

Selling OpenStack to Egypt

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Agenda

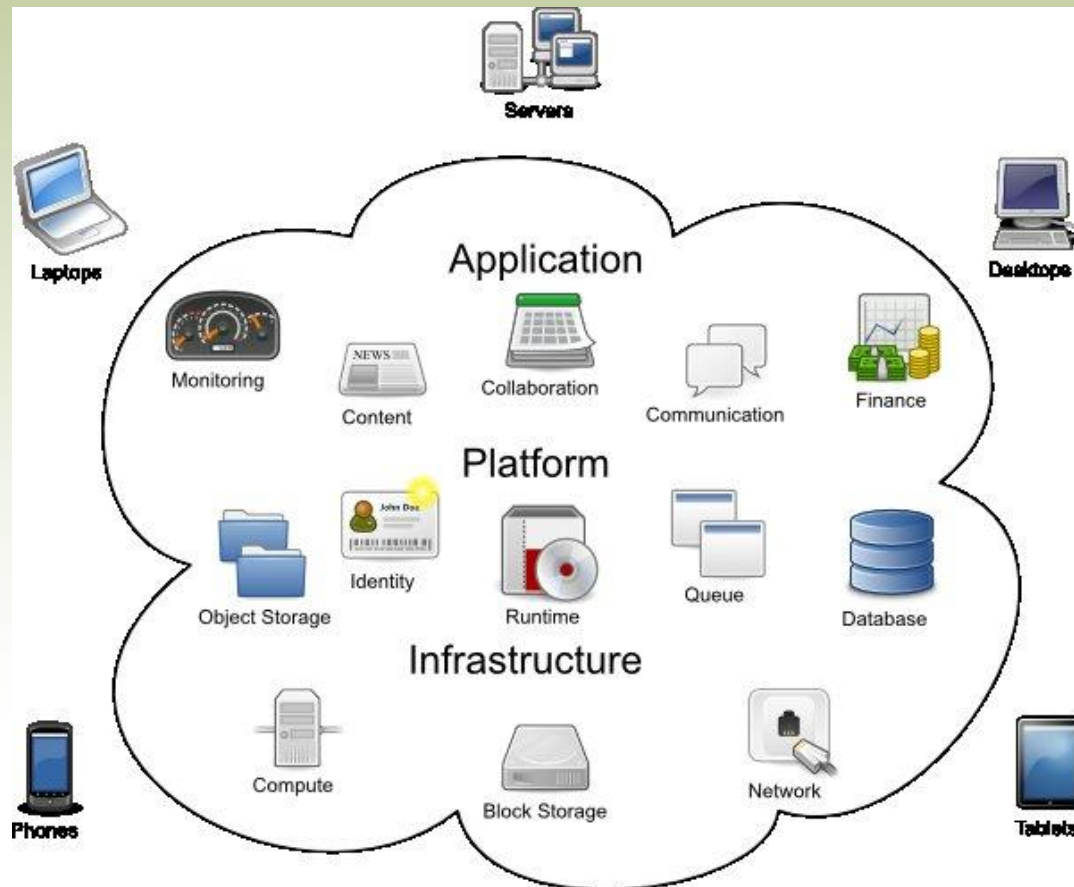
- Cloud Computing
- OpenStack
- OpenStack in Egypt
- Business Opportunities
- Next Steps

What is Cloud Computing

- What is Cloud Computing?
- What is a Virtual Server?
- Advantages of Cloud Computing?

What is cloud computing?

- Cloud computing is a suite of programs that allows an end user to provision a virtual or physical server (with an OS and/or an application) on demand via the web browser



Instances & Volumes - OpenStack

Logged in as: admin [Settings](#) [Sign Out](#)

openstack
DASHBOARD

Project: Admin

PROJECT: admin

Manage Compute

- Overview
- Instances & Volumes
- Images & Snapshots
- Access & Security

Object Store

- Containers

Instances & Volumes

Success: Instance "test-www.demo.com" launched.

