The background is a solid green color with various light green geometric shapes scattered across it, including squares, circles, and crosses. The text is centered and reads:

THE BATTLE OF CLOUDS

Openstack vs. Amazon



Hello!

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“

One key benefit to cloud computing is the ability to spin up compute, networking and storage quickly when users request these resources and similarly decommission when no longer needed.

AGENDA

- × Compare services that the two platform provide.
- × Compare business characteristics of AWS & OpenStack.
- × How to choose platform?

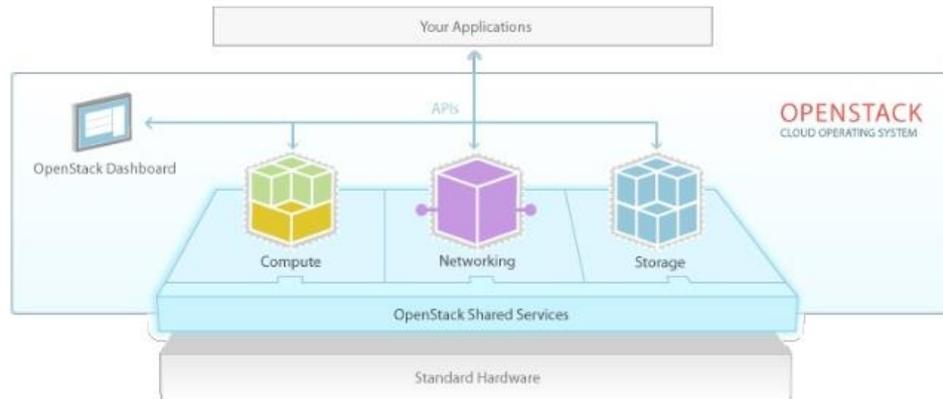


BIG CONCEPT

Public vs Private, Amazon Web Service EC2
compared to OpenStack ®

OPENSTACK ®

- ✗ A cloud operating system that controls large pools of computing storage and network resources
- ✗ Managed through a dashboard or command line
- ✗ Empowers users to self provision using a GUI or CLI

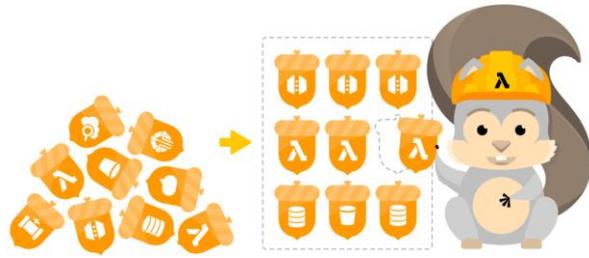


AMAZON WEB SERVICES

- ✗ Provides a way to access servers, storage, databases and a broad set of application services over internet.
- ✗ AWS owns and maintain the network- connected hardware required for these application service.
- ✗ You provision and use what you need.



MEET SAM.



USE SAM TO BUILD TEMPLATES THAT DEFINE YOUR SERVERLESS APPLICATIONS.



DEPLOY YOUR SAM TEMPLATE WITH AWS CLOUDFORMATION.

COMPARISON OF SERVICES



BATTLE 1



COMPUTE



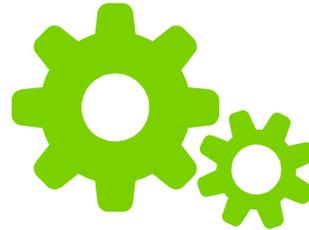
NETWORKING



IDENTITY
& SECURITY



ORCHESTRATION



USER INTERFACE & API

COMPARISON OF SERVICES

COMPUTE

OpenStack

AWS

Name

Instance

Virtual Machine (VM)

Guest OS/
App offered

Certified by
OpenStack vendor
apps.openstack.org

Certified by AWS
AMI marketplace

NETWORKING

OpenStack

AWS

Name

Neutron

Networking

Offering

IP Addressing
Load Balancing
Firewall (DNS)

IP Addressing
ELB, Firewall, DNS
VPC

IDENTITY & SECURITY

OpenStack

AWS

Identity
Authorization,
Keypairs

Keystone –
authentication,
roles, privileges

IAM –
Authentication,
roles, privileges

Network security
Ingress/ Egress

Virtual firewall

Virtual firewall

ORCHESTRATION

OpenStack

AWS

Name

HEAT

CloudFormation

Method

Text files for
repeatable operations

Templates for
repeatable operations

USER INTERFACE & API

	OpenStack	AWS
API	OpenStack API (subset of Amazon EC2)	EC2 API
CLI	Available	Available
GUI	Horizon	Console

BUSINESS CHARACTERISTICS



BATTLE 2

SERVICE LEVEL AGREEMENT

SLA Offering

High
Availability

OpenStack

Support from
OpenStack Team
(Red Hat offers 24/7 support)

Available Zones

AWS

99.5%

Available Zones

OWNERSHIP OF DATA

	OpenStack	AWS
Who owns the data?	You	You
Who controls the data?	You	You but... AWS SLA

ECOSYSTEM

OpenStack

Partners who offer:

- Operating Systems
- Applications
- Add-ons
- Consulting
- Developer support
- Hardware
- Community

AWS

Partners who offer:

- Operating System
- Applications
- Add-ons
- Consulting
- Developer Support

You are not
alone

COST & PRICING

Cost

OpenStack

- Purchase hardware and software
- Receive support, maintenance, consulting
- Do It Yourself

AWS

- Credit card billing by the minute/ hour
- Pre-purchased blocks of usage at other rates

USE CASES



BATTLE 3

OpenStack® vs. AWS?

COST

- × Can rapidly escalate in public cloud

MAINTENANCE

- × To maintain a private cloud, personnel & capacity

SECURITY & REGULATORIES

- × Requirements vary by industry and country
- × SOX, HIPAA, PCI-DSS, FedRAMP, FIPS, ISO 27001

REFERENCE

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Data retrieved June 5, 2017 from:

<https://www.forbes.com/sites/moorinsights/2016/10/24/3-reasons-why-an-openstack-private-cloud-may-cost-you-less-than-amazon-web-services-aws/#81d312648da6>



Thanks!

Any questions?

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