

ROOMAN TECHNOLOGIES



Curriculum AWS Practitioner & Associate Combo

Introduction of Network

- Introduction of network
- type of network
- TCP/IP Model
- IP Address(type version and class)
- windows and Linux Physical servers setup

Introduction to Cloud Computing

- Introduction to Cloud Computing
- Why Cloud Computing?
- Benefits of Cloud Computing
- Public Cloud, Private Cloud, Hybrid Cloud
- Service Models (IAAS, PAAS, SAAS)
- Software as a Service,
- Platform as a Service,
- Infrastructure as a Service,
- VIRTUALIZATION
- What is virtualization?,
- Virtualization and Cloud Computing,
- Types of virtualization,
- Virtualization terminologies,
- Hypervisor,

Introduction to AWS

- Elastic computing
- Introduction to the AWS products
- Regions and Availability Zones
- Signing up for AWS.
- AWS Free usage tier
- Introduction AWS management console

C-9, New Krishna Park, Vikaspuri, New Delhi – 110018

Ph: 011-41582663, Mob. : 9891093219

E-mail: info@rtechdelhi.com Website: www.rtechdelhi.com

ROOMAN TECHNOLOGIES

Identity access management (IAM)

- Introduction of IAM Service
- Creating Users and Groups
- Grant Least Privilege
- Configuring a Strong Password Policy for your Users
- Enabling MFA for Privileged Users
- Granting permissions using IAM Policies
- Creating Custom Policies and Associating to Users and Groups
- Understanding Roles

EC2 Compute Service

- EC2 Introduction
- Public and Private IPs
- Spinning Windows/Linux servers in EC2
- Key Pairs,
- Elastic IPs
- Connecting to Instances using RDP, MobaXTerm, Putty
- Security Group Basics and Implementing Security for Real-Time Environments.
- Backups for Instances using Snapshots

S3 (Simple Storage Service)

- Introduction to AWS Object Storage
- Creating S3 Buckets and Uploading Data into them
- S3 durability and redundancy
- Various S3 Storage Types (Standard, Infrequent, One Zone)
- Configuring S3 Versioning, Logging, Encryption
- Hosting a Static Website on S3
- Implementing Lifecycle and cross region replication for S3 Buckets
- Understanding S3 Analytics, Metrics and Inventory

EBS (Elastic Block Storage)

- Understanding Block Level Storage using EBS
- Configuring SSD/HDD/Magnetic Storage for Windows and Linux Servers
- Attach and detach EBS volumes,
- Mounting and un-mounting EBS volume,
- Creating and deleting snapshots,
- Creating volumes from snapshots
- Configuring VOLUME-SNAPSHOT-VOLUME Process
- Understanding AMI and its Features
- Creating AMI for Windows/Linux Servers
- Server migration in same region and cross region

Amazon Virtual Private Cloud (VPC)

- Introduction to VPC
- IPv4 Addressing Scheme
- Public and Private IP's
- Understanding Subnetting
- Elastic IP's
- Basic VPC configuration

C-9, New Krishna Park, Vikaspuri, New Delhi – 110018

Ph: 011-41582663, Mob. : 9891093219

E-mail: info@rtechdelhi.com Website: www.rtechdelhi.com

ROOMAN TECHNOLOGIES

- Implementing Private/Public subnets in VPC
- VPC security
- Deep Dive in to VPC core concepts (Route Tables, Subnets, Internet Gateway)
- Building Custom VPC Network Topology for Real Time Environments

ELB (Elastic Load Balancer)

- Introduction to ELB
- Implementing HA using Load Balancer for Websites
- Understanding ELB Load Distribution using Round Robin Algorithm
- Understanding Health Checks
- Configuring Advanced VPC and Cross-Zone Load Balancing
- Adding and removing instances on ELB

CloudWatch

- Introduction of AWS Monitoring
- Understanding Virtualization
- Making a Status Check Failed Incident manually
- CloudWatch Basic and Detailed Monitoring and Its Features
- Cloudwatch dashboard
- Implementing Real-Time monitoring by Integrating with SNS.
- Understanding CloudWatch Logs and Metrics
- Creating Alarms and its Actions
- Configuring Dashboards for Organization Architectures

Simple Notification Service (SNS)

- Introduction to SNS.
- Creating topics and Evaluating ARNs.
- Subscribing using Various Protocols.
- Publishing Notifications using SNS.
- Integrating SNS Topics with CloudWatch and Autoscaling Services.

Route53

- Introduction of the Domain-Name System
- Buying Domain names at Domain Registrars
- Creating Zones on Route53
- Creating Route53 Records (Address, CNAME, Alias)
- Creating Health Checks in Route53
- Understanding routing policies provided by AWS
- Routing Policy and its Implementation

Auto scaling

- Understanding Horizontal vs Vertical scaling
- Understanding Auto Scaling
- Create a launch configuration
- Create an Auto Scaling group
- Understanding Various Scaling Types (Dynamic, Scheduled, Step, Target Tracking Scaling Policies)
- Setting up an auto-scaled, load-balanced Application using Autoscaling

C-9, New Krishna Park, Vikaspuri, New Delhi – 110018

Ph: 011-41582663, Mob. : 9891093219

E-mail: info@rtechdelhi.com Website: www.rtechdelhi.com