

CourseContentforAWS Cloud Training

AmazonWebServices-Essentials

CourseObjectives:

- ❖ RecognizeterminologyandconceptsastheyrelatetotheAWSplatform
- ❖ NavigatetheAWSManagementConsoleUnderstandthesecuritymeasuresAWSprovides
- ❖ DifferentiateAWSStorageoptionsandcreateanAmazonSimpleStorageService(S3)bucket
- ❖ RecognizeAWSComputeandNetworkingoptionsanduseAmazonElasticComputeCloud(E C2)and Amazon Elastic BlockStorage(EBS)
- ❖ IdentifyDeploymentandManagementoptions
- ❖ LoadbalanceandAuto-ScalewithEC2
- ❖ UseEC2APIs
- ❖ DebugAWSEC2instance

Why Choose Apponix for AWS Cloud Training?

- Apponix has excellent qualified AWS Trainers
- 100% student satisfaction rate, we will continue that in future.
- 5000+ satisfied students overall till now.
- Excellent Lab facility for AWS Training
- There are no hard & fast rules for timings.
- All our trainers are min 7+ years of AWS cloud experience.

1: Introduction to AWS

- Navigate the AWS Management Console
- Recognise AWS Global Infrastructure
- Describe these security measures AWS provides
- Create an Amazon EC2 instance
- Remotely connecting to an EC2 instance
- Setting up Amazon Linux and Apache webserver
- Browsing Amazon Machine Images (AMI)
- Specifying security groups and key pairs
- Creating new images off of running instances

2: AWS Storage

- Identify key AWS storage options
- Describe Amazon EBS
- Use Amazon EBS with Amazon EC2
- Working with Volumes and snapshots
- Transmitting data in/out of the Amazon cloud

3: Installing Software in your Amazon Instance

- Implementing a Webserver in an Amazon Linux/Windows Instance
- Configure the firewall to access a Webserver

4: Security in Public Cloud

- Security issues in Public Cloud
- Securing the Access: Creating a RSA Public/Private Key for VMs
- Creating a software firewall
- Configuring firewall rules
- Securing the access with an Elastic IPs
- Managing users with Identity Access Management (IAM)

5: Alternate access

- Using EC2 Command Line APIs [from Windows/Linux machines]

6: Load-balancing with EC2 and Auto Scaling

- Creating and using Load Balancers
- Distributing incoming traffic with elastic load balancing
- Dynamically adding and removing instances with Auto Scaling

7: CloudWatch to be seen along with Auto Scaling

- Overview of Monitoring and Setting Alarms
- Visualising utilization metrics with CloudWatch
- Setting alarm to send and receive notifications

8: Simple Notification Services [to be seen along with Auto Scaling]

- Using SNS to send Notifications

9: Amazon S3 Basics

- Creating Buckets
- Creating Folders
- Uploading Objects
- Making Objects Public
- Creating Buckets
- Securing Bucket/Object access
- Configuring a Bucket as Static Web Page
- Controlling Life Cycle of a Bucket
- Accessing Amazon Buckets from Windows/Linux desktops/Servers

10: Virtual Private Cloud

- Create a VPC [VPC with a single public subnet]
- Create and attach an Internet gateway

- Create an Amazon VPC subnet
- Set up routing in the VPC
- Set up a security group to control the inbound and outbound traffic
- Launch an instance into the subnet
- VPC console to allocate an Elastic IP address and assign it to the instance
- Amazon EC2 console to terminate your instance and the Amazon VPC console to delete your VPC

11: AWS-RDS

- Overview of AWS RDS
- Launching a MySQL Database in RDS
- Creating Backups/Snapshots and Read Only DBs
- Connecting to RDS-DB using local DB-Clients
- Terminating a DB Instance

12: AWS-IAM

- Creating Groups and Defining access policy
- Creating Users
- Log into AWS account using new users

13: Installing Software in your Amazon Instance

- Implementing a Web server in an Amazon Linux/Windows Instance
- Configure the firewall to access a Web server

14: AWS-CloudFormation

- Introduction to CloudFormation
- Launching instances in EC2 using Templates

15: AWS-CloudFront

- Concepts of AWS-CloudFront
- Host a Website with CloudFront

16: AWS-Route53

- Creating a Failover setup for Load Balancers running in different AWS regions [users need to have a registered Domain]
- Health Check a private website

17 :AWS-CloudTrail

- UsingCloudTrailtoaudittheAPICalls

18 :HostingApplicationswithElasticBeanstalk

- ImprovingapplicationdeliverywithPlatformasaService(PaaS)
- DeployingscalableapplicationsontheAWScloud
- Selectingandlaunchinganapplicationenvironment(sampleapplicationinPHPandMySQL)

19 :DynamoDB

- OverviewofAWS DynamoDB
- DynamoDB TablesandNamingConventions
- DataTypesinDynamoDB
- DynamoDB CapacityUnits
- ConfiguringAlarms
- TackingBackupandRestore

20 :LambdaFunction

- OverviewofAWS Lambda
- CreatingaLambdaFunctionwithNode.js
- LambdaPricing&UploadingCode
- ConnectingLambdaFunctionstoAPIGatewayEndpoints
- AccessingLambdaLogs
- GettingStartedwithBodyMappingTemplates

21 :APIGateway

- OverviewofAPIGateway
- CreateaRESTAPI
- CreateResource
- CreateHTTPMethods
- DeployAPI
- IntegratingwithLambdafunction

22 :SimpleQueueService

- OverviewofSQS
- CreateStandardqueue
- CreateFIFOqueue
- WithTimerorDelaytoaStandardqueue

23 EnduserComputing,OrganizationsetupandResourceSharingwith (SSO)

- Directoryservices(LaunchingAwsmanagedAD)
- SSOintegrationwithADusers
- WorkEmail
- Workdocks
- Workspaces
- AwsmanagementSSOlogin

24 :AWSSystemManager

- Runcommand
- ContentDe-duplication
- Deletethequeue

25 :Compute

- 2and3tierwebarchitecturerunninginEC2(windowsandLinux)
- MultipleChildapplicationRunninginEC2(windowsandLinux)
- Lightsailimplementation
- ECSandECRLaunchingDockerimages
- UnderstandingoflaunchingOnDemandInstances,Reserved,spot,DedicatedHosts andDedicated Instance

26 :AWS-AutomationwithPythonBoto3module

- CompleteInDepthunderstandingandimplantationAWS-AutomationbyusingBoto3 Module
- LaunchingEC2andEntireVPCcreationbyusingPythoncode.
- CreationS3Bucketsbywritingpythonboto3module
- CreatingIAMUsersandRolesandPoliciesbyusingPythonboto3module

27 :Security,IdentityandComplianceManagement

- SecuringthewebapplicationbyusingtheWAF
- AWSInspector
- AWS securityManager(SSL/TLSCertificates)
- AWSShield
- AWSArtifact
- AWSKeyManagementService
- Compliance
- Patch Manager

28 :AWSCostManagement

- AWSCostExplorer
- AWSBudgets
- AWSMarketplaceSubscriptions