



ubuntu-ir

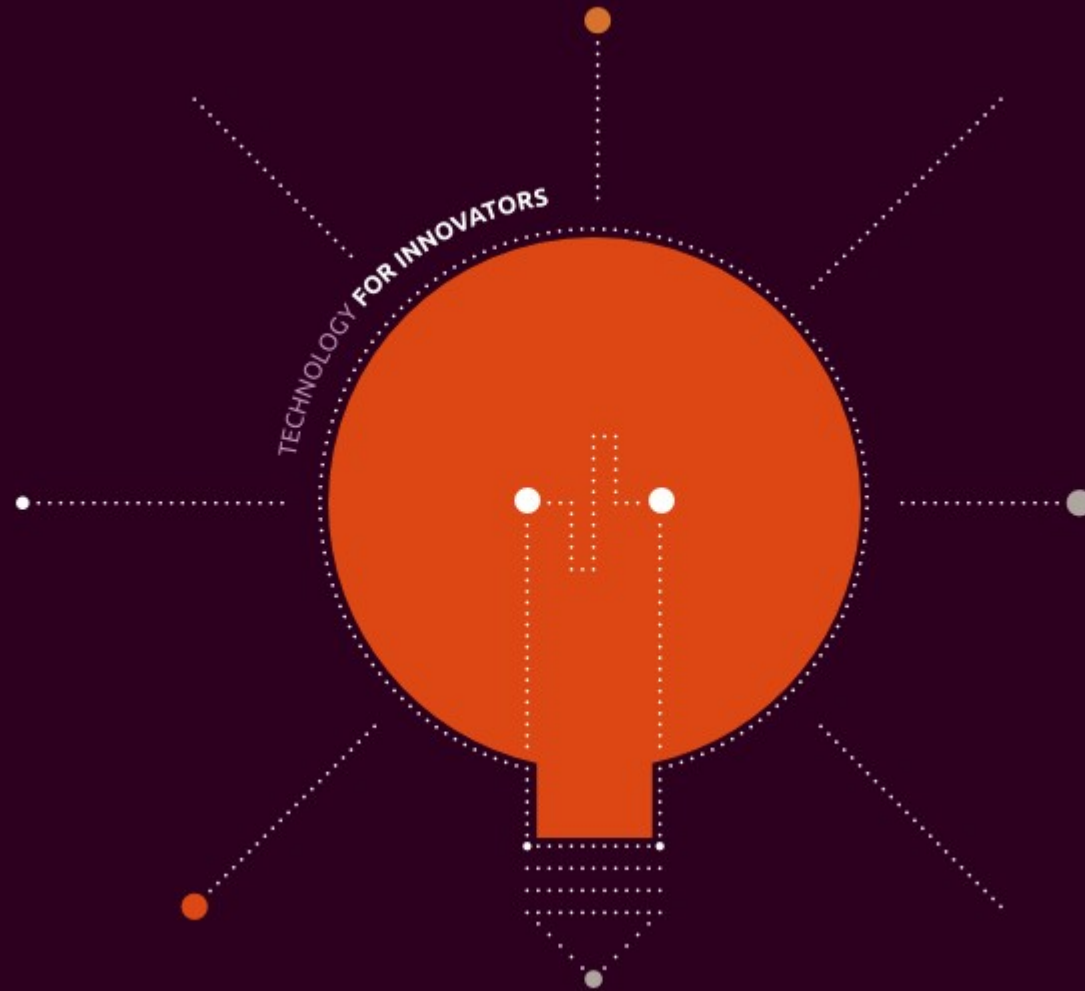
OpenStack Clouds on Ubuntu

open infrastructure introduction

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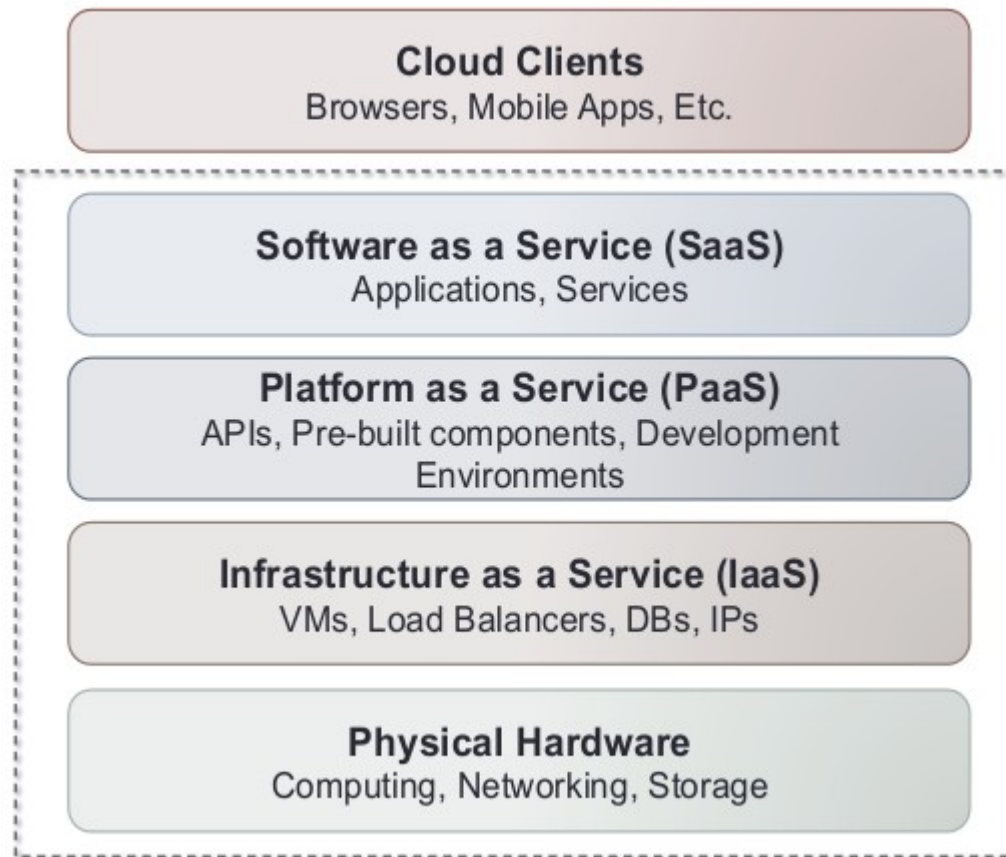




Now... It's show time !

Walking on edge of technology...

Cloud Services



Everyone uses cloud services everyday

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



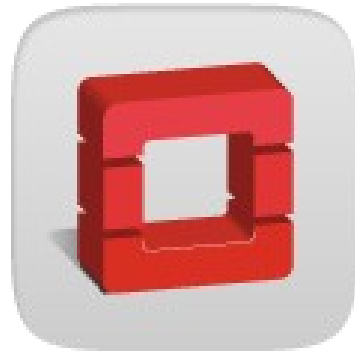
Software on clouds does run on an infrastructure



