

An Introduction to Cloud

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Created by:

Modified Date:

Classification:



Cloud



NIST Definition – Service models

- On-demand self-service.
- Broad network access.
- Resource pooling.
- Rapid elasticity.
- Measured service.

Source: <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>

NIST Definition – Service Models

- Software as a Service (SaaS)
- Platform as a Service (Paas)
- Infrastructure as a Service (IaaS)

Source: <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>

NIST Definition – Deployment Models

- Private cloud
- Community cloud
- Public cloud
- Hybrid cloud

Source: <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>

Public vs Private



vs.



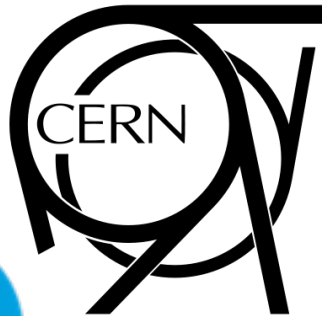
Cloud – Practical Definition



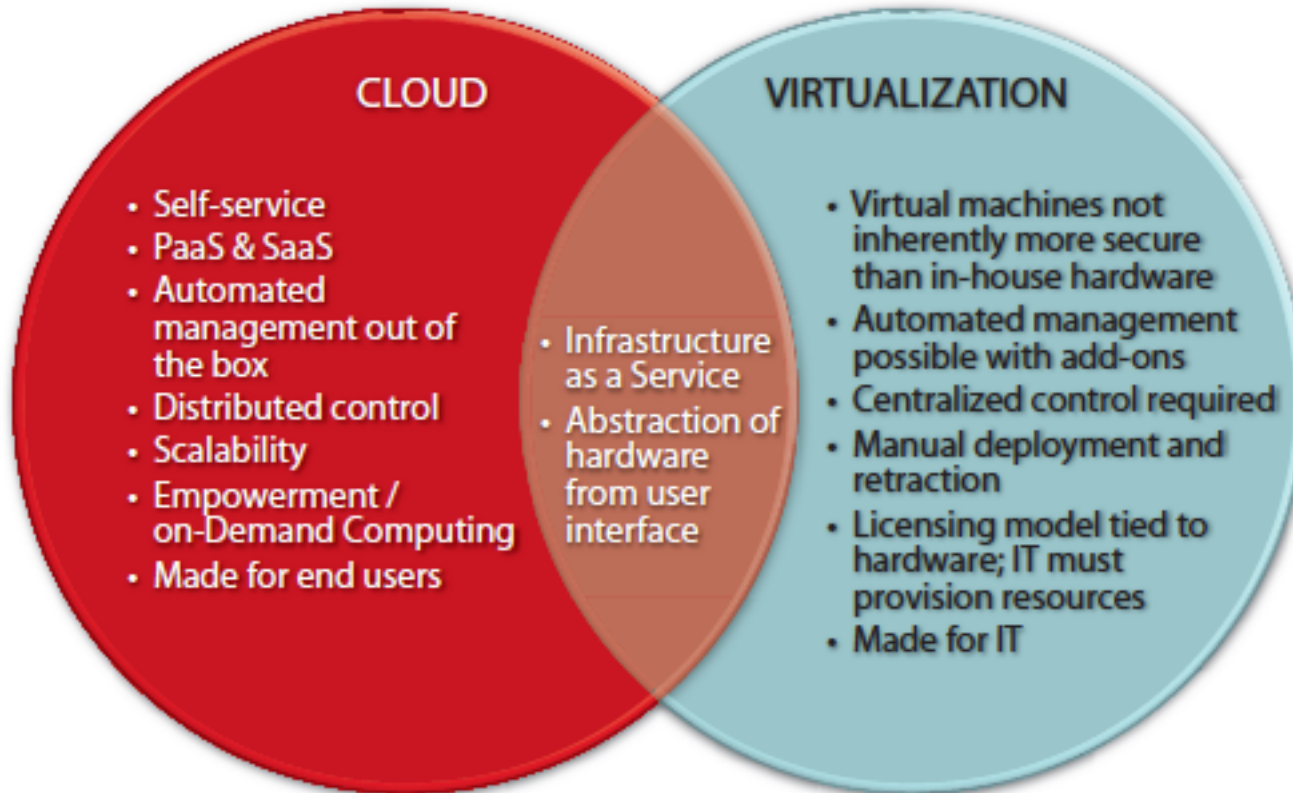
| SYNC



Windows Azure



Cloud vs Virtualization



Read more: http://www.rackspace.com/knowledge_center/whitepaper/virtualization-is-not-the-cloud

Amazon and the rest



amazon
web services™



Google Compute Engine

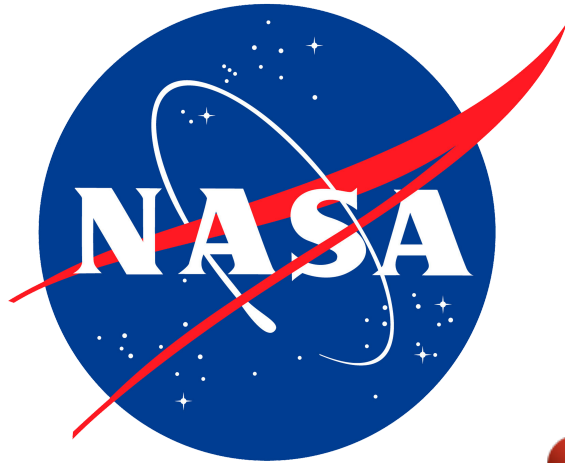


Windows Azure™

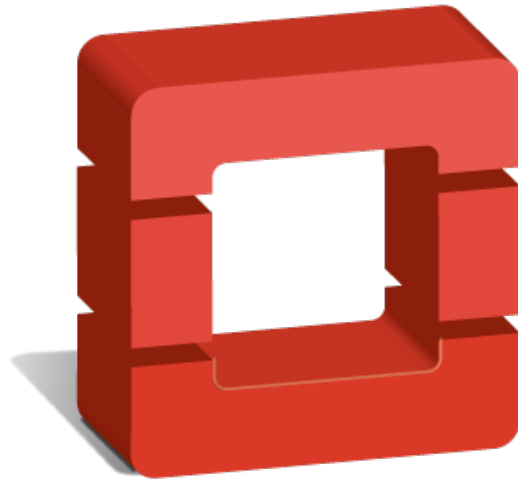
 **rackspace®**
the #1 managed cloud company

