AWS Technical Essentials

Description

AWS Technical Essentials introduces you to AWS products, services, and common solutions. It provides IT technical end users with basic fundamentals to become more proficient in identifying AWS services so that you can make informed decisions about IT solutions based on your business requirements.

Hands-On Activity

This course includes activities that will allow you to test new skills and apply knowledge through hands-on lab activities.

Duration

- 35 Hours

Intended Audience

This course is intended for:
- Individuals responsible for articulating the technical benefits of AWS services
- Any individual who is new to AWS
- Sys Administrators and Developers who are interested in using AWS services

Overview of the architecture

- EC2 – Elastic Compute Cloud
- AMI – Amazon Machine Image
- EBS – Elastic Block Storage
- ELB – Elastic Load Balancing
- Auto Scaling Group
- EC2 Container Service (**Cluster**)
- Elastic Beanstalk (Run and Manage Web Apps)
- S3 – Simple Storage Service
- Cloud Front
- Glacier
- RDS – Relational Database Services
- VPC – Virtual Private Network
- Route53
- CloudWatch
- CloudFormation
- CloudTrail
- Config
- IAM-Identity & Access Management

Delivery Method

This course will be delivered through a mix of:
- Instructor-Led Training
- Hands-on Labs
- Knowledge Checks

Module 1: Introduction & History to AWS

- Navigate the AWS Management Console
- Recognize AWS Global Infrastructure
- Describe the security measures AWS provides
- Advantage and Disadvantage Of AWS Cloud
- Cloud Service Models
- Cloud Deployment Models

Module 2: Achieving Agility with EC2 Provisioning Resources
- Managing the EC2 Infrastructure
- Specifying security groups and key pairs
- Elastic IPs
- Browsing Amazon Machine Images (AMI)
- ELB- Elastic Load Balancers
- Distributing incoming traffic with elastic load Balancing (ELB)
- Dynamically adding and removing instances with (ELB) and Auto Scaling
- Launch Configuration & Auto Scaling Group

Module 3: Adapting EC2 to Your Business Needs
- Customizing virtual machines
- Creating Your Own AMI
- Creating new images of running instances

Module 4: Hosting Applications with Elastic Beanstalk
- EC2 Container Service (Run and Manage Docker Containers) Cluster
- Elastic Beanstalk (Run and Manage Web Apps)
- Improving application delivery with Platform as a Service
- Deploying scalable applications on the AWS cloud

Module 5: Implementing Durable and Reliable Storage
- Storing Data in the cloud
- Creating backup with Snapshots
- Achieving high durability with Simple Storage Service (S3)
- Transmitting data in/out of the Amazon cloud
- Glacier (Archive Storage in the Cloud)

Module 6: Relational Database Service (RDS)
- Creating Database Instances and scheduling for Backup
- Taking snapshot of Database
- Create read replica RDS

Module 7: Management Tools
- CloudWatch (Monitor resources and Applications)
- CloudFormation (Create and Manage Resources with Templates)
- CloudTrail (Track User Activity and Usage)
- Config (Track Resource Inventory and Changes)

Module 8: AWS Security Features
- Controlling account security
- Configure access credentials
- Managing users with Identity Access Management (IAM)

Module 9: Networking
- Launching EC2 instances in private subnets for extra security
- Bridging EC2 instances to your internal network with a VPN
- Organizing EC2 instances in separate subnets with a VPC
- Route 53 (DNS and Domain Name registration)