Scaling Up With Amazon Web Services

An Intro to AWS Simple Storage Service and Elastic Compute Cloud
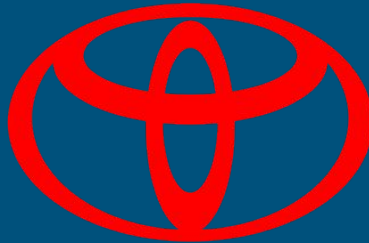
Michael Jenkins

Agenda

- A Brief Overview of Amazon Web Services (AWS)

- Simple Storage Services (S3) Demo: Setting up a static website

- Elastic Compute Cloud (EC2) Demo: Virtual server in the cloud

Before We Begin...

- Sign up for a free account at qwikLABS.com to follow along with the demos: https://qwiklabs.com/

- Free access to AWS products for limited periods of time along with step by step guides

- Download this sample website theme for the S3 lab: https://startbootstrap.com/template-overviews/stylish-portfolio/

- Link to this presentation: http://bit.ly/wilaws

About Me...

- BS, MS Computer Engineering from Iowa State University
- Experienced in administering public facing, high traffic web sites
- Using AWS for three years
- Certified Solutions Architect Associate

A Brief Overview of Amazon Web Services

A Brief Overview of Amazon Web Services

- Amazon Web Services (AWS), a subsidiary of Amazon, is a cloud-focused service provider. It pioneered the cloud Infrastructure as a Service (IaaS) market in 2006.

- AWS provides a highly reliable, scalable, low-cost infrastructure platform in the cloud: Compute, Database, Networking, Storage & Content Delivery

- AWS operates 35 Availability Zones within 13 geographic Regions around the world

Magic Quadrant for Cloud IaaS Worldwide

CHALLENGERS

LEADERS
AWS, Microsoft

NICHE PLAYERS
Rackspace, IBM,
VMWare

VISIONARIES
Google

CHALLENGERS

LEADERS

Amazon Web Services

Microsoft

Google

Rackspace

Virtustream

CenturyLink

VMware

NTT Communications

IBM (SoftLayer)

Fujitsu

ABILITY TO EXECUTE

NICHE PLAYERS

VISIONARIES

COMPLETENESS OF VISION

As of August 2016

Popular AWS Products

Virtual Servers:
EC2

Containers:
EC2 Container Service

Serverless And Event-Driven
Compute Functions:
Lambda

Object Storage:
S3

Archive Storage:
Glacier

Content Delivery:
CloudFront

Managed Relational Database:
RDS

Managed NoSQL Database:
DynamoDB

In Memory Caching:
ElastiCache

Amazon Web Services Free Tier

- Free access to AWS products for 12 months
  - Requires a credit card to open an account and may incur charges

- Elastic Compute Cloud (EC2)
  - 750 hours per month of Linux or Windows t2.micro instance usage
  - For example, run 1 instance x 1 month or 2 instances x half a month

- Simple Storage Service (S3)
  - 5 GB of Standard Storage; 20,000 Get Requests; 2,000 Put Requests

- Free databases, containers, and more

Simple Storage Service (S3) Demo

- qwikLABS: Introduction to Amazon Simple Storage Service
  https://qwiklabs.com/focuses/2355?search=146247

- Create a cloud location to upload files

- Set up a static website that operates at enterprise scale

- https://startbootstrap.com/template-overviews/stylish-portfolio/

Elastic Compute Cloud (EC2) Demo

- qwikLABS: Introduction to Amazon Elastic Compute Cloud (EC2)
  https://qwiklabs.com/focuses/2352?search=146251

- Create a virtual server in the Amazon cloud

- Log into the server via Secure Shell (SSH)

Thank you!

References

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- "What Are Valid S3 Bucket Names", http://docs.rightscale.com/faq/clouds/aws/What_are_valid_S3_bucket_names.html