Section 2: Understanding AWS Features



Cost Centre: Demo



What is Cloud Computing?

Cloud computing is the on-demand delivery of compute power, database, storage, applications, and other IT resources through a cloud services platform via the Internet with pay-as-you-go pricing.

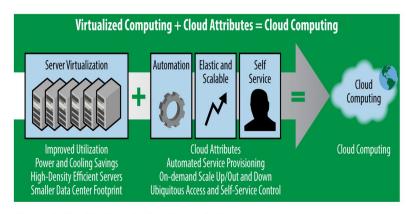


Figure 2-6. Virtualization + cloud attributes = cloud computing

Six Advantages of Cloud Computing

- 1. Trade capital expense for variable expense
- 2. Benefit from massive economies of scale
- 3. Stop guessing capacity
- 4. Increase speed and agility
- 5. Stop spending money running and maintaining data centers
- 6. Go global in minutes

Basics of Cloud Computing

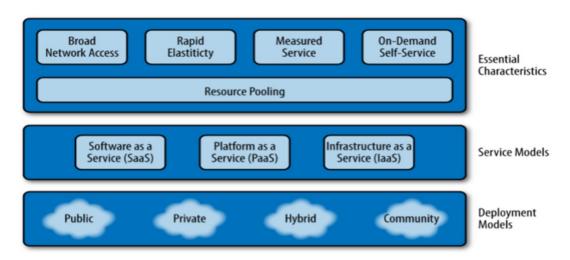
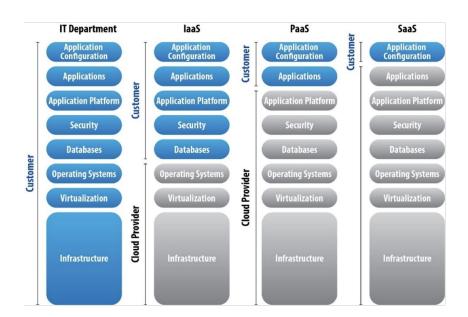
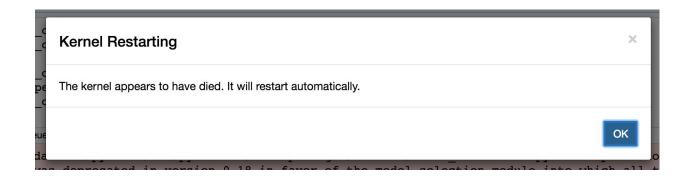


Figure 1-2. NIST model of cloud computing (illustration courtesy of NIST; http://1.usa.gov/1GkRKQE)

Cloud Service Models



Have you ever faced this issue?



EC2, Elastic Cloud Computer

"Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers"

Creating EC2 Instance: Demo



Use Cases of EC2

- 1. Hosting Environments
- 2. Development & Test Environments
- 3. Backup & Disaster Recovery

Characteristics of EC2

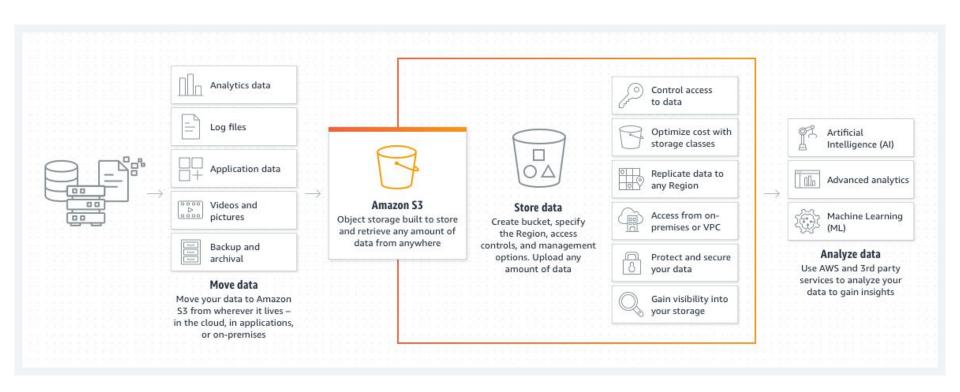
- 1. Complete control of computing resources
- 2. Quick Scaling of capacity
- 3. Pay for what you use
- 4. Failure Resilient

Benefits of EC2

- 1. Elastic Web-Scale Computing
- 2. Completely Controlled
- 3. Flexible Cloud Hosting Services
- 4. Integrated
- 5. Reliable
- 6. Secure

S3, Simple Storage Service

"Object storage built to retrieve any amount of data from anywhere"



Configuring S3: Demo



Characteristics of S3

- 1. Data Storage for any use case
- 2. Easy to optimize costs and organize data
- 3. Access Control configuration

Benefits of S3

- 1. Scalability
- 2. Data Availability
- 3. Security
- 4. Performance