Software on clouds run on an infrastructure

- CloudStack
- Eucalyptus
- Amazon EC2
- OpenStack

OpenStack runs as cloud infrastructure



OpenStack
cloud infrastructure

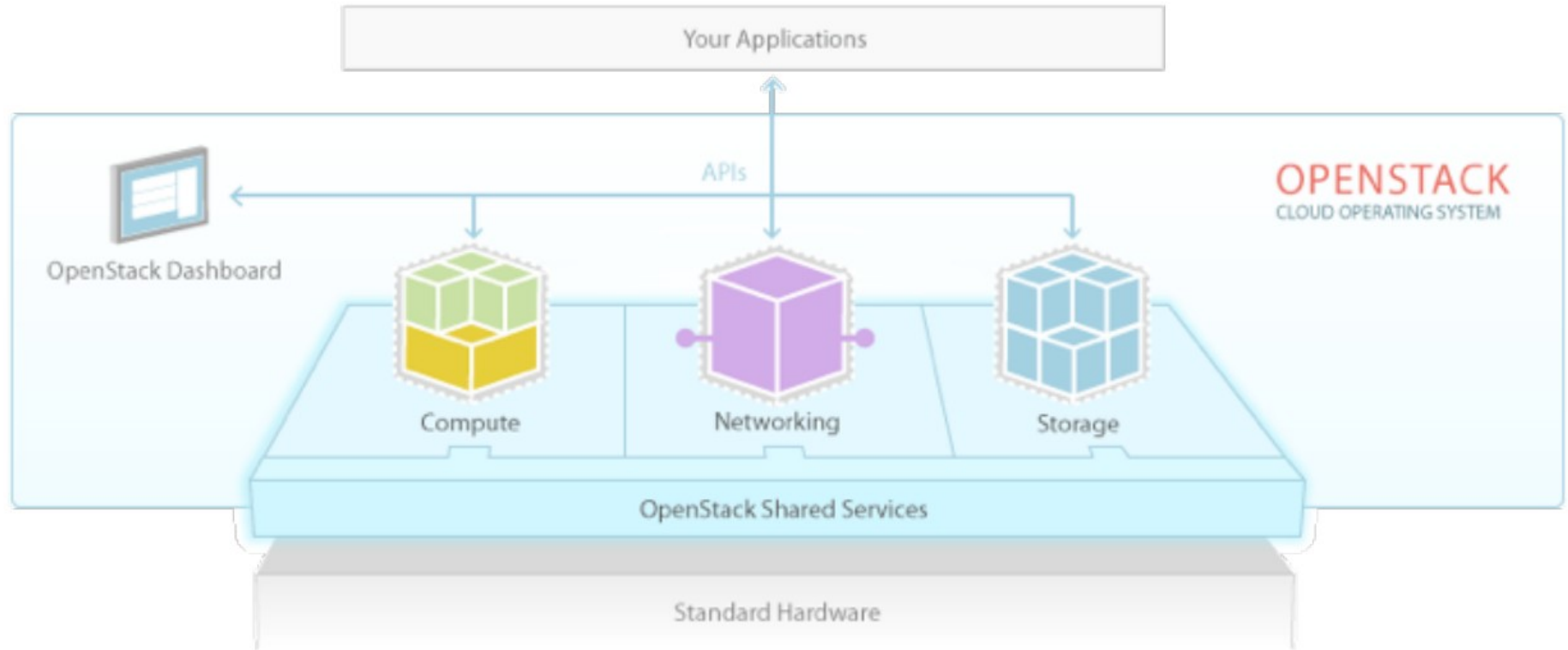
About OpenStack

- 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

The screenshot shows the OpenStack Dashboard (Horizon) interface. The top navigation bar is orange with the 'ubuntu' logo and 'OpenStack Dashboard' text. On the right, it says 'Logged in as: User' with links for 'Settings', 'Help', and 'Sign Out'. The left sidebar contains a 'Project' tab and an 'Admin' tab. Under 'Project', there's a 'CURRENT PROJECT test project' section with a 'Manage Compute' link. Below that are links for 'Overview', 'Instances', 'Volumes', 'Images & Snapshots', 'Access & Security', 'Manage Network', 'Networks', 'Routers', and 'Network Topology'. The main content area is titled 'Overview' and shows a 'Quota Summary' section with five horizontal progress bars: 'Used 1 of 10 Available Instances', 'Used 1 of 20 Available vCPUs', 'Used 512 MB of 51,200 MB Available RAM', 'Used 0 of 10 Available volumes', and 'Used 0 GB of 1,000 GB Available volume storage'. Below this is a 'Select a month to query its usage:' section with a dropdown menu set to 'May' and '2013', and a 'Submit' button. The summary text reads: 'Active Instances: 1 Active RAM: 512MB This Month's VCPU-Hours: 198.46 This Month's GB-Hours: 0.00'. A 'Download CSV Summary' button is on the right. At the bottom, a table lists the instance details.

