



Ubuntu & the Cloud

Kyle MacDonald

General Manager, Cloud & Server - Canonical





Open Source & The Cloud



What is the Cloud?

The Landscape



- IaaS - Amazon EC2, Rackspace Cloud
- PaaS - Force.com, CloudFoundry, OpenShift, Heroku
- SaaS: Salesforce, Zoho, Google Apps, Zendesk



CANONICAL



CANONICAL



The Landscape

- IaaS - Amazon EC2, Rackspace Cloud
- PaaS - Force.com, CloudFoundry, OpenShift, Heroku
- SaaS: Salesforce, Zoho, Google Apps, Zendesk



CANONICAL



CANONICAL



The Model: a Mapping

- IaaS: Servers & Storage
- PaaS: Middleware
- SaaS: Applications



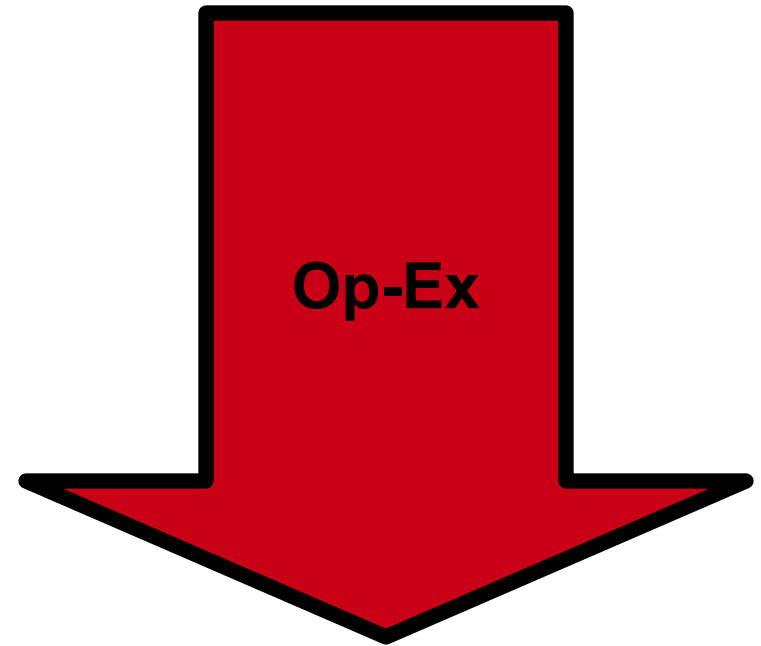
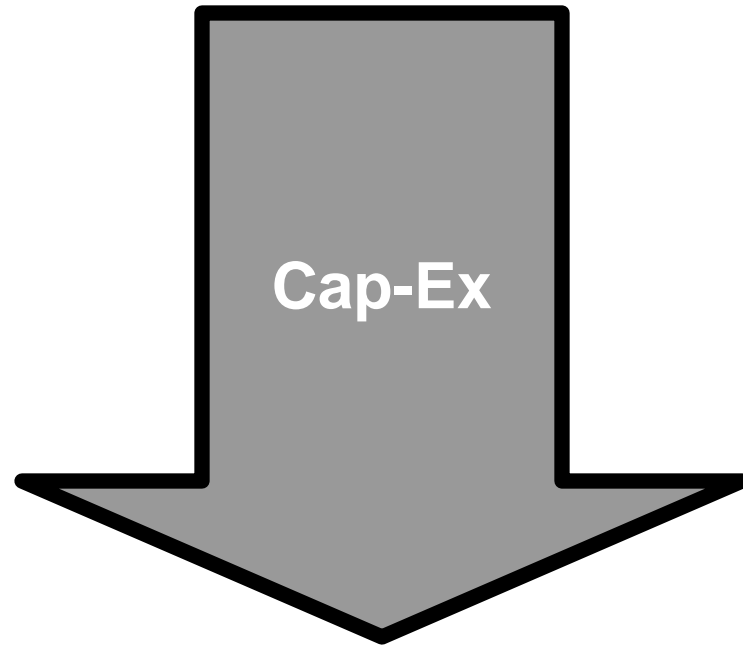
Why Cloud?