Launch Instance Terminate Instances

<input type="checkbox"/>	Instance Name	IP Address	Size	Status	Task	Power State	Actions
<input type="checkbox"/>	test-www.demo.com	10.4.128.20	4GB RAM 2 VCPU 10.0GB Disk	Active	None	Running	Edit Instance
<input type="checkbox"/>	test-www.demo.com	10.4.128.19	4GB RAM 2 VCPU 10.0GB Disk	Build	Spawning	No State	Edit Instance
<input type="checkbox"/>	myserve	10.4.128.18	2GB RAM 1 VCPU 10.0GB Disk	Active	None	Running	Edit Instance
<input type="checkbox"/>	myserver	10.4.128.16	2GB RAM 1 VCPU 10.0GB Disk	Active	None	Running	Edit Instance

Displaying 4 items

Volumes

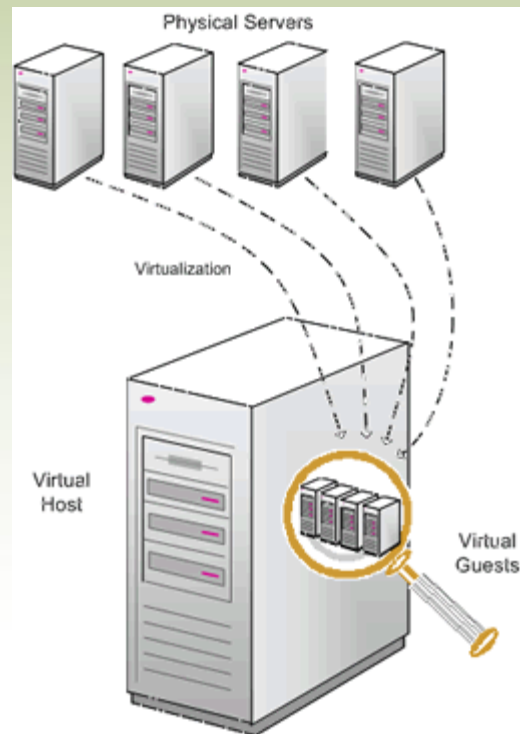
[Create Volume](#)

<input type="checkbox"/>	Name	Description	Size	Status	Attachments	Actions
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- A cloud can be a public cloud or a private cloud
 - public means you provision a server on the internet and pay someone else for the CPU, RAM, network and disk resources
 - private means you provision a server on your physical servers on your local internal network in your own datacenter
- **NOTE:** this provisioned server can be a virtual server or a physical server

What is a virtual server?

- Today's physical servers are powerful beasts. most of the time you don't use 100% of the CPU or RAM. Often 5% to 15% average



Advantages of cloud computing

- Provision servers on demand like for a big marketing event for a product launch or a year end sale
- Deprovision when demand decreases; reduce costs
- Time to provision is counted in minutes not days or months; no external RFP process or waiting for delivery delayed by customs etc;
- End users provision servers not system admins; smaller operations team
- Maximise CPU and RAM resources utilisation
- Speed to Market is faster

OpenStack

- What is OpenStack?
- What is a stack?
- History of OpenStack
- OpenStack Board of Directors
- OpenStack by the Numbers
- Public OpenStack clouds
- Private OpenStack clouds
- Companies aka integrators and consultants
- Training

What is OpenStack?

- <http://www.openstack.org>
- OpenStack is a suite of programs that provide cloud computing, networking, metering (aka billing hooks), and storage among other services.
- (computing and storage are compatible with amazon ec2 and s3)
- OpenStack calls the virtual machines and physical servers provisioned through it "instances"

What is a stack?

- A stack here refers to the application stack on top of the instance
- A user can provision servers with different stacks: web servers, load balancers, firewalls, databases, application servers, compilers and renderers and more - just add the template to your cloud

History of OpenStack

- OpenStack began in 2010 as a joint project of Rackspace Hosting and NASA, and is currently managed by the OpenStack Foundation, a non-profit corporate entity established in September 2012 to promote OpenStack software and its community.

OpenStack Board of Directors







- A summit accompanies each release (every 6 months) where plans, decisions and feature lists are made for the release after the next one; software demonstrations, training as well as some programming sprints occur. Also companies launch new OpenStack based products.