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The origin of OpenStack



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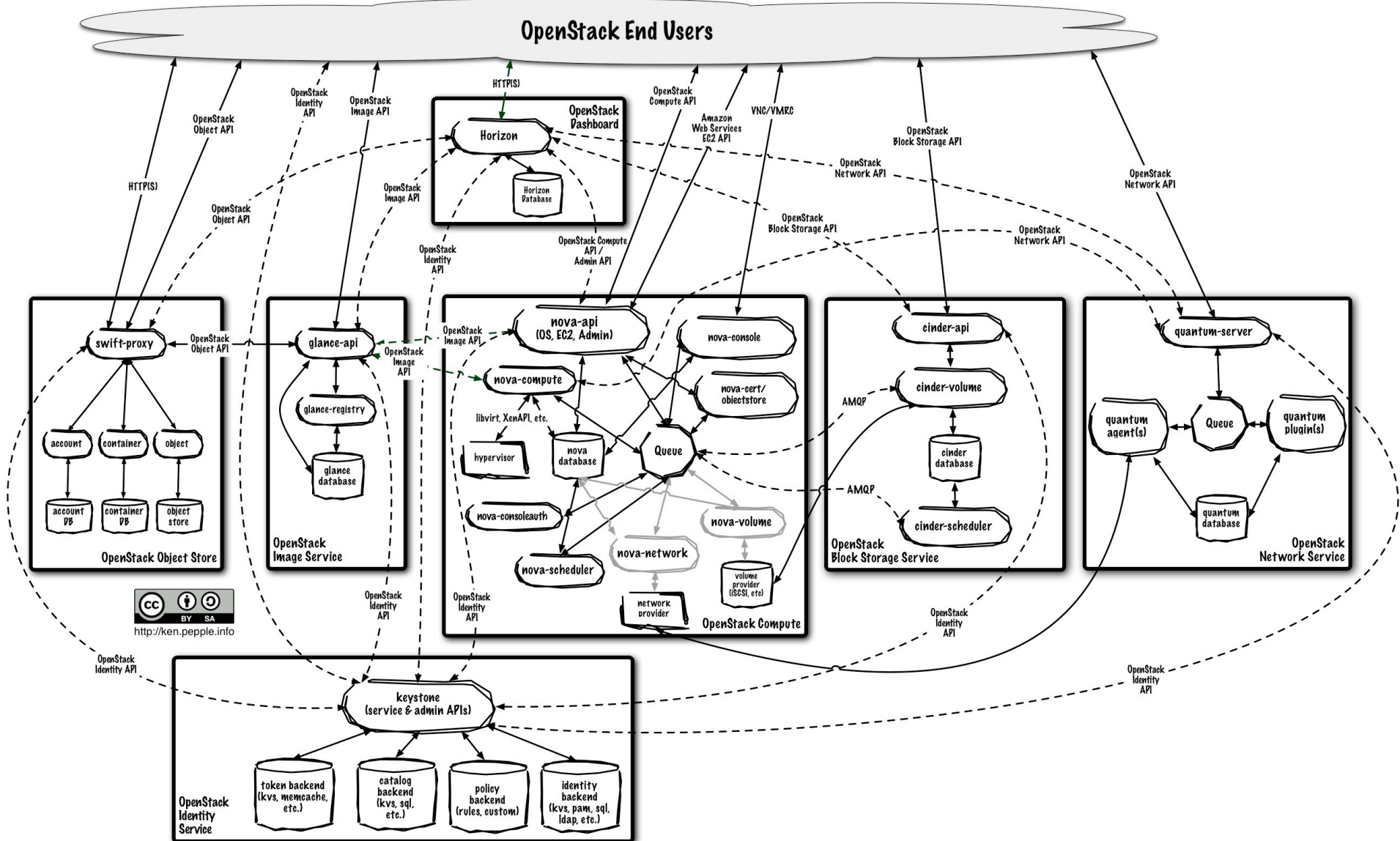


openstack™

OpenStack releases

JUN10
THE TENTH OPENSTACK RELEASE

OpenStack Architecture



OpenStack Programs

- Keystone
- Glance
- Nova
- Swift
- Cinder
- Neutron
- Savannah
- Trove
- Barbican
- Designate
- HEAT
- Ceilometer
- Manila
- Melange
- TripleO
- Tuskar
- Gnocchi
- Tempest

Compute



Object Storage



Block Storage



Storage Options



Experimenting with OpenStack

- **DevStack** (<http://devstack.org>) – easiest way to try out OpenStack inside a VM on your laptop or in a public cloud VM
- **RDO** (<https://www.rdoproject.org/>) - flexible tool for building proof of concept OpenStack environments
- OpenStack Community docs (<http://docs.openstack.org/>) - Community documentation for deploying and configuring OpenStack services
- **OpenStack Developer site** (<http://developer.openstack.org/>) - API reference and SDK index for interacting with OpenStack-based clouds
- Production-grade OpenStack platforms are available from Mirantis (Fuel), Piston (CloudOS), Red Hat (RHEL-OSP), and Rackspace (RPC)

THANK YOU



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