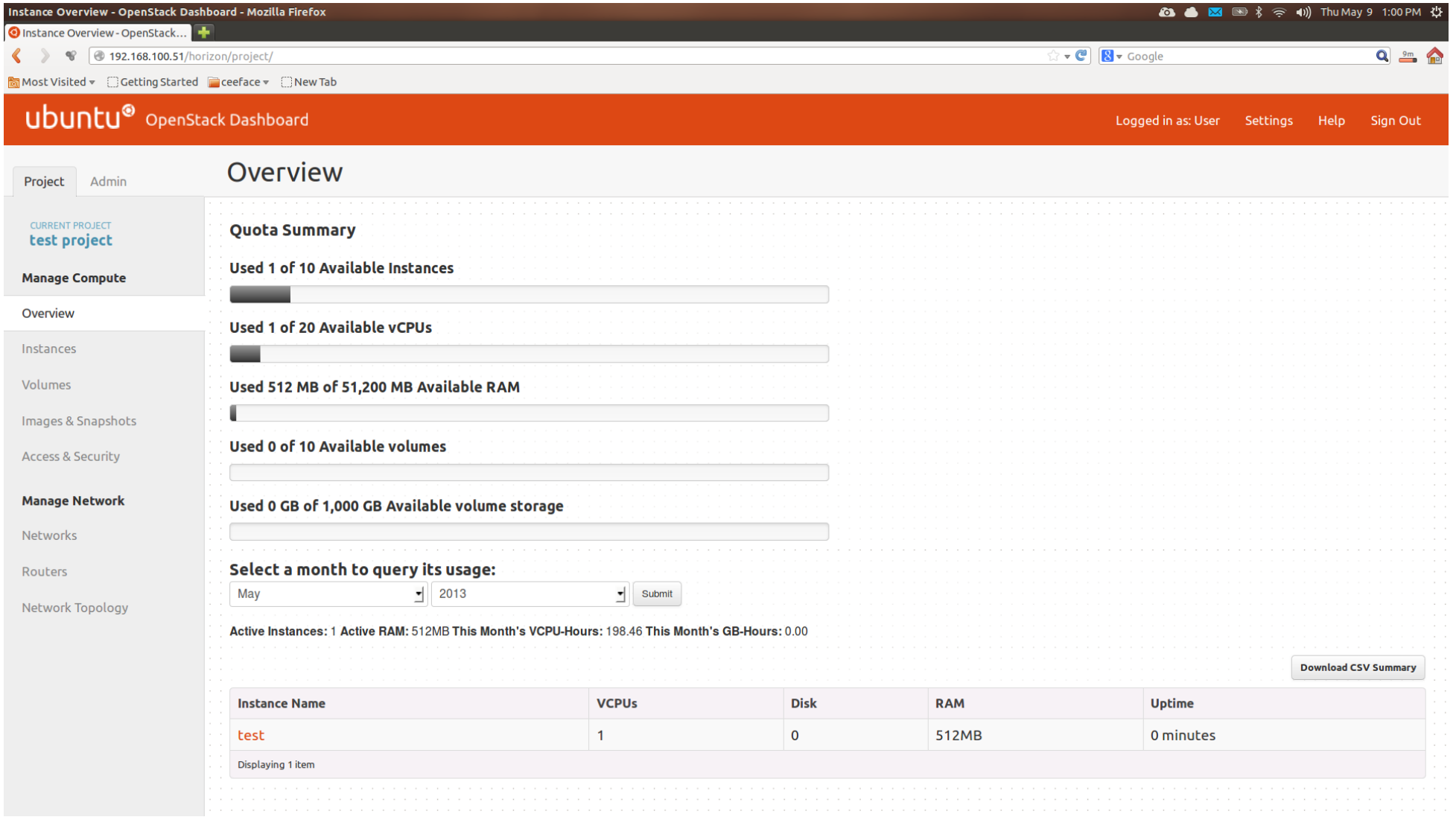
Enterprise Contributions

- Rackspace and NASA as project founders
- Red Hat as #1 contributor in development
- Ubuntu and Canonical as the first partners of OpenStack
- AT&T, Suse, HP, IBM, Nebula, Intel, Dell,Cisco, VMware