OpenStack by the Numbers

- OpenStack is used in 139 countries. to put that in perspective, there are 196 nations in the world of which 193 are member states of the United Nations
- How many instances? Unknown but if it is not 1 million then it is really up there. PayPal, CERN, WebEx, Webtrends, IBM, intel, Opera, Seagate, Liveperson, Cisco, Avaya, Sony Network Entertainment (PlayStation Network) and many universities, all big names and all have private clouds and some reach into the tens of thousands of instances

Public OpenStack clouds

- <http://www.OpenStack.org/marketplace/public-clouds/>

	<h2>RACKSPACE PUBLIC CLOUD</h2> <p>Apps and sites run better on our high-performance cloud. Whether you're building a corporate website or a demanding application, our public cloud can power your most critical workloads.</p> <p>DETAILS </p>
	<h2>HP HELION PUBLIC CLOUD</h2> <p>HP Helion Public Cloud provides on-demand enterprise-level computing & storage infrastructure that lowers costs while increasing scalability & capacity. Based on OpenStack® technology, it offers users flexibility, convenience & confidence.</p> <p>DETAILS </p>

Private OpenStack clouds

- <http://www.OpenStack.org/user-stories/>
- Private clouds include PayPal (rumoured to be in the 10,000s), CERN (rumoured to be 15000), WebEx, Webtrends, IBM, intel, Opera, Seagate, Liveperson, Cisco, Avaya, Sony Network Entertainment (PlayStation Network) and many universities

Companies aka integrators and consultants

- <http://www.OpenStack.org/marketplace/consulting/>
- Names like
 - eNovance
 - Dell
 - Mirantis
 - HP
 - Rackspace
 - IBM
 - (Add yours!)

Training

- <http://www.OpenStack.org/marketplace/training>
- NB. that each training company has its own OpenStack distribution as they are also consultants and integrators and gives training on its own distribution

OpenStack in Egypt

- Egyptian OpenStack Companies
- Egyptian Trainers
- Egyptian Research Institutions

Egyptian OpenStack companies

- Cloud Niners
- IT Synergy
- Code 95

Egyptian trainers

- TIEC – Technology Innovation and Entrepreneurship Center
<http://www.tiec.gov.eg>

Egyptian Research Institutions

- Egyptian Universities such as
 - Munufiya University
 - Suez Canal University
 - Nile University

Egypt and international user support groups

- <http://webchat.freenode.net/?channels=OpenStack> (IRC)
- <http://ask.OpenStack.org/>
- <https://www.facebook.com/groups/OSEgypt>
- <http://groups.google.com/group/egypt-OpenStack-user-group>

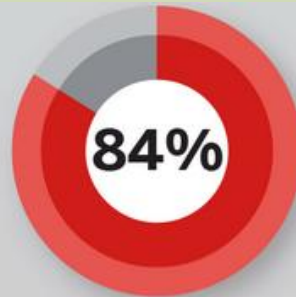
Business Opportunities

- Quote: Analyst firm 451 Research has predicted that annual revenue stemming from the use of OpenStack will top \$1 billion by 2015.
- Quote: Mathew Ingram writes that Red Hat has agreed to acquire distributed file system provider Inktank for \$175 million and signed a deal to buy open-source cloud services provider eNovance for \$95 million.
- Note that OpenStack is only 3 years old and already established companies are purchasing startups at high prices.

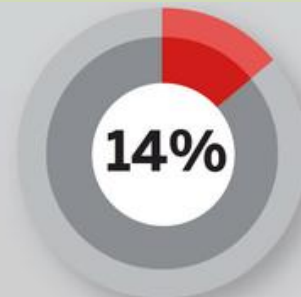
- Business opportunities include public clouds, distributions, training, network and storage drivers, filesystems, consultation, integration, automation and more
- Quote: What's interesting is in countries where there's an interesting development community and a cloud vendor with a presence, companies are adopting cloud far more aggressively because they can keep their data in country.
- OpenStack facilitates converting your datacenter from a cost center to an investment center

- An IDC Connect survey of 200 US enterprise decision makers ... (show that 84% will make OpenStack a part of their future plans)

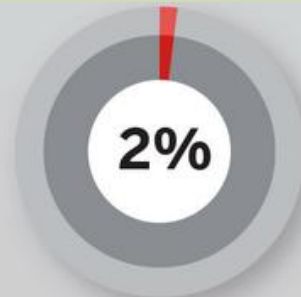
Will OpenStack be part of your future private cloud plans?



Yes



Unsure



No

Next steps

- OpenStack releases new versions every 6 months - next is due October 2014
- Egypt OpenStack event day (15th July 2014)
 - watch <http://www.OpenStack-Egypt.org>

Thank you

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