

AWS Syllabus

AWS Overview

- Cloud Computing
- What is AWS?
- Introduction to AWS product
- Signing up for AWS
- AWS free tier
- Introduction AWS management console

Overview of all AWS products and services

Elastic Compute Cloud (EC2)

Overview of EC2
EC2 AMIs
EC2 Instance Types
EBS Volumes
EBS Snapshots
On-demand vs Spot vs Reserved
Placement Groups
Load Balancers
Auto Scaling
EC2 best practices
EC2 costs and prices
Creating Amazon EC2 Instances (for Linux)
Creating Amazon EC2 Instances with Microsoft Windows
Working with Amazon Elastic Block Store (EBS)
EBS Encryption
Working with Elastic Load Balancing
Configure an Amazon Machine Image (AMI)
Maintaining High Availability with Auto Scaling (for Linux)

IAM

Overview of IAM
Groups
Users
Roles
Policies
IAM best practices

VPC

- Overview of VPC
- VPC
- Subnets
- Route Tables
- Elastic IPs
- Internet Gateway
- NAT Gateways
- Network ACLs
- Security Groups
- VPC best practices
- VPC costs and prices
- Building Your First Amazon Virtual Private Cloud (VPC)

S3

- Overview of S3
- S3 Buckets
- Version Control
- Lifecycle Management (General Purpose, IA, Glacier)
- CloudFront & CDNs
- Security & Encryption
- Import/Export & Snowball
- S3 best practices
- S3 costs and prices
- Create an AWS S3 bucket and upload a file
- Hosting a Static Website on Amazon S3

Route53

- Overview of Route53
- DNS
- Routing Policies
- Route53 best practices
- Route 53 costs and prices

Overview of databases

- RDS
- Licensing
- SQL vs NoSQL
- DynamoDB
- RedShift
- Elasticache
- Aurora
- Databases best practices
- Databases costs and prices
- Launch an RDS instance and connect to it remotely
- Database Migration Services (DMS)

CloudWatch

- Cloudwatch dashboard
- Configuring Monitoring services
- Setting thresholds
- Configuring actions
- Creating a cloudwatch alarm
- Getting statistics for EC2 instances
- Monitoring other AWS services
- Configuring Notifications
- Integrating cloudwatch with Auto scaling

CloudTrail

- Viewing Events with CloudTrail Event History
- Overview for Creating a Trail
- Getting and Viewing Your CloudTrail Log Files
- Configuring Amazon SNS Notifications for CloudTrail
- Controlling User Permissions for CloudTrail

EFS

- Create EFS
- Mount and unmount EFS
- Clean Up Resources

AWSCLI

- Installing and configuring AWSCLI
- Commands
- Options
- Resource identifiers
- SDKs

CloudFormation

- What is cloud formation?
- Deploying template
- Create Stack
- Update Stack
- Delete Stack
- Provisioning application resources with CloudFormation

Elastic Beanstalk

Lambda

Glacier

SES

SNS

CloudFront

API Gateway