OpenStack runs as cloud infrastructure



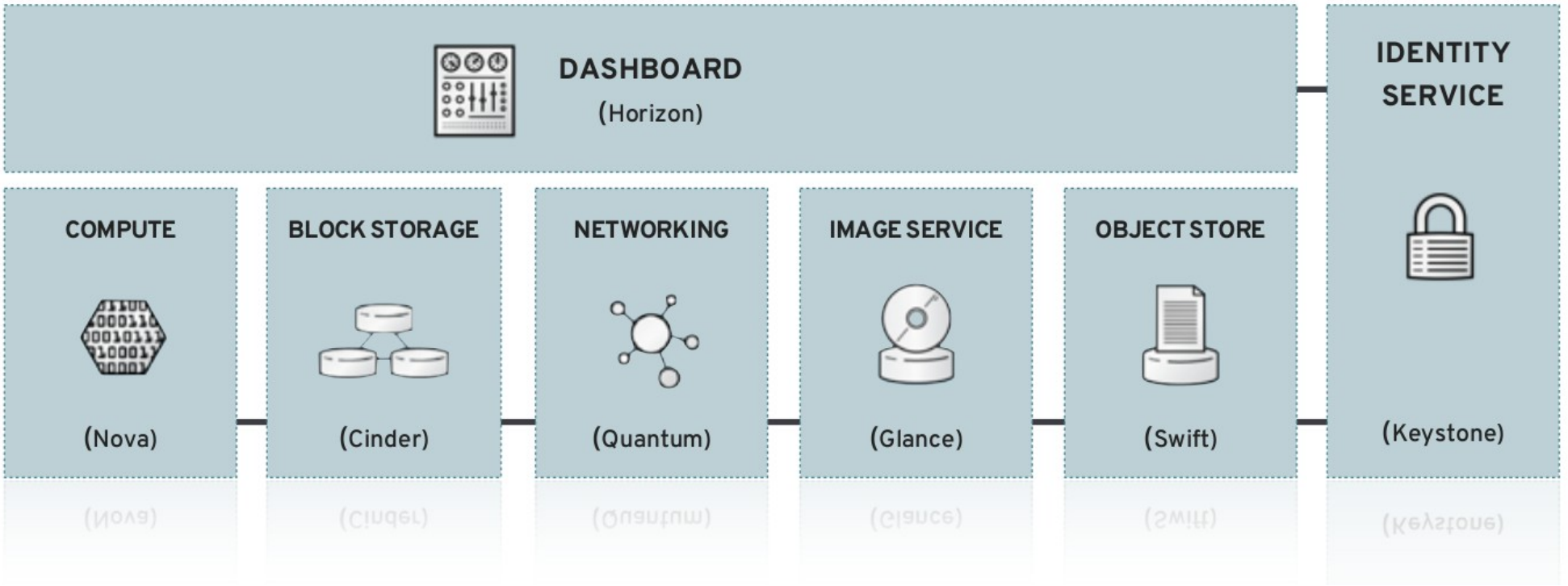
OpenStack runs as cloud infrastructure



OpenStack Components

- Compute (Nova)
- Object Storage (Swift)
- Block Storage (Cinder)
- Networking (Neutron)
- Dashboard (Horizon)
- Identity (Keystone)
- Image Service (Glance)
- Orchestration (Heat)
- Database (Trove)

