AWS Solution architect – associate - Training

Duration: 4 Days

Course Contents

Day 1
1)AWS Concepts and Overview of services
- AWS Architecture and Terminology
- Compute and Networking Services
- Storage and Content Delivery Services
- Database Services
- Analytics Services
- App Services
- Deployment Services
- Management Services

2) Amazon IAM (Identity And Access Management)
- IAM Essentials
- IAM Best Practices for New Accounts
- API Keys and Roles
- IAM Policies
- Log IAM Events with CloudTrail

3)Amazon S3 (Simple Storage Service)
- AWS S3 Essentials
- S3 Permissions
- S3 Bucket/Object Versioning and LifeCycle Policies
- Website Hosting With S3

Day2

4) Amazon EC2 (Elastic Compute Cloud)
- EC2 Essentials
- Understanding On Demand Reserved and Spot Instances
- Selecting and Building EC2 Instances
- Working with AMIs
- EBS Volumes and Snapshots
- Working With Public and Private IP Addresses
- Cloud-init Userdata and Metadata
- Security Groups
- CloudWatch and EC2
- EC2 Placement Groups
- Serving Traffic to Private Web Servers
- Using a Bastion Host

5) Amazon RDS (Relational Database Service)
- RDS Essentials
- MultiAZ RDS Instances and single AZ instances
- Concept of Read Replica
- Subnet Groups
- RDS Security Groups and Connecting To RDS from EC2

6)Amazon VPC (Virtual Private Cloud) and Networking
- Introduction to VPC and AWS Networking
- Building A VPC from Scratch
- VPC Networking
- VPC Security
- Configuring A NAT Instance
- DB Subnet Groups
- Extending the VPC to On-Premise Networks
- VPC Peering

Day3

7) High Availability and Fault Tolerant Tools with EC2
- Working With Amazon Machine Images (AMI's)
- ELB with High Availability Hands On
- Troubleshooting Connectivity Issues
- Applying Auto Scaling and ELB to Create High Availability and Fault Tolerance

8) AWS Direct Connect
- Understanding AWS Direct Connect

9) Route 53
- Route53 and DNS Failover
- Latency Based Routing
- Weighted Routing Policies in Route53
- Amazon SNS (Simple Notification Service)

10) SNS Essentials
- SNS Integration with other services

11) Amazon SQS (Simple Queue Service)
- SQS Essentials
- Using SQS to Build Decoupled Application Architectures

Day4:

12) Amazon Elastic Beanstalk

13) Amazon CloudFormation
- CloudFormation Essentials
- Building an S3 Bucket and and Instance with CloudFormation

14) AWS Command Line Interface (AWS CLI)
- Installing CLI on windows and Linux instances
- AW CLI: Working With EC2
- AW CLI: Working With S3

15)Designing highly available, cost efficient, fault tolerant, scalable systems
- Implementation/Deployment
- How to Design Cloud Services & Best Practices
- Monitoring
- Architectural Trade-Off Decisions
- Elasticity and Scalability
- Data Security
- Security Architecture with AWS

- Shared Security Responsibility Model and Attributes
- AWS Platform Compliance and Security Services
- Incorporating Common Conventional Security Products
- Amazon CloudWatch for the Security Architect
- CloudHSM
- Disaster Recovery

16) Troubleshooting on AWS
- VPC Troubleshooting Scenarios
- ELB Troubleshooting Scenarios
- Auto Scaling Troubleshooting Scenarios

17) Installing and configuring a 2 Tier application on AWS using Autoscaling and Fault Tolerance

18) Design patterns on AWS –

This is not a developer content, hence people with ops and administration background are preferred.