Module 1 - Cloud Concepts Overview

Module Overview And Objectives

Topics that you'll learn

- Introduction to cloud computing

- Advantages of cloud computing

- Introduction to Amazon Web Services (AWS)

- AWS Cloud Adoption Framework (AWS CAF)

Module objectives

- Define different types of cloud computing models

- Describe six advantages of cloud computing

- Recognize the main AWS service categories and core services

- Review the AWS Cloud Adoption Framework (AWS CAF)

Section 1: Introduction to cloud computing

What is cloud computing?

Cloud computing is the **on-demand** delivery of computer power, database, storage, applications, and other IT resources **via the internet** with **pay-as-you-go** pricing.

> **Pay-as-you-go: Is a type of payment system based on "pay what you use"**

These servers run on server computers that are located in large data centers. When you use a cloud service provider you using the computers owned by that service provider.

Infrastructure as software

Cloud computing enables yout to stop thinking of your infrastructure as hardware, and instead think of (and use) it as software.

Traditional computing model

- Infraestructure on traditional model is thought of as hardware

- Hardware solutions:

    - Require space, staff, physical security, planning, capital expenditure

    - Have a long hardware procurement cycle

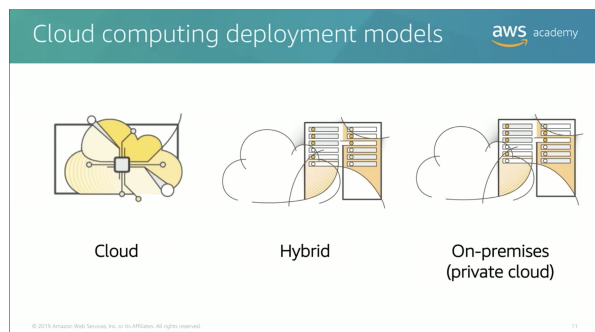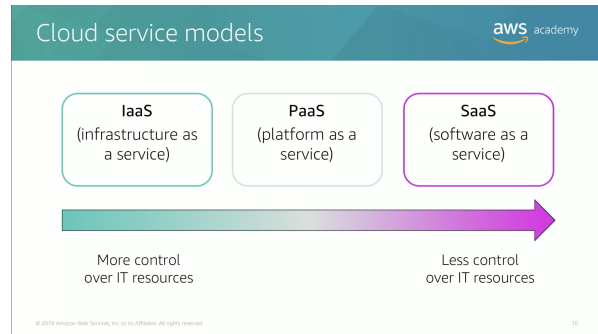   - Require you to provision capacity by guessing theoretical maximum peaks

Example:

Cloud computing model

- Infraestructure on cloud model is thought of as software

- Software solutions

    - Are flexible

    - Can change more quickly, easily, and cost-effectively than hardware solutions

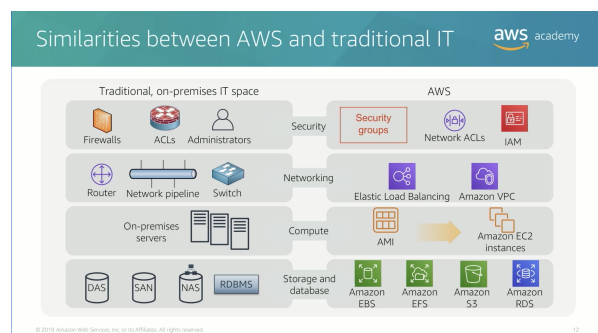   - Eliminate the undifferentiated heavy-lifting tasks

You can select cloud services thatbest match your needs, provision them, and terminate their use based on your demand. You also pay only for what you use, when you use it. You can scale resources up and down in an automated fashion as a way to expand and contract your deployment in order to meet your customer demand. With Cloud computing model you can treat resources as temporary and disposable.

Cloud service models

Cloud computing deployment models

Similarities between AWS and traditional IT

Section 2: Advantages of the Cloud

Trade capital expense for variable expense

Massive economies of scale

Stop guessing capacity

Stop guessing capacity

Increase speed and agility

Stop spending money on running and maintaining data centers

Go global in minutes

Section 3: Introduction to Amazon Web Services (AWS)

What are web services?

What is AWS?

Categories of AWS services

Choosing a service

Services covered in this course

Three ways to interact with AWS

Section 4: Moving to the AWS cloud

Wrap Up