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## "AWS for Administrators"

## What makes us unique

- ★ Industry experts
- ★ Real-time projects
- ★ Workshops on every weekend
- ★ Internship Programs
- ★ Job assistance up to 12 months
- ★ Placement Assistance Program(PAP)

#### Our address:

### **Ameerpet**

307/B, Nilgiri Block, Aditya Enclave, Ameerpet, Hyderabad-500038

A place where learning made easy..

# **AWS for Administrators**

#### What is Amazon Web Servers?

Amazon Web Services is one of the leading cloud computing platform which offers numerous managed resources to build, deploy and monitor your applications on cloud. AWS

## Why AWS?

AWS is leading cloud computing platform among other public clouds. It has numerous managed resources to build different type of applications on cloud in less time. Many of the fortune 500 companies use AWS cloud platform to host the applications. Their competitive pricing model attracts the SMBs to host the applications and manage at less cost. AWS offers lot of tools for automation at no additional cost. Amazon EC2, Amazon S3, Amazon S3, Amazon ELB, and auto-scaling are widely used build applications along with other resources like Amazon CloudFormation, Amazon OpsWorks, and Amazon Lambda etc.,

### Who should attend?

- System Administrators, database or network administrators.
- Application architects
- Project Managers
- Anybody else who is aspiring career on either Cloud Computing or DevOps.

## What you should know?

- Creating user, groups on either windows or Linux.
- Installing packages and configuring web servers like apache or IIS.
- Installing database and creating schema.
- Sharing files to remote servers using scp or ftp.
- Connecting to database using client tools.
- Should have exposure to XML, YAML and JSON formats Basic networking knowledge.

If you don't have the above skills it is recommended to join the "AWS for beginners" course which includes Linux administration.

## What you will learn in this course?

Understand what is Cloud computing and AWS.

- Building applications on AWS using resources like Amazon EC2, Amazon RDS and Amazon S3 etc.,
- Creating application stacks using Amazon CloudFormation.
- Configuring AWS as virtual datacenter and enable connectivity using Amazon VPC and VPN.
- Protecting unauthorized access to AWS resources using Security groups and network ACLs.
- Migrate on premise servers to AWS using best practices.

## Which job roles you are eligible for?

Cloud engineer, Cloud administrator, AWS administrator, AWS engineer

#### **Duration**

- 20hrs Theory
- 40hrs Lab

### Certification

The course is aligned towards **AWS Solution Architect - Associate (Fee Not included)** level.

## **What Next?**

Learn Python or Ruby for cloud automation

Learn DevOps

Enhance your skill with AWS Solutions Architect – Professional level certification course Explore how Microsoft Azure or Google Cloud work

#### **Course content**

#### **Amazon Web Services**

#### **Introduction to Cloud Computing**

- Introduction cloud computing world
- History
- Cloud business models
- Public, Private and Hybrid cloud models
- Advantages of cloud computing

#### **AWS Overview**

AWS Regions and Availability zones.

- Tools to access services.
- Overview of the console.

#### **AWS EC2(Elastic Compute Cloud)**

- Introduction to EC2.
- Pricing models On-demand vs Reserved vs Spot instances.
- Using Amazon Machine Images (AMIs) to create the instances.
- Public vs Private Images.
- Sharing Images to other accounts.
- Logging into instances using key pairs.
- Converting PEM files to ppk.
- Volumes and types.
- Using snapshots for backup.
- Increasing the size of the volumes.
- Backup and restore process of the EC2 instances.
- Adding network interfaces.
- Assigning static IPs using Elastic IPs.
- Control access to instances using Security Groups.

#### **Elastic Load Balancer**

- Introduction to Elastic Load Balancing.
- Creating ELB from Console.
- Attaching instances to ELB.
- Configuring Ports, Protocols and health checks.
- Enabling sticky session.
- Connection draining.
- Enabling SSL Certificates for https transactions.

#### **Cloud Watch**

- Introduction to CloudWatch monitoring service.
- Monitoring CPU, Memory and network utilization of different resources.
- Creating notifications.

#### **Simple Notification Services**

- Introduction to notifications
- Creating Topics
- Subscribing to Topic
- Publishing to SNS Topic
- Testing e-mail and SMS functionality.
- Other supported endpoints.

#### **Relational Database Service**

- Introduction to Managed database.
- Creating RDS instances using AWS console.
- Choosing an RDS engine and version.
- Public vs Private database instances.
- Multi-AZ setup.

- Backup using snapshots and point in restore.
- Parameter Group.
- Options Group.
- Control access to instances using Security Groups.

#### **Auto-scaling**

- Overview.
- Creating launch configuration.
- Creating auto-scaling group.
- Auto-scaling policies.

#### **AWS S3(Simple Storage Service)**

- Introduction to Simple Storage Server (S3).
- Storage options (default vs reduced redundancy vs Glacier).
- Creating buckets using Console.
- Uploading and downloading data tS3.
- Building static websites using S3.
- Enable version control on S3.
- S3 access policies.

#### Storage(Glacier)

- Introduction to Glacier.
- Moving data from S3 to Glacier.
- Setting archiving policies on S3.

#### **Cloud Front (Content Delivery Network)**

- Introduction to Content Delivery Networks.
- Overview of Amazon CDN
- Origins and Edge locations
- Configure S3 backend for CloudFront.
- Configure ELB backend from CloudFront.

#### Simple Email Services(SES)

- Introduction to SES.
- Advantages

#### **Identity Access Management (IAM)**

- Introduction to IAM.
- Access controls using IAM.
- Creating users, groups and roles.
- Assigning policies.
- Inline vs Managed policies.

#### **Virtual Private Cloud (VPC)**

- Introduction.
- Choosing a network design and CIDR.
- Design a simple network.
- Creating Subnets and setup routing as per the design.
- Using IGW tenable internet access.

- Access controls using Network ACLs.
- Network ACLs vs Security Groups.
- Creating Private connections from data center to AWS.
- Enabling VPC peering between VPCs.

#### CloudFormation

- Introduction.
- Understanding the template format.
- CloudFormation designer.
- Create a simple CloudFormation template.
- Managing dependencies.
- Updating the existing stacks.
- Intrinsic functions.
- Pseudo parameters.
- Updating CloudFormation stacks.
- Understanding event.
- Cloudformer.

#### **Using CLI**

- Installing AWSCli
- Installing CLI tools using rpm or pip
- Configuring credentials
- AWS CLI syntax
- Creating and managing resource using CLI
- Examples

#### **Best practices**

- Cost optimization
- Cloud migration
- Using 3rd party tools for health and billing monitoring

### **Trainer Profile**

Satheesh Challa (Sr.Architect)

12+ years of experience in IT industry with 5 years on Cloud and DevOps.