OpenStack Components



Compatible with Hypervisors

- KVM
- LXC (Linux Container)
- Xen
- VMware ESXi
- Microsoft Hyper-V

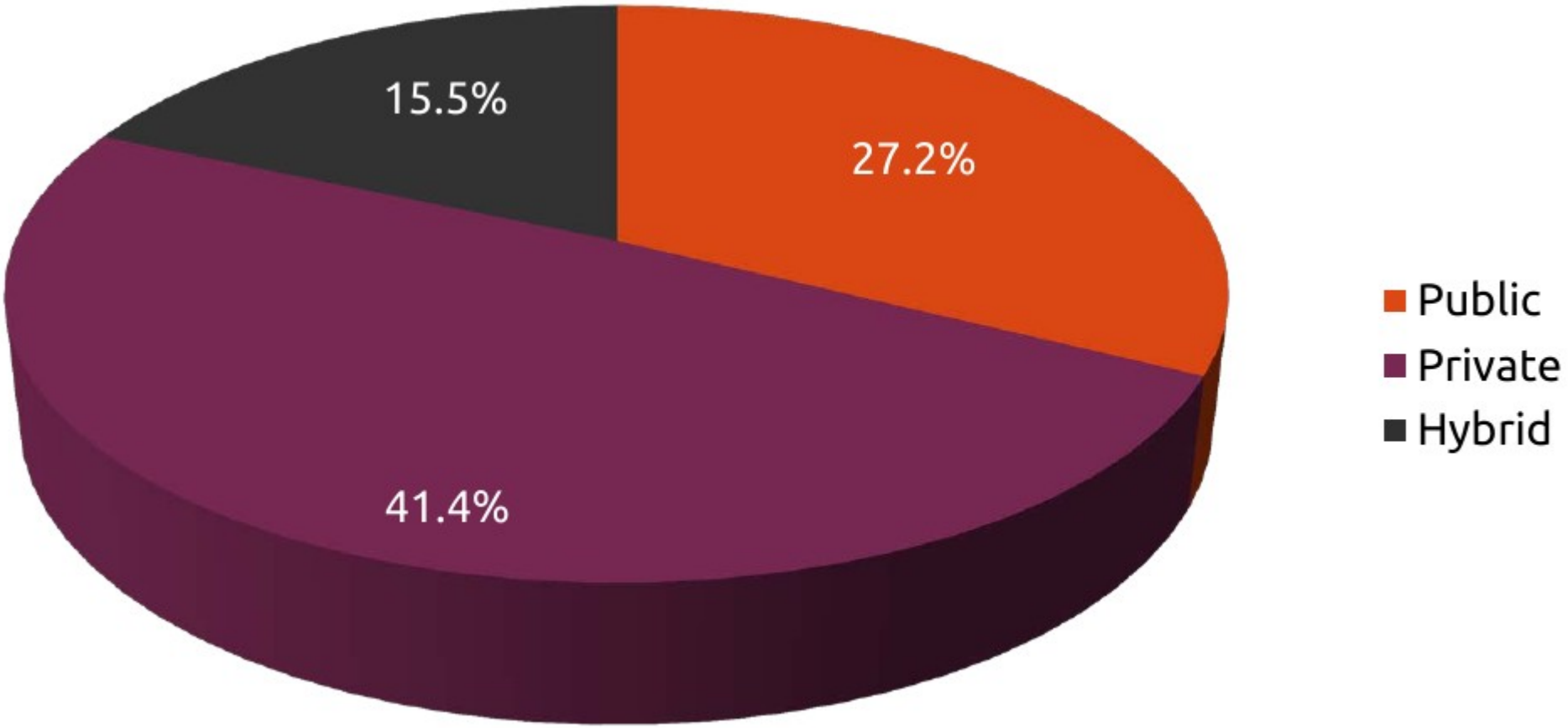
OpenStack and Ubuntu Relationship

- Running on more than 55% of public clouds
- Reference OS for OpenStack development

