

IT - Tower

Online IT Training & Services



amazon
web services





About AWS

Amazon Web Services (AWS) is a secure cloud services platform, offering compute power, database storage, content delivery and other functionality to help businesses scale and grow. Running web and application servers in the cloud to host dynamic websites. It is the world's most comprehensive and broadly adopted cloud platform, offering over 165 fully featured services from data centers around the world.

Why AWS

- Gain better pay.
- Cloud computing is the future.
- A positive impact on resume.
- Attain more job opportunities.
- Benefits for freelancer and employer.
- Includes future development

AWS certification is important for your career. From content delivery to database migrations, AWS has become a one-stop shop for many companies looking for solutions to help their businesses run more efficiently.

AWS - Solutions Architect

Course Duration : 48 Hours

AWS Professional Level training imparts the knowledge and technical skills for designing distributed applications and systems on AWS platform. Participants will gain practical exposure about the designing and deploying of scalable and highly flexible server setup on AWS. Fault tolerance, multi-tier applications, and migrating complex data set will be discussed during the training. The skills of selecting appropriate AWS services are developed by understanding the fundamentals of cloud computing and analyzing the business requirements and technical feasibility. Aspirants will learn different AWS products including VPC, Elasti Cache (EC), Glacier, IAM, Route 53, Simple Storage Service (S3), Auto Scaling, Elastic Load Balancing (ELB), Cloudfront, Elastic Compute Cloud (EC2), EBS, and Relational Database Service (RDS).

Introduction to Cloud Computing

- Introduction to Cloud Computing
- Why Cloud Computing?
- Benefits of Cloud Computing
- Types of Cloud Computing
- Public Cloud
- Private Cloud
- Hybrid Cloud
- 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
- Benefits
- Vendors-Amazon Web Services (AWS)

Introduction to AWS

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

EC2 (Elastic Compute Cloud)

- Instances creation

- Understanding AMI
- Launching your first AWS instance
- On-demand Instance pricing
- Reserved Instance pricing
- Setting up security
- Security groups
- Choosing the AMI
- Creating a new AMI
- Deploying a new instance from the created AMI
- Key Pairs, Elastic IP's

EBS (Elastic Block Storage)

- Create EBS volumes
- Delete EBS volumes
- Attach and detach EBS volumes
- Mounting and unmounting EBS volume
- Creating and deleting snapshots
- Creating volumes from snapshots

Auto Scaling & load balancing

- Create an Auto Scaling group
- Create a policy for your Auto Scaling group
- Set up an auto-scaled, load-balanced Amazon EC2 application Identity access management
- Create load balancer
- Manage Load balancer

Amazon Virtual Private Cloud (VPC)

- What is VPC?
- VPC configuration
- VPC Peering between same Region
- VPC Peering Between Cross Region
- VPC Peering between Different AWS Account
- Nat Configuration
- Elastic IP's
- Inbound and outbound ACL's
- VPN configuration

Identity Access Management (IAM)

- Creating Users and Groups
- Applying AWS predefined policies
- Applying Aws inline policy
- Password Policy

- Roles base Policy configuration
- MFA

Cloud Watch

- Cloud watch dashboard
- Configuring Monitoring services
- Configuring metric for monitoring
- Creating a cloud watch alarm
- Monitoring other AWS services
- Configuring Notifications
- Integrating cloud watch with Auto scaling Simple Notification Service (SNS)
- What is SNS?
- Creating Event rule for Aws Resources.

Storage Service of AWS

- What is S3?
- Creating S3 Buckets
- S3 Bucket Replication
- S3 Uploading Downloading
- S3 Permissions
- S3 Object Versioning
- S3 Lifecycle Policies

EFS storage (only Linux instance)

- Creating EFS shared storage
- Mount with Linux instance with same region
- Mount with Linux instance between cross region
- Backup of EFS Storage and Restore

FSX Storage (New for windows instance only)

- What is Fsx storage
- Creating FSx storage for windows instance
- Creating directory Service for Fsx storage
- Mount with domain base windows instance.

S3 Glacier Storage

- How to crate Glacier Storage
- How to connect from on-premises environment
- How to set permission and policy on Glacier
- How to remove it

Relational Database Service (RDS)

- Understand the Database type
- Creating database

- Configuring the database
- Connecting to the database.
- Configuring backups and Restore
- Configuring the Replication process of Database

Route 53

- What is Route 53
- How to registered exiting Domain in it
- How to registered New Domain through Route 53
- How to Link Aws resource with Domain through Route 53
- How to configure Health Check in Route 53

Cloud Trail

- What is Cloud Trail
- Creat Cloud trail for event monitoring
- Manage Event History in cloud Trail

Overview topics:

- Cloud Formation- What is, Deploying template
- Create Stack, Delete Stack, Provisioning application resources with Cloud Formation

Creating a cloud front distribution

- Hosting a website of cloud front distribution
- Elastic Beanstalk - Creating environment
- Troubleshooting using Cloud Trail

AWS Case study

- Creating and managing a multitier application on AWS platform
- Best practices for AWS
- Cost control strategies
- Overview of AWS certification
- AWS troubleshooting

Practicals and hands on Lab Exercises Under Trainer's Guidance