

A photograph of a server room with rows of server racks. The room is dimly lit with a strong blue light source, creating a futuristic and technical atmosphere. The server racks are dark, and some have small red and green lights visible. The perspective is from a low angle, looking down a long aisle between the racks.

Cloud computing's truly open silver lining: OpenStack

Dan Șerban

What do we mean by "cloud"?

The cloud model enables you to:

- :: pay as you go
- :: pay as you grow

- :: IaaS - by-the-hour rental of computing cycles / storage
(EC2+S3, Rackspace CloudServers+CloudFiles, Joyent)
- :: PaaS - application development engines
(Google App Engine, AppScale, Heroku, AEMR)
- :: SaaS - web-enabled, turnkey software solutions
(salesforce.com CRM, Google Docs, Zoho)

Differences:

- :: height of technology stack
- :: pricing model
- :: focus on productivity for different target groups

IaaS vs. PaaS vs. SaaS

IaaS

- :: remote virtual machine, remote storage bucket
- :: pricing per VM type per hour, per stored GB per hour
- :: focus on sysadmin productivity

PaaS

- :: remote LAMP stack, load balancing, HA failover
- :: pricing per 1000 HTTP requests
- :: focus on developer productivity

SaaS

- :: remote turnkey software solution
- :: pricing per user seat per year
- :: focus on end-user productivity and collaboration

What exactly is OpenStack?

- :: OpenStack is an open-source foundational set of technologies for building infrastructure clouds, which are online services that provide on-demand access to computing power and storage and are capable of scaling as needed**
- :: OpenStack Compute (Nova) is software for automatically creating and managing large groups of virtual private servers (CloudServers codebase)**
- :: OpenStack Object Storage (Swift) is software for creating redundant, scalable object storage using clusters of commodity servers to store terabytes or even petabytes of data (CloudFiles codebase)**

<http://nova.openstack.org/>
<http://swift.openstack.org/>

OpenStack is hypervisor agnostic

twitter

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RT @soochoitweets: 3 hypervisors in three weeks. @openstack now supports KVM, Xen, and VirtualBox. Kudos to Justin from @FathomDB and Ew

...

1:08 AM Aug 7th via Twitter for iPhone



OpenStack

Demo

Questions / Feedback