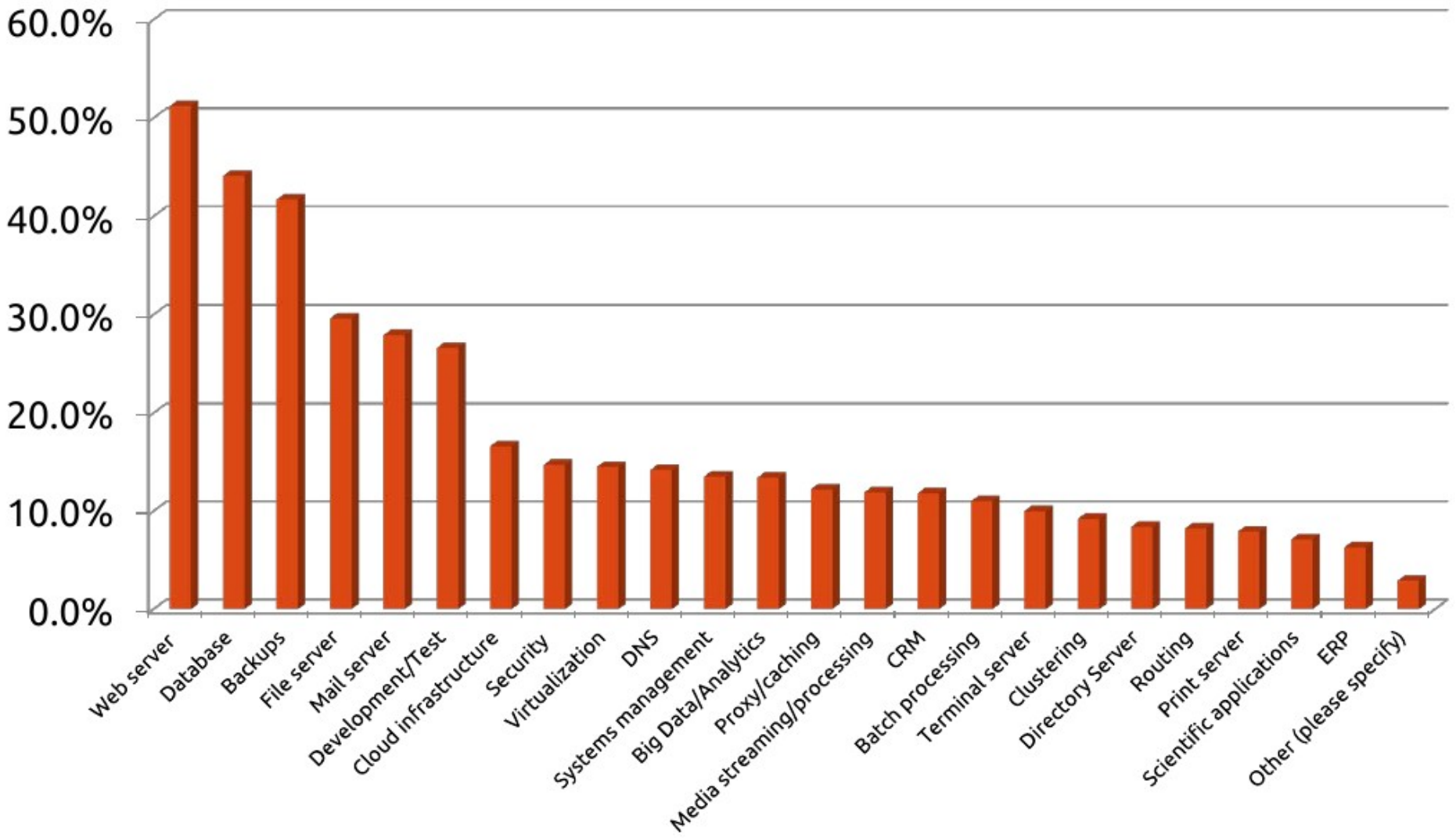
OpenStack on Ubuntu in All Type of Clouds

