

DVS AWS Course Content

This course is for those who are completely new to AWS. No prior AWS experience is required. We will introduce you to AWS, walk you through the process of setting up your own AWS account, and teach you the essentials to get you using AWS's core services.

Account Basics

1. AWS Free Tier
2. Create an AWS Account
3. How to Navigate the AWS Console
4. AWS Documentation

Identity & Access Management (IAM)

1. What is IAM?
2. IAM Initial Setup and Configuration
3. IAM Users and Policies
4. IAM Groups and Policies

Virtual Private Cloud (VPC)

1. AWS Global Infrastructure
2. VPC Basics
3. Internet Gateways (IGW)
4. Route Tables (RTs)
5. Network Access Control List (NACLs)
6. Subnets
7. Availability Zones (VPC Specific)

Simple Storage Service (S3)

1. S3 Basics
2. Buckets & Objects
3. Storage Classes
4. Object Lifecycles
5. Permissions
6. Object Versioning

Elastic Compute Cloud (EC2)

1. EC2 Basics
2. Amazon Machine Images (AMIs)
3. Instance Types
4. Elastic Block Store (EBS)

5. Security Groups
6. IP Addressing
7. Launching and Using an EC2 Instance

Databases

1. RDS and DynamoDB Basics
2. Provisioning an RDS MySQL Database
SSH Tunneling

Simple Notification Service (SNS)

1. SNS Basics
2. Using SNS

CloudWatch

1. CloudWatch Basics
2. CloudWatch Metrics and Alarms

Elastic Load Balancer (ELB)

1. ELB Basics
2. Creating an ELB

Auto Scaling

1. Auto Scaling Basics
2. Using Auto Scaling

Route 53

1. Route 53 Basics
2. Using Route 53

Lambda

1. Lambda Basics
2. Lambda Test

Infrastructure As Code (IAC): Terraform

1. Introduction to Orchestration Tools
2. Configuration Management vs Orchestration
3. Mutable Infrastructure vs Immutable Infrastructure
4. Procedural vs Declarative
5. Client/Server Architecture vs Client-Only Architecture
6. Infrastructure As A Code with AWS Using Terraform
 - Installation
 - Creating connection between CLI & AWS API
 - Planning
 - Applying
 - Destroy

Real Time AWS Automation Examples:

7. Creating a Key pair
8. Creating security groups
9. Creating a EC2 Instance
10. Creating Elastic Load balancer
11. Creating and configuring Auto Scaling