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results!***



Techno Expert Solutions

AMAZON WEB SERVICES COURSE OUTLINE

- Real Time Trainers
- 100% Placement Assistance
- Small Training Batch

Hands on Experience • Certification Support • Video Tutorials will be provided • Life Time Support will be provided

Implementation Support will be provided for Real Time Projects • after regular Class hours 24/7 support provided for Practice

Course Objective

- This course will introduce to the cloud computing basics and the services offered by Amazon in cloud to host the applications. At the end of the course you will be able to configure the applications on AWS by using different resource like EC2, RDS, S3, ELB,IAM, VPC , Security etc.

Duration

- 30 Hrs + 5 Hours would be extra for doubts and extra sessions.

Intended audience

- Linux or Windows administrators
- Database, storage or network administrators
- Developers who wants to develop applications for AWS

Prerequisites

Basic knowledge on the following is mandatory

- Using PUTTY to login to Linux servers
- Using WINSCP to upload files to remote server
- Creating user, groups on Linux and installing packages
- Setting up simple website using apache webserver
- Installing database and creating schema
- Connecting to database using client tools
- Should have exposure to XML, YAML and JSON formats
- Network troubleshooting using ping, nslookup and telnet commands
- Exposure to any of the programming languages Java, Python, Ruby or Shell scripting

Lab or workstation requirements

- All candidates should have admin privileges on their laptops/desktops or they should have the following software installed.
 - Putty (For windows download from [here](#))

- WinSCP (For windows download from [here](#))
- MySQL WorkBench (For windows download from [here](#))
- All candidates should have AWS accounts created and have admin privileges.
- Candidates attending online sessions should make sure their audio drives are installed on their workstations. We would recommend to use a headphone with MIC which is tested.

Training mode

- Classroom or Online

Course Content

Introduction to Cloud Computing

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

AWS -Introduction

AWS Regions & Availability zones
Tools to access services
Low level building blocks
High level building blocks
Overview of the console

Elastic Compute Cloud (EC2)

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

Relational Database Service (RDS)

- 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

Elastic Load Balancer (ELB)

- 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

Auto-Scaling

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

Storage (Simple Storage Service S3)

- Introduction to Simple Storage Server (S3)
- Storage options (default vs reduced redundancy vs Glacier)
- Creating buckets using Console
- Uploading and downloading data to S3
- 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

CloudFront (Content Delivery Network Service)

- Introduction to CloudFront
- Configure S3 backend for CloudFront
- Configure ELB backend from CloudFront

CloudWatch

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

Simple Notification Services (SNS)

- Introduction to SNS
- Subscribing to receive notifications
- Sending alerts using SNS

Simple Email Services (SES)

- Introduction to SES

Identity Access Management (IAM)

- Introduction to IAM
- Access controls using IAM
- Creating users, groups and roles

Assigning policies
Inline vs Managed policies

Others

Tagging
Installing CLI tools
Using CLI

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 to enable 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

Cloud Formation

Introduction
Understanding the template format
Cloud formation designer
Create a simple cloud formation template
Managing dependencies
Updating the existing stacks
Intrinsic functions
Pseudo parameters
Updating cloud formation stacks
Understanding events
Cloud former

Advance Level Solution Architecting

Cloud Computing with AWS Course Outline

Fundamentals of Amazon Web Services (AWS)

- ▣ Regions
- ▣ Availability Zones and Data centers
- ▣ AWS Credentials
- ▣ Review of All AWS Services

Amazon S3

- ▣ Fundamental APIs: PUT, GET, LIST, DELETE
- ▣ Consistency model
 - Types of consistency model for distributed storage
 - S3's consistency model
 - Really understanding eventual consistency
- ▣ S3 Namespace
- ▣ Access Control List
- ▣ Bucket Policy
- ▣ Pre-signed URL
- ▣ Multipart upload
- ▣ Understanding Pricing for S3

Hands-on: S3 Lab; Creating Buckets, objects, and managing access control

- ▣ Data encryption with S3
- ▣ Multipart upload
- ▣ Understanding Pricing for S3
- ▣ Data encryption with S3
- ▣ AWS Import/Export Service
- ▣ Server side logging
- ▣ Versioning of data in S3
- ▣ Architecture case study of common Use Cases of S3

For Any query

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