- Public Clouds
- Private Clouds
- Hybrid Clouds

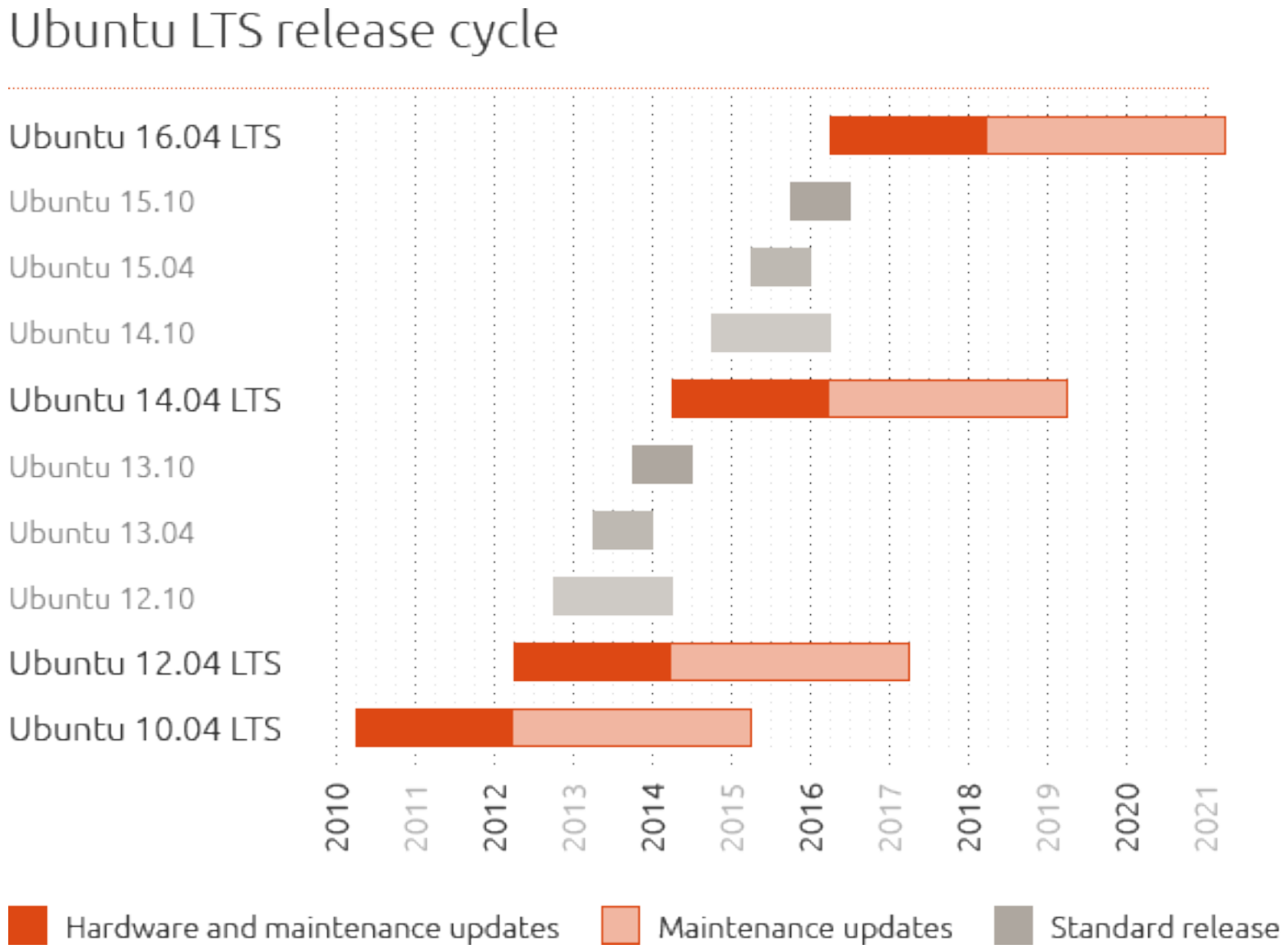
OpenStack Cloud Types Market Share



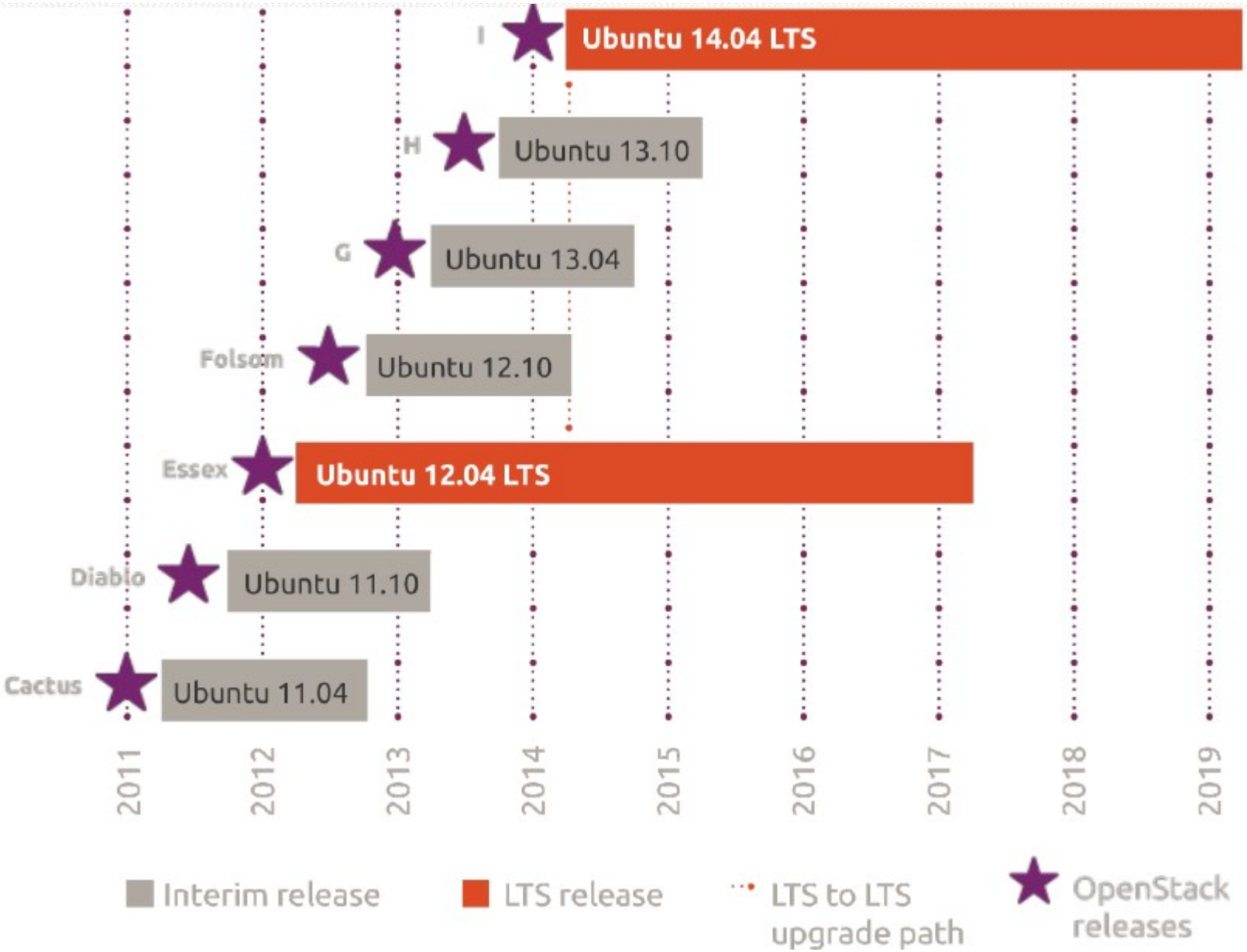
Ubuntu Server Workloads



Ubuntu release every 6 months



OpenStack and Ubuntu Release Cadence



OpenStack and Ubuntu Relationship

Why Ubuntu for Private and Public Clouds

- Free from licensing fees
- Wide range of certified hardware
- No vendor lock-in
- Open API
- Open Formats
- Open Source
- Optional support available
- Run on more than 55% of public clouds (so it's trusty)