Instance Name	VCPUs	Disk	RAM	Uptime
test	1	0	512MB	0 minutes

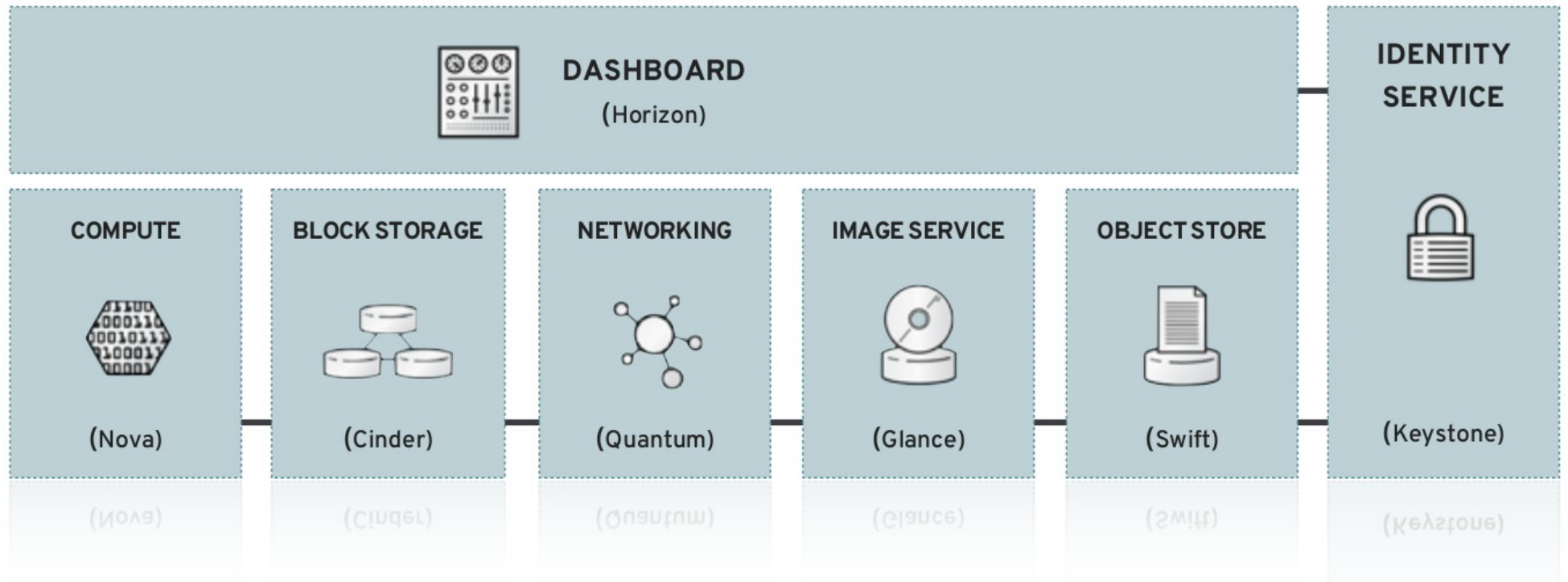
Displaying 1 item

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



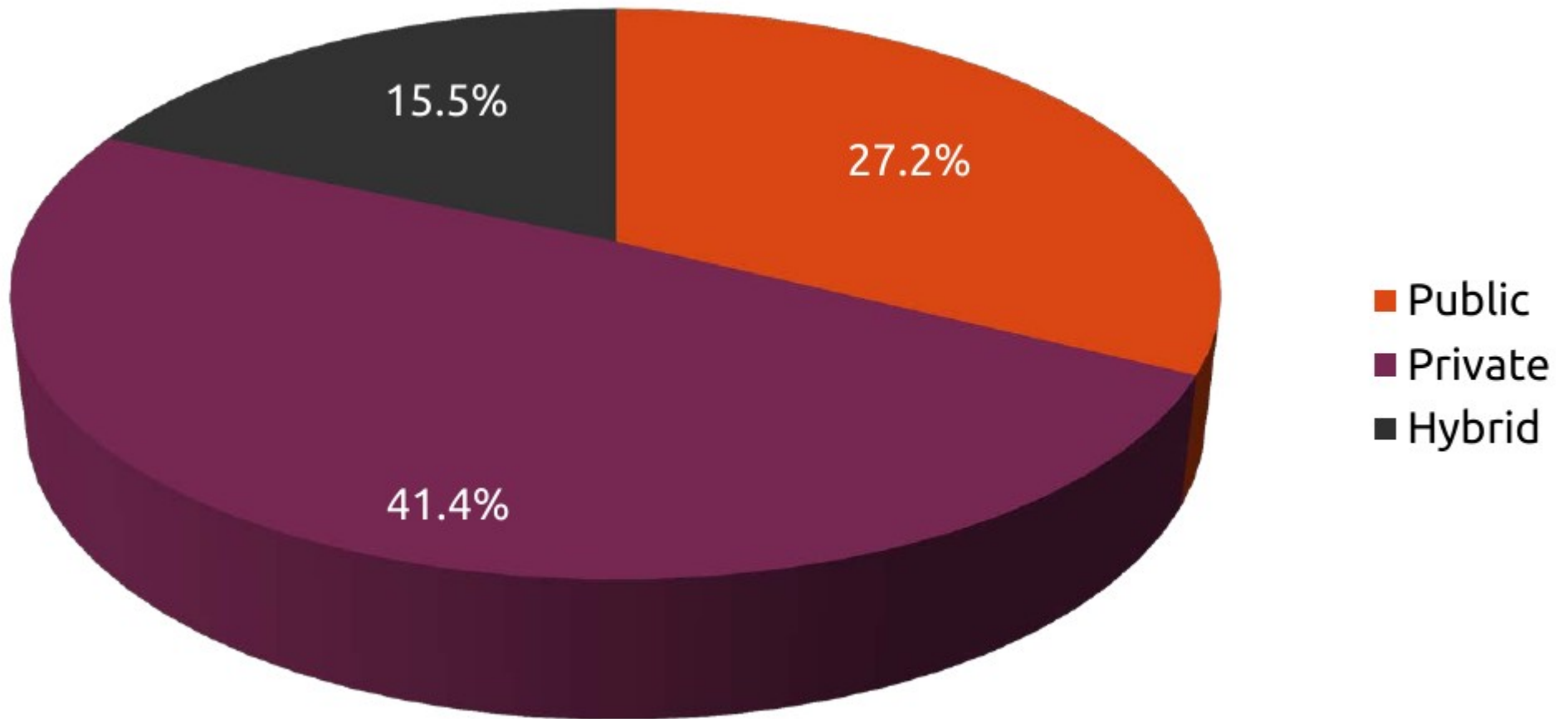
- Running on more than 55% of public clouds
- Reference OS for OpenStack development

OpenStack on Ubuntu in All Type of Clouds

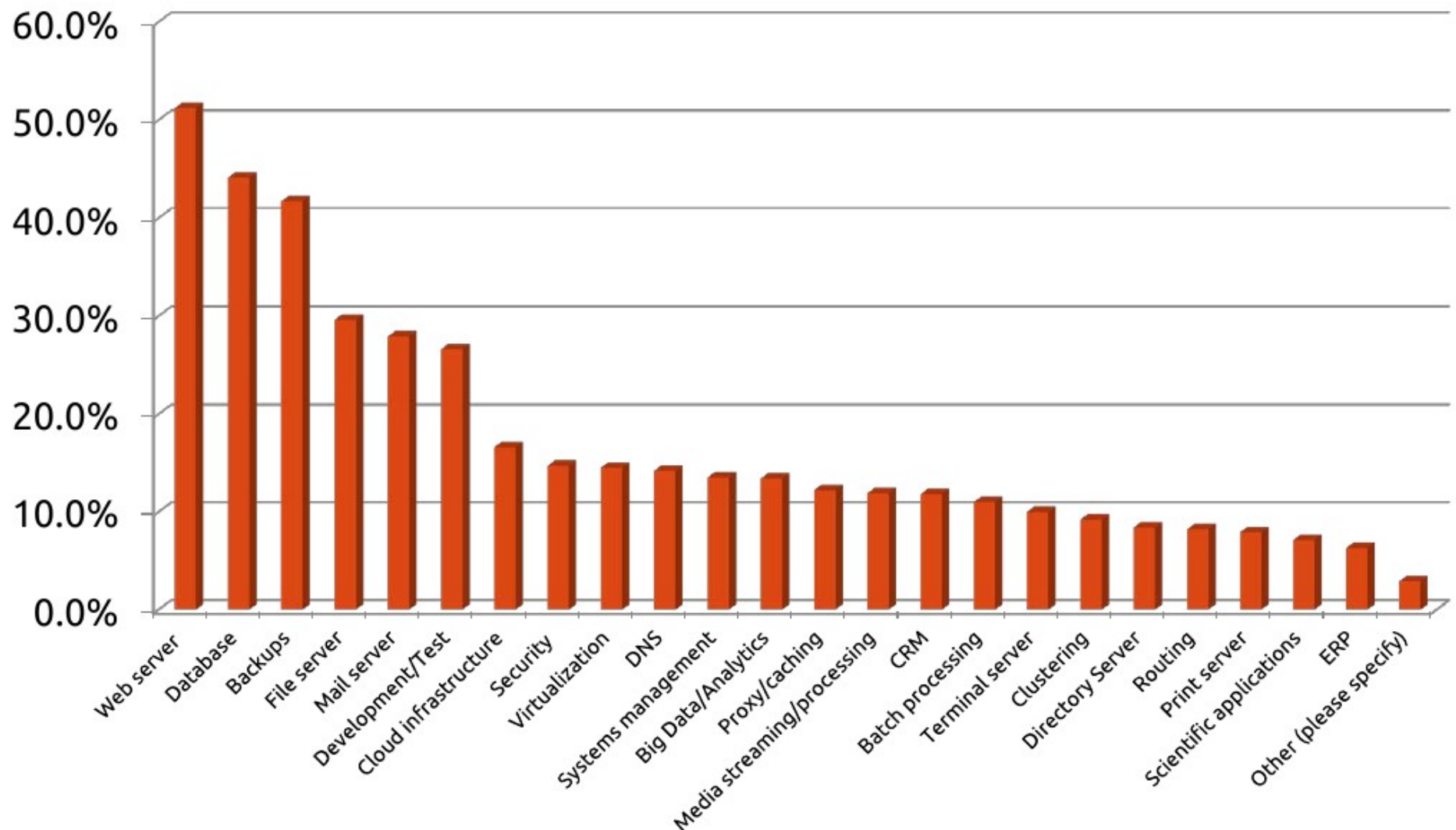
- Public Clouds
- Private Clouds
- Hybrid Clouds



OpenStack Cloud Types Market Share

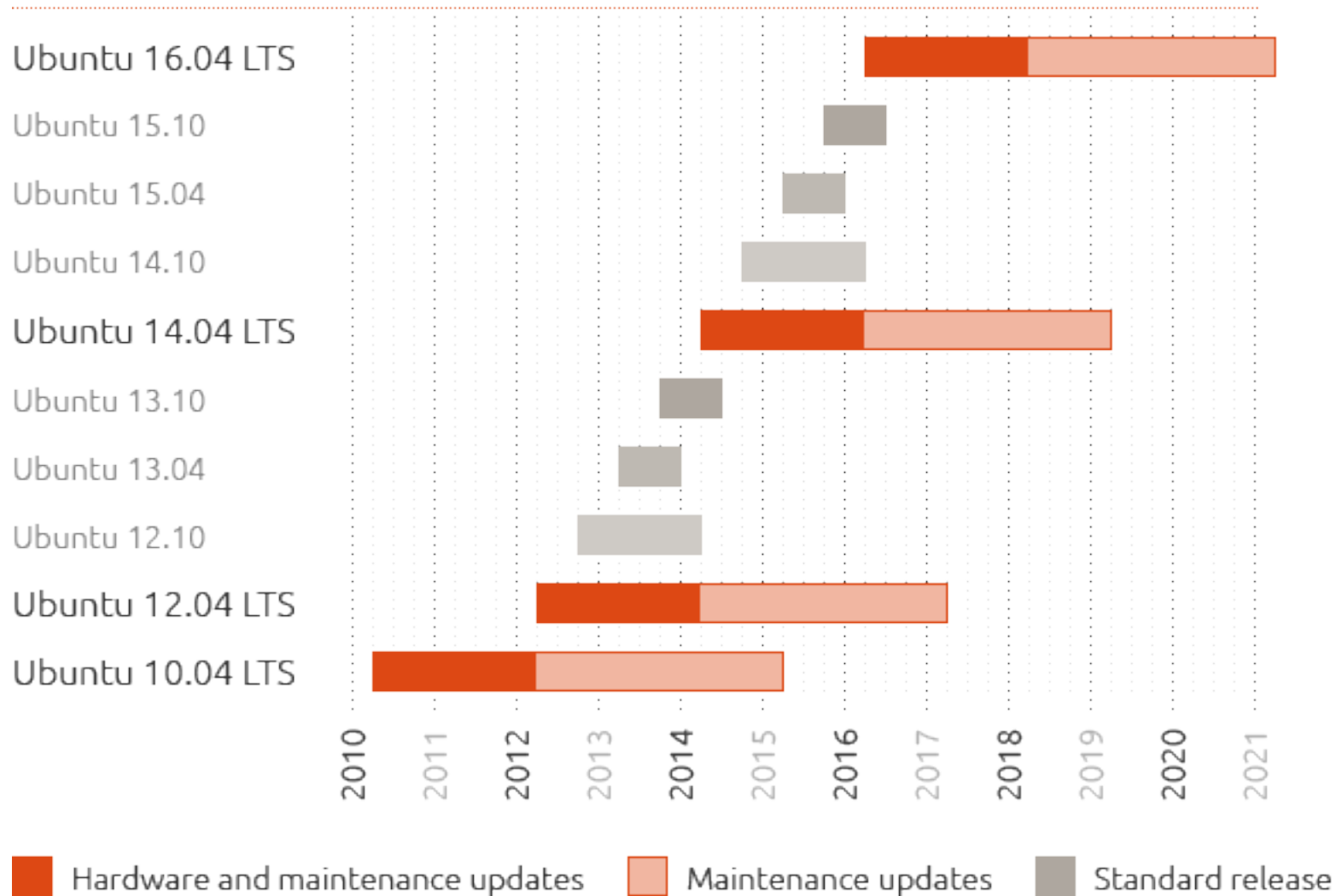


Ubuntu Server Workloads

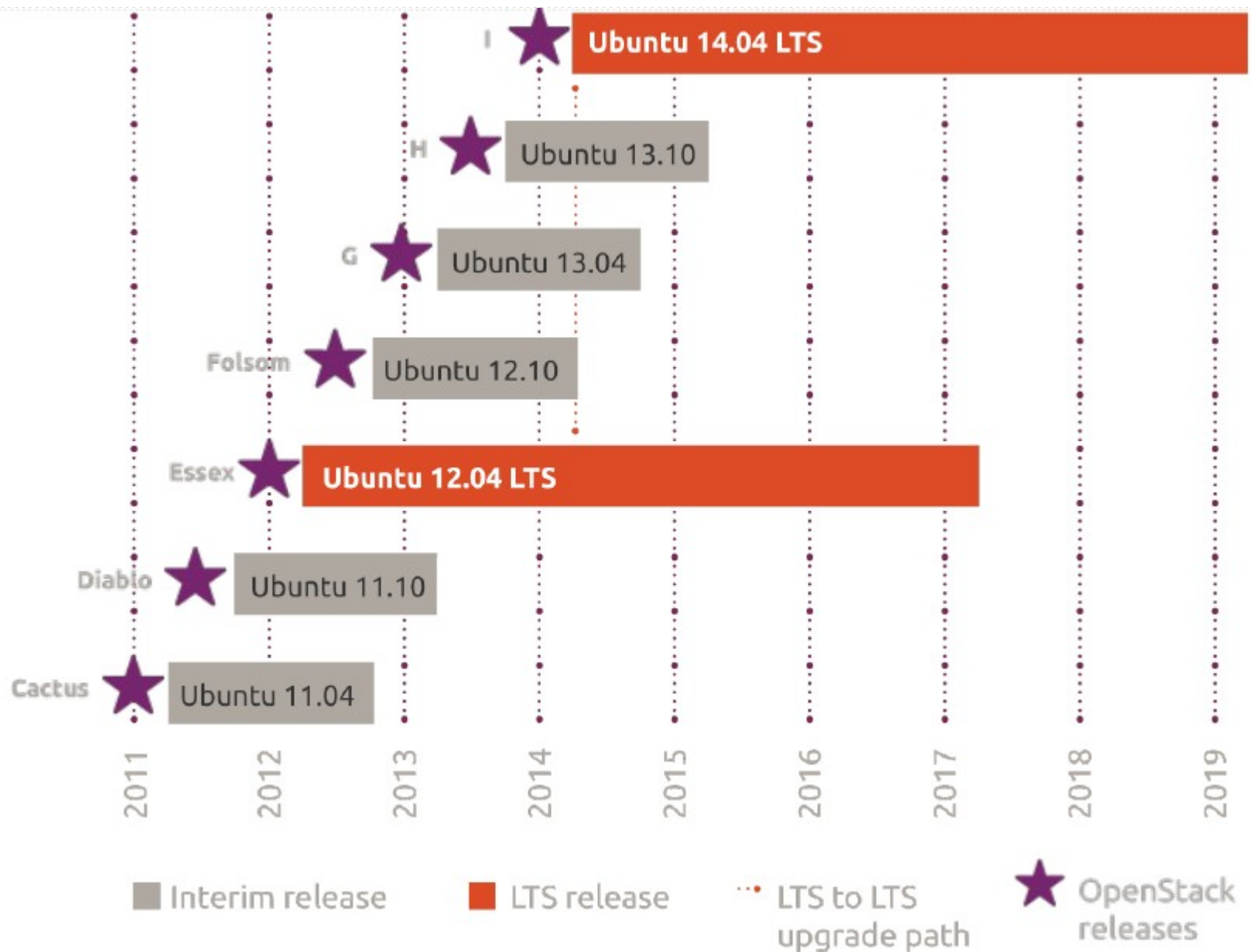


Ubuntu release every 6 months

Ubuntu LTS release cycle



OpenStack and Ubuntu Release Cadence





Most OpenStack
clouds run on
Ubuntu

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 trustworthy)

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
-

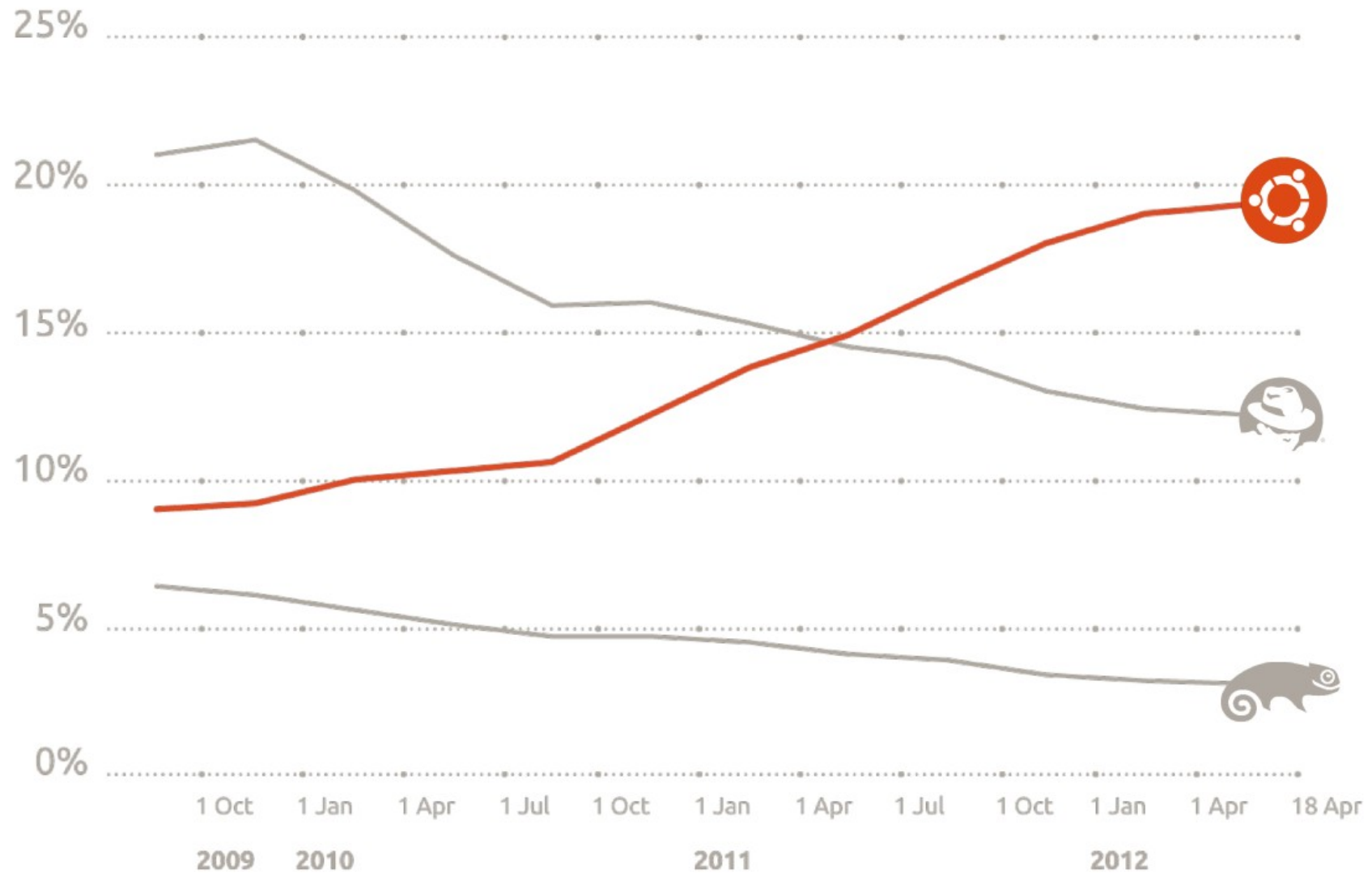
Metal As A Service - MAAS



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 tftpbboot 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...



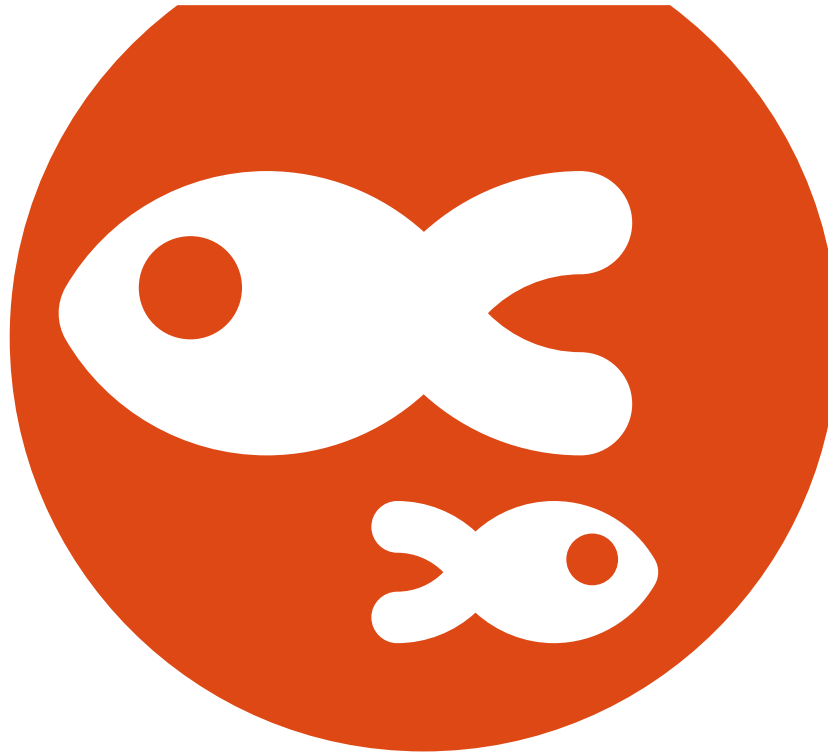
Love OpenStack - OpenStack Loves You



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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