Elastic
Multi-tenancy
Pay *As You* Go
Pace of Innovation
Speed of Provisioning



An Opportunity

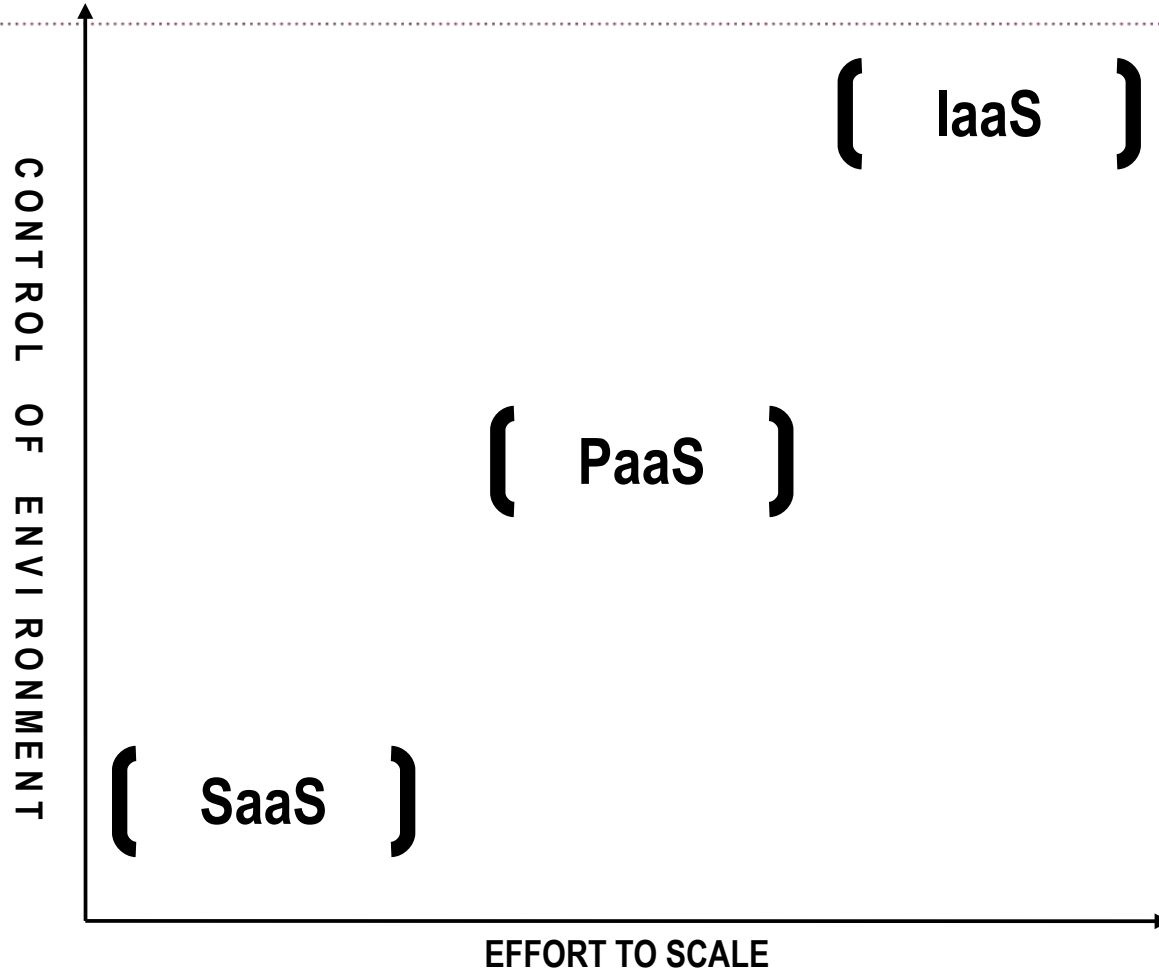


	Cloud	Traditional
Accessibility	Minutes	Days
Capex	Pay As You Go	Fixed, Upfront Cost
Economies of Scale	Yes	No
Geography	Distributed	Local/Offsite
Multi-tenant	Yes	No
Scalability	Elastic	Manual
Virtualized	Yes	Both



But...