Why Ubuntu for Private and Public Clouds

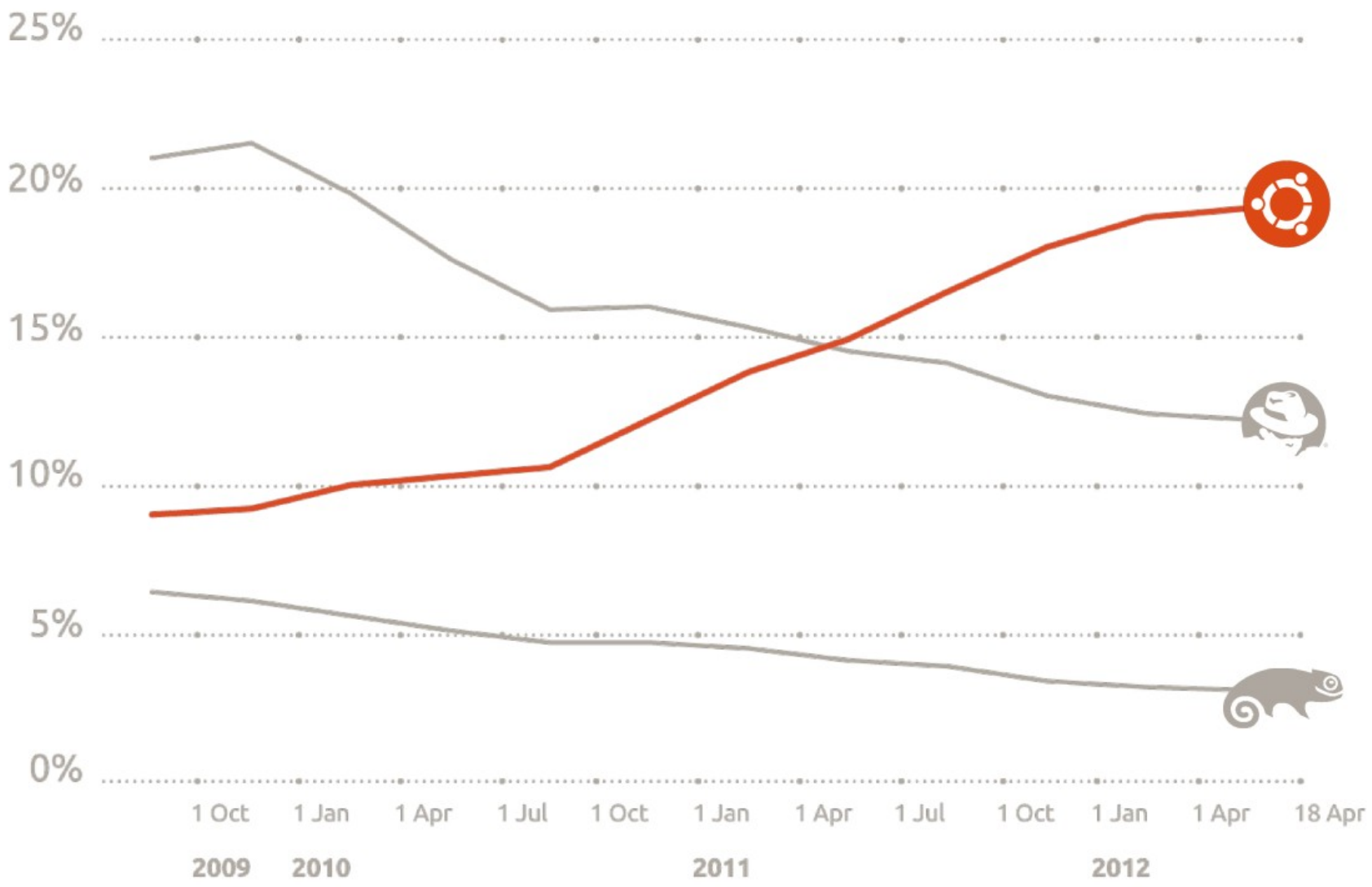
- Lean, fast, and efficient
- Innovative components
- Support for the latest cloud workloads
- Predictable release cycle
- Reference platform for OpenStack deployments
- Latest version of OpenStack in repositories
- Physical provisioning with MAAS
- Juju Charms and Orchestration

