



Cloud computing and Amazon cloud

Course Objectives:

This course teaches you how to:

Describe AWS services and global infrastructure.

Identify core AWS services and relate them to common architectures and solutions.

Use pricing tools to estimate AWS costs and make the most efficient and cost-effective choices for AWS services.

Recognize common concerns about data security in the cloud and articulate the shared responsibility model.

Table of contents:

- Introduction to cloud computing
 - What is cloud computing
 - Traditional computing vs Cloud computing
 - What is SaaS, PaaS & IaaS
 - What is private, Public and hybrid computing
- AWS Fundamentals
 - Amazon web services and cloud computing
 - AWS history and Global research.
 - AWS infrastructure
 - Zones – Availability zones and Edge locations.
 - AWS value proposition
- Review of all widely used AWS Services
 - Compute (Amazon EC2, Elastic load balancing, Auto Scaling, AWS Lambda).
 - Database (Amazon RDS, Amazon DynamoDB, AWS DMS).
 - Networking (Amazon VPC, Amazon Route 53).
 - Storage (Amazon S3, , Amazon EBS, Amazon Glacier).
 - Admin & Security (AWS IAM, Amazon cloud watch, Amazon Inspector, AWS WAF).
 - Analytics - Amazon Redshift
 - Deployment - AWS Cloud Formation.

- Simple Storage Service (S3) in detail
- Amazon Elastic Compute Cloud (EC2) in detail
- Amazon Elastic Block Storage (EBS) in detail
- Amazon Elastic IP-Address Service in detail
- Amazon Relational Database Service (RDS) in detail
- Amazon Elastic Load Balancer (ELB)
- Amazon CloudWatch
- CDN service from AWS -
- AWS Technical Professional: AWS Security and Compliance
- Auto Scaling of EC2 Instances
- Common Architecture and solutions.
 - Backup and Archive
 - Disaster recovery
 - Web, Mobile and Social
 - Big Data
 - AWS Pricing tools
- AWS Security & Compliance.
 - Identify security measures provided by AWS
 - Identify customer responsibilities for security.
 - Review certification and compliance
 - Fault tolerance.
 - Packet sniffing
 - IP spoofing
 - Distributed denial of service
 - Secured Network.
- Miscellaneous Features and troubleshooting
- Amazon CloudSearch
- Amazon Mechanical Turk
- Trouble shooting
- Introduction to Microsoft Azure Cloud and Openshit/OpenStack. Similarities and differences between these public/private Cloud offerings