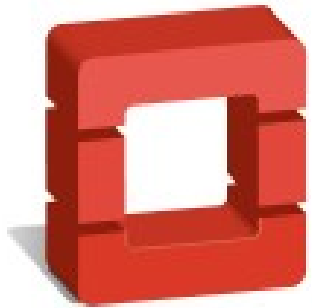
open source

Hosted IAAS Options



OPEN

CLOSED



openstack™

nimbus i|o

cloud.com



Eucalyptus

 Joyent
smart computing

 vmware®

PAAS Generations



GEN 1

GEN 2

GEN 3

force.com 

Google 
App Engine

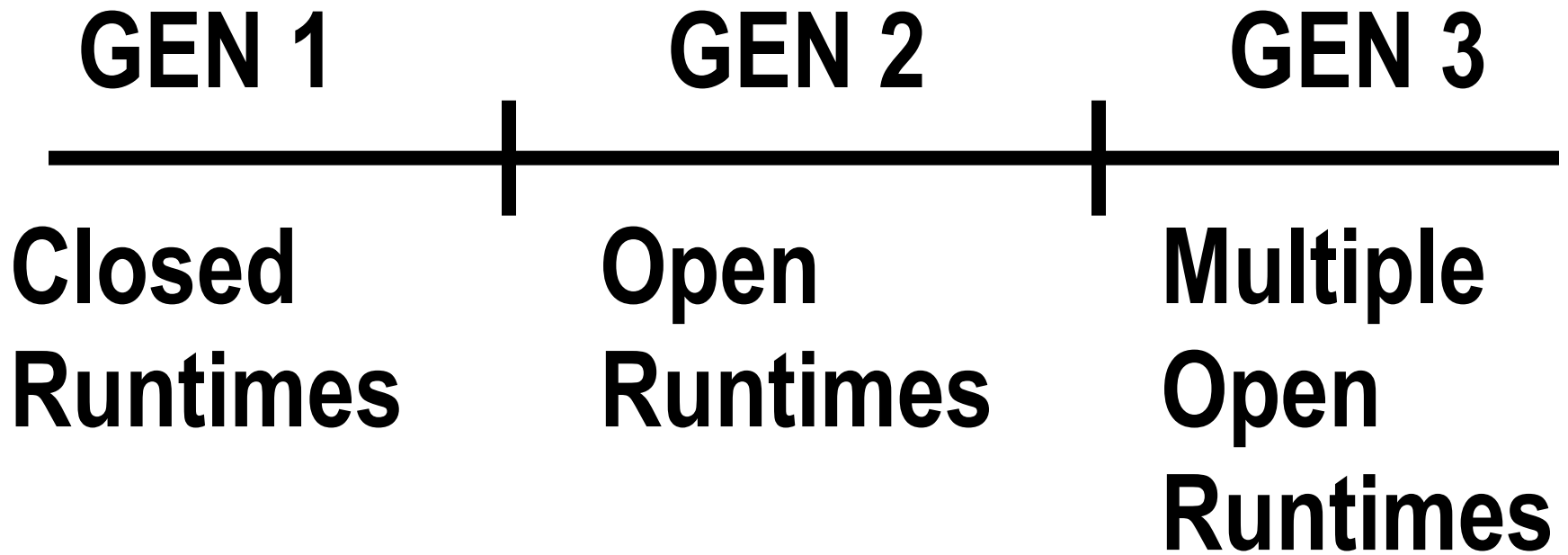
 Engine Yard™

 heroku


OPENSHIFT™
PaaS by Red Hat® Cloud

 CLOUD FOUNDRY

The Future is Open





Hybrid cloud is the goal:

Move workloads between your private cloud and major public cloud infrastructures



Friction-free deployment

Provisioning and deployment
friction destroy your agility
and efficiency



Power density is critical: ARM processors coming to the data centre



OpenStack – the Open Cloud



Openstack Compute (- Nova)

- Delivers instances and disk space on demand to run Ubuntu Cloud Guest or most other Operating Systems.
- Logical equivalent to AWS EC2

Openstack Image Service (- Glance)

- Delivers machines images locally and remotely
- Ubuntu Cloud Guest enabled
- Logical equivalent of AWS AMI Server

Openstack Object Storage (- Swift)

- Delivers Peta-scale object storage capabilities with redundancy built-in.
- Logical equivalent to AWS S3



OpenStack – the Open Cloud

Ubuntu + OpenStack (12.04 LTS)





Thank you.

Questions?

<https://pages.ubuntu.com/ubuntu-cloud-jumpstart>

www.ubuntu.com/business/cloud/overview

juju.ubuntu.com

@ubuntucloud on Twitter