Metal As A Service - MAAS

Metal As A Service - MAAS

- A new bare metal provisioning system to rapidly deploy Ubuntu across distributed systems.
- Scales services up or down as if they were in a cloud
- Add, commission, update and deploy servers at will
- Common protocols such as tftpboot and PXE
- Tightly integrated with Juju
- Provision systems in advance of Ubuntu Cloud being deployed.

The Platform for Scale-Out



Ubuntu Clouds in Enterprise

- Rackspace
- HP Cloud
- Wikipedia
- NASA
- IBM

Juju Charms and Orchestration

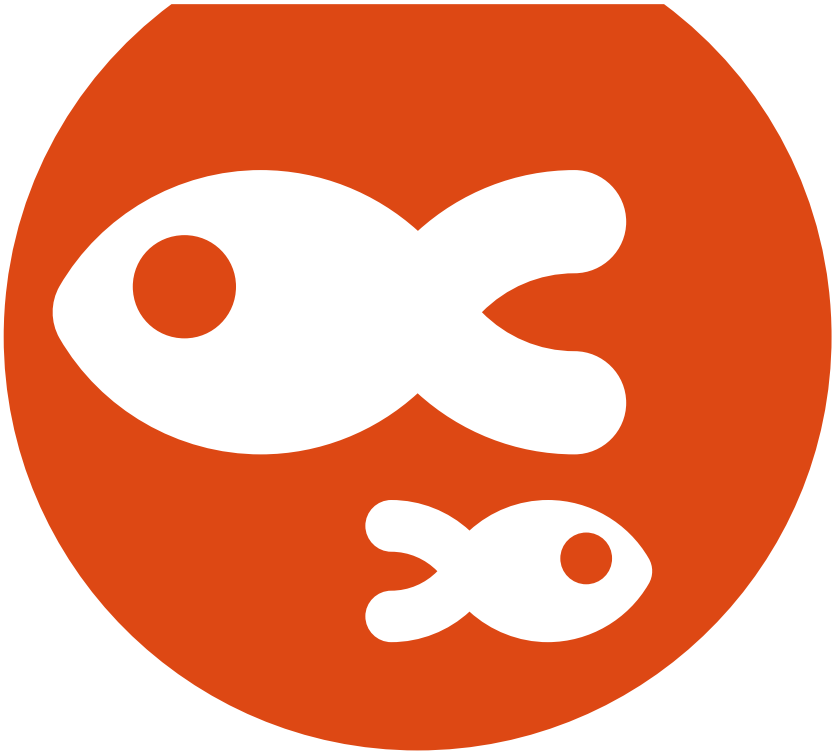
We Should talk about Juju
but we have not much time...

Love OpenStack - OpenStack Loves You

How to Contribute to OpenStack

- If you're building clouds
- If you're a developer
- If you're a tester
- If you're into security
- If you're into documentation
- If you're a designer or usability professional
- If you're a translator

OpenStack IRAN Community



OpenStack IRAN Community

- Home Page: OpenStack.ir
- IRC Channel on FreeNode: #OpenStack-ir
- Mailing List: OpenStack-ir@Lists.OpenStack.org
- Twitter Account: @OpenStackIR
- Twitter Hashtag: #OpenStack-IRAN